



A Resource Guide to:

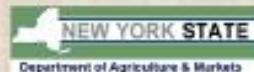
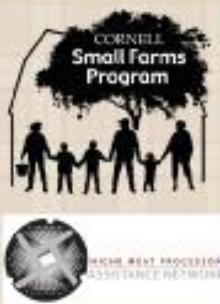
Direct Marketing Livestock & Poultry

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Resource Guide to Direct Marketing Livestock and Poultry

TABLE OF CONTENTS

Introduction to Meat Regulation.....	8
Why We Decided to Undertake This Project	8
Why Inspections are Important and the History of Federal Inspection	8
Compliance Versus Circumventing	9
How Regulations are Classified	10
Are the Animals or Birds Amenable or Non-amenable?.....	10
Why Identifying a Market Channel is Important.....	12
What is Commerce?.....	13
Intrastate or Interstate?	13
Import or Export?	14
Religious Exemptions, Certifications, and Cultural Practices	15
New York's Kosher Law Protection Act of 2004.....	16
New York's Halal Foods Protection Act of 2005	17
Cultural Practices	18
Federal, State, or Custom: What is the Difference?	18
USDA Inspected Meat Processing Facilities	18
State or Local Inspected "Custom Exempt" Slaughterhouses	19
DUAL LICENSES for Custom Exempt and 5-A Slaughtering	20
5-A Non-Amenable Slaughtering and Processing Facilities	21
5-A Poultry Slaughtering and Processing Facilities	22
5-A Facility Design and Location.....	23
20-C Meat Processing Facilities	24
Meat Lockers	25
Other Types of Slaughter Houses Not Available in New York.....	25
Retail-Exempt	25
Talmadge-Aiken Meat Plants	25
State Licensed USDA Equivalent Slaughterhouses.....	25
Who are the Responsible Parties of the Tiered System?.....	28
Food and Drug Administration (FDA)	28
USDA Food Safety and Inspection Service (FSIS)	29
Other Federal Agencies	29
Other State and County Agencies	30
Handling Slaughter Animals.....	31
Humane Handling	31
Humane Transport	32
Movement of Non-Ambulatory Animals to Slaughter	32
How Many Animals Can Be Loaded on a Trailer?	33
Acting as a Livestock Hauler.....	35
Holding Animals.....	35
Shrinkage of Animals in Transit.....	35
Field Harvesting.....	36
Animal Identification and Health Records.....	36
Why Keep Records?	36

Animal Health Treatment Records	37
Aging an Animal Without a Birth Certificate Through Dentition.....	39
Slaughtering, Cutting, and Processing.....	41
Slaughtering, Cutting, and Processing of Amenable Meats:	41
Selling the Live Animal Direct to Consumers as “Freezer Meat”.....	41
On-Site Slaughter for Entire Animals Sold Live	42
Offal Disposal and On-Farm Composting.....	42
If Selling Amenable Red Meat Wholesale, Retail and/or Direct to the Consumer	43
Slaughter Requirements.....	43
Amenable Meat Processing Options.....	44
Organ Meats and Specified Risk Materials	44
Slaughtering, Cutting, and Processing of Non-Amenable Meats and Poultry	47
NYS Requirements for Large Farm Raised Game	47
NYS Requirements for Farm Raised Rabbits	49
NYS Requirements for Non-Amenable Poultry	50
Value Added Products From Non-Amenable Meats	50
FDA Requirements when Raising Non-Amenable Game	51
Slaughtering, Cutting and Processing of Poultry.....	53
Ratites	53
Poultry Exemptions At a Glance	54
Poultry Exemptions From Federal Inspection	55
Personal Use Exemption.....	55
Custom Slaughter/Processing Exemption.....	55
Poultry Processed for In-State Market Channels	56
Producer/Grower – 1000 Bird Limit Exemption.....	56
Exemptions Requiring a 5-A license	57
Producer/Grower or Other Person (PGOP) Exemption - 20,000 Limit Exemption.....	58
Producer/Grower – 20,000 Limit Exemption	58
Small Enterprise Exemption – 20,000 Limit Exemption.....	59
Retail Exemptions (Store/Dealer/Restaurant).....	60
Retail Dealer Exemption	60
Retail Store Exemption	60
Retail Restaurant Exemption	61
Mobile Slaughtering and/or Processing	63
Poultry.....	63
Mobile Facilities for Marketing Under the 1000 Bird Exemption	63
Mobile units for custom slaughter/processing	64
Mobile units for NY 5-A poultry plants	64
Mobile units for USDA federal inspected or USDA equivalent poultry plants	67
Red Meat Mobile Units	67
Custom slaughter/processing	67
Retail Meat Processing (20-C).....	67
Mobile Retail Meat Processing Unit Protocol	68
5-A Non-Amenable Meats.....	69
USDA federally inspected or USDA equivalent plants.....	70

Obtaining a Federal Grant of Inspection for a Mobile Red Meat Slaughter Unit:	71
The Cuts.....	73
Butchering Step By Step.....	73
Industry Cutting Charts.....	74
Yields and Dressing Percentages	80
Value Added Products.....	81
FDA and Nitrate Usage	81
Sausages, Smoked Meats and Dried Meats	82
Fresh Sausages	82
Cooked Smoked Sausages	82
Fermented Sausages.....	82
Smoked Meats and Sausages	83
Jerky and Dried Meat.....	84
Recipe Development and Considerations.....	84
Casings.....	84
Spice Selection.....	85
Packaging Options	85
Vacuum Packaging	85
Labeling	86
USDA Mark of Inspection and Establishment Number	87
Safe Handling Instructions: Required for Raw Meat and Poultry	88
Labeling of Additives	88
Dating	89
Nutrition Labeling	90
Country of Origin Labeling	91
UPC or Bar Codes	93
Regulatory Enforcement	93
Misbranding.....	93
Failure to Comply: Selling Product from a Non-Approved Source	94
Satisfying the Customer	94
What Are The Differences Between Inspection & Grading?	94
Beef.....	94
Lamb	95
Pork.....	96
Goat.....	96
Rabbit.....	98
Poultry.....	98
Quality Assurances	99
Certification Programs and Product Claims.....	99
Certified Organic	102
Other Labels.....	103
Wholesale Market Opportunities	105
Marketing of Live Slaughter Animals	105
The Players	105
The Concern: Sufficient Supply	106
A Farmer's Legal Obligations	106

Information and Responsibilities	107
Legal Recourse in Case of Nonpayment.....	108
Locating Buyers	109
Marketing Carcasses Wholesale	110
Retail Market Opportunities	110
Direct Marketing Live Animals.....	111
Live Animal Markets	111
On-Farm Slaughtering	111
Freezer Trade	112
Community Supported Agriculture	113
Farm Cooperative	114
Contract Raising of Livestock	114
Auctions	114
Retailing the Cuts	115
Retail Markets: From the farm stand to the upscale grocery store	115
Back porch/ Classic Farm-stand	116
Farmers Markets	116
Hotels, Restaurants and Institutions (HRI)	117
Farm to School.....	118
Fundraising Dinners.....	118
Donations of Product	118
Fairs and Festivals	118
Mail Orders	119
Finding a Specialty (Niche) Market for Meat and Poultry	119
Safe Product Handling	121
Temperature and the Cold Chain	121
Transporting Products.....	122
Storage	122
Expiration Dates	122
Safe Handling	124
Mishandling	124
Sampling and Slicing	125
Additional Retailing Concerns.....	125
Product Distribution.....	125
Product Inventory and Record Keeping	125
Premise Registration.....	125
By Product Marketing Opportunities for Consideration.....	127
Pet Food	127
Whole Muscle Raw Meat as Pet Food.....	128
FDA Regulation of Pet Food	130
New York State Regulations for the Manufacturing and Distribution of Commercial Feed -Including Pet Food:	131
Ensuring Meat Safety - HACCP, SOP and GMP	135
Hazard Analysis Critical Control Point (HACCP)	135
Introduction to HACCP	135
HACCP Testing	135

HACCP Assistance	136
Hazards	136
Standard Operating Procedures (SOP)	137
Good Manufacturing Practices (GMP).....	137
End Product Testing	137
Risk Management and Insurance Considerations for Farmers Selling Direct.....	138
Risk Management	138
Insurance.....	138
General Liability Insurance	138
Product Liability Insurance.....	139
Licenses to Consider	139
Food Establishment Licenses	139
Article 20-C Food Processing Establishments.....	139
Article 28 Retail Food Stores	139
Article 28 Food Warehouses.....	140
Article 17-B Food Salvager	140
Article 19 Refrigerated Warehouse/Locker Plant.....	140
Article 5-C Licensing of Rendering Plants.....	140
Other Departments Farmers May Need to Contact	140
State Jurisdiction.....	140
County Jurisdiction	141
Glossary Of Terms.....	142
Glossary of Commonly Used Meat and Poultry Additives and Terms	152
RESOURCES and REFERENCES.....	155
Agencies to Contact for Additional Information	162

Disclaimer Notice: In this publication, we provide information on additional resources and in some cases mention companies by name. Please note that it is not our intention to promote these resources or businesses. Rather, by mentioning them, we are illustrating a point and providing examples of products available.

Introduction to Meat Regulation

Why We Decided to Undertake This Project

The purpose of this resource guide is to help New York farmers better understand the current regulations governing the slaughtering, processing, and marketing of meat animals. Two ways for farmers to realize higher returns for their farm products are to take over some of the traditional roles of middlemen or to shift completely to direct marketing. However, meat regulations are complex. Accurately interpreting the statutes governing the processing and sale of meat animals – including poultry- and their products is more formidable for livestock farmers than for their counterparts in fruit and vegetable production. Even experienced farmers can be confused by the regulations. Without a clear understanding of what is and is not permitted under current laws, many meat producers are hesitant to participate more directly in the marketing of their product. Instead, farmers may be limited to contract growing livestock for large corporate packers, or selling slaughter animals through a shrinking number of local auctions and dealers. Both alternatives offer limited recourse to competitive pricing. This resource guide explains the complex meat laws in layman's terms and clarifies the legal logistics of direct marketing livestock and poultry. Ultimately, this should lead to a more direct market chain from farmer to consumer in New York and hence, more local dollars circulating in local communities.

Why Inspections are Important and the History of Federal Inspection

Why are regulations for the processing and marketing of meat more complex than those for vegetables and fruit? Many of the acute human health problems posed by fresh fruit and vegetables are caused by unsanitary water. Fortunately, in the United States, ample, potable water is available and therefore fruits and vegetables are not considered a critical threat. However, unlike fruits and vegetables, health pathogens can multiply rapidly in animal products that are improperly handled.

The United States acknowledged early on that poorly managed livestock and their products could pose a threat for human health. In 1865, USDA Secretary Isaac Newton urged Congress to enact legislation providing for the quarantine of imported animals. On May 29, 1884, President Chester Arthur signed the act establishing the Bureau of Animal Industry, which was the forerunner of Food Safety and Inspection Service. The Bureau of Animal Industry's early function was to focus on preventing diseased animals from being used as food.

In 1905, author Upton Sinclair published a novel titled "The Jungle", which took aim at the brutalization and exploitation of workers in a Chicago meatpacking house. This truly was the turning point for food inspection. While Sinclair attempted to raise awareness of the working conditions, he also raised public outrage with the unsanitary processing practices that he graphically described in his book. As a result of the public outcry, the United States government enacted the Federal Meat Inspection Act in 1906. The Act placed federal inspectors within slaughterhouses for the first time.

In the early 1900's local butchers slaughtered and cut meat that consumers used locally. Following World War II, the processing industry changed significantly. The rapid growth of the interstate highway system and the development of refrigerated trucks allowed packing houses to expand and become more mechanized. The poultry industry experienced explosive growth. The Bureau of Animal Industry evolved into the Food Safety and Inspection Service (FSIS), a public

health agency within the U.S. Department of Agriculture. Today, this agency oversees the processing, labeling, and packaging of commercial meat, poultry, and egg products.

Congress passed the Poultry Products Inspection Act in 1957 to keep pace with the rapidly expanding market for dressed, ready-to-cook poultry and processed poultry products. The 1967 Wholesome Meat Act and the 1968 Wholesome Poultry Products Act clearly defined the handling of meat products. They expanded the mandate of the Federal Meat Inspection Act and the Poultry Products Inspection Act by requiring that state inspection programs be "at least equal to" federal requirements. (*Current government statutes covering meat products are listed in Title 9 of the "Code of Federal Regulations" for Animals and Animal Products. This code is available on the web and as hard copies from the National Archives & Records Administration (NARA)*).

Initially, federal inspectors used sight, touch, and smell methods of inspection for meat products. As technology advanced, inspectors adopted laboratory testing to ensure that all meat and poultry handlers maintained products under proper conditions. Inspectors, in addition to the routine inspection, perform in-plant residue testing and collect samples to ensure that products are free of disease pathogens.

Today, FSIS combines visual inspection of carcasses and periodic laboratory testing with an aggressive preventative program referred to as HACCP (Hazard Analysis and Critical Control Point). Under HACCP, the plant operator must identify all critical points along the processing and handling route where microbial and pathogenic problems could develop. The operator must then develop standard operating procedures (SOPs) for these areas of concern and for validating that no problems are encountered. The job of the inspector under HACCP today is not only to inspect animals and carcasses but also to ensure the plant is following the HACCP plan written specifically for it. Inspectors verify that a plant identifies potential hazards, completes testing, and undertakes corrective measures according to each plant's own personalized plan.

Compliance Versus Circumventing

The purposes of government regulations for the inspection of meat and poultry products are to: 1) prevent the sale of adulterated, contaminated, or otherwise unsafe livestock products; 2) prevent misbranding; 3) insure the safety of consumers by establishing minimum standards for the production, slaughter, processing, and marketing of these products; and 4) create a system of licensing, inspection and labeling to trace a product back to its origin if a public health problem should arise.

An inadvertent side effect of increased regulation and validation is that smaller processors and farmers may be disproportionately disadvantaged due to economies of scale. For example, validation equipment is often expensive to purchase and maintain. The smaller volume of output of smaller plants results in these plants incurring a greater overhead expense on a per pound basis.

This negatively affects producers and conflicts with the stated aim of our New York agricultural agencies to increase the sales of value-added farm products. However, a close study of the meat statutes reveals some exemptions and alternatives that can benefit the small farmer and processor who are marketing slaughter animals or meat products.

It is far better to have an excellent understanding of the meat regulations and to diligently study any changes in their interpretation rather than to focus on circumventing them and risk trafficking in illegal or unsanitary products.

The New York livestock industry needs to build strong communication channels with meat inspectors. There is a formal review process for proposed changes in the wording of statutes. The livestock industry needs to be able to rapidly apprise farmers and small processors when such regulatory reviews are ongoing and find ways to motivate them to participate in the process. Unfortunately, there are no formal regulatory review procedures when the interpretation of a regulation is being changed. This is unfortunate, because even a small change in interpretation can have damaging implications for farmers and processors. Making sure livestock farmers are knowledgeable about the current regulations governing meat products and slaughter is a positive first step at improving their ability to communicate effectively with officials.

How Regulations are Classified

The slaughtering and processing regulations that a farmer is required to abide by vary according to several factors. A farmer must first determine what type of animal or bird he or she is raising. Is it a farm animal or is it poultry? Ratites can be confusing. In 2002 the USDA required mandatory inspection of ratites. These large flightless birds are considered a red meat, and are often slaughtered at plants with both meat and poultry capabilities . Although these birds are not listed in the Poultry Products Inspection Act (PPIA), the USDA recently listed them as poultry in the Federal Meat Inspection Act (FMIA).

The farmer must next decide if that animal is considered amenable or non-amenable.. Any amenable animal or poultry is specifically listed in the regulations. Those animals or birds not listed are classified as non-amenable. However, designation may vary from state to state. For example, bison are not specifically mentioned in the FMIA, making it non-amenable. Never the less, specific state provisions may grant it amenable status for slaughter, as is the case in Iowa.

A farmer must then decide where and how the product will be sold. Will the product stay in state or will it be shipped out of state? Will product be sold retail or wholesale? If the farmer is doing his own marketing, will he be selling directly to an end consumer or will there be an intermediary such as a retail store or restaurant? Will the farmer sell live animals, carcasses, or retail cuts? The answers to these questions determine what type of slaughter facility is licensed to handle each of the different kinds of sales.

The last factor to consider is whether the animal needs to be raised, slaughtered, and processed under specialized restrictions to meet any religious requirements of a given consumer market.

Once the above questions have been answered, it is far easier to figure out which regulations apply. The following section is designed to help a farmer determine which slaughtering and processing options are most appropriate for their situation.

Are the Animals or Birds Amenable or Non-amenable?

A farmer must determine the legal classification for his or her type of livestock or poultry. He/she must decide if the animals being raised are amenable or not.

Amenable is defined as “answerable or accountable to higher authority”. The USDA lists the animals and birds that are considered “amenable” and which must then be slaughtered and

processed under the Food Safety and Inspection Service (FSIS). “Amenable” indicates that the animal species is specifically mentioned in the Federal Meat Inspection Act (FMIA).

Amenable livestock are those animals listed within the Act. Amenable livestock includes all cattle, sheep, goats, swine, and equines.

Amenable poultry listed specifically in the Act include chickens, turkeys, ducks, geese, guineas, ratites, or squabs, also termed young pigeons from one to about thirty days of age), whether live or dead . (Section 381.1) Ratites (ostrich, emus, and rhea) were recently added to the list of amenable poultry species. All these listed birds are considered amenable species and fall under the jurisdiction of the FSIS. The slaughter and processing regulations specified for them differ from those of livestock. Poultry slaughtering and processing regulations are detailed in the Poultry Products Inspection Act.

Non-amenable livestock and poultry are those animals and birds that are not listed specifically in the Federal Meat Inspection Act. They are not required to be processed under the Food Safety and Inspection Service, but are subject to FDA regulations. For the most part, non-amenable species may also be considered game animals or birds. Because they are consumed in limited numbers, the potential risk from consuming an adulterated product from a non-amenable species is minimal in comparison to an amenable species.

Non-amenable species include mammals such as reindeer, elk, deer, antelope, water buffalo, bison, squirrel, opossum, raccoon, rabbits, nutria or muskrat, and non-aquatic reptiles such as land snakes. Even if a farmer raises a domesticated species, it is still considered non-amenable. For example, farm raised White-tailed Deer or New Zealand rabbits are both non-amenable species, though both can be found on farms across the state. **Non-amenable** poultry includes game birds such as pheasant and quail. These birds can also be found on many farms.

Aquatic reptiles (turtles, alligator, water snakes, and frogs) are considered game animals by the New York State Department of Environmental Conservation. The Food and Drug Administration (FDA) classifies these aquatic reptiles as “Seafood” and they are therefore subject to the FDA's Office of Seafood regulations. The National Marine Fisheries Service (NMFS) of the National Oceanic Atmospheric Administration of the Department of Commerce administers the voluntary seafood inspection program.

A game animal refers to an animal - the products of which are food - that is not classified as fish, cattle, sheep, swine, goat, horse, mule, or other equine, as defined by the Federal Meat Inspection Act or the Poultry and Poultry Products inspection Act. Game animals are defined in section 11-0103 of the NYS Environmental Conservation law. **Wild game** includes game birds, big game, and small game. **Game birds** are subdivided into migratory game birds and upland game birds. "Upland game birds" (Gallinae) refers to wild turkeys, grouse, pheasant, Hungarian or European gray-legged partridge and quail.

"**Big game**" means deer, bear, moose, elk, except captive bred and raised North American elk (*Cervus elaphus*), caribou, and antelope.

"**Small game**" means black, gray and fox squirrels, hares, cottontail rabbits, frogs, land turtles, box, wood and the bog turtles, coyotes, red fox and gray fox except captive bred red fox or gray fox, raccoon, opossum, or weasel, skunk, bobcat, lynx, muskrat, mink, except mink born in captivity, fisher, otter, beaver, sable and marten but does not include coydogs.

To qualify as **domestic game, captive bred game, farm raised game or non-native big game**, the game must be held in private ownership on a licensed premise by which there is no means of escaping into the wild. Captive bred North American big game mammals may include: cougar, wolf, bear, bison, big horn sheep, mountain goat, antelope, elk, musk ox, mule deer, black tailed deer, caribou, swine, and other domestic game animals as defined by law.

Some wild game may be taken by lawful hunting including deer, bears, coyotes, and rabbit. Trapping of game is also permitted but deer and bear may NOT be trapped. Some wild species legally taken (legally hunted or trapped within the designated season) and legally possessed may be sold. Skunk, bobcat, mink, raccoon, and muskrat may be bought and sold alive, dead, or in part during their respective open seasons. Migratory game birds and beaver, fisher, otter, bobcat, coyote, fox, raccoon, skunk, muskrat and mink shall be possessed, transported, and disposed of only as permitted by regulation of the department. The flesh of cottontail rabbits, hares, squirrels, bear and deer shall not be bought or sold, except as provided in section 11-1713 with respect to bear.

For more information, contact the New York State Department of Environmental Conservation.

Why Identifying a Market Channel is Important

Regulations for livestock slaughter and meat processing vary depending on which market channel the farmer ultimately markets his or her product within. The regulations are not consistent across the three different animal classifications, and the determination of the market channel is critical to ensure lawful compliance for the end-market being served. Later chapters discuss specifically the regulations for amenable livestock, non-amenable animals, and amenable poultry. However, market channels are discussed here to help farmers determine what slaughtering and processing is required for their business model.

In a typical supply chain, a farmer might sell his or her slaughter animals at a local auction where a regional livestock dealer picks them up to sell to a distributor. The distributor could be a meat packer (a slaughterhouse that takes orders for carcasses from wholesale or retail businesses and then buys live animals and then slaughters and processes them to fill the orders) or a wholesale business that buys animals outright and then arranges their processing at a slaughterhouse of their choice. The distributor then sells the carcasses or meat cuts to retail businesses that in turn serve the end consumer directly.

There are several opportunities to shorten this chain. For example, a farmer might sell his or her live animals direct to a dealer, a live animal market, or a farmer-owned cooperative. It is important to note that a farmer generally assumes more labor and legal responsibility the more he or she becomes involved in the marketing process.

Even if simply taking an animal to auction, every farmer has some legal responsibility. When animals leave a farm for the auction house, farmers need to make sure animals are tagged and are wearing official USDA (for amenable species) or NYSDAM (for non-amenable species and poultry) identification as required. Farmers should contact potential buyers, accurately describe their animals, make sure they meet the market demand, arrange for transporting, and request prompt payment.

Even greater advantages are recognized when a farmer sells their livestock directly to consumers, who then make the slaughter arrangements. Even though this is a very direct way to market an

animal, the fact that a live animal is sold (rather than the meat from it) allows a farmer to fall outside the parameters of many regulations. In this case, the meat from the live animal does not enter commerce, only the animal does. In this sales arrangement, the consumer often has a chance to evaluate visually the herd health and can easily trace back to the farm any problems that may arise.

A farmer can also evolve into a dealer or packer. If this occurs, then there are several licensing and bonding issues a farmer should be aware of. These are discussed in a later chapter on wholesaling.

Recently, New York farmers have opted to build custom or 5-A slaughterhouses on their property. Some have even expanded their operations to include a live animal market. Some farmers have added an additional processing license to allow them to manufacture various meat and poultry value-added type products.

A farmer may also decide to sell meat and poultry products themselves. When selling meat, it is important for farmers to remember that the closer they move to the end consumer, the more responsibility they take on. Regulations and licensing for amenable red meat differ depending on whether a farmer is operating as a wholesaler and selling carcasses or retail cuts to other wholesalers, retail businesses, and restaurants; Or whether they are operating as a retailer and selling meat cuts direct to consumers. In the case of poultry, there are important exemptions from federal inspection depending on how many birds a poultry grower is processing for sale and whom they are selling the birds to.

The important point to remember is that the regulations for slaughtering and processing depend greatly on if a farmer decides to market live animals, carcasses, or retail cuts to wholesalers, retail businesses or direct to consumers.

What is Commerce?

Commerce is the exchange or transportation of poultry products between States, U.S. territories and the District of Columbia. Commerce can be interstate or intrastate. **The USDA FSIS does not view the product as having been introduced into commerce if it has not left the control of the processing entity.** Therefore, products sold at a farmers' market by the farmer himself or by his employee are not considered to have entered commerce. However, if someone other than the farmer sells the product at the market, then the product enters commerce.

(Reference USDA Guidance for Determining Whether a Poultry Slaughter or Processing Operation is Exempt from Inspection Requirements of the Poultry Products Inspection Act, Revision 1, April 2006.)

Intrastate or Interstate?

NOTE: In this section and the one following on Imports and Exports, we address the movement of meat and meat products. Movement of live animals in interstate and international trade is beyond the scope of this project - as states and countries have very rigid and specific requirements for live animal movement. It is as important to contact the exporting state for the appropriate health tests required, as it is the importing state to determine what papers are needed.

Please consult the New York State Department of Agriculture and Markets for information on moving live animals for interstate and international trade.

Intra-State refers to transactions within a single state. A sale made from a farmer in Owego, NY to a customer in Ithaca, NY is an intra-state sale.

Inter-State refers to transactions across state lines. This is trade between two states. A sale made between a farmer in Whitehall, NY and a customer in Rutland, VT is an inter-state sale.

The Food and Drug Administration (FDA) under the Federal Food, Drug and Cosmetic Act, has authority over food in interstate commerce unless regulated by the USDA Food Safety and Inspection Service (FSIS).

The Federal Meat Inspection Act permits states to have a cooperative agreement with USDA FSIS, whereby states have a mandatory meat inspection program equal to the federal standards. The federal law limits state inspected amenable animals to intrastate commerce. However, this limitation is currently being challenged and may soon be changed.

In contrast, non-amenable meat from state licensed 5-A plants is eligible for sales in all states, including states with state inspection programs. Just because it is eligible for sale does not guarantee that it is legally allowed to be sold in a particular state. State or local health codes may prohibit the sale of state inspected non-amenable meat. When Chronic Wasting Disease was discovered east of the Mississippi River, many states closed their borders to the sale of not only live cervids, but also to the meat from these farmed species.

It is up to the producer to know the regulations of the jurisdiction to which he will be shipping his or her products. It is recommended that the producer call the State Department of Agriculture and the State Department of Fish and Game (or Natural Resources) to see what products are legally allowed to be sold in that state, what products are allowed to come into that state and what, if any, inspections are required for it to do so.

Import or Export?

NOTE: For our purpose, import and export will be defined as a transaction between two countries (as opposed to two places). The destination of the end product may in some cases determine the inspections required.

Import is the act of bringing into a country a commodity from another country or place for sale or exchange.

Export is the act of sending a commodity to another country or place for sale or exchange.

The Federal Meat Inspection Act (FMIA) requires that countries exporting meat products to the United States impose inspection requirements that are equivalent to U.S. requirements. Under this statute, imported meat products are to be treated as "domestic" product upon entry into the

United States. All meat products imported into the United States must bear the country of origin on the labeling of the original container in which they are shipped.

If an imported meat product is intended to be sold intact, then it must remain in its original packaging (with the country of origin and foreign establishment number on the label) to the point of consumer purchase. For example, canned ham imported from Denmark and sold intact would bear the label "Product of Denmark".

If imported meat is removed from its original container and packaging and is cut or processed in any way in the United States, the resultant product does not need to bear country-of-origin labeling. For example, ham salad made from imported Danish ham does not need to bear a label identifying the country of origin of the ham. The labeling requirements for the resultant product are the same as for domestic product.

In March 2009, the Country of Origin Labeling law went into effect. The law requires that muscle cuts of beef (including veal), lamb (including mutton), pork, goat, and chicken; ground beef, ground lamb, ground pork, ground goat, and ground chicken; farm-raised fish and shellfish; wild fish and shellfish; and other listed products be labeled as to its origin. (*More on COOL is provided in a later section on labeling.*)

Additional requirements or prohibitions may be made on the importation of various products into the United States or export of meat products from the United States to other countries. For example, meat from cattle being imported from Canada into the United States must be tested for BSE.

Imported products are addressed in Part 327: <http://ecfr.gpoaccess.gov/cgi/t/text{text=idx?c=ecfr&sid=2e759d58d538a2fb50a8b7dd0dfe5805&rgn=div5&view=text&node=9:2.0.2.1.25&idno=9}>

Exports are addressed in Part 322: <http://ecfr.gpoaccess.gov/cgi/t/text{text=idx?c=ecfr&sid=2e759d58d538a2fb50a8b7dd0dfe5805&rgn=div5&view=text&node=9:2.0.2.1.23&idno=9}>

For the specifics of import and export, farmers are encouraged to consult with the New York State Department of Agriculture and Markets and the USDA.

Religious Exemptions, Certifications, and Cultural Practices

Some cultures have very strict meat handling requirements. Muslim consumers require their meats to be "Halal" or "lawful" to their religious scriptures. For many Muslims, this means it should be slaughtered using "**zabiha**" methods. Halal requires that the animal must be humanely killed by an adult Muslim. However, some Muslims will accept Kosher killed meats (especially if Halal is unavailable) and some will accept meat killed by a Christian butcher.

During a zabiha kill, the animal faces Mecca and the Takbir (a blessing invoking the name of Allah, the Muslim word for "God") is pronounced while the animal is killed without stunning - by holding it's head back and using a quick, single continuous cut across the throat just below the jawbone to sever the windpipe, esophagus, arteries and veins forward of the neck bone.

Ideally, the knife blade should be extremely sharp and twice as long as the width of the animal's neck. A hand guard is permitted for safety.

Muslims view any livestock that has consumed any pork products (including lard or blood meal) to be unclean. Other feeds that might be categorized as “filth” may also lead to rejection of the animal. A 40-day period prior to slaughter of “clean” feed will generally suffice.

Customers who are Orthodox Jews require that livestock be Kosher killed. The animal is killed without stunning by a specially trained religious Orthodox Jew using a properly sharpened special knife with no hand guard, who subsequently inspects the carcass and organs for defects.

If the meat is to be certified as “**Glatt Kosher**”, a stricter Kosher standard, the carcass from a small animal such as a sheep must have no lung adhesions. Animals that are exposed to conditions predisposing them to pneumonia (i.e. poor ventilation, overcrowding, etc.) are most likely to have lung adhesions.

The sciatic nerve and various veins, fats and blood are prohibited from Kosher consumption and must be removed. In most cases, rather than going through the difficult procedure of removing the sciatic nerve in the hindquarter, only the forequarter is marketed as Kosher and the hindquarter is sold through other marketing channels.

Federally inspected slaughterhouses need to apply for a “religious exemption” from stunning to conduct Halal and Kosher slaughter. Unlike the “poultry exemptions” or the “custom exemption”, **this is not an exemption from federal inspection of the carcass; rather it exempts the plant from having to stun the animal prior to death.**

The animal should either be killed on the ground (allowable only for custom or on-farm slaughter), straddled, or walked onto a double rail for a religious kill - because it is considered inhumane to hoist and shackled the animal by its hind legs while still alive. Research has shown that ruminant animals remain very calm when their body’s weight is supported by a “double rail”. However, the handling and preparation for the ritual falls within the ritual exemption. Therefore, if hanging the animal live is part of the ritual then it is allowed because the handling and preparation falls within the ritual exemption.

Although there are national certification programs for Kosher and Halal processed foods, there is no national mandatory labeling and certification for Halal or Kosher meats. For the most part, it is a farmer’s responsibility to insure that their meat meets their customers’ definitions of Halal or Kosher. New York does have laws pertaining to Halal and Kosher certification records.

Information about the availability of double rail slaughter systems for large commercial operations is available on the web at <http://www.grandin.com/restrain/intro.rest.html>

New York’s Kosher Law Protection Act of 2004

This law requires that consumers of food represented as Kosher in New York be provided with information identifying the person or organization who is certifying that food as Kosher. All producers, processors, packers, distributors and retailers distributing or offering for sale food certified as Kosher are required to be registered.

Anyone marketing or distributing Kosher food, operating a food establishment, or preparing Kosher food will need to fill out a Kosher Certification Form, which is filed with NYSDAM. These certifiers must have on file with NYSDAM the name, address and phone number of the person or organization providing them with Kosher certification. Persons certifying non-prepackaged foods as Kosher must put a statement of their qualifications for certifying food as

Kosher on file with NYSDAM. The statement should include background, training, education, experience, and any other information that shows the Kosher certifier's qualifications. These certifications must be displayed at the establishment where the Kosher business is being conducted.

The responsibility for registering the person or organization who certifies a food as Kosher and for filing information about products offered for sale as Kosher depends on whether or not the food is in packaged form. A food is in packaged form when it is not intended to be consumed at the point of manufacture and is packaged in advance of sale in units suitable for retail sale. If the food is in packaged form, the producer or distributor must register the name, address, and phone number of the person who certified the food as Kosher with NYSDAM. If the food is not in packaged form, the person who manufactures, processes, packs or sells it must register the name, address and phone number of the Kosher certifier with NYSDAM. Filings must be done 30 days in advance of offering or distributing food as Kosher in New York.

*Information on New York's Kosher Law Protection Act of 2004 is available on line at:
<http://www.agmkt.state.ny.us/KO/KOHome.html>*

To file a form electronically, visit www.agmkt.state.ny.us/kosher and electronically file or update the information required by the Act. Forms can also be obtained by mail by calling 718-722-2852 and making that request.

New York's Halal Foods Protection Act of 2005

This act requires certain businesses and individuals to register or file with NYSDAM information as to the person or organization that is certifying their products as Halal. Manufacturers, producers, packers and distributors, of all food, including meat, which is certified as Halal must register their company with NYSDAM and file the name, address, and phone number of the person, (e.g. individual, corporation, partnership, association or organization), who certifies the food as Halal. Certifying individuals, partnerships, associations or organizations need to complete a separate General Information and Statement of Qualification forms. Firms that utilize their own employees or personnel to certify product need to have those employees complete General Information and Statement of Qualification forms. Any advertisement for food or food products representing the products as Halal shall identify the name of the person or entity certifying the product as Halal.

Food establishments, food retailers, restaurants, caterers, and food carts who sell food prepared on their premises or under their control, which is represented as Halal, must post, at their business in a location readily visible by consumers and file with NYSDAM, a Halal Certification Form. Retail stores that sell both Halal and Non-Halal foods require a window sign, with block letters at least four inches in height, that states "HALAL AND NON-HALAL MEAT SOLD HERE" or "HALAL AND NON-HALAL FOOD SOLD HERE."

Wholesale and retail firms that purchase Halal meat and poultry or food products that include meat and poultry shall retain the invoices or bill of sales for those products for a period of two years. Meat and poultry or food products that include meat and poultry are exempt from this record keeping if the manufacturer's or packer's name, address and certifying person are listed on the package containers.

More information, including certification forms, can be located at the NYSDAM website at: <http://www.agmkt.state.ny.us/Halalsite/halals.html> The registry is listed under the Division of Food Safety and Inspection. Persons with questions on how to complete the forms, those who wish to submit the required information in print form, and individuals who need paper forms sent to them should call the NYSDAM Division of Food Safety & Inspection Albany office at 518-457-8835.

Cultural Practices

Certain African, Caribbean, and Oriental cultures prefer carcasses to be scalded or singed as part of the processing procedure. A federally inspected slaughterhouse that plans to conduct scalding or singeing needs to include these procedures in the mandatory hazard analysis portion of their HACCP (Hazard Analysis Critical Control Point) plan.

Federal, State, or Custom: What is the Difference?

Not all meat-processing facilities are the same. It is important to know the different types of slaughter and processing plants operating in the United States and more importantly for farmers, the markets they are allowed to process for. The following section describes these various facilities. Not all of these slaughtering and processing plants are available in New York.

A red meat plant can simultaneously do work that is custom-exempt, retail-exempt and state or federally inspected; a poultry plant cannot. Depending on the state, a plant may or may not be both state and federally inspected. There are several federal poultry processing exemptions, all of which are complex and only exempt facilities processing less than 20,000 birds per calendar year.

USDA Inspected Meat Processing Facilities

The USDA issues a “grant of inspection” to approved facilities; USDA facilities for this reason are not “licensed” but “inspected”. USDA inspected meat processing facilities that have been issued a “grant of inspection” may butcher and/or process amenable livestock or poultry under the Federal Meat Inspection Act. A USDA plant must conform to the “Code of Federal Regulations for Animals and Animal Products”.

This code is available in the Title 9 portion (revised Jan '01) of the code on the NARA (National Archives & Records Administration) website. The current address is <http://www.access.gpo.gov/cgi-bin/cfrassemble.cgi?title=200309>.

Federal meat inspection requires that a USDA Food Safety and Inspection Service (FSIS) inspector inspect the carcasses at a USDA inspected slaughterhouse. The inspector must verify that the establishment address all federal regulations outlined in the code. He must verify not only that the carcass is wholesome but also that the facilities, equipment and procedures conform to the owner’s approved SSOP or SPS plan. The inspector also monitors employees to see if they are following the plant’s HACCP (Hazard Analysis Critical Control Point) plan. Currently, the salary of this inspector is paid for by federal tax dollars.

There are strict federal mandates regarding the 1) health of the animals permitted to enter the plant; 2) care of the animals at the plant; 3) parts of the animal that can be used for human consumption; and 4) disposal of animal parts not used for human consumption.

Inspected meat from these USDA inspected plants can be sold anywhere in the United States and exported to sell or trade in international markets.

In general, the physical requirements for a USDA inspected slaughterhouse are that –

- 1) Facilities and equipment must be validated by owner's SSOP or SPS plan to be hygienic.
- 2) In general, a wholesome plant is required to have
 - a. easily cleanable equipment
 - b. washable, nonporous walls and ceilings
 - c. lack of condensation
 - d. appropriate rail heights
 - e. sufficient drains
 - f. sufficient lighting (50 ft candle lights in the processing area)
 - g. floor plan that keeps livestock and livestock contaminated material well separated from inspected meat
 - h. well running and appropriate coolers, rails, drains and hooks
 - i. sufficient septic or municipal sewage facilities
 - j. pest control
 - k. potable water
- 3) It must have employee welfare facilities (lunch locker, bathroom)
- 4) It must have inspection facilities (private room with filing cabinet and chair; bathroom facilities can be shared with employees).
- 5) Livestock must be stunned prior to slaughter unless the plant has a religious exemption.

There are some conditions where meat is exempted from having to conform to all or part of this code. These "exemptions" are listed later in the resource guide.

Some states hold their USDA inspected facilities to stricter regulations than what is outlined in the federal code. According to the New York State Department of Agriculture and Markets Food Safety and Inspection Division, New York generally follows the letter of the federal code.

State or Local Inspected "Custom Exempt" Slaughterhouses

A custom exempt slaughterhouse may offer slaughtering services without federal inspection and oversight. The federal code provides for this exemption and allows the owner of an animal to forgo having the animal slaughtered under federal or state inspection if the meat and byproducts from that animal are consumed by the owner and his or her household - as opposed to being sold. Carcasses at these slaughterhouses are exempt from federal inspection because these plants are limited only to custom slaughter and processing. Carcasses and meat leaving custom slaughterhouses are not inspected and must be stamped "Not for Sale".

Custom exempt slaughter is a service provided only to an animal's owner. In New York, a person does not have to be present to take ownership of an animal. For example, if a farmer or live animal market sells live animals for the freezer trade, a household consumer can take ownership of the animal over the phone and have the animal delivered to a custom slaughterhouse for butchering and processing according to their directions. The farmer or live animal market needs to know the new owner's name and address and the animal must be clearly

identified throughout the slaughter/processing operations so that the products the owner receives are from the animal that was selected by or for them.

Custom exempt slaughterhouses are not to be confused with state licensed plants that undergo state inspection of carcasses for intrastate sales. They also should not be confused with whitetail butcher shops, which only process hunter harvested wild deer, and come under the jurisdiction in New York, by the Department of Environmental Conservation. Some custom slaughterhouses have not applied to have an approved kill floor and are also set up primarily to process white tail deer for hunters who harvest those animals within the state. (Hunter harvested deer carcasses cannot cross state lines without first being butchered to the imported state's specification. In many cases, this means complete de-boning.)

Carcasses are not inspected under custom slaughter. However, custom exempt facilities are inspected periodically. The USDA Food Safety and Inspection Service has jurisdiction over all amenable red meat processing in the United States. The USDA may however opt to subcontract out inspection of custom facilities. In 2010 inspection of custom facilities was once again undertaken by the USDA FSIS directly, but prior to that they had been contracting the work out to the New York State Department of Agriculture and Markets (NYSDAM). This has added more administration and paperwork for processors, and created some confusion and concern as to the level of the inspection undertaken.

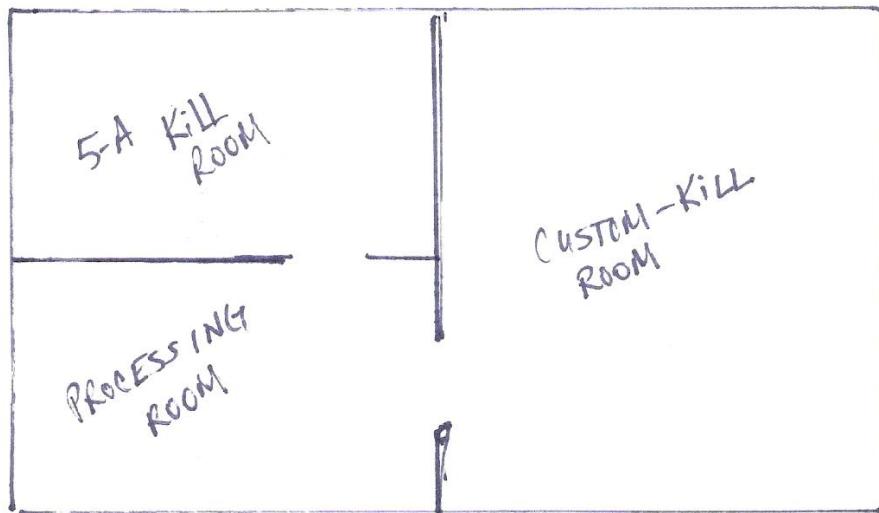
The Division of Food Safety and Inspection is responsible for locating inspectors to inspect slaughtering and processing facilities. Inspectors may be temporarily assigned or rotated throughout a region.

Some basic requirements of a custom slaughterhouse are 1) washable walls and floors (for example, painted concrete), 2) kill floor located in a separate area from processing, 3) drains equipped with a back-flush system, and 4) hot water capability of 170° F (for melting poultry fat).

Federal guidelines can and do change; thus one of the first steps in opening a custom slaughterhouse in NY is to contact NYSDAM Division of Food Safety Inspection. Local health departments are also involved because they must approve the slaughterhouse septic system prior to opening and will be responsible for testing any well water to validate it as potable twice yearly.

DUAL LICENSES for Custom Exempt and 5-A Slaughtering

At one time, an establishment may have held dual licenses for custom exempt operations and a NYSDMA 5-A activities within a singular, shared establishment; but in recent years this dual licensing is no longer being permitted without full separation. According to NYSDAM this doesn't have to require separate facilities, but may simply involve separation of the two activities, by room layout as the floor plan demonstrates. In this case both the 5-A facility and the custom exempt facility can share the processing room. The processing room may also be eligible for licensing as a 20-C establishment.



Hanging carcasses and frozen product of inspected and non-inspected product must be separated. This can be accomplished by designated areas within the cooler and freezer for each type of product.

5-A Non-Amenable Slaughtering and Processing Facilities

These are specialized state licensed facilities that conduct butchering and/or processing operations that are exempt from federal inspection but require NY licenses in order to operate. One type of 5-A classification is for plants that process non-amenable farm raised game species (bison, farmed deer, rabbits, etc). Non-amenable livestock and poultry species can be slaughtered at a 5-A licensed plant without federal inspection.

Products manufactured from this facility may be offered for sale by the farmer who raised them. The slaughterhouse may also buy the meat from the farmer and market it themselves in a meat shop affiliated with the slaughterhouse or sell the meat to a wholesaler or retail outlet.

The meat can be sold within state or across state lines but must be sold directly to an end consumer or a restaurant, hotel, boarding house, caterer or similar retail business. Both states must agree to the transaction. Some states, in an effort to protect their wild game populations and protect their own game meat industries, have opted not to allow product into their state from outside of it. For example, Vermont does not permit farm-raised deer carcasses from NY to come into the state.

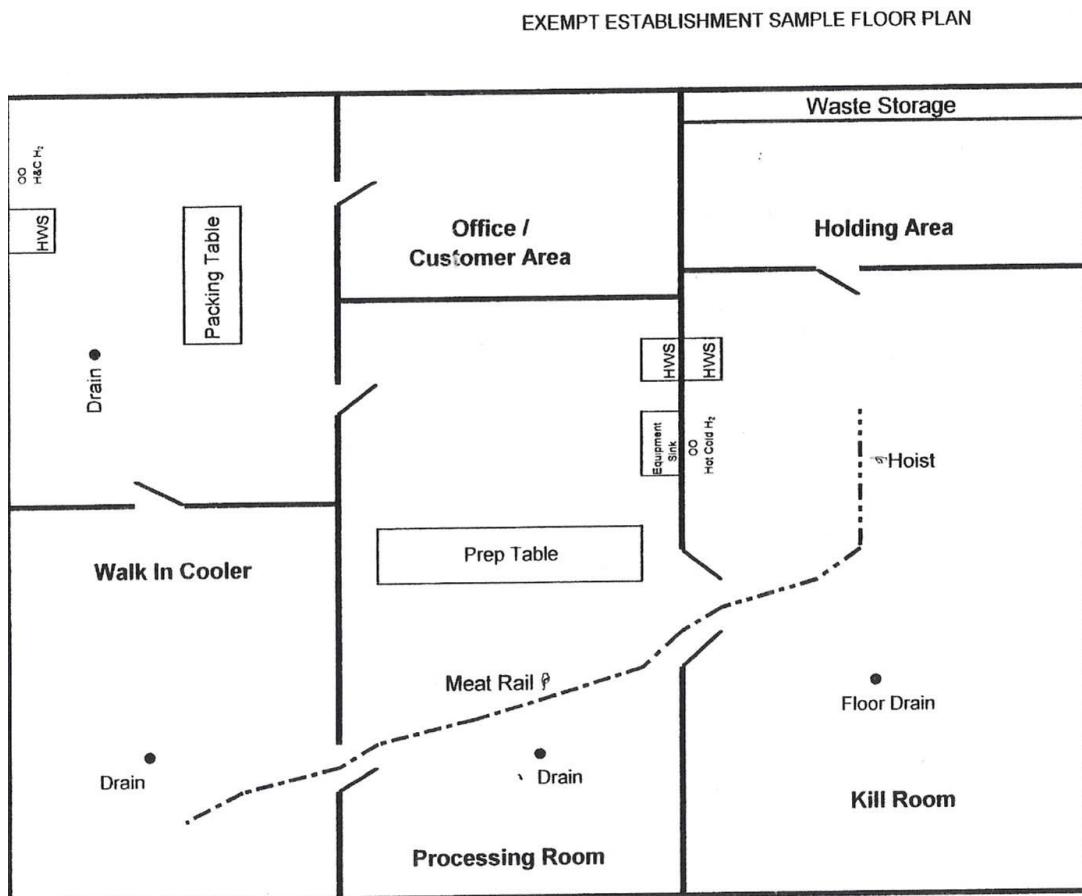
If the meat is processed by mixing it with meat or fat from a conventional (amenable) livestock species or if the meat is cured using nitrate then further restrictions may apply.

The carcasses are not inspected, though the owner/operator of the 5-A facility has the right to reject a carcass or product. All non-amenable species must also have certified health papers from the farmer's veterinarian stating that the animals are in good health and are eligible to enter the food chain.

The 5-A facilities are inspected by state employees and are held to a higher standard than conventional custom plants. For example hot water must be 180°F. A blue print or schematic of

the plant must be submitted and approved prior to licensing. HACCP plans documenting the handling of products for resale may be required.

An example of a 5-A non-amenable slaughtering and processing facility floor plan as provided by NYSDAM.



5-A Poultry Slaughtering and Processing Facilities

Another 5-A classification is granted for plants that slaughter and/or process amenable poultry under circumstances that allow them to be exempt from federal inspection. There are several allowable exemptions important to poultry growers wanting to market their own birds themselves within state to household consumers, retail stores, restaurants, and distributors. These exemptions are also important to live poultry markets and to custom processors.

The many poultry exemptions vary with regard to how many birds can be processed, who the birds can be processed for, the type of processing that can be done, and what market channels the resulting poultry products can be sold through. **Generally, a plant is permitted to operate under only one poultry exemption.** Therefore, poultry growers should study the exemptions carefully to choose the exemption that best meets their needs.

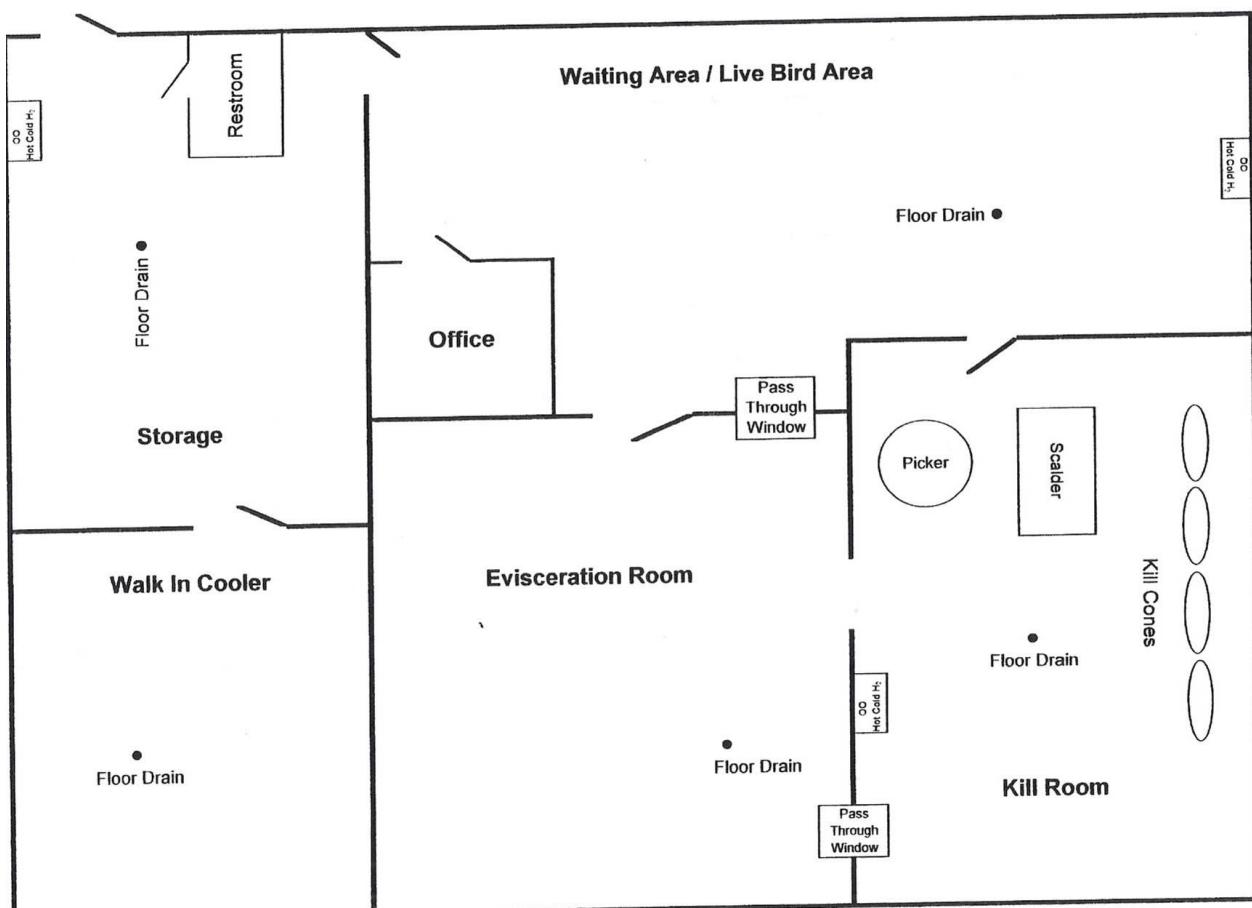
5-A Facility Design and Location

Separate Killing and Evisceration rooms are required in NYSDAM licensed 5-A facilities. If further cutting, a separate processing and packaging room is required. A 2 or 3 bay equipment was sink should be located in the eviscerating room. Hand-wash sinks are required in the killing room and eviscerating room. A hand-wash sink is also required in the separate processing room. Separating walls are required, time and distance are not enough. There are no provisions under Article 5-A allowing time as separation; Physical separation is required.

If poultry crates or cages are stored at a facility, a separate area for cleaning and storage must be provided. This can be a separate shed

The 1500' limitation **separating a processing plant from a dwelling** only applies to facilities in cities with one-million or more residents. Therefore, the limitations are unlikely to affect most of the 50 or so 5-A facilities located in upstate NY.

POULTRY MARKET SAMPLE FLOOR PLAN



20-C Meat Processing Facilities

These facilities are New York state licensed commercial kitchens. They cannot slaughter livestock or poultry. Instead, they are permitted to further process 1) red meat that was butchered, inspected, and passed at a USDA slaughterhouse or 2) poultry under a legally accepted federal exemption or non-amenable meats properly slaughtered at a 5-A facility.

Processing operations are limited to those activities that are usually conducted at retail stores, restaurants, and caterers. This would include dividing carcasses or wholesale cuts into retail cuts, cutting, slicing, trimming, grinding, freezing, breaking up bulk shipments, and wrapping or rewrapping.

The holder of the establishment's 20-C license can then sell these products to consumers including instate restaurants, hotels and institutions as long as 1) the sale amount does not exceed a "normal retail quantity" and 2) sales to consumers other than household consumers do not exceed a) 25% of the total value of total sales of product, and b) the dollar limitation per calendar year set by the FSIS Administrator every year and published in the Federal Register. Essentially 20-C establishments are permitted to retail product but are not allowed to wholesale product.

A 20-C commercial kitchen is also permitted to further process meat and poultry by curing, cooking, and smoking. They may also render and refine fat. However, the holder of the 20-C license is then limited to selling the value added products directly to household consumers rather than to restaurants, hotels and other institutions.

Direct sales to household consumers can take place from the retail establishment adjoining the commercial kitchen or at the license holder's farm (for example, from an on-farm farm stand). Direct sales to consumers can also take place from the farm's produce or food stall at a public farmers' market.

A commercial kitchen can also further process custom exempt meats and poultry products for the products' owners. However, the processed products cannot be sold and must be consumed solely by the product's household and nonpaying guests and employees. The custom prepared products must be kept separate from all "For Sale" product at all times and must be clearly marked "Not for Sale" immediately after being prepared and packaged.

At the discretion of the NYSDAM Division of Food Safety & Inspection, multiple 20-C licenses can be held for a single commercial kitchen facility. The facility and its staff can be employed or rented out by one or more other businesses. However, each business must have a separately scheduled time for facility use. The granting of multiple licenses is on a case-by-case basis.

The Food Venture maintains a list of commercial kitchens in New York at:

www.nysaes.cornell.edu/necfe/copackerkitchen/nu.html

An on-line Article 20-C application can be accessed at the New York State Department of Agriculture and Markets at: <http://www.agmkt.state.ny.us/FS/general/license.html>

Meat Lockers

Meat lockers are an option for farmers who need to age product or store a quantity of product. If farmers are considering their own cutting or sausage making, and can find a USDA kill floor and a 20-C kitchen, then locker space for fresh-chilled or frozen product becomes a concern. Each business using the meat locker needs separate space with their own lock, perhaps separated by wire mesh. Alternatively, the locker needs to employ a manager who is responsible for managing product movement. The locker is required to obtain an Article 19 warehouse license, or locker license.

Other Types of Slaughter Houses Not Available in New York

Retail-Exempt

A retail exemption allows a meat processor to sell meat at its own retail storefront without developing a HACCP plan. However, the processor is still subject to periodic inspection by USDA FSIS and/or state authorities. The meat used to manufacture retail products (fresh cuts or processed meats) must come from livestock inspected by USDA FSIS or the state inspection agency in the same state as the processor. A retail-exempt processor can also sell a limited amount of product on a wholesale basis to hotel, restaurant, or institutional customers, as long as the product has NOT been cooked, cured, smoked, rendered, refined, or otherwise processed. Retail-exempt wholesaling is limited to 25% of the dollar value of the processor's total sales or as of May 2008, \$56,900 for red meat and meat products and \$44,700 for poultry products per calendar year, whichever is less.

Talmadge-Aiken Meat Plants

These are federally inspected slaughterhouses where state employees following federal mandates do the inspections. States on the east coast that contain Talmadge-Aiken meat plants are Delaware (10), Maryland (21), Florida, Georgia, North Carolina, and Virginia. Inspected meat from these plants can be sold across state lines. New York has no Talmadge-Aiken plants.

State Licensed USDA Equivalent Slaughterhouses

These plants have been granted state licenses for state inspection of carcasses. These plants are very similar to USDA plants. However, inspectors working at these facilities are paid for by state tax dollars. They inspect carcasses and facilities for compliance with state rather than federal regulations. They are held to standards equal but not necessarily identical to federally inspected plants. Inspected meat from these plants can be sold within state for intrastate commerce but not out-of-state (interstate commerce). However, select state licensed USDA equivalent plants will be permitted to sell their products across state lines starting in 2010. Vermont, West Virginia, Ohio, and now even Maine operate state licensed USDA equivalent plants. New York no longer operates any such plants. Although there is appreciable interest on the part of NY farmers in resuming state inspection, a serious barrier to this option is the cost of hiring more inspectors.

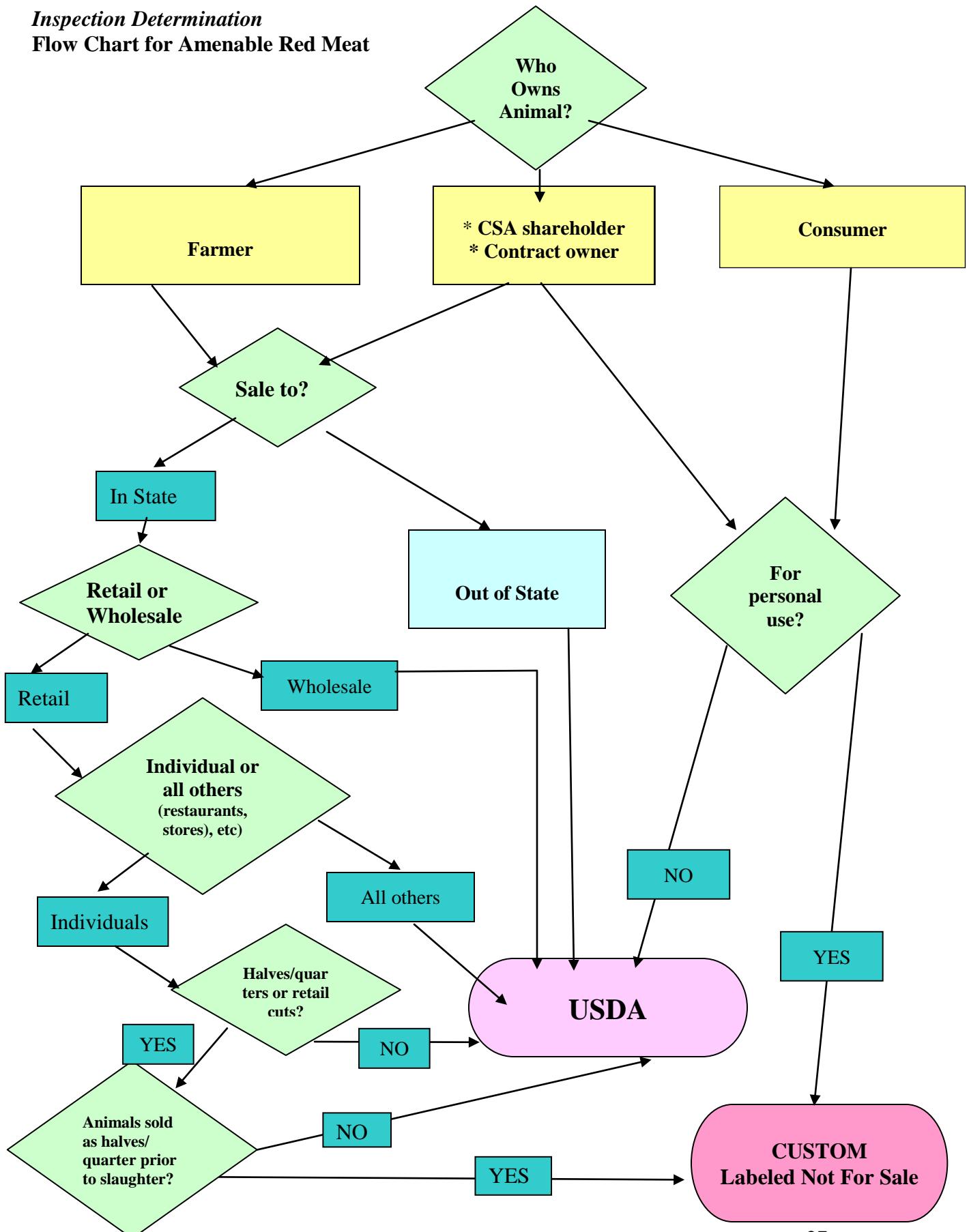
**Listing of Participating States (last updated by
USDA on August 13, 2007)**

State	Meat and/or Poultry Programs
Alabama	Meat & Poultry
Arizona	Meat & Poultry
Delaware	Meat & Poultry
Georgia	Meat Only
Illinois	Meat & Poultry
Indiana	Meat & Poultry
Iowa	Meat & Poultry
Kansas	Meat & Poultry
Louisiana	Meat & Poultry
Maine	Meat & Poultry
Minnesota	Meat & Poultry
Mississippi	Meat & Poultry
Missouri	Meat & Poultry
Montana	Meat & Poultry
North Carolina	Meat & Poultry
North Dakota	Meat & Poultry
Ohio	Meat & Poultry
Oklahoma	Meat & Poultry
South Carolina	Meat & Poultry
South Dakota	Meat Only
Texas	Meat & Poultry
Utah	Meat & Poultry
Vermont	Meat & Poultry
Virginia	Meat & Poultry
West Virginia	Meat & Poultry
Wisconsin	Meat & Poultry
Wyoming	Meat & Poultry

This listing is available on line at:

http://www.fsis.usda.gov/regulations_&_policies/listing_of_participating_states/index.asp

Inspection Determination
Flow Chart for Amenable Red Meat



Who are the Responsible Parties of the Tiered System?

Food and Drug Administration (FDA)

Under the Federal Food, Drug and Cosmetic Act, (FFDCA) the Food and Drug Administration (FDA) protects consumers against impure, unsafe, and fraudulently labeled food. The FDA has inspection authority over any food in interstate commerce except for products regulated by the USDA Food Safety and Inspection Service (FSIS).

Products that are regulated by the USDA FSIS include meat, poultry, and egg products. Initially, both FSIS and FDA were part of the US Department of Agriculture. However, in 1940 the FDA was transferred out of the USDA. It is now part of the Department of Health and Human Services.

The mission of both the FDA and the FSIS is to ensure national food safety. The FDA requires that all food come from an “approved source and process”. The most common approved sources include licensed food establishments, federally inspected meat plants, and state-inspected meat plants.

The two agencies share statutory authority in a few instances. They both share authority in regard to egg safety because FSIS is in charge of inspecting plants processing liquid, frozen, and dried egg products, while FDA monitors fresh eggs. They both share authority for food additives used in meat, poultry, and egg products. All new additives are initially evaluated for safety by the FDA. However, the FSIS has the authority to enact different regulations than the FDA with regard to the food additives allowed in the products under their jurisdiction. For example, although the FDA considers ascorbic acid to be an approved food additive, the FSIS denied permission to use it as an additive in meat salads because of fears that such usage would mask meat spoilage by organisms causing food borne illnesses.

In addition, the **1958 Food Additives Amendment** to the FFDCA permitted FSIS to continue to permit use of nitrites and nitrates in amenable meat products even though the FDA does not permit their use in other food products. The FDA does not allow the use of nitrite or nitrates in food products, therefore all meat food products must be manufactured under USDA FSIS inspection. In March of 2006, FSIS issued notice 15-06 clarifying the use of nitrates in non-amenable meat products. (*More on this in a later section.*)

Meat products for use in pet foods fall under the jurisdiction of the FDA, which is also responsible for ensuring the safety of medicines, cosmetics, animal feed, and drugs for pets and farm animals.

The FDA also ensures that products are labeled truthfully with the information that people need to use them properly.

The regulations require FDA inspection of the facilities and processes involved in slaughtering of non-amenable species (if not already inspected by another party) and the processing of food, including amenable and non-amenable meat and poultry products. According to the FDA the source and process, not the animal itself, must be inspected and approved. FDA inspections are usually done once a year. If a facility is involved only in processing, then the FDA requires that all ingredients come from an “approved source and process”. Approved sources of meat and poultry are those that come from a licensed food establishment, a federally inspected meat plant, or a state-inspected meat plant.

If a company is found violating any of the laws that FDA enforces, then the FDA can encourage the firm to correct voluntarily the problem or to recall the product from the market. A recall is generally the fastest and most effective way to protect the public from an unsafe product. When a company can't or won't correct a public health problem voluntarily, FDA can enact legal sanctions.

USDA Food Safety and Inspection Service (FSIS)

USDA's Food Safety and Inspection Service (FSIS) is responsible for ensuring that meat, poultry, and egg products are safe, wholesome, and properly labeled and packaged. The Department is also responsible for assuring that state meat and poultry inspection programs for commerce within that State are at least equal to Federal standards. In addition, products imported from other countries must be produced by a system that is equivalent to that employed by the United States. USDA statutory authority lies with the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Egg Products Inspection Act.

The Federal Meat Inspection Act defines specifically the kinds of animals that must be slaughtered and processed under FSIS inspection. Animals mentioned under the act are amenable; animals not mentioned are "non-amenable" (not covered or unanswerable) under the Act and these animals are exempt from FSIS requirements for meat inspection for intra-state, interstate and foreign trade. However, states can put in place further regulations for meat products from non-amenable animals.

The Agricultural Marketing Act of 1946 (**Voluntary Reimbursable Inspection**) allows FSIS to inspect exotic animals under a voluntary inspection program. The producer must pay for the voluntary FSIS inspection. FSIS regulations governing the slaughter and processing of exotic animals do not require HACCP or risk assessment. At present FSIS is considering the addition of farm-raised bison, elk, deer, and other species to the list of animals requiring USDA inspection.

A provision of the Federal Meat and Inspection Act permits states to have a cooperative agreement with USDA FSIS, where by states may have mandatory inspection programs equal to that of the federal standards. The federal law limits state inspected "amenable" animals to intrastate commerce. **New York does not have a USDA FSIS equivalent program for New York's state licensed plants.** Therefore, despite the fact that all New York slaughterhouses are New York State inspected, there are no New York Slaughterhouses that are USDA equivalents.

The USDA/FSIS is responsible for inspection of meat, poultry and processed meats and poultry products in interstate and foreign commerce. FSIS inspectors examine each animal before (ante-mortem) and after slaughter (post-mortem) for visible defects that can affect safety and quality of meat and poultry products. FSIS regulations require ante-mortem and post-mortem inspections of each animal and daily inspection of processing facilities by FSIS inspectors.

Other Federal Agencies

There are a number of other agencies that are directly or indirectly tied to direct marketing of meat and poultry.

The Environmental Protection Agency (EPA) licenses all pesticide products distributed in the United States and sets standards on the amount of pesticides that may remain on food. The 1996 Food Quality Protection Act requires the EPA to consider the public's overall exposure to

pesticides (through food, water, and in home environments) when setting the standard for pesticide use on food. EPA is also responsible for protecting against other environmental, chemical, and microbial contaminants in air and water that might threaten the safety of the food supply.

The National Marine Fisheries Services (NMFS) conducts a voluntary seafood inspection and grading program that checks mainly for quality. Seafood is the only major food source that is both "caught in the wild" and raised domestically. Quality and safety standards vary widely from country to country and inspection of processing is a challenge because much of it takes place at sea. Mandatory regulation of seafood processing is under FDA and applies to exporters, all foreign processors that export to the United States and importers.

Other Agencies that oversee the USDA's marketing and regulatory programs include: The Agricultural Marketing Service, Grain Inspection, Packers and Stockyards Administration, and Animal and Plant Health Inspection Service of the USDA.

Food safety issues are generally supported by the **Center for Disease Control** (CDC) and Prevention under the Department of Health and Human Services. The CDC engages in surveillance and investigation of illnesses associated with food consumption in support of the USDA and FDA regulatory missions.

The Federal Trade Commission, through regulations of food advertising, plays an indirect role in food safety regulations. The Department's Customs Service assists other agencies in ensuring the safety and quality of imported foods through such services as collecting samples.

Other State and County Agencies

The **New York State Department of Agriculture and Markets** is directly involved in many aspects of meat production in the state. Their **Division of Animal Industry** provides licenses for livestock dealers and domestic animal health permits for middlemen handling pass thru livestock. The veterinarians in this division monitor animal welfare and record keeping at live poultry markets, livestock sale barns, etc. They also make sure that slaughter animals are properly identified for trace back purposes. The **Division of Food Safety Inspection** licenses and inspects all state licensed meat plants and food establishments. This division is subcontracted by the USDA FSIS to supervise custom exempt meat plants.

The **New York State Department of Transportations** (DOT) requires that some livestock vehicles be assigned and display a DOT number depending on weight and use.

The **New York State Department of Weights and Measures** will need to certify the scales used in the business. Scales are sealed and a sticker is adhered showing their expiration date. A small fee is charged for the inspection.

The **County Health Department** will want to know if a farm is selling meat and meat products in any form. They are also responsible for helping to certify that a meat plant's water source is potable. Each county has different regulations so a farmer must be very specific about his or her intentions when they contact the Health Department to make sure they are in compliance.

Handling Slaughter Animals

The 1978 Humane Slaughter Act made humane slaughter and handling of livestock in connection with slaughter of all food animals slaughtered in USDA and custom slaughter facilities mandatory. This law covers cattle, calves, horses, mules, sheep, goats, swine, and other livestock. FSIS has authority on an establishment's official premise. Once a vehicle enters the premises it is considered a part thereof and is subject to the FSIS regulations that ensure humane handling. Truck unloading must therefore be done in a manner that allows animals to be unloaded without injury. The authority of humane handling regulations begins from the time the livestock are in queue for slaughter until the animal becomes a carcass.

Humane Handling

The following suggestions are intended to help farmers move their animals in a low stress manner. Animals that are over stressed will tend to have more health problems, less desirable meat characteristics (including greater shrinkage), and are more dangerous when handled. Conditions for the handler and the animal are much better when using low stress practices. It is important to respect livestock – and not to fear them.

Animals sense their surroundings differently than humans. Their vision is in black and white, not in color. As a result, animals move more readily from dark areas into lighter ones, but will avoid layouts that make them look directly into the sun. Lighting should be even and diffused. Bright spots and shadows tend to make animals more skittish, especially near crowding or loading areas. Handlers should wear clothing that will not cause them to stand out, which may cause the animal to balk or turn away.

Loud noise should be kept to a minimum and quick movements avoided. Most animals will respond to routine; especially when handlers remain calm and deliberate. Handlers are reminded to be patient; and should never prod an animal when it has nowhere to go. Slow and deliberate movement around livestock is more effective, as is gentle touching -rather than shoving or bumping them.

Animals have a flight zone (diagram 1). When a person enters this zone, the animal will begin to move away from the person or thing that is approaching. Animals also have a point of balance from which their movement can be directed forward or backward. This point is located at the shoulder of the animal. If a person moves toward an animal from the front, the animal will move to the rear. On the other hand, if the animal is approached from the rear or side it will move forward and in a circular motion around the approaching being. When moving animals try to move them in small groups, rather than individually. Many animals cannot see directly behind themselves, so caution should be used when approaching from the rear (diagram 2).

Farmers should avoid using electric prods because they usually agitate the animals more than they help in moving them along. By law, prods cannot carry a charge higher than 50 volts. In place of electric prods, handlers can use sticks with cloth on them. Large plastic paddles can also be purchased for this use. Sticks and paddles should be used as extension of the arm to direct the animal.

Dangling chains, bags, pipes etc in the path of animals discourage their forward movement and will cause the animal to balk or turn back, away from the direction of travel. Reflections from metal or puddles of water can also distract animals and cause them to stop, as can out of place objects or movements.

Handlers should always have an escape route when working with an animal in close quarters. Alleys and chutes should be wide enough to allow animals to pass, but not wide enough to allow them to turn around. Solid wall chutes, instead of fencing, will lower the number of animals that balk in the chute. Animals move better if directed through a circular solid walled chute. Appropriate handling equipment can speed up livestock confinement work operations, reduce time and labor requirements, cut costs, and decrease the risk of injury.

Dr. Temple Grandin provides excellent resources on humane handling and transportation of slaughter animals on her website at <http://www.grandin.com/>

For more information on humane handling, refer to the FSIS Humane Handling of Livestock. On line at: http://www.fsis.usda.gov/PDF/Humane_Handling_of_Livestock.pdf

Humane Transport

When transporting animals, cold and wet conditions should be avoided whenever possible. These conditions are stressful on the animal and can cause illness. Wet animals are much more susceptible to wind chill than dry animals. Young animals or animals with poor body reserves are also more susceptible. During hot weather, haulers should try to time travel for night or early morning. Swine need to be able to lie down if the trip is longer than a few hours or temperatures are warm. In contrast, cattle should not be encouraged to lie down. Sheep and goats benefit from being able to lie down on very long trips. Sick or weak animals should be excluded.

When transporting the animal in the trailer, the driver should not only use slow starts when accelerating, but should also avoid sudden stops when braking. Extra time - compared to what it would normally take to travel the route - should be allowed to compensate for the slower movement of a trailer. Drivers should remember that it takes more distance to stop a trailer loaded with livestock, than it does to stop an empty trailer.

Try to provide non-slip flooring in trailers and on loading ramps. Trailer floors need to be designed to stop the flow of urine and manure onto the roadways.

The USDA AMS has an excellent guide for trucking swine and cattle that can be found here: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELDEV3008268>

Movement of Non-Ambulatory Animals to Slaughter

In March of 2009, the USDA FSIS published a final rule to amend the federal meat inspection regulations, requiring a complete ban on the slaughter of cattle that become non-ambulatory after passing initial FSIS inspection. All cattle that are non-ambulatory disabled ("downer cattle") at any time prior to slaughter at an official establishment, including those that become non-ambulatory disabled after passing ante-mortem inspection, are to be condemned and properly disposed of according to FSIS regulations. Animals with fractures of the limbs or injuries to the spine should not be transported to slaughter.

This decision over-rides the July 13, 2007, FSIS rule, "Prohibition of the Use of Specified Risk Materials for Human Food and Requirements for the Disposition of Non-Ambulatory Disabled Cattle; Prohibition of the Use of Certain Stunning Devices Used To Immobilize Cattle During Slaughter" (the SRM final rule). The previous rule allowed a case-by-case re-inspection of cattle that became non-ambulatory disabled after ante mortem inspection. This allowed inspectors to

address individually the rare situations in which an animal that was deemed by FSIS as fit for human food at ante-mortem inspection and then subsequently suffered an acute injury.

Animals that are disabled or unable to move must be segregated and moved to covered “suspect” pens. Disabled livestock must be handled using humane methods. Regulations strictly prohibit the dragging of a conscious animal that is unable to walk. Personnel must either stun the non-ambulatory disabled animal before dragging them, or move the animals by placing them on a skid, stone boat, bucket lift or some other type of equipment that is suitable.

How Many Animals Can Be Loaded on a Trailer?

The number of animals that can be humanely transported in a given trailer depends on several factors. More space is required per animal during hot weather as compared to cold weather. Unshorn sheep and horned or antlered livestock require more space than short haired or polled animals. Ideally, animals should be similar in weights and accustomed to each other prior to loading for transport.

Recommended trucking densities range from about 3.5 sq. ft (winter or short drives) to 4 sq. ft. (summer or long drives) for 200 lb market pigs and 4.5 sq. ft. (winter or short drive) to 5 sq. ft. for 250 lb market pigs. Recommended trucking densities for shorn market lambs range from about 2.1 sq. ft. to 3.2 sq ft. for 60 to 120 lb. lambs respectively while recommendations for shorn lambs range from 2.25 sq. ft. to 3.35 sq. ft. for 60 to 120 lb. lambs respectively.

Farmers should not over-crowd animals on a trailer. The below chart can help determine the appropriate number of bovine that can be loaded in a given space.

Approximate square footage needed for loading adult cattle for road transport

Mean live weight (lb) of cattle	Floor area (f ² /head)
500	8
600	9
700	9.5
800	10
900	11.5
1000	12
1100	13
1200	14.5
1300	16

Diagram 1: Flight Zone and Point of Balance

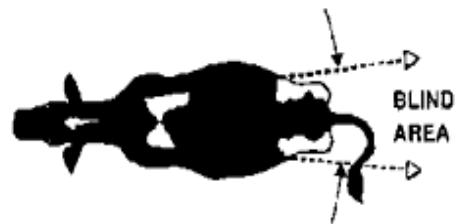
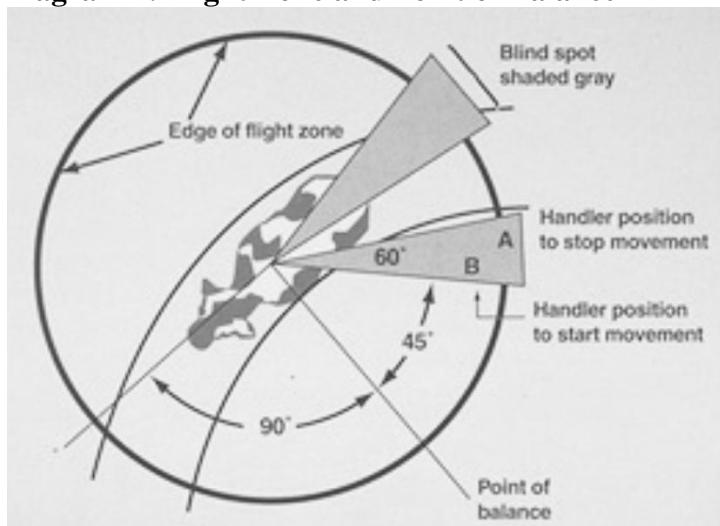
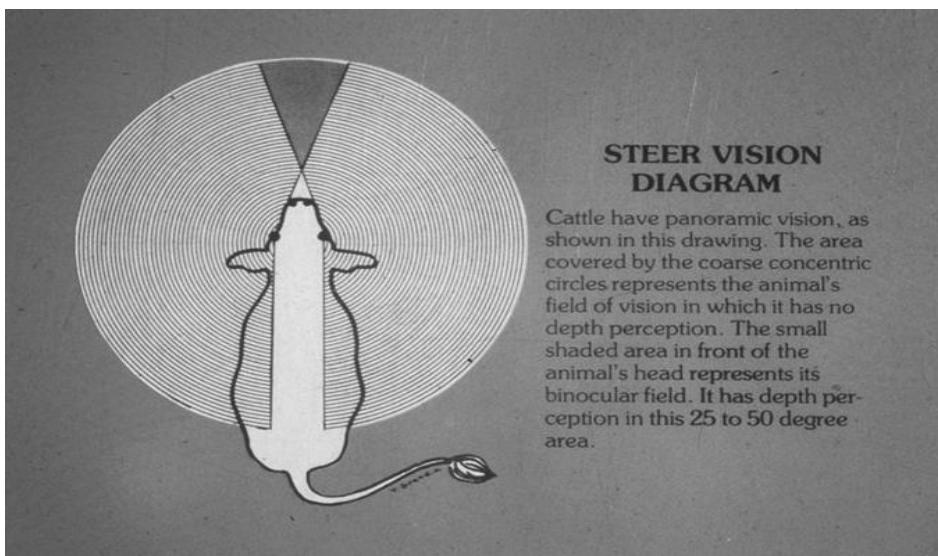


Diagram 2: Animal Vision Area

Figure 1. Cattle have pararomic vision; they can see everything except what is directly behind them



Acting as a Livestock Hauler

Some farmers actively engage in transporting animals for other farmers and for their customer. If the animal is purchased by the farmer-transporter domestic animal health permits are required, and depending on the financial volume of animals bought and sold a wholesalers license would be needed as well. (Refer to the later section on this).

When a farmer transports a live animal for a customer, sold previously in an exempt transaction to a USDA plant with a custom exemption, then an affidavit is needed. If the facility is strictly a custom exempt facility then no affidavit is needed.

In New York, if a truck is being used for earning money from the sale of products and has either a gross vehicle weight rating >10,000 lbs or a truck/trailer gross combination weight rating of >10,000 lbs then the truck owner must apply for either a USDOT-NY number (intrastate) or USDOT number (interstate) and display this number on their truck. Livestock farmers are not exempt from this requirement. Even being awarded prize money for your animals at a fair is considered "earning money". The gross weight rating is the maximum allowable total weight of a vehicle/trailer when loaded. On trucks it is generally listed on or over the inside driver's side. Further requirements may be necessary depending on the loaded weight and use of your vehicle.

Further, haulers must keep their trailers in good working order. The Humane Slaughter Act requires that trailer ramps and floors be kept in good repair.

The New York Farm Bureau (NYFB) publishes THE FARMER'S GUIDE TO TRUCK & FARM IMPLEMENT LAWS & REGULATIONS, 3rd Ed. Copies are available for purchase from the NYFB office. \$20.00 per copy for members and \$40.00 per copy for non-members. New York Farm Bureau, 159 Wolf Road, Albany, NY 12205-0330 Phone: 518-436-8495 or Toll-Free: 800-342-4143 Fax: 518-431-5656

Holding Animals

Regulations require livestock to have access to water at all times. If animals are held longer than 24 hours, animals must have access to feed that is appropriate for the age and species. If animals are held overnight, they must have enough room to lie down without being forced to lie on top of one another.

Shrinkage of Animals in Transit

Shrinkage or shrink refers to the amount of live weight an animal loses from the time the animal is gathered for transport to the slaughterhouse until it is slaughtered. Livestock coming off lush pastures will show live weight losses shortly after being taken off feed because the feed passes through them faster than dried forages and grains do. Poor ventilation and/or overcrowding in the gathering pens or trailers increases shrinkage rates. Animals that are overheated or shivering from extreme cold will also suffer more weight loss.

If animals are deprived of feed for 6 or more hours not only live weight but carcass weight starts to decrease and dressing percentage (DP) will also start to drop. Carcass weight loss in young goats is about 2.5%, 3 to 4%, and 6 to 7% after a 12, 24, and 48 hr fast, respectively. Water deprivation can result in another 2% loss in carcass weight. Depending on the distance traveled, truckers report shrink losses of 3% to 10% for livestock going from farm to auction.

Field Harvesting

Non-amenable animal species that are difficult to load, transport and handle can be killed directly on-farm. This is typically limited to buffalo, bison and some cervids (deer and elk). Field harvested animals may be presented for USDA inspection or be taken to a 5-A facility. Either option will allow a farmer to market his product. Field harvested animals may also be taken to a custom exempt facility, but meat from that establishment cannot be sold.

For animals entering commerce through either USDA or 5-A inspection, a veterinarian must be on the farm premise when the animal is slaughtered to confirm that it is not sick or "down". Animals entering the USDA voluntary inspection program must submit a request for field harvest and receive approval before commencement AND the ante-mortem inspection must be performed by a USDA inspector in the field. Without an ante-mortem field inspection the non-amenable animal will not be eligible for USDA post-mortem inspection.

Both USDA and New York State regulations state that a farm must designate an area for field harvesting from which a licensed veterinarian can observe the animal prior to dispatch. The veterinarian must be on site when the animal is dispatched. The animal may be bled out on premise (but not eviscerated) and then be transported to a USDA or 5-A slaughterhouse for processing on that day. (New York State recommends within 2 hours but understands that some farmers may travel a distance slightly longer than this.) The field-harvested animal must be accompanied to the 5-A slaughterhouse by a veterinarian signed certificate of health or an veterinarian signed ante-mortem report. For USDA inspection a USDA employee must sign the certificate of health or ante-mortem report.

Amenable species must be presented for inspection at an inspected slaughterhouse; therefore, no field harvesting provisions are applicable. There are special provisions for emergency slaughter of amenable species, with the exception of cattle (which can never be field harvested under any circumstance for USDA inspection). When it is necessary for humane reasons to slaughter an injured animal at night, on a Sunday, or on a holiday when the inspector cannot be obtained, the carcass and all parts shall be kept for inspection, with the head and all viscera except the stomach, bladder, and intestines held by the natural attachments. If parts are not kept for inspection, then the carcass shall be condemned. If, on inspection any lesion or other evidence is found indicating that the animal was sick or diseased, or affected with any other condition requiring condemnation then the carcass shall be condemned. In addition, if there is lacking evidence of the condition which rendered emergency slaughter necessary, then carcass shall be condemned.

Animal Identification and Health Records

Why Keep Records?

Records are essential when raising animals for food production. To ensure consumer confidence and maintain the marketability of meat products, livestock owners need to document the safety of their product. Through effective recordkeeping, producers can strengthen consumer confidence by demonstrating tight control over potential risk factors. Recordkeeping also provides a tool for producers to monitor quality, efficiency, effectiveness, and success within

their herd management scheme. Complete, accurate livestock records also assist producers in making management decisions regarding breeding, culling, and sale.

Animal identification is essential for record keeping and all animals should have a unique identifying number. Most breed registration associations for livestock require that the animals be marked with a permanent tattoo (usually in their ear). However, slaughter animals are unlikely to be registered with a breed association and are generally identified with a unique number instead. Ear tagging is the preferred method of animal identification. Some species combine health program compliance tags (such as CWD or scrapie tags) with their own farm tags. For species requiring dual identification, such as cervids, dual tags or a combination of an ear tag and tattoo or microchip is required. Accurate birth records are also essential for product testing and assuring quality to consumers. Ear notching may be an acceptable form of identification if performed on animals less than two weeks of age and acceptable for regulatory agencies for that species of animal.

Depending on how animals are managed, breeding dates may not be known. However, dates of birth for resulting offspring should be noted down if possible. Accurate birth records are essential for age verification of slaughter animals and have a direct impact on product testing, quality assurance and on legal requirements for discarding specific parts of the animal depending on whether the animal is of an age to be infected with specific pathogens.

Regardless of the production methods incorporated on a facility, records of all drugs used including immunizations, anthelmintics (dewormers), antibiotics, implants, etc. should be recorded. Farmers are encouraged to keep and maintain records on all animals for pertinent production parameters, vaccinations given, and any other drug treatments.

Additional record keeping requirements may be required depending upon the species raised. The following Uniform Methods and Rules may be applicable to certain farmers.

USDA APHIS Scrapie Eradication Uniform Methods and Rules
http://www.aphis.usda.gov/publications/animal_health/content/printable_version/scrapumr05.pdf

USDA APHIS Bovine Tuberculosis Eradication Uniform Methods and Rules
http://www.aphis.usda.gov/animal_health/animal_diseases/tuberculosis/downloads/bovtbumr.pdf

USDA APHIS Bovine Brucellosis Eradication Uniform Methods and Rules
http://www.aphis.usda.gov/animal_health/animal_diseases/brucellosis/downloads/umr_bovine_bruc.pdf

USDA APHIS Swine Brucellosis Eradication Uniform Methods and Rules
http://www.aphis.usda.gov/animal_health/animal_dis_spec/swine/downloads/sbruumr.pdf

USDA APHIS Cervidae Brucellosis Eradication Uniform Methods and Rules
http://www.aphis.usda.gov/animal_health/animal_diseases/brucellosis/downloads/bcervumr.pdf

Animal Health Treatment Records

Records of health treatments given to animals are necessary to prevent the harvest of animals prior to completion of safe, legal withdrawal periods. The drug **withdrawal period** is the time lapse required after administration of a pharmaceutical, to assure that drug residues in the marketable product are below a pre-determined safe maximum residue limit (MRL)). Records on

chemical use, feed and drug purchase, etc., can also help safeguard an operation should questions arise concerning animals sold.

For individuals with one or two backyard animals, or for those keeping individual records for animals, record keeping can be as simple as recording:

- Origin information and date (record who the animal was purchased from who or if the animal was born at your facility. If the animal was not born at your facility, obtain record of birth from the place of origin.)
- Sire and Dam identification
- Immunizations, date and dosage
- Parasite tests, date and results
- Parasite treatment, date and dosage
- Feed quantity and type
- Injuries and illnesses (cause and treatment)
- Weight or size, at time of sale
- Disposition information (death, personal use or private sale, and price received)

When livestock are processed as a group, all livestock within the group shall be identified as such, and the following information recorded:

- Group or lot identification.
- Date treated.
- Product administered and manufacturer's lot/serial number.
- Dosage used.
- Route and location of administration.
- Earliest date animals will have cleared withdrawal period.
- Weight or size, at time of sale
- Disposition information (death, personal use or private sale- include date, contact information of new owner or processing plant, and price received)

All livestock shipped to slaughter will be checked by appropriate personnel to assure that animals that have been treated meet or exceed label or prescription withdrawal times for all animal health products administered. All processing and treatment records should be transferred with the livestock to the next production level. Prospective buyers must be informed of any livestock that have not met withdrawal times.

Another suggested tip for producers is to keep notes on all stock that goes to slaughter; i.e.: kill weight, dressed weight or percentage, grade of meat, price received, etc. This information can prove helpful for fine-tuning management or providing records for filing tax forms at year's end.

Records are only functional when they are complete and accurate. A periodic review of records and record keeping methods will help catch mistakes and oversights while they can still be easily corrected. A suggested management practice would be to review records quarterly.

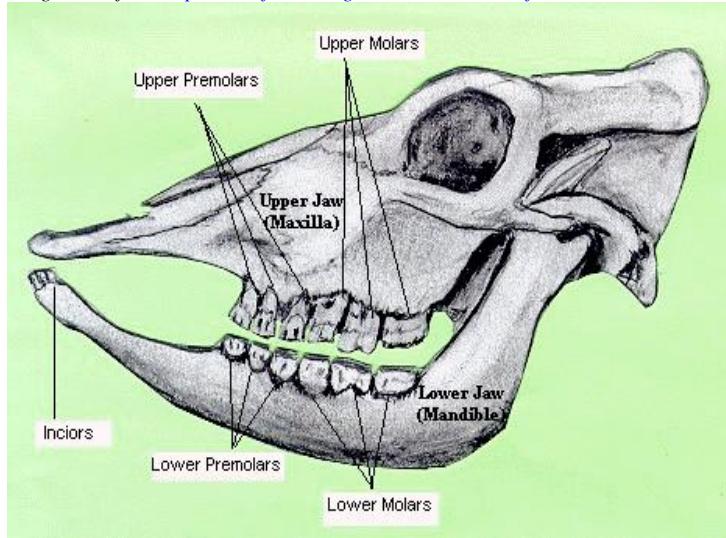
Records should be kept for a minimum of 2 years (3 years of records are required if the farm uses any Restricted Use Pesticides). Be aware that not all processing facilities require records on animals. However, if a problem arises then the farmer will be held accountable, and will be required to submit livestock records showing any products given to their animals for the previous two year and the sale of individual animals to and from the farm.

Aging an Animal Without a Birth Certificate Through Dentition

Dentition is the development of teeth and their arrangement in the mouth. For many years, producers, veterinarians, and exhibitors have used dentition to make general age determinations. Dentition will vary from herd-to-herd and animal-to-animal, because of the animal's genetics, their diet, and the varied geographical locations in which they are raised. When the age of an animal is not known, (or when there are no birth certificates) the best and most practical way to determine age is by an examination of the teeth.

There are three types of teeth found in the bovine: incisors, premolars, and molars. Incisor teeth are found in the front of the mouth, but they are absent from the upper jaw. The premolars and molars are found in the back of the mouth and are present in both the upper (maxilla) and lower (mandible) jaws.

Image taken from http://www.fsis.usda.gov/OFO/TSC/bse_information.htm



At birth, calves have deciduous teeth, known as temporary, milk, or baby teeth. The deciduous teeth are lost as the animal ages and they are replaced by the permanent teeth. Calves have a total of 20 deciduous teeth. There are no deciduous molars and a deciduous premolar is not present. Gradually permanent teeth replace deciduous teeth.

The deciduous incisors differ from the permanent incisors in being much smaller. The crowns (that part of the tooth that is covered with enamel) of the deciduous incisors are narrower than the permanent incisors and they diverge more from the base (at the gum line) of the tooth to the apex when compared to the permanent incisors.

Approximate Eruption Times of Permanent Teeth	
Teeth	Age at Eruption
First Incisor (I 1)	18 – 24 months
Second Incisor (I 2)	24 – 30 months
Third Incisor (I 3)	36 months
Fourth Incisor (I 4 or C)	42 – 48 months
First Cheek Tooth (P 2)	24 – 30 months
Second Cheek Tooth (P 3)	18 – 30 months
Third Cheek Tooth (P 4)	30 – 36 months
Fifth Cheek Tooth (M 2)	12 – 18 months
Sixth Cheek Tooth (M 3)	24 – 30 months
I = Incisor P = Premolar M = Molar	

An animal 14 months of age would have a full set of deciduous incisors. All four pairs of teeth are temporary and firmly in place. The teeth are short, broad and usually have a bright, ivory color. There is usually space between the Di 1 incisors. Other incisors may touch on the inside corner at the top of the tooth. As the animal ages, the deciduous teeth become loosely set in the jaw. The teeth appear longer and narrower than in younger animals and the teeth may or may not be touching at the upper corners.

The permanent incisors usually erupt at an angle and straighten into a definite pattern with growth. Animals with eruption of one or more central incisors are considered to be 18 – 24 months of age. When one or both middle (I 2) incisors erupt, the animal is considered to be 24 – 30 months of age.

Cattle that have the middle (I 2) incisor (or incisors) erupted are in the 24 – 30 month age range. However, FSIS, as written in FSIS Notice 5-04, is using a conservative approach and is determining that cattle with eruption of at least one of the second set of permanent incisors (I 2) is 30 months of age or older.

The eruption of the lateral (I 3 or second intermediate) incisor (or incisors) indicates that the animal has reached 36 months of age. The eruption of the corner (I 4) incisor (or incisors) indicates that the animal has reached at least 42 months of age.

For more information visit: http://www.fsis.usda.gov/OFO/TSC/bse_information.htm

Slaughtering, Cutting, and Processing

Slaughtering, Cutting, and Processing of Amenable Meats:

Selling the Live Animal Direct to Consumers as “Freezer Meat”

There is a very important exemption from federal inspection for livestock producers that market freezer lamb, beef, goat, and hog. This is the “custom exemption” which allows the owner of an animal to slaughter the animal himself/herself or deliver it to a custom exempt slaughterhouse for slaughter and processing. The meat and byproducts cannot be sold. Instead, their use is limited to the owner’s household and nonpaying guests and employees.

In New York, it is assumed that a person owns an animal when they purchase it. Thus, a customer can purchase a lamb, goat, steer or hog from a farm or live animal market, take ownership of it, and either slaughter it themselves or arrange for slaughter and processing through a custom slaughterhouse.

The customer does not have to pick out the animal himself or herself. Instead, the farmer or custom slaughterhouse operator may select an animal for them after receiving the customer’s order for a live animal or portion thereof. The farm owner or custom slaughterhouse operator may act as an agent for the owner and arrange transportation of the animals or carcasses.

“Freezer” animals may be priced for sale by the head or by the pound. Halves or quarters may be priced by the pound, although their actual weight will not be determined until the animal is slaughtered. The weight of the animal or a portion thereof, must be determined on a certified scale if the animal is sold by weight. If a certified scale is not available, then the animal can only be sold by the head or portion.

Cutting orders must be directed by the owner of the animal. The animal must be identified throughout the slaughter and processing operation as belonging to that particular customer. The custom slaughterhouse and any agents for the owner are required to have the name and contact information of the customer.

Although there is no official inspection of the live animal or carcass, all animals slaughtered under custom exemption must be unadulterated (i.e. fit for human consumption). The meat must be stamped ‘not for sale’.

Farmers can advertise that they offer freezer meat for sale, but must have an agreement that shows that the animal or the portions were sold in advance of slaughter. “Freezer meat” is not the same as USDA inspected retail cuts, and individual “freezer meat” cuts cannot be sold by the farmer.

As in several other states, New York State officials interpret the custom exemption to allow a farmer to pre-sell portions of the live animal. This interpretation allows the farmer to sell halves or quarters of a market animal prior to slaughtering between a given number of individuals. If halves or quarters are sold prior to slaughter, the new owners can agree to send that animal to custom slaughter, but only if all agree that the meat will be used for their own personal consumption. Cutting instructions should be provided for each owner.

In some cases, New York custom slaughterhouse owners will allow customers to slaughter their own animals and bring the carcass in for further processing. It is best to talk with the

owner/operator of the facility to see what he or she will allow and whether they require the animal to be skinned and quartered before being accepted for further processing. Many custom slaughterhouse operators prefer to come directly to the farm to slaughter swine and cattle. The operator will then transport the carcasses in as sanitary a manner as practical to their custom meat plant for further processing. Sheep and goats are generally butchered on the meat plant's kill floor but can also be slaughtered on-farm by the custom operator. Again, it is best to call well ahead of desired slaughter/processing dates to discuss these arrangements.

It is important to note that some states take a strict interpretation of the custom exemption and consider the owner of the animal to only be the person who actually raised it. Therefore, it is very important that custom red meat from amenable species never show up in commercial or retail outlets in order to assure New York officials that our state's interpretation of the custom exemption poses few health risks.

For more information on selling live slaughter animals on and off the farm, see the later chapter on marketing.

On-Site Slaughter for Entire Animals Sold Live

In New York, the farmer can also allow the customer to slaughter and process the animal on the farmer's land. Farmers may not help the new owner with butchering unless the farmer has a custom exempt operator's license. The exception to this is in cases where the animal is not successfully killed and the farmer must intercede to prevent animal suffering.

A sanitary 3-sided shed with a drain to an approved sanitary system has been required by some inspectors, though it is not required. Substantial liability insurance may also be advised.

Resources related to on-farm butchering are provided in a later chapter.

A helpful resource on humane on farm Halal slaughter was produced by the Northeast Sheep and Goat Marketing Program is available from Cornell University. It can be found on line here: <http://www.sheepgoatmarketing.info/news/HumaneSlaughter.pdf>

Offal Disposal and On-Farm Composting

Offal disposal is a major consideration with on-site slaughter. However, on-site composting of offal is legal in NY if done properly with a high carbon substrate such as wood shavings or straw and without chance of contamination of water sources. Farmers can allow the skinning of the animal on the farm, but those customers taking carcasses with the hide still on are encouraged to contact the DEC for guidance of how to dispose of the skin.

A helpful resource "Natural Rendering: Composting Livestock Mortality and Butcher Waste" is available on line at:

<http://www.nwnyteam.org/Dairy/Natural%20RenderingFS.pdf>

The New York State DEC Solid Waste Management Regulations, 6 NYCRR Part 360 1.7 (b) exempts carcasses from permit requirements. However, revision of this rule is in process to include a subpart for animal and contaminated food supply waste management facilities <http://www.dec.ny.gov/regs/4415.html> Continue checking for updates.

If Selling Amenable Red Meat Wholesale, Retail and/or Direct to the Consumer

Slaughter Requirements

In New York all red meat for resale from amenable species must be slaughtered at a USDA inspected facility and the animal must be inspected before and after slaughter by a FSIS inspector. This is not true throughout the entire Northeast United States. For example, in Maine, Vermont and West Virginia an amenable animal can be inspected and slaughtered at a “USDA Equivalent” state facility and the state inspected carcass (or meat from it) can be sold within that particular state. In Delaware, Maryland and Virginia an animal may also be slaughtered under inspection at a Talmadge-Aiken plant.

At the USDA slaughterhouse the animal:

- Must be humanely stunned and rendered unconscious prior to killing unless the slaughterhouse has a religious exemption in which case it must be humanely killed within religious constraints
- Must undergo ante-mortem and post-mortem inspections
- Must be identified as one of the species that a slaughterhouse will be slaughtering on the slaughterhouse’s application for federal inspection.

Some amenable species, **with the exception of cattle**, may be field-harvested on-farm under extreme conditions with prior approval from USDA officials and only for custom exempt processing. This is not a common practice and is greatly frowned upon for amenable species.

Information on the requirements for field harvesting is provided in a separate section.

Because the returns from slaughtering small ruminants are generally less than for doing cattle or hogs, some slaughterhouses no longer apply for federal inspection for small ruminants. Thus, a farmer could not take a lamb to a USDA plant for federal inspection if that plant does not have sheep listed on their approved slaughter list. In general, the large rails used for doing large animals will also work for small ruminants; however, a slaughterhouse that is only set up to handle small ruminants may have its rails set too low to be suitable for hogs and/or cattle.

Custom meat must be kept separated at all times from inspected meat. During deer season, carcasses brought in by hunters must be kept separate from USDA inspected meat. Depending on the size of the slaughterhouse and their cooler capacity, the FSIS inspector may ask plants that process meat for hunters to accept no domestic livestock during deer season or to store deer carcasses in separate coolers.

Farmers can sell USDA inspected meat direct from their farms with the following provisions. All inspected meat intended for sale or resale must be transported and stored at temperatures 41 F or less. Meat may be transported in a clean cooler with adequate ice packs. Frozen meat must be transported and stored at temperatures 0 F or below. Inspected meat must be kept separate from non-inspected meat. It must either be stored in a separate freezer/cooler from non-inspected meat or stored in a separate area of the freezer/cooler to minimize any risk of contamination. For example, if stored in an upright freezer, inspected meat should be stored on the top shelves to avoid any leakage from non-inspected meat.

More on storage and safe product handling in a later chapter.

Amenable Meat Processing Options

Processing of meat covers a wide range of operations. It includes simple operations such as deboning meat, the repackaging of larger packages of meat into smaller sized packages.

Processing also includes complex procedures such as the production of beef stock, the manufacturing of bolognas, or the canning of a hash.

Amenable meat must be processed at a USDA meat plant under federal inspection if it is to be sold wholesale. It can be processed in a state certified kitchen (also known as a 20-C licensed facility in New York) if it is to be sold direct to consumers or from the farmer's on-farm stand or retail store. Amenable processed meat can also be sold at the farmer's stall at a farmer's market and in limited amounts to off-site restaurants. However, meat products that are cured, smoked, cooked, or marinated at a 20-C facility cannot be sold to off-site restaurants.

Keep in mind that the marketer of the meat must hold the 20-C license. Shared-use kitchens are legal in NY as long as each operator has obtained a 20-C license from NYSDAM.

The butcher shops in most supermarkets and meat shops operate under 20-C retail licenses rather than USDA federal inspection. This license allows them to process USDA inspected carcasses into retail cuts and to repackage wholesale packages of inspected meat into smaller retail portions for sale to customers.

It is important to remember that if amenable meat is processed in a state certified kitchen it cannot be transported to another state for marketing. In addition, processed amenable meat products are held to the same transportation and storage requirements as amenable meats.

An on farm restaurant may process meat products and package them for sale at farmer's market or at an on-farm store. This may be permitted if the restaurant has a 20-C license or if the restaurant permitted under the Department of Health (DoH), has a scheduled process filed with both the DoH and NYSDAM. All other regulations, such as labeling and packaging requirements are applicable.

Organ Meats and Specified Risk Materials

The customer can request various organ meats at a USDA slaughterhouse. The USDA FSIS has specific regulations outlining the procedures required for cleaning, preparation, and packaging of various organ meats. Typically, USDA meat plants will return heart, liver, tongue, and kidneys to customers upon request. Parts such as the tongue, spleen, thymus, testicles, pancreas, esophagus, stomachs (tripe, etc.), as well as hog heads may be more difficult to acquire in part because processors may be less familiar with the procedure requirements for cutting, cleaning or packaging them. Some of these by-products such as testicles, pig snouts, etc. can be marked for sale as edible products but cannot be used as ingredients in a meat product.

Some animal parts are not available as either edible products or meat products. This is because they have been identified as **Specified Risk Materials** (SRMs). Most SRMs are associated with **Transmissible Spongiform Encephalopathies** (TSEs), a family of diseases occurring in man and animals characterized by a degeneration of brain tissue caused by **prions** (misfolded proteins) that build up in the central nervous system and kill nerve cells. There are several examples of TSEs in humans including **Creutzfeldt Jakob Disease** (CJD). Livestock examples include **Bovine Spongiform Encephalopathy** (BSE) or "mad cow disease" in cattle, **Scrapie** in sheep and goats, and **Chronic Wasting Disease** (CWD) in deer and elk.

Because the transmission of some of these diseases is not completely understood, the possibility of transmission from animals to humans and vice versa has not been completely ruled out. Therefore, animal parts such as the brain, skull, tonsils, eyes, trigeminal ganglia, spinal cord, dorsal root ganglia, and vertebral column (excluding vertebrae of the tail, the transverse processes of the thoracic and lumbar vertebrae, and the wings of the sacrum) of cattle 30 months of age or older which may harbor any BSE prions, are not available for consumption and must be properly disposed of.

The age of cattle should be determined by age documentation such as birth records if available. However, dentition (examination of the teeth) is the final determinant in cases where no age documentation is available or the inspector has serious concerns about the age documentation records.

Tonsils from any species and the distal ileum portion of the small intestines of all cattle regardless of age have also been identified as SRMs and are unavailable for human consumption. The USDA regulations declare lungs as inedible even though they are not on the SRM list. Generally, organs and parts not fit for consumption are marked or dyed in a non-edible substance and taken off the facility.

Currently there is no official offal disposal requirements for the different species, although it is recommended that parts which may have the potential for any type of TSE contamination (BSE, scrapie or CWD) be sent to public landfills and buried. Composting is an accepted method of disposal in the State of New York for amenable species. Rendering companies may collect offal and then cook and separate the components for later use in animal feeds. As a result, some renderers may refuse Specified Risk Materials.

Edible by-products may become part of FDA-regulated human food or cosmetics. However, SRMs such as the brain, spinal cord, and eyes of cattle 30 months of age or older, the distal ileum portion of the small intestine of all cattle, and the tonsils of all animals are prohibited.

Edible by-products may be used in diet soups, stocks, flavorings, extracts, collagen, and amino acids.

Ask yourself the question in the bold type and then follow the appropriate Yes or No response arrows to determine where your amenable livestock can be slaughtered and processed. You must read the criteria on the cited page before you can determine whether your operation fits the circumstances.

Do you sell your slaughter animals directly to the consumer either by phone or in person prior to slaughter?

es

Are you selling carcasses or meat cuts wholesale?

yes

Are you selling carcasses or cuts retail?

yes

no

Is the animal to be consumed by the consumer, their immediate family members, or non-paying guests?

no

Animal must be slaughtered and carcass inspected at a USDA slaughterhouse

Animal must be slaughtered and inspected at a USDA processing plant

Slaughtering, Cutting, and Processing of Non-Amenable Meats and Poultry

The handling of game animals such as bison, deer, rabbits, pheasants, etc. is not covered by either the Federal Meat Inspection Act or the Poultry Products Inspection Act. Thus, these “exotic” animals and birds are considered “non-amenable”. However, the Agricultural Marketing Act of 1946 does provide for the voluntary inspection of game animals and birds by federal inspectors for marketing situations where meat and poultry products from them must bear a USDA mark of inspection. In addition, states that provide “USDA equivalent” inspections of livestock and carcasses can mandate the inclusion of specific non-amenable game species in their inspection programs and provide them with the same mark of inspection as amenable livestock and poultry. Again, New York State does not have “USDA equivalent” slaughter and processing facilities.

The FDA has authority over any meat and poultry products entering commerce that are from non-amenable livestock that have not been “inspected and passed” by federal or state inspectors. At this time the Food Safety Modernization Bill is being debated. The final wording of this bill should it be signed into law, will likely be applicable to those raising, slaughtering or manufacturing product of non-amenable species.

All product, regardless if it is amenable or not, must still come from an “approved” source in order to be sold to retail stores, restaurants or wholesalers. In New York State exotic animals are amenable to New York State Agriculture and Markets Law Article 5-A.(This is why a NYS licensed 5-A plant is an approved slaughtering and processing facility in New York for these exotic animals.)

Most non-amenable meat and meat products offered for sale are derived from farm raised (or “farmed”) game. However, some states do allow the sale of hunter harvested game (as opposed to “farmed game”). New York does not allow the sale of hunter harvested deer or rabbits. It does allow for some marketing of small game animals such as opossums. Hunter harvested deer and rabbits in NYS can only be used for the hunter’s personal use. Curiously, hunter harvested meat from a state or country permitting the marketing of this meat, can be harvested and processed in that state and then sold in New York.

The venison donation program under the jurisdiction of the NYS Department of Environmental Conservation, is the only exception. This program allows hunters to take legally tagged and properly field-dressed deer to participating processors and have the venison processed under custom exemption for distribution by specific food banks and soup kitchens.

States can mandate stricter regulations for non-amenable meat and poultry products than those outlined above. Non-amenable meat can be sold in commerce, both in and out-of-state but only with approval of the importing state and adherence to that state’s slaughter, processing, and inspection requirements. It is important that game farmers know the regulations of the state where they are planning to market the meat.

NYS Requirements for Large Farm Raised Game

Large non-amenable “farmed” game such as bison, elk, and deer can be harvested on farm by the consumer for their own personal use. This is essentially what occurs at a shooting preserve. In addition, large game can be harvested on-farm by the consumer or by a custom processor and then transported in a sanitary manner to a processing plant for custom processing. The meat must

be labeled “not for sale” and is limited to use by the consumer’s household and nonpaying guests and employees.

In New York, if the meat is being sold to an end consumer or retail business, then deer and other exotics can be slaughtered and/or processed at either a 5-A non-amenable meat plant without carcass inspection or at a USDA plant under voluntary inspection. However, if the meat product is being sold to wholesalers within New York for interstate trade, it must be slaughtered and processed under voluntary federal inspection at a USDA facility.

Because there is no mandatory USDA FSIS inspection for non-amenable livestock, federal tax dollars cannot be used to pay for the inspection. Instead, the farmer must pay a certified USDA FSIS inspector out-of-pocket to inspect the carcasses. The rate for 2010 is \$51.35 per hour with a 2-hour minimum visit. The USDA federally inspected plant must first apply for and receive approval to process “exotic” animals. The mark of inspection for game animals is triangular rather than circular as for amenable livestock.

These inspections are covered in Title 9 of the Federal Code under Section 352.

Large non-amenable livestock such as bison, elk, and deer pose special challenges for producers and processors in terms of handling, loading, transporting, and confinement. The USDA FSIS has made special provisions for these difficulties by permitting on-farm harvesting of large non-amenable species. In order to qualify for on-farm harvesting, the game farm must have a separate area in which to present the live animal(s) to a licensed veterinarian or USDA inspector, before being dispatched on the property.

There is no provision for a USDA facility to accept an ante-mortem inspection by a non-USDA employee. Therefore any animal that is destined for USDA inspection must have an ante-mortem examination performed by a USDA employee. USDA will not accept an ante-mortem exam performed by a non-USDA veterinarian. New York State will accept a veterinarian certificate for those animals delivered to a NYSDAM licensed 5-A facility. The game farm must pay for the on-farm live animal inspection.

The veterinarian or inspector must approve the designated harvesting site and indicate that 1) the animal is wholesome, 2) the harvest is conducted in a manner minimizing the possibility of soiling of the animal, and 3) the transport vehicle is as sanitary as practical. After harvest, the animal is bled out and transported to a USDA or NYSDAM licensed 5-A facility. The animal must be accompanied by the veterinarian signed ante-mortem report and should arrive at the designated destination within two hours but must arrive by law at the plant on the same day that it was dispatched.

If large non-amenable livestock are brought live to the slaughter facility, the slaughterhouse must have a holding pen where the federal inspector can observe the animal without approaching it. The top rail height should be 6 ft. minimum to contain these animals. Deer, elk, or other large non-amenable animals can be killed in the holding pen rather than in the stun box. Section 352.10 allows for an FSIS inspection to be performed on the truck thus permitting an animal to be dispatched while on the transport vehicle. Farmers need to make sure that the USDA or NYSDAM 5-A facilities they plan on using has prior approval and adequate facilities to work with large non-amenable livestock.

Some species of deer and all elk are susceptible to Chronic Wasting Disease, a debilitating disease of the nervous system. There are no known cases of transfer of CWD from animal to

humans. However, as a precautionary measure to minimize any human health risks from CWD, specific cutting techniques are required for those deer and elk. Hand boning is required and parts that may be potentially infectious such as the brain, spinal cord and specified lymph nodes must not be severed, must not appear in any end product, and must be disposed of in a municipal landfill. According to the NYSDAM CWD monitoring program, all slaughterhouses (custom, 5-A, or USDA) operating in NYS and processing deer or elk must have an offal disposal plan on record with NYSDAM. Additionally, meat products from deer and elk must be tested and negative test results received prior to the meat being released for sale. Testing is not required if the meat is processed under the custom exemption and marked "not for sale".

NYSDAM's CWD Program is on line at: <http://www.agmkt.state.ny.us/AI/cwd.html>

NYS Requirements for Farm Raised Rabbits

The most commonly "farmed" small game animal in the United States is the domesticated meat rabbit. Although rabbit processing is similar to that of chickens, rabbits are not included in either the Federal Meat Inspection Act or the Poultry Products Inspection Act and thus, none of the exemptions that apply to amenable poultry apply to rabbits. In addition, just like larger non-amenable species, federal tax dollars cannot be used for their inspection.

The FDA has jurisdiction over shipment of rabbit meat in interstate commerce, and in New York the Department of Agriculture and Markets regulates intrastate sales of exotic animals under 5-A. Other states that operate a "USDA equivalent" inspection program may mandate rabbit inspection. States vary widely in their slaughter, processing, and inspection regulations for rabbits.

If the exotic meat is to enter commerce and be sold for resale to wholesalers in interstate trade, then the producer must pay the voluntary inspection fee for live animal and carcass inspection at a USDA facility. Under voluntary inspection, each rabbit and its internal organs are inspected for signs of disease. The "Inspected for Wholesomeness by USDA" mark of inspection ensures the rabbit is wholesome and free from disease. Inspected rabbits are stamped with a circular mark and may even be graded.

Voluntary inspection for rabbits is covered in Title 9 of the Federal Code under Section 354.

Rabbit meat products, that are to be offered for sale in NY State, may be slaughtered either under USDA voluntary inspection or at a NYSDAM 5-A establishment. Whole rabbit carcasses and rabbit cuts which have been slaughtered at a 5-A slaughterhouse may be sold direct, (this includes sales of rabbit at farmers' markets), to retail outlets, and to distributors.

As of May 2006, NYSDAM allowed rabbit carcasses slaughtered at either a USDA facility or a 5-A facility to be further broken down into whole muscle meats at either a 5-A or 20-C establishment. (Note: Before using a 5-A plant to process rabbit, NYSDAM should be contacted to ensure that the plant's particular license allows them to process rabbit.)

A restaurant that is located right on a rabbit farm, may slaughter their own rabbits and then process them in their own 5-A facility for serving at the restaurant or for sale in their own farm stand. A 20-C license is not acceptable for the slaughtering of any species.

In New York, rabbits may be purchased live from the farm by a consumer and processed under custom inspection for the new owner's personal use. Alternatively, rabbits can be sold live from the farm direct to the consumer and butchered on-farm by the consumer with the farmer's

permission. Even though rabbits are not listed in the NY regulations, the farmer cannot actually do that slaughtering for an on-farm customer, as is done in some other states.

Because rabbits are easy to handle - unlike large non-amenable game animals - there are no special provisions permitting on-farm slaughter or rabbit meat or field harvesting of rabbits that is/are entering commerce.

USDA FSIS FACT SHEET: Rabbit from Farm to Table

http://www.fsis.usda.gov/factsheets/Rabbit_from_Farm_to_Table/index.asp

NYS Requirements for Non-Amenable Poultry

The Federal Meat Inspections Act lists poultry which must be slaughtered and processed according to the PPIA. These bird species include chickens, turkeys, ducks, geese, guineas, ratites (ostrich, emu, and rhea), and squabs (pigeons up to one month old). Any bird not listed is considered non-amenable poultry.

According to the USDA FSIS, the game bird industry in the U.S. raises millions of birds for sale to restaurants and direct to consumers. These include up to 10 million pheasants, 37 million quail (including 12 million Bobwhite), 4 million Chukar partridges, 1 million Mallard ducks, 200,000 wild turkeys, and several other bird species.

When the USDA calls birds and poultry “non-amenable”, it means that there are no regulations addressing that particular species of bird or poultry. In other words, the PPIA becomes applicable to non-amenable farmed game birds and non-amenable poultry when it becomes an issue, such as when they enter commerce. (See Title 9 of the Federal Code under Section 362.2(a)).

The USDA does provide for a voluntary inspection of game birds. They are slaughtered and processed under Part 381 of the Code, the same regulations governing amenable poultry. Voluntary inspection as outlined in Section 362 of Title 9 of the Federal Code refers to the importation of game bird carcasses, and the re-packing of USDA inspected product into smaller units to maintain the Federal Mark of Inspection.

Here in New York, game birds come under the jurisdiction of the New York State Department of Agriculture and Markets, which requires that these birds - if offered for sale - be processed under 5-A inspection, if not slaughtered, inspected and processed under USDA inspection.

The non-amenable birds count towards the limits of the 1,000 and 20,000 bird exemptions. For the 1,000 bird limit, Section 96-c (c), Article 5-A states in part “any person who slaughters not more than 250 turkeys or an equivalent number of birds of all other species raised by him on his own farm during the calendar year for which the exemption is sought”. The 5-A poultry plant is not required to fill out special forms in order to slaughter or process game birds.

Information regarding poultry regulations is discussed in a later section.

Value Added Products From Non-Amenable Meats

Non-amenable fresh or fresh-frozen whole meats, ground meat with no additives and sausage with no nitrite cures may be cut and packaged in a NYSDAM 5-A licensed facility for sale to consumers, retailers, and restaurants. These products can also be cut and packaged in a 20-C facility as well if the meat is from an approved source (either USDA inspected or slaughtered at a 5-A facility).

Value added non-amenable meat products which involve the addition of 3% or more amenable meat or 30% amenable fat or 2% cooked USDA FSIS passed amenable poultry with no bone or skin, and/or the addition of a nitrite cure may be processed in either a USDA facility or a New York State licensed 20-C or 5-A plant for sale to consumers and retailers. However, all the amenable meat contained in them must be federally inspected and passed. If sold to wholesalers, the resulting value added product needs to be processed at a USDA federally inspected facility.

Value added game meats cured with a nitrate or nitrite and without the addition of an amenable meat, meat product, or fat cannot be processed at a 20-A or 5-A NY state licensed plant or USDA facility regardless of who they are to be marketed to. Because of this, the proportions of amenable meat or poultry listed in the paragraph above are commonly added to the non-amenable product if nitrate/nitrite curing is to take place.

Non-amenable meat from the same game species that is combined under different inspections must be labeled with the lower inspection. For example, buffalo meat inspected at USDA facility and marked with the voluntary mark of inspection that is then combined with buffalo meat inspected at a NYSDAM 5-A facility cannot maintain the voluntary mark of inspection. Thus in NYS, the combined product could only be marketed to consumers and retailers; and not wholesalers.

Interestingly enough, USDA FSIS federally inspected and passed amenable meat products can bear the federal mark of inspection for amenable meats and still include non-amenable meat that has been slaughtered and processed without the mark of inspection, provided that the USDA establishment can ensure that these non-amenable meat ingredients are clean, sound, healthful, wholesome, properly identified and will not result in adulteration of products. The product name must declare the species of non-amenable meat included (for example, ground lamb with venison). The product must contain at least one of the following: more than a) 3% amenable meat, b) 30% amenable fat or c) 2% cooked US passed amenable poultry with no bone or skin. Any amenable meat used as an ingredient must be from an inspected source.

Furthermore, non-amenable meat products from one species of game animal produced under voluntary federal inspection can include non-amenable meat from another species of game animal that does not have the mark of inspection, provided that those ingredients are clean, sound, healthful, wholesome, and properly identified, and will not result in adulteration of products. This combined product can bear the mark of inspection for non-amenable meats.

USDA FSIS Notice 15-06 and 14-91

http://www.fsis.usda.gov/regulations_&_Policies/Notice_15-06/index.asp

USDA TSC Q&A FSIS Notice 26-06 (clarifies 15-06, which replaces 14-91)

http://www.fsis.usda.gov/HELP/FAQs_TSC_Note15_06/index.asp

FDA Requirements when Raising Non-Amenable Game

The FDA has strict guidelines for the use of drugs in production of non-amenable animals. Many drugs are not labeled for these species and need approval for "off label use". Hormones may not be used in raising game birds or game a [Decision Flow Chart for NON-Amenable Livestock Slaughter](#)

Ask yourself the question in the bold type and then follow the appropriate response arrows to determine where your non-amenable livestock can be slaughtered and processed. You must read the criteria on the cited page before you can determine whether your operation fits the circumstances.

Slaughtering, Cutting and Processing of Poultry

The Poultry Products Inspection Act (PPIA) outlines the legal conditions under which amenable poultry must be slaughtered and processed. Amenable poultry species include chickens, turkeys, ducks, geese, guineas, ratites (ostrich, emu, and rhea), and squabs (pigeons up to one month old). At minimum, states must conform to these federal requirements. However, states can put in place regulations that are stricter than the PPIA.

Amenable poultry that is slaughtered and processed under federal inspection can be marketed through all marketing channels and across state lines. The inspection must include both ante mortem and post mortem inspections of the birds.

In contrast, there are few, if any, USDA inspected slaughter/processing poultry plants in New York that a farmer can take more traditional poultry (chickens, turkeys, etc.) to. This is because all of the USDA inspected poultry plants in New York are set up as packers processing only their own birds they raised or purchased for marketing under their own label to retail stores, restaurants, and wholesalers. They are not set up to process birds belonging to small local farmers who want to market their own birds themselves to household consumers, restaurants, retail stores, or wholesalers. Therefore, it is imperative that poultry farmers in New York be knowledgeable about the legal exemptions from federal inspection that poultry may be marketed under.

Policy makers at the USDA FSIS have developed a helpful guidebook for determining when poultry slaughter or processing operations are exempt from the inspection requirements of the PPIA. This Guidebook is under revision and the FSIS hopes to have the revised version available in 2010. The old version is located here:

http://www.fsis.usda.gov/OPPDE/rdad/FSISNotices/Poultry_Slaughter_Exemption_0406.pdf

The flow chart at the end of this chapter is taken from the USDA FSIS Guidebook and is an excellent tool for determining which exemption, if any, a poultry business falls under. Even when exempted from federal inspection, all poultry is legally required by the PPIA to 1) be healthy at the time of slaughter and 2) be slaughtered and processed under sound sanitary standards, practices, and procedures that produce poultry products that are sound, clean, and fit for human food (not adulterated).

Ratites

Ratites are large wingless birds including ostriches, emus, and rhea. They are often slaughtered under federal inspection at USDA dually licensed facilities. These red meat facilities are additionally approved to slaughter poultry, though typically those slaughtering ratites do not slaughter poultry exclusively. At an official establishment, these birds are subject to the regulatory requirements of the Poultry Products Inspection Act. The plant has to have requested that the ratites be included in their list of approved species to slaughter under federal inspection. Meat from these birds can then be offered for sale in any market channel. Also, carcasses or parts of ostrich or ratites not slaughtered at a USDA establishment may be delivered to a custom exempt facility by their owner for custom processing provided the birds were previously slaughtered in accordance with the requirements of the PPIA or equivalent state mandates and the product is marked "Not for Sale".

Poultry Exemptions At a Glance

5-A EXEMPTION Type	ALLOWED SALES and ACTIVITIES	DISALLOWED SALES and ACTIVITIES
Producer/ Grower 1,000 bird limit- For a farmer's own birds only done on own premises	The farmer's own: Roadside Stand, On-Farm Outlet, Farmers' Market Stall	Wholesale, Off-farm retail including retail food stores, HRI; Out of state sales
Producer/ Grower or Other Person Exemption (PGOP) 20,000 bird limit – May raise or purchase the live birds	Household customers, restaurants, hotels and boarding houses for dining room use only (solely for preparation of meals served by these establishments)	Out of state sales not allowed. Sales to Institutions, Wholesale, Off-farm retail including retail food stores; another producer-grower; also not allowed.
Producer/ Grower Exemption 20,000 bird limit – For a farmer's own birds only done on own premises	Household consumers, Roadside stands, On-Farm Outlets, Farmers Markets, HRI, Retail stores, Distributors, and Small Enterprise Exempt operations +May lease slaughter/processing equipment but unit may not be used for another person's birds while on renter's premises	Out of state sales not allowed. +May not buy live birds from other farmers + May not slaughter or process poultry for another individual Can lease slaughter/processing equipment but unit may not be used for another person's birds while on renter's premises
Small Enterprise Exemption 20,000 bird limit – May raise or purchase the live birds, and also handle dressed poultry	Household consumers, Roadside stands, On-Farm Outlets, Farmers Markets, HRI, Retail stores, and Distributors. +May buy live birds from other farmers +May purchase dressed poultry for cutting and distribution +May sell live birds and slaughter and process for the customer +May purchase live birds from farmer and sell back to farmer as a distributor if farmer is not a 5-A poultry exempt business	Out of state sales not allowed. +May not sell poultry products to other exempted 5-A facilities for resale. +May not process carcasses beyond cutting.
Retail Store Exemption – May raise or purchase live birds or carcasses	May sell birds live on site, or processed poultry at their own on-site retail case in normal retail quantities (75 pounds or less to households or 150 pounds or less to HRI) + May not exceed dollar limitations of sales set by FSIS + May sell live birds and process for customer but must tag birds through entire process	Wholesale, Off-farm retail including retail food stores +Processing limited to boning, cutting, stuffing, smoking, rendering or salting: +No canning allowed
Retail Dealer Exemption – no live birds	HRI sales allowed but a max of 25% of total sales can be sold to other retailers and HRI	- NO SLAUGHTERING allowed - Processing limited to cutting of USDA inspected and passed poultry.
Custom Exemption – unlimited quantities	- May slaughter and process birds for the birds' owner for the owner's personal use - May sell live poultry to a customer and custom slaughter/process for them.	MAY NOT SELL, donate or buy poultry products used for human food

Poultry Exemptions From Federal Inspection

Exemptions are of two types, one allows unlimited processing of birds intended for an owner's personal use. In this case, product is not being sold, but consumed directly. The second type of exemption is for product entering the marketplace and under which a financial transaction is made.

Personal Use Exemption

Under the **Personal Use Exemption**, a grower, producer, or owner of poultry can slaughter and process an unlimited number of their own healthy birds as long as they perform the slaughter and processing themselves under sanitary conditions and the consumption of the birds is limited to their own household and nonpaying guests and employees. The resulting poultry products cannot be sold or even donated for use to other people for use as human food. Any shipping containers used for poultry under this exemption must be labeled with the statement, "Exempt P.L. 90-492", which identifies the product as produced under this exemption.

Custom Slaughter/Processing Exemption.

A custom poultry slaughterer is a business or person who slaughters and processes poultry belonging to someone else solely for the personal use of the grower or owner of the live bird. The grower/owner of the custom slaughtered or processed poultry may not sell or donate the custom slaughtered poultry to another person or institution. There is no restriction on the number of birds the custom business may slaughter or process.

Keep in mind that a custom slaughterer provides a service to a customer and IS NOT permitted to engage in the additional business of buying or selling poultry products capable of use as human food. However, a custom slaughterer is permitted to sell live birds to a customer. For example, a custom slaughterer may sell live poultry to a customer and then custom slaughter the birds for that customer. Furthermore, a person who is a custom slaughterer and is also a poultry grower may sell live poultry they have raised to other poultry businesses not associated with their custom slaughter business.

A custom slaughterer is also permitted to slaughter and process poultry he or she has raised if the resulting products are solely for consumption by his or her household, nonpaying guests, and employees. This constitutes an exemption under "Personal Use Exemption" and not the "Custom Slaughter/Processing Exemption".

Any shipping containers used for poultry products slaughtered and processed under the Custom Exemption must bear the producer's name, the producer's address, and the statement, "Exempt P.L. 90-492", which identifies the product as having been produced under an exemption from the PPIA.

In New York, the oversight of custom slaughterhouses that handle poultry and/or red meat is subcontracted to the NYDAM Division of Food Safety Inspection. The design of custom facilities for poultry is similar to that of the 5-A poultry plants discussed later in this chapter. Processors should check with NYDAM for more information on plant requirements.

A custom slaughter business may use a mobile slaughter/processing unit to custom slaughter and process poultry. The owner of the poultry may deliver the poultry to the mobile

slaughter/processing unit located at his or her own premises or any other person's premises provided the slaughtered or processed poultry is for the personal use of the owner of the poultry.

Poultry may also be custom slaughtered and processed at a USDA federally inspected red meat plant provided that the plant does not engage in the business of buying and selling poultry products. Ratites (ostriches, emus, and rheas) are often handled this way. Again, product would be for personal use only and would need to bear the owner's name, address, and the statement, Exempt P.L. 90-492. In addition, carcasses or parts of ratites and poultry not slaughtered at a USDA federally inspected red meat plant can be delivered to such a plant for custom processing provided they were previously slaughtered in accordance with PPIA or equivalent state mandates.

Poultry Processed for In-State Market Channels

These poultry exemptions to federal inspection relate to poultry products destined for in-state markets as human food. The first four of these exemptions from federal inspection specifically restricts the number of birds a business can slaughter or process. The specific exemptions described below also restrict where and how these birds can be marketed. Each of the exemptions has specific labeling requirements.

Producer/Grower – 1000 Bird Limit Exemption.

This exemption is one of the most important for small poultry farmers. It permits a poultry raiser to slaughter and process their own birds on their own premises for marketing within their state as human food without federal inspection as long as the number of birds does not exceed 1000 chickens or equivalent within one calendar year. For the purpose of this exemption, one turkey is equivalent to four chickens.

It is also important to note that both the USDA and NYSDAM interpret this exemption as per "farm" and not per farmer. If a number of farmers or family members operate on a given location known as "a farm", only 1000 birds in total are allowed from this farm for the exemption. Each farmer or family member raising birds on a particular farm is not entitled to the 1000 bird exemption.

The PPIA does not spell out any restrictions on where the resulting poultry products can be marketed. However, interpretation of this exemption by NYSDAM Division of Food Safety Inspection restricts these exchanges to sales directly from the farmer to the consumer. Thus, birds slaughtered and processed under this 1000 bird exemption in New York can be sold to consumers directly by the poultry raiser from a farm stand, a store located on the farm, or from the farm's stall at a farmer's market. **Birds slaughtered and processed under this exemption cannot be sold to an off-farm restaurant, to a retail store, or to wholesalers or distributors.** The birds cannot cross state lines. At this time, there are no written legal opinion statements from NYSDAM formalizing this interpretation.

The slaughter and processing must be done on farm and the on-farm slaughtering premises are not inspected by NYSDAM unless problems with sanitation or compliance occur. Farmers may cut carcasses as a service to a customer, but may not manufacture any food product from the poultry. NYSDAM recommends that a farmer sell only whole carcasses, as selling parts or cut up pieces makes traceback difficult. While selling cuts is allowable, a farmer doing so should plan for trace-back by implementing thorough record-keeping.

The farmer must keep flock records, slaughter records and records covering the sale of poultry products to customers (i.e., sale receipts) to verify that they are staying within the 1000 bird limit. The poultry raiser can only process poultry of their own raising. They cannot buy or sell any poultry products other than those from poultry of their own raising.

Although the slaughter and processing must be done on farm, the equipment used may be rented or provided in the form of a mobile unit. Some counties in New York have mobile poultry slaughter/processing units available for farmer use. The South Central New York Resource Conservation and Development Agency of New York no longer has a unit available. However, building plans for the unit they used are still available. Cornell Cooperative Extension of Allegany County has a mobile unit available but requires that farmers complete a short certification course they also offer on poultry slaughtering and processing prior to using the unit.

Exemptions Requiring a 5-A license

In New York, any slaughter conducted under the remaining exemptions must take place in a state licensed 5-A poultry plant or food establishment. A business can operate under only one of the following exemptions. Each facility must operate under its own license.

The first three exemptions below are limited to slaughtering and processing no more than 20,000 poultry in a calendar year where a single turkey, goose, chicken, or duck equals “one poultry”. The poultry and poultry products cannot be marketed out of state. The facility used to slaughter and process poultry under each of these three exemptions cannot be used to slaughter or process another person’s poultry unless the Administrator of FSIS formally permits an exception to this regulation.

A 5-A poultry facility is a considerable investment. Many growers have concluded that building and operating a 5-A facility is not feasible given the small number of birds they raise unless they can share the facility with another small producer. However, the PPIA is quite clear that the facility used to slaughter or process the poultry under this exemption cannot be used to slaughter or process another person’s poultry unless the Administrator of FSIS grants an exemption to this restriction. Several New York poultry slaughter and processing businesses with help from NYSDAM have petitioned the Administrator of FSIS for permission to allow plants to be shared between two or more producer/growers but thus far, all have been denied. The state of Kentucky was granted an exception to the regulation for a mobile plant that is parked at a neutral docking station. Producers go through intensive training on the mobile plant’s HACCP plans, SSOPs and SOPs and act as the plant’s on-site manager on the day their birds are scheduled for processing. Each farmer provides their own labor and no birds from other farms are allowed on the same day. After processing, the products are reclaimed by the farmer for marketing or storage. They attribute their success in obtaining an exemption to 1) the location of the docking stations at neutral sites, 2) the intensive training farmers undergo to act as plant managers, and 3) the farmers maintaining control of their individual products before, during, and after slaughter.

Below are the poultry exemptions requiring a 5-A slaughter/processing facility in New York State.

Producer/Grower or Other Person (PGOP) Exemption - 20,000 Limit Exemption

The term “Producer/Grower or Other Person” (PGOP) refers to a single entity, which may be 1) a poultry grower who slaughters and processes poultry that he or she raised, or 2) a person who purchases live poultry from a grower and then slaughters and processes these poultry.

The business is limited to slaughtering and processing no more 20,000 poultry in a calendar year that the producer/grower or other person raised or purchased. A business preparing poultry products under the PGOP exemption may not slaughter or process poultry for another person.

Under this exemption, a business is limited to marketing their poultry products directly to: 1) household consumers, 2) restaurants, 3) hotels, and 4) boarding houses for use in dining rooms or in the preparation of meals sold directly to customers within the jurisdiction where it is prepared. A business preparing poultry products under the PGOP exemption may not sell the products to a retail store or other producer/grower.

These poultry products can only be distributed by the manufacturer and cannot be marketed out of state. The producer/grower or other person cannot buy or sell poultry or poultry products prepared under other exemptions in the same calendar year that he or she claims the Producer/Grower Exemption.

Similar to the Personal Use Exemption and Custom Exemption, any shipping containers must bear the processor's name, address and the statement, Exempt P.L. 90-492. Additionally, a statement of “Safe Handling Instructions” needs to be included. Please note that the “Safe Handling Instructions” for the poultry exemptions must be modified so that the standard clause stating that product is “USDA inspected” has been removed. Wing tags and safe handling instructions are the responsibility of the 5-A facility and must be approved and filed with NYSDAM.

Producer/Grower – 20,000 Limit Exemption

This exemption is designed for poultry growers who raise more than 1000 and less than 20,000 birds in a calendar year for slaughter/processing. The birds must be slaughtered and processed at a 5-A facility on the farmer's own premises and the facility cannot be used to slaughter and process for another producer.

The grower is permitted to use rented equipment (including an approved mobile slaughter/processing service), but the equipment cannot be used to slaughter or process another person's birds while on the grower's premises. The grower is required to have a 5-A license for his or her own premise, even when using a mobile service or rental equipment.

Poultry processed under this exemption can be marketed within state by the grower to any type of business or consumer including a household consumer, hotel, restaurant, retail store, institution, or distributor.

Unlike the rules for the other exemptions, under this exemption, the producer is NOT the only one permitted to distribute the poultry products that he or she produced under the exemption; however, the birds must have been raised by the producer/grower. The birds slaughtered and processed under this exemption may be sold to a wholesaler or other distributor, though the poultry can only be sold within the state in which it was raised, slaughtered, and processed.

The grower may not buy or sell poultry products prepared under another exemption in the same calendar year in which this exemption is claimed.

Instead of the required features of a label of inspected product, the label only needs to bear the producer's name, b. producer's address, "Safe Handling Instructions" (see above), and the statement, "Exempt P.L. 90-492." Wing tags are required for birds being processed under the producer/grower exemption.

Small Enterprise Exemption – 20,000 Limit Exemption

Under this exemption processing of birds is limited to the cutting up of dressed carcasses. No manufacturing of product is allowed. For example, turkey sausage cannot be made under this exemption. Slaughtering of birds is allowed. A business can dress no more than 20,000 birds in a calendar year under this exemption.

Poultry can be marketed to any type of business or consumer including a hotel, restaurant, institution, retail store, or distributor.

A business that qualifies for the Small Enterprise Exemption may be 1) a producer/grower who raises live poultry, 2) a business that purchases live poultry, or 3) a business that purchases dressed poultry for further distribution.

A small enterprise is not required to have slaughtered the poultry it cuts up under a Small Enterprise Exemption. Instead, it may purchase poultry slaughtered under USDA federal inspection or at another instate 5-A facility processed under the Producer/Grower 20,000 Bird Limit Exemption.

A small enterprise may handle "pass through" product and may cut exempt product produced under the Producer/Grower 20,000 bird Exemption. A small enterprise may also sell live poultry to a customer and then slaughter, dress, and cut up the poultry for the customer.

A small enterprise may not cut up and distribute poultry products produced under the Small Enterprise Exemption to another business operating under the Producer/Grower Exemption, PGOP Exemption, Retail Dealer Exemption, or the Retail Store Exemptions. Further, this facility cannot be used to slaughter or dress another person's poultry unless the Administrator of FSIS grants an exemption.

However, it is completely legal for a business operating under the Small Enterprise Exemption to buy live poultry from another poultry raiser, slaughter and dress the birds, and then sell the same birds back to the original grower who can now act as a distributor of the product and market it to retail stores, restaurants, and direct consumers. The farmer/distributor cannot hold a 5-A Producer/Grower license. It is important to note that these two buy-sell transactions be recorded separately and that receipts be kept for both purchase/sale be recorded. Receipts should not indicate any charge for slaughtering or dressing.

Wing tags are required for birds being processed under the small enterprise exemption. Labels for poultry products marketed under the Small Enterprise Exemption must include plant owner's name, address, product's name, ingredient list, date of packing, "Safe Handling Instructions" and the statement, "Exempt P.L. 90-492. The 5-A plant can also add the statement if the 5-A plant is providing the labels.

If the 5-A plant is providing the label then the statement "Manufactured by Plant ABC" must be on the label. In addition the words, "Manufactured for Farmer ABC" or "Distributed by Farmer ABC" may be added to the label to indicate the name of the distributor (farmer). The address and phone must be that of the processor, but may also include that of the distributor.

If the distributor (or farmer) is providing the label, then the distributor's name (the farmer) should predominately appear on the label and the statement should read "Processed for Farmer ABC". In addition, the words "Manufactured by Plant ABC" may be added to indicate the processing facility. The address and phone must be that of the distributor, but may also include that of the processor. All other labeling requirements apply.

A distributor can not resell birds under this exemption to another distributor. Rather the distributor can act as a transporter, simply carrying, trucking or moving the birds between the parties.

Retail Exemptions (Store/Dealer/Restaurant)

A retail business is a facility where poultry products are sold to a customer (household consumers and hotels, restaurants, and similar institutions) at the retail business and the amounts purchased by the customer are considered normal amounts for retail purchase. These exemptions are not commonly claimed by poultry growers.

The Act provides for several types of retail exemptions: (1) the Retail Dealer Exemption, (2) the Retail Store Exemption, and (3) the Restaurant Exemption. The type of poultry transactions and slaughter and processing operations a business conducts, determines which retail exemption under which the business may produce poultry and whether a 5-A license is required.

Retail Dealer Exemption

Businesses operating under this exemption are not permitted to slaughter poultry. Instead, they purchase poultry carcasses or parts. They are not permitted to process any poultry but are only allowed to cut-up USDA inspected poultry. No other forms of processing are allowed under this exemption. In addition, a 5-A license is required.

Any out of state sales they make are limited to their USDA inspected poultry products. Any poultry products they sell to instate customers must either have been USDA inspected or slaughtered/processed at an instate Producer/Grower or Small Enterprise Exempt plant. Keep in mind that birds slaughtered/processed under the PGOP Exemption cannot be sold to retail dealers or stores.

There is no limit on the pounds of poultry products a retail dealer can sell to his or her customers under the Retail Dealer Exemption. However, sales to hotels, restaurants, and similar institutions cannot exceed 25% of the dollar value of their total poultry product sales. In other words, 75% or more of their sales have to be to household consumers. They are not permitted to sell to other retail markets or distributors.

Labels for poultry products produced under the Retail Store Exemption which was not slaughtered and processed at a USDA federally inspected plant must include product's name, ingredients statement, statement of quantity of contents (weight or measure), name and address of manufacturer, date of packing, "Safe Handling Instructions" and a statement indicating why the inspection legend is not permitted such as "Retail Exemption from inspection."

Retail Store Exemption

Many of the live poultry markets in New York City are licensed as 5-A facilities under this exemption. The only poultry that can be slaughtered under the retail store exemption is poultry that is purchased live at the retail store by the customer and then slaughtered, dressed and prepared according to the customer's instructions at the same retail store and delivered back to

the customer. If the store takes orders for dressed poultry before the arrival of the customer (for example, by phone), and slaughters several birds at one time for various customers, the birds must be identified throughout the process so that the processed bird that each customer receives is the same live bird originally selected by or for them.

The retail business is not allowed to custom slaughter live birds delivered to the facility by the customer but can custom process poultry carcasses delivered by the customer if they were slaughtered under USDA inspection or an acceptable poultry exemption.

Similar to the previous exemption, any other poultry products the retail store sells to instate customers must either have been USDA inspected or slaughtered/processed at an instate Producer/Grower or Small Enterprise Exempt plant.

Exempt retailers are not permitted to sell to other retail markets or distributors, nor can any of their federally exempt poultry products be marketed out of state.

The allowed processing operations under the retail store exemption include boning, cut up, stuffing, smoking, rendering, and salting. Canning is not permitted.

Poultry sales are limited to "normal retail amounts". These are considered less than 75 pounds for household consumers and less than 150 pounds for hotels, restaurants, and similar institutions. Sales to hotels, restaurants and similar institutions cannot exceed 25% of the dollar value of their total poultry product sales nor can these sales exceed the dollar limit for retail stores set each calendar year by the Administrator of FSIS. This dollar limit is published each year in the Federal Register and does not include pass through poultry products derived from federally inspected poultry that are not further processed at the retail store.

Labels for poultry products produced under the Retail Store Exemption which was not slaughtered and processed at a USDA federally inspected plant must include product's name, ingredients statement, statement of quantity of contents (weight or measure), name and address of manufacturer, date of packing, "Safe Handling Instructions" and a statement indicating why the inspection legend is not permitted such as "Retail Exemption from inspection.

Retail Restaurant Exemption

The poultry used in the preparation of meals at a restaurant with this exemption must either have been slaughtered under USDA inspection or at a 5-A plant which is permitted to sell to restaurants (PGOP, Producer/Grower or Small Enterprise) While a 5-A license is not required for this exemption, restaurants are regulated by the State or local Departments of Health and are required to have an appropriate permit.

For more information on poultry processing in New York and to apply for specific poultry exemptions, contact the NYSDAM Division of Food Safety Inspection at 1-518-457-8835. The FSIS District Office is located at 230 Washington Ave. Extension, Albany, NY 12203-5369 and can be reached by phone at (518) 452-6870

Figure 1 Decision Flow Chart for Poultry Exemptions

Ask yourself the question in the bold type and then follow the appropriate response arrows to determine whether your poultry slaughter or processing may qualify for an exemption. You must read the criteria on the cited page to determine whether your operation qualifies for the exemption.

YES

NO

NO

YES

YES

NO

YES

NO

YES

YES

Mobile Slaughtering and/or Processing

Farmers need ready access to good quality slaughter and processing facilities in order to direct market meat and poultry products from their animals. Many regions of New York do not have sufficient facilities to meet the needs of local farmers, particularly during busy times of the year. New stationary plants are very expensive to build. Mobile plants are less expensive and may help fill the void. The initial investment in a mobile facility can be shared by several businesses or a cooperative, in order to better attract capital and spread operating costs. The owners will need to determine whether the mobile unit can service enough animals to make it worth the investment. Reliable estimates of the actual demand in the probable service area and of the daily volume of animals the plant can efficiently handle are necessary to make this determination. Keep in mind that the travel/labor expenses to get animals to and from processing are often reversed onto the operator of the mobile plant (rather than the owner of the animals) and may result in additional costs to a mobile plant operator as compared to a stationary plant.

Poultry

One of the largest areas of growth in on-farm processing and sales has been in the production of pastured poultry. Pastured poultry is a production model where broiler chickens are raised predominantly on pasture in some form of movable structure. Due to the relatively small numbers of birds per farm and the seasonality of this production system, it can be difficult to find poultry processors to handle these birds. Additionally, almost all USDA poultry plants in New York are operated by private packers who do not slaughter or process birds for other farmers regardless of the season or volume.

Mobile Facilities for Marketing Under the 1000 Bird Exemption

Starting in the mid 1990's several Mobile (Poultry) Processing Units have been designed and built for use in New York State by poultry farmers marketing their own birds under the 1000 bird exemption from federal inspection. These units are basically open trailers with poultry processing equipment mounted onto them. The operational concept is similar to that of an individual going to an equipment rental store and renting whatever equipment was needed to do the particular job on the farm. The trailers can be pulled by small pickup trucks either belonging to the poultry farm or the actual owner of the unit - which is often a non-profit agency providing services to farmers. Rental prices are based on the volume of birds to be processed or on a per bird price. In addition, there is usually a transportation fee depending on the distance the unit has to travel between the farm and its storage area. In most cases, farmers must replenish the scalder's propane tank after use.

The units are usually intended to assist first year poultry producers with processing while they save up money to invest in their own stationary processing equipment and become proficient at safe and sanitary slaughtering and processing procedures. Participating farmers usually go through a training program on sanitary poultry slaughtering and processing. Many inexperienced processors will assist an experienced farmer operating the unit before they are able to rent the unit for use on their own farms.

One of the first mobile units was manufactured by the South Central New York Resource Conservation and Development Agency (SCNY RC&D). The unit was made by stripping a

camper trailer to its frame, welding expanded metal to the frame and reinforcing it with additional angle iron. The processing components were then attached. These components included 5 poultry crates for containing live birds, 5 poultry kill cones to ensure correct bleeding, a propane fired scalder (capable of handling 3 to 4 birds at a time), a 3 to 4 bird barrel-type feather picker, a stainless steel evisceration table, chill tanks for processed birds, knives and scales. A 20-foot long tarp was included to provide shade and protection from the elements. There were also hookups for 110-volt electricity and water. Approximate construction cost for the MPU in 1995 was \$3000 not including the 70 hours of labor required to assemble the unit.

A series of educational resources for use in training small poultry processors using mobile units is available from Cornell Cooperative Extension of Allegany County.

Mobile units for custom slaughter/processing

Mobile units are allowed for custom processing of poultry under the same limitations as any other custom transaction, i.e. the slaughtered or processed birds must be for the personal use of the owner. The unit would need to be inspected by the state (under contract with USDA FSIS) for prior approval.

Mobile units for NY 5-A poultry plants

The New York State Department of Agriculture and Markets has interpreted the definition of places and establishments where animal or poultry are butchered for food in the NY Agriculture & Markets (NYAM) Law to include mobile slaughter units. Therefore, New York State is willing to accept the operation of 5-A mobile poultry plants under Article 5-A of the NYAM Law. Such mobile units must satisfy the requirements of poultry farmers operating under the Producer/Grower – 20,000 bird exemption from federal inspection. In addition, farmers operating under the Producer/Grower – 1,000 bird exemption (only processing 1000 birds or less per calendar year to be marketed direct to consumers), may also rent the services of these mobile units but would not need to apply for a 5-A license.

The units are often fully enclosed trailers with similar design and equipment to stationary 5-A poultry plants. One such mobile unit, recently approved in New York and scheduled to operate in the Hudson Valley region, is owned by Wildcraft Farms. The farm's owner, Ed Leonardi, plans for individual poultry farmers to go through a certification training program so that they could supply the labor when the mobile unit is on their farm. He estimates that it would take 6 to 8 people to process 500 chickens per day - with most farms only being able to supply enough labor to process 250 chickens per day. The farms would supply the propane, electricity, and potable water for the unit on-site and their own air compressor for operating the onboard dunker-scalder. Farms would need a level pad to park the unit and sufficient driveway clearance for an 8.5 x 28 ft trailer. The unit was made by retrofitting a new 2-car transport trailer with steel rather than aluminum walls. The unit is outfitted with a shackle system, killing tunnel, dunker-scalder, picker, hand wash sink, double sink, evisceration table, quality assurance table, bagging table and two chill tanks on wheels. Additional equipment includes an on-demand hot water heater, pressure pump, space heaters, and air conditioner. The unit obtained a waiver from the 5-A requirement for separate rooms for kill and evisceration in part because of the use of a killing tunnel.

Kentucky State University uses a refitted gooseneck trailer to provide slaughter/processing facilities to poultry farmers operating under the 20,000 bird exemption. The unit does not go from farm to farm. Instead, it was granted an exemption by the USDA FSIS Administrator from the requirement that a facility operating under a 20,000 bird exemption be limited to slaughtering for only one poultry owner at a given location. The trailer is docked at one of two centralized docking stations that are tied-in to septic, potable water and 220-volt electrical systems. The docking stations operate as fully enclosed kill floors and the trailer operates as the evisceration room. Rather than renting the services of mobile unit employees for the days, farmers are required to undergo rigorous training in the plant's HACCP plans and standard operating procedures in order to operate as facility manager on their scheduled slaughter/processing days. Several farmers utilizing the plant have been able to expand their operations to more than 20,000 birds per year and eventually build their own stationary USDA poultry plants.

There are several steps a New York farmer needs to go through to use a poultry mobile slaughtering unit (PMSU) under an Article 5-A license. The farmer must 1) consult with local zoning officials for an approved plan for operating a PMSU, 2) consult with zoning officials for an approved plan to dispose of inedible waste, 3) develop a NYSDAM approved floor plan for the PMSU – the operator/owner of the PMSU usually provides this, 4) have the water which will supply the PMSU, tested for potability, and 5) submit documentation of the above to the NYSDAM FSI Region Chief Inspector for approval. An Article 5-A License application can then be forwarded upon approval of documents. After review of the establishment/farm's facilities, including access to a toilet facility, the Department may consider a facility variance from certain requirements; provided that the mobile unit has met Department approval and the establishment/farm acknowledges the unit's operator as an employee of the establishment/farm as so stated pursuant to Article 5-A of Agriculture and Markets Law. Please note, the Article 5-A License is issued to the poultry farmer's premises; not to the PMSU. Establishments/farms employing a PMSU must maintain compliance with the NYSDAM PMSU Protocol, and are responsible for ensuring the mobile unit is clean and sanitized before it enters the premises and, cleaned and sanitized before the unit leaves the premises.

The NYSDAM Division of Food Safety Inspection has recently written an easy-to-read protocol for the licensing of PMSUs. This protocol is reproduced verbatim below.

(FSI-1120A 10/09)

**NYS Department of Agriculture & Markets
Division of Food Safety & Inspection
10B Airline Drive
Albany, NY 12235**

Poultry Mobile Slaughtering Unit Protocol

Establishments intending to utilize a Poultry Mobile Slaughtering Unit (PMSU) must adhere to the following guidelines:

1. The operator of the **Poultry Mobile Slaughtering Unit** shall arrange to meet with the Zone Supervising Inspector or Regional Chief Inspector to discuss their plans for their poultry

mobile slaughtering unit. The operator shall submit a floor plan of their proposed operations to the Meat and Poultry Supervisor and/or the Zone Supervisor prior to the meeting. The unit floor plan shall include but not be limited to the following:

- Dimensions of the unit.
- Location of the hand wash sink, and equipment washing and sanitizing sinks within the unit.
- Location of refrigeration equipment.
- Location of hot water and potable water supply.
- Location of water storage facilities or outlet.
- Location of entrance/exit.
- License number of vehicle(s).

Note: Potable water source and discharge of wastewater must be approved in writing by the appropriate county or state health department.

2. The establishment/farm leasing the poultry mobile slaughtering unit slaughtering more than 250 turkeys or 1,000 birds of all other species must be inspected and licensed by the Department of Agriculture and Markets, pursuant to the regulations of Article 5-A, of the Agriculture and Markets Law.
3. Only after review of the establishment/farm's facilities, including access to a toilet facility, the Department may consider a facility variance from certain requirements, provided the mobile unit has met Department approval and the establishment/farm acknowledges the units operator as an employee of the establishment/farm as so stated pursuant to Article 5-A of the Agriculture and Markets Law.
4. The operator of the poultry mobile slaughtering unit and the licensee shall be required to keep the following written records:
 - Names and addresses of establishments/farms leasing the mobile slaughtering unit and dates used.
 - Production records indicating the species and number of poultry processed for retail sale and wholesale.
 - Standard Sanitation Operating Procedure (SSOP) log for each day processing occurs.
 - Water quality verification.
5. Finished product (wrapped, encased) labeling shall contain the establishment/farm's name, address and the statement "Exempt P.L. 90-492".
6. The operator of the poultry mobile slaughtering unit will be required to fax to the appropriate Regional Chief Inspector or Zone Supervising Inspector their tentative monthly slaughtering schedule at the beginning of each month.
7. The poultry mobile slaughtering unit operator and the licensee must consult with local zoning officials before commencing the operation of the poultry mobile slaughtering unit.

For more information, contact any NYSDAM Regional Office at:

<u>ALBANY</u>	<u>SYRACUSE</u>	<u>ROCHESTER</u>	<u>BUFFALO</u>	<u>NEW YORK CITY</u>	<u>NEWBURGH</u>
(518) 457-5459	(315) 487-0852	(585) 427-2273	(716) 847-3185	(718) 722-2876	(845) 220-2047

Mobile units for USDA federal inspected or USDA equivalent poultry plants

The Vermont Department of Agriculture now operates a USDA equivalent state inspected mobile poultry unit for use by farmers in their state. This unit consists of a completely enclosed 8' x 36' trailer with separate kill and eviscerating rooms, tiny on board bathroom and office for state inspectors (rarely if ever used), ice machine, on board generator, and on board propane tanks for the hot water and scalding. The unit is towed with an F-550 truck. Most of the equipment was purchased through Cornerstone Farm Ventures <http://cornerstone-farm.com/> in Norwich, New York. The unit was manufactured by Brothers Body & Equipment in Ohio. The unit is valued at about \$93,000 and is leased to a private operator under a 2-year renewable contract with a buy out option. The Vermont Department of Natural Resources has granted a variance so that the mobile unit can manage wastewater when on-farm as a farm operation. Farmers rent the unit and the operator's services. The operator can process 100 birds per day. However, the unit was designed to employ two people processing 200 birds per day.

Unlike Vermont, New York does not have provision for USDA equivalent state inspected meat plants. Thus, NY farmers and funding agencies wanting to operate a similar mobile unit under USDA federal inspection would need to contact the USDA FSIS District Office in Albany to discuss the likelihood of similar prototypes being approved as mobile USDA poultry plants in New York.

Red Meat Mobile Units

Custom slaughter/processing

Custom mobile units have been permitted in the past in New York. However, unless animals are being processed the same day that they are field harvested, or the farm has its own cooler facilities for hanging carcasses, the mobile units may actually result in more back and forth transportation than a stationary plant. The animals are normally field harvested and then transported back to the mobile unit's docking station where they are hung in a refrigerated truck. After hanging, they are moved to the mobile processing unit for cutting and packaging, and then transferred to a freezer truck for return to the consumer. The mobile processing unit has similar facilities to those required for a 20-C mobile red meat processing unit. The unit needs to be inspected by the state (under contract with USDA FSIS) for prior approval. The owner of the animal must take possession of the meat/meat products, which are limited to their personal use and must be marked "not for sale".

Retail Meat Processing (20-C)

The New York State Department of Agriculture & Markets interprets the definition of places and establishments where animals or poultry are processed for food in the NY Agriculture & Markets (NYAM) Law to include mobile processing units. Therefore a farmer may get livestock

inspected and passed at a USDA federally inspected slaughter house and properly transport the meat back to the farm for further processing under the farmer's own 20-C retail meat processing license at an on-site mobile unit previously approved for 20-C red meat processing. The restrictions for marketing the resulting meat products are identical to those for USDA inspected meat processed at a stationary 20-facility.

One such 20-C mobile processing unit operates under the name "Cowboy Custom Processing". This unit operates out of Schoharie County, NY. The unit is an 8' x 24' enclosed trailer that can be pulled by a ¾-ton pickup truck. It includes a saw, mixer, grinder, cutting tables, three-bay sink, programmable scale, and wrapping equipment. The owner, Eric Shelley, provided all labor other than installation of the refrigeration system. The whole unit cost "not much more than a new truck" and was partially funded through a low-interest loan from the county Industrial Development Agency (IDA). The unit serviced at least four farms operating under individual 20-C licenses. Several of these farms expanded their markets enough to eventually build their own stationary 20-C establishments. Similar to mobile poultry plants, a complete time-consuming cleanup of the unit is required between uses by different farms. Thus, its efficiency increases as the number of animals processed per farm visit increases.

The conditions that the 20-C farmer and the mobile unit operator must meet are listed in the following NYSDAM FSI document.

Mobile Retail Meat Processing Unit Protocol

Establishments intending to utilize a mobile retail meat-processing unit must adhere to the following guidelines:

1. Establishment operators shall arrange to meet with the NYSDAM FSI Zone Supervising Inspector or Regional Chief Inspector to discuss their plans for their mobile retail meat-processing unit. The establishment operator shall submit a floor plan of their proposed operations to the Zone Supervisor prior to the meeting. The unit floor plan shall include but not be limited to the following:

- Dimensions of the unit
- Location of equipment, hand wash sink, and washing and sanitizing sinks within the unit.
- Location of refrigeration equipment.
- Location of hot water and wastewater storage facilities.
- Location of entrance/exit.
- License number of vehicle(s)

Note: Potable water source and discharge of wastewater must be approved in writing by the appropriate county or state health department.

2. The mobile retail meat processing unit may operate only at an establishment/farm inspected and licensed by the Department of Agriculture and Markets, pursuant to the regulations of Article 20-C, of the Agriculture and Markets Law.

3. Only after review of the establishment/farm's facilities, including access to a toilet facility, the Department may consider a facility variance from certain requirements, provided the mobile unit has met Department approval and the establishment/farm acknowledges the units operator as an employee of the establishment/farm as so stated pursuant to Article 20-C of the Agriculture and Markets Law.

4. The operator of the mobile retail meat-processing unit and the licensee shall be required to keep the following written records:

- Documentation, i.e. invoices or receipts, verifying all meats/meat products for retail were slaughtered at a USDA facility
- Production records indicating the start weight of the carcass and how many pounds were processed for retail sale. .
- Standard Sanitation Operating Procedure (SSOP) log for each day processing occurs.
- Water quality verification.

5. Finished product (cut, wrapped) labeling shall contain the establishment/farm's name, address and all other information required by law.

6. The operator of the mobile retail meat-processing unit will be required to fax to the appropriate Regional Chief Inspector or Zone Supervising Inspector their tentative monthly processing schedule at the beginning of each month.

7. The mobile retail meat-processing unit and the licensee must consult with local zoning officials before commencing the operation of the mobile retail meat-processing unit.

8. The mobile retail meat processing unit operator and/or the licensee may be required under Article 5-C to register as a Disposal Plant/Transportation Service.

For more information, contact a NYSDAM Regional Office: ALBANY (518) 457-5459; SYRACUSE (315) 487-0852; ROCHESTER (585) 427-2273; BUFFALO (716) 847-3185; NEW YORK CITY (718) 722-2876.

5-A Non-Amenable Meats

The flat bed trailers used in NY for mobile slaughter/processing of poultry under the 1000 bird exemption are not sufficient for the slaughter and processing of rabbits under a 5-A license. However, it is likely that a protocol could be developed to allow for the slaughter and processing of rabbits in the enclosed trailers approved by NY for 5-A poultry processing. Several other states operate modified mobile units that are approved for poultry farmers operating under the Producer/Grower – 20,000 bird exemption AND rabbit producers.

There are no mobile processing units for large non-amenable species in New York. However, the first large scale mobile slaughter/processing units operated in the United States were originally designed for the field harvesting of large non-amenable meat species. Animals were dispatched

outside the trailers and then the carcasses brought in for further processing. The expense of the units is probably the major impediment to their operation in New York.

USDA federally inspected or USDA equivalent plants

USDA federally inspected red meat mobile plants now operate in several states. These units consist of tractor/trailer combinations. Most units are equipped to only slaughter, dress out, wash, and store the carcasses. The carcasses are then transported to a centralized cut and wrap stationary establishment or to a farmer designated meat locker or other such processing plant. These units require creative thinking and problem solving on the part of regional USDA FSIS officers because the federal regulations are based on stationary meat plants.

Special issues relating to mobile red meat USDA slaughter plants include considerations as to the needs of the inspector. Most inspectors working with mobile plants need advance notice of schedules and slaughter locations than is required by an inspector operating at a stationary meat plant. Directions to each location need to be provided well in advance. Prior approval of each site may be necessary. If inspectors need to travel a long distance to meet the traveling unit, overtime may be required. Inspectors need access to computers and telephones regardless of the location of the facility; this requirement is not waved for mobile units in the field. However, technological advances -in terms of cell phones and EVDO wireless cards - often provide sufficient access. Mobile USDA facilities typically do not include rest room facilities. Instead, FSIS offices in several states have issued waivers allowing the use of portable rest rooms or farmhouse lavatories. The units usually provide a place for the inspector's file cabinet, storage cabinet and horizontal space for computer and printer use and storage of his/her records, brands, and supplies.

Another challenging issue for the field unit is the designation of the official address of the mobile unit. Mobile units have used the official address of either the home address of the unit's manager or the address of the stationary processing plant affiliated with the mobile unit.

The water used for slaughtering and processing must be certified as potable. Several mobile units carry their own water tanks (e.g. 500 gallons) which are filled at specific locations supplying the certified potable water requirements. In situations where the farm's water is not certified, the on-farm water is used only for cleaning the outside of the mobile unit. In some cases, each farm is required to provide a certification of potable water and thus meets the water supply requirement. The units must supply 180° F water. This can be achieved by a heat exchanger and electric sterilizers, or hot water heaters. Some mobile units in addition to carrying potable water also carry holding tanks to contain a wastewater. In other cases, the farmer is responsible for discharging wastewater properly.

Other issues may need to be addressed with mobile units. The trailers should be parked on a gravel or concrete pad. Concrete pads need to be sloped with drain lines or fields for run-off, while gravel pads have the advantage of allowing blood and water to percolate through. Slaughtering and processing wastewater should not be discharged into sewers or storm drains. The live animal inspection and kill usually takes place in outside pens supplied by the farm and adjacent to the trailer-landing pad. Adequate restraint must be provided for dentition examination

of the animals if necessary and for humane stunning. Depending on the number of animals slaughtered and the frequency the site is used, the pen flooring can be grass, gravel, or concrete. Rodent control is also an issue and the site must not harbor any rodents. This can be an issue when the pens are located near or within a barn structure. Vegetation around the landing site should be mowed short or eliminated to discourage rodents.

After the animal has been inspected and dispatched, it is then hoisted into the trailer but only after the previous carcass has been moved into the cooler. The access door should be closed immediately behind the animal to avoid flies. Carcasses are inspected on the rail after skinning but prior to washing. In some cases, inedible offal can be inspected on the floor if space is otherwise limited for this activity. Removable head racks and drain trays may be used for head and edible offal inspections respectively. Inedible materials are often properly and legally disposed of on-farm under variances from state officials allowing the mobile unit to operate as an on-farm activity. Some states such as New York allow on-farm composting.

Most of the units currently approved for federally inspected red meat are designed to handle cattle and pigs. Several of these were built through either Tri Van <http://www.trivan.net/> in Ferndale, WA and Waco, TX or Featherlite <http://www.fthr.com/> in Cresco, Iowa. Featherlite has several dealers in the Northeast US. The currently approved units may be larger than what is necessary for small ruminants only. The Spirit of Humane <http://spiritofhumane.com/> in Wisconsin used a grant from the Sustainable Agricultural Research and Education (SARE) Program to develop a mobile slaughter unit for sheep and goats. The unit is only approved for custom slaughter thus far, but, purportedly, was built to meet USDA federal inspection standards. It consists of an 8 x 24 x 8 ft. trailer towed by a ¾-ton pickup. The trailer was created by bolting a truck van body to a mobile home trailer bed. It includes an electrically heated ceramic tile floor, food grade plastic coated walls and reinforced ceiling, grey water collection tank, 4 x 8 ft. chill area with side exit from the trailer, water proof lighting, stainless steel sink and work tables, and a double rail upright slaughter restrainer for humane Halal kill of small ruminants within the back part of the trailer. USDA inspectors did a walk thru of the plant and recommended increased ventilation to prevent moisture condensation by adding a ceiling air conditioner and fan, and an active insect control system such as an ultra violet light flytrap. The unit cost \$46,000 to build including research, design and redesign time. The owners estimate that similar units could be built for \$25,000.

To date, there are no USDA mobile red meat plants operating in New York. Units have been built for possible use and the USDA FSIS regional office is determining the feasibility of allowing USDA mobile units within the state.

Obtaining a Federal Grant of Inspection for a Mobile Red Meat Slaughter Unit:

- 1) File an application for a Federal Grant of Inspection with your USDA FSIS District office. Be sure to include either a drawing or written description of the “Limits of the Establishment Premises”.
- 2) Make sure that the unit meets Regulatory Performance Standards (listed in Sections 416.1 to 416.6 of Title 9 of the Federal Code). A FSIS representative from the District Office (often the

frontline supervisor) will inspect your unit.

- 3) Reserve an establishment number and obtain approved labels containing the assigned establishment number.
- 4) Obtain approved water source letter from local authorities that identifies the water source, states that the source is approved and that water is certified as potable and meets EPA testing requirements. An acceptable current water laboratory sample report must be on file before inspection can be granted.
- 5) Obtain an approved sewage system letter from local health agency. In several cases, dispersal of blood and waste water into farmer's fields has been approved for mobile units.
- 6) Provide a written Standard Operating Procedure (SOP) for Sanitation - Sections 416.11 to 416.17 of Title 9 of the Federal Code.
- 7) Provide a written Hazard Analysis and HACCP Plan – Section 417 of Title 9 of the Federal Code.
- 8) Submit schedules for hours of operation as soon in advance as possible.
- 9) Make sure "office space" for the inspector is prepared. Can be a conveniently located locker and horizontal space. Obtain prior approval to dispense with desk and toilet requirements if these will not be available.

USDA FSIS is preparing the publication, "Guidelines on Mobile Slaughter Unit Compliance". There is a publication on "Guidelines for Obtaining a Federal Grant of Inspection" (includes sample forms and approval letters) at:

<http://www.fsis.usda.gov/Regulations & Policies/Grant of Inspection Guideline/index.asp>

*For more information on mobile meat plants, check out the mobile processing page on the Niche Meat Processing Assistance Network's Website
http://www.extension.org/pages/mobile_slaughter_processing_units*



A mobile 20-C processing facility. (Photos: Eric Shelley)

The Cuts

It is imperative when trying to sell cuts (to a greater extent retail cuts as opposed to wholesale cuts) that both the farmer and his/her customer are in complete understanding of the product. What exactly does the customer want when he says, "I'll take a steak."? As a salesperson, the producer must be able to identify the cuts. Standardized industry cutting charts follow on the next few pages. Farmer-marketers should learn them.

It is also beneficial to be able to make recommendations on how to cook the various cuts. Grass fed meats tend to be lean. Proper cooking techniques must be used to ensure tenderness. When in doubt, grass-fed meats should be cooked low, slow, and moist; never allowing them to dry out.

It also helpful to know the which muscle cuts are tender (prime) and which are tough and how to cook each of these. It is easy to remember that the more a muscle is worked, the tougher it is (think about necks, shoulders and shanks). Prime, tender cuts can be, broiled, grilled, roasted, fried or sautéed. The meat should be cooked quickly over a very high heat, then removed and allowed to rest. The high protein/low fat content allows the meat to finish cooking during this rest period. Basting or barding should be practiced when dry roasting. Less tender cuts are an excellent alternative in soups, stews, casseroles and stir-fries where they can be braised, stewed or sautéed to maintain tenderness. Try using broth, wine, fruit or vegetable juice or spring water with a crock-pot, Dutch oven, or covered casserole.

Butchering Step By Step

There are many good resources to help farmers who are butchering livestock and poultry for their own use. This information is outside the scope of this resource guide. Rather we have decided to include here a few good examples of these types of resources available to those interested.

Home Processing of Poultry by Melvin L. Hamre University of Minnesota Extension
<http://www.extension.umn.edu/distribution/livestocksystems/DI0701.html>

Home Slaughtering and Processing of Beef by Harold R. Hedlick and William C. Shingel
Department of Food Science and Nutrition AND Maurice Alexander Department of Animal Husbandry, College of Agriculture
<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-2047/ANSI-3400web.pdf>

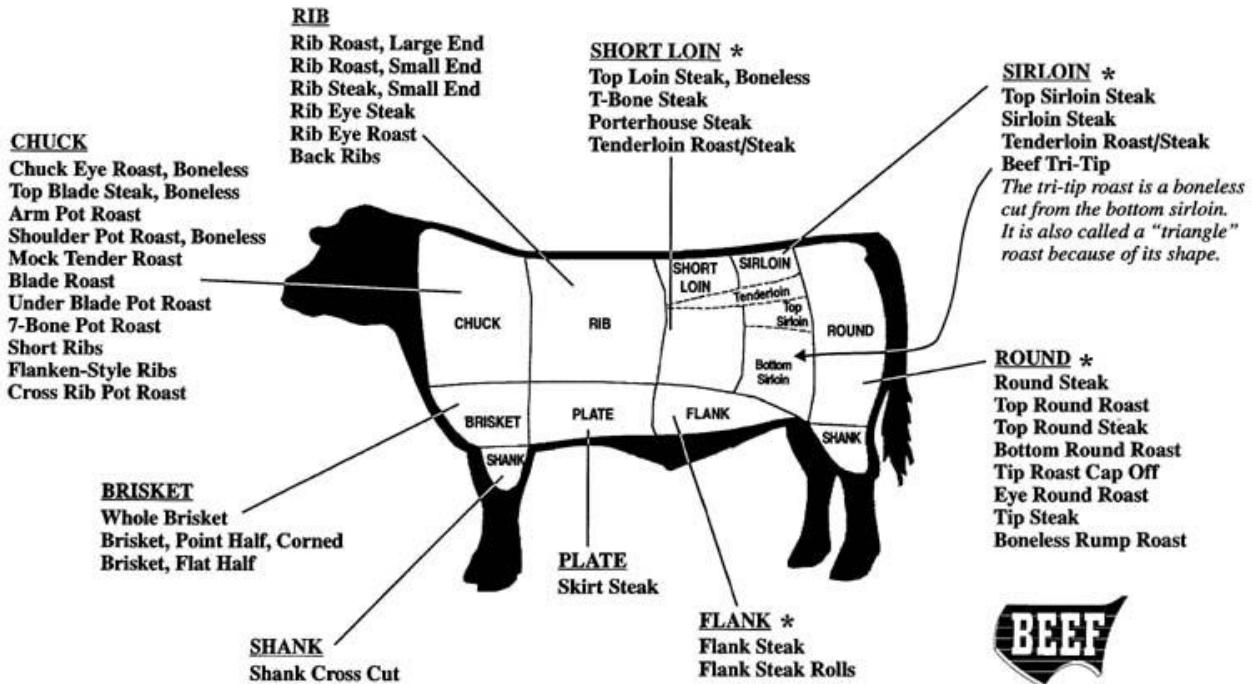
Home Slaughtering and Processing of Pork by Maurice Alexander, Department of Animal Husbandry; and William C. Stringer and Harold B. Hedrick, Department of Food Science and Nutrition, College of Agriculture University of Missouri. Published by Oklahoma State University Distributed Through County Extension Offices No. 3670
<http://www.ansi.okstate.edu/resource-room/meats/homeprocessingpork/index.htm>

A Step-by-Step Guide to Butchering a Lamb Carcass, The Guardian
<http://www.guardian.co.uk/lifeandstyle/gallery/2008/nov/19/foodanddrink?picture=339595404>

Cutting Meat, by G. H. Wellington
<http://ecommons.library.cornell.edu/bitstream/1813/3221/2/Cutting%20Meat.pdf>

Industry Cutting Charts

— BEEF CUTS — *Where They Come From*



* Beef primals that feature cuts lowest in fat.

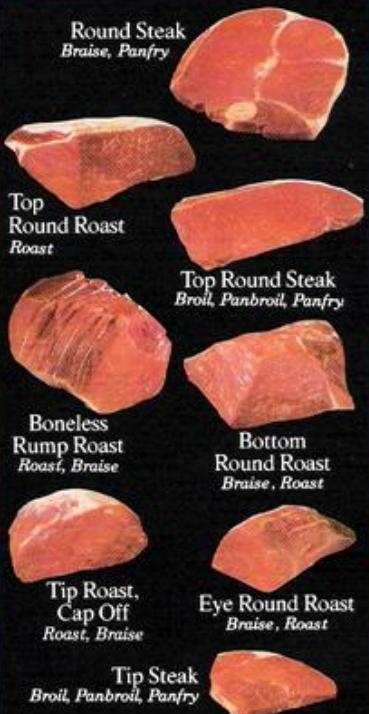
National Cattlemen's Beef Association
444 North Michigan Avenue
Chicago, Illinois 60611
(312) 467-5520



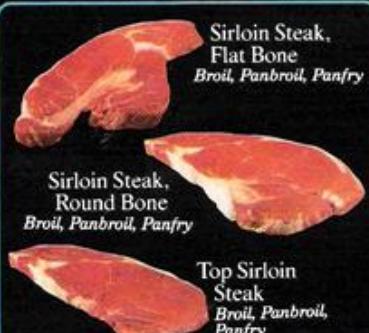
21-500

Beef

• RETAIL CUTS •
WHERE THEY COME FROM
HOW TO COOK THEM



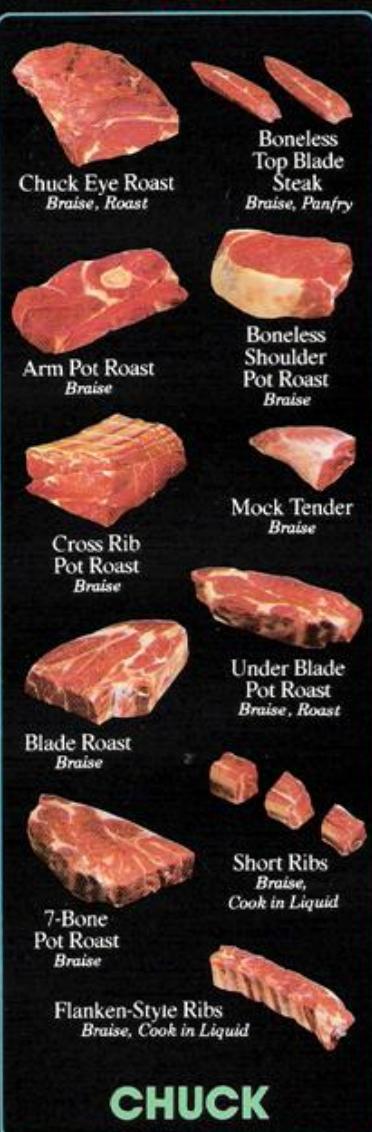
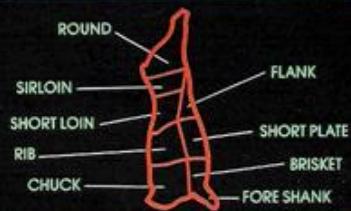
ROUND



SIRLOIN

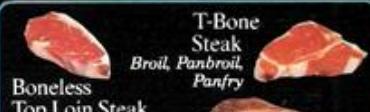


FORE SHANK & BRISKET



CHUCK

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SHORT LOIN



RIB



FLANK & SHORT PLATE

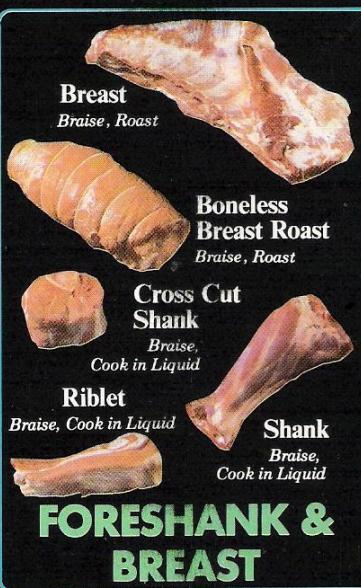
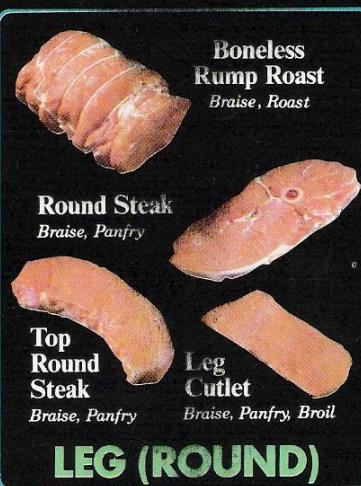
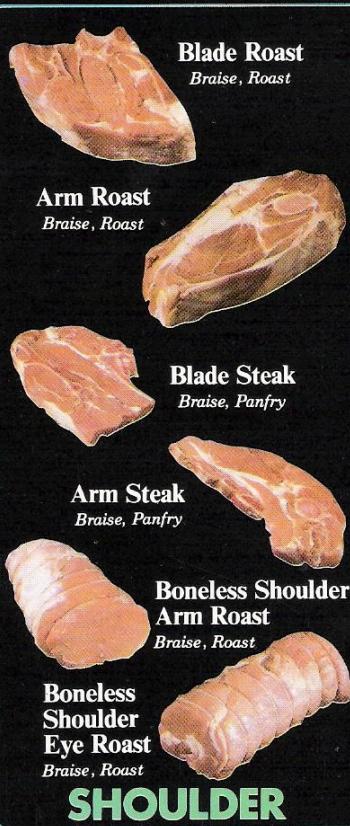
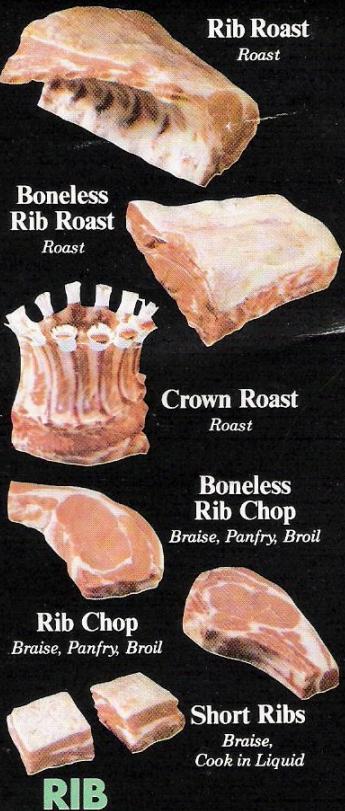
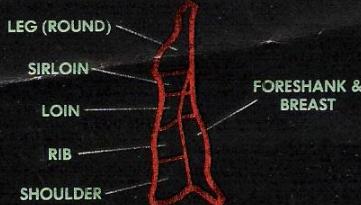


OTHER CUTS

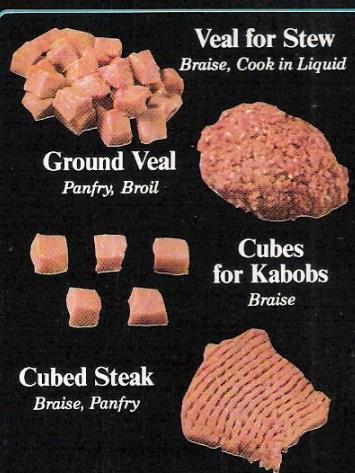
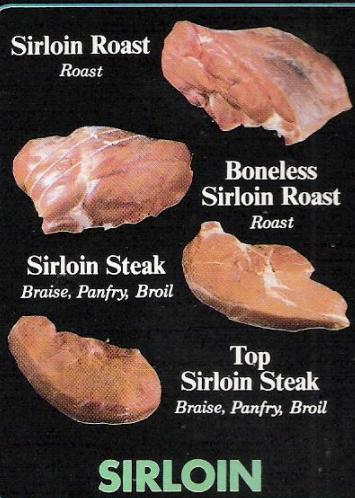
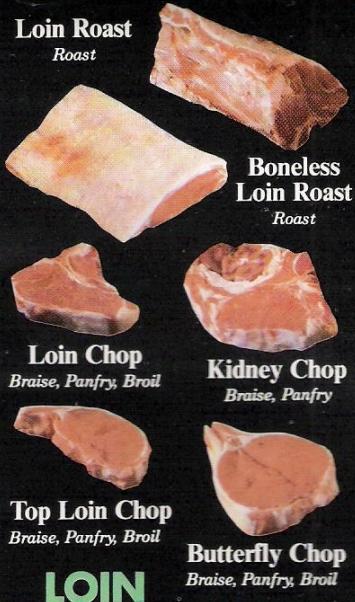
Veal

• RETAIL CUTS •

WHERE THEY COME FROM HOW TO COOK THEM



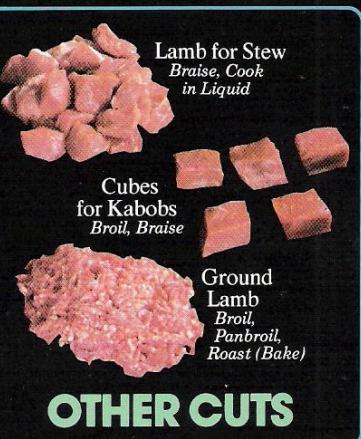
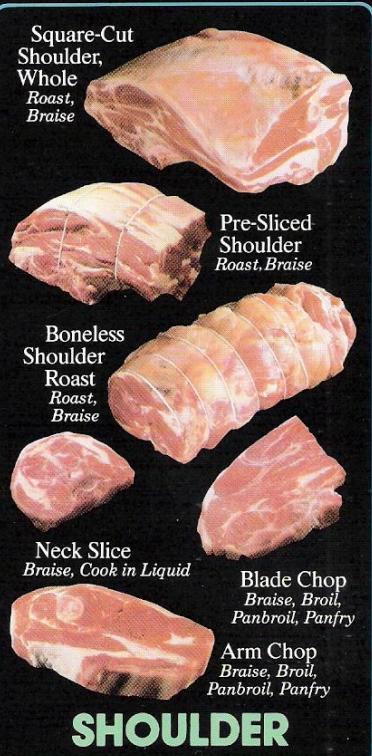
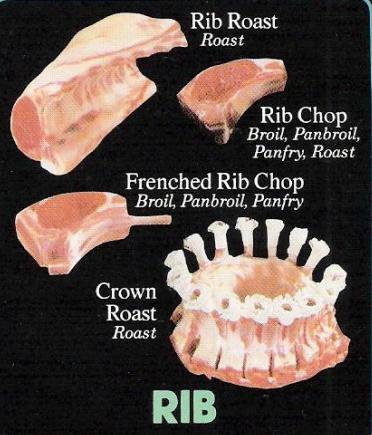
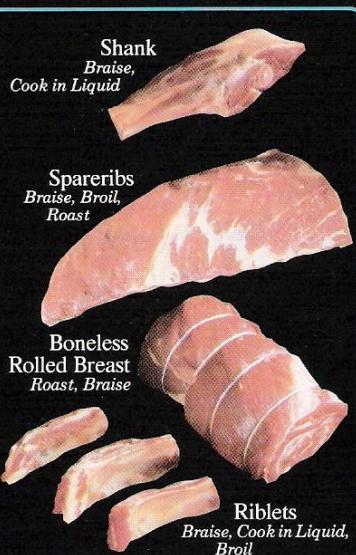
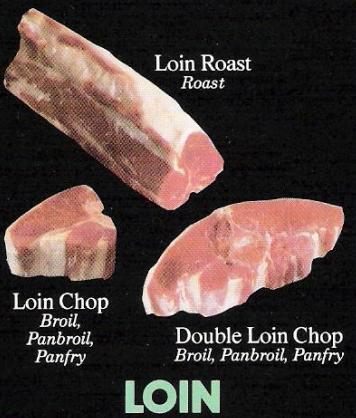
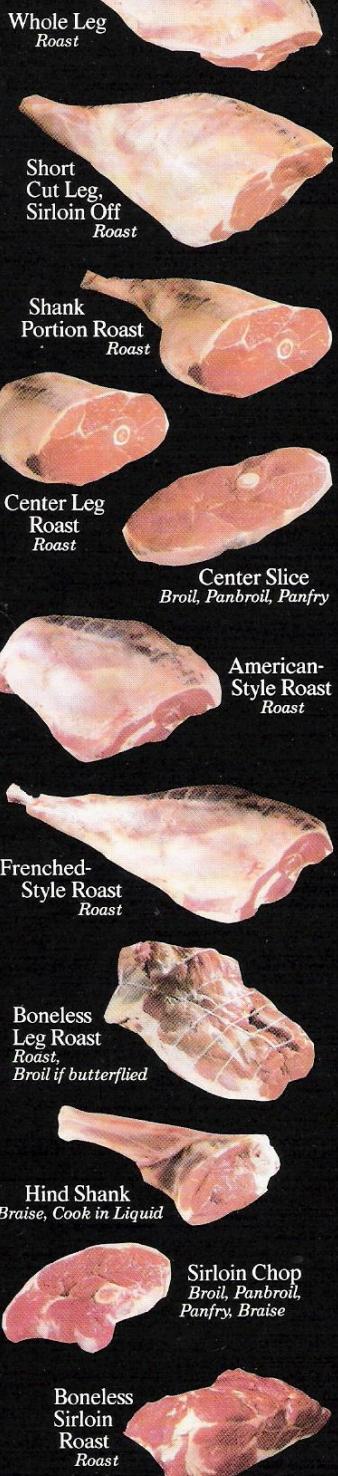
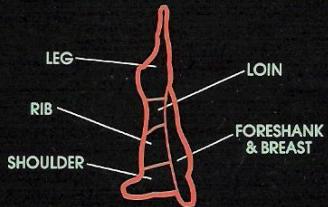
THIS CHART APPROVED BY
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Lamb

• RETAIL CUTS •

WHERE THEY COME FROM HOW TO COOK THEM



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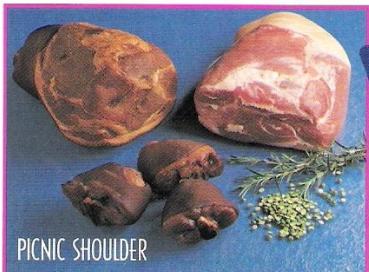
PURCHASING PORK

Left: tenderloin
Right: Canadian-style bacon



SHOULDER BUTT

Upper row (l-r): bone-in blade roast, boneless blade roast.
Lower row (l-r): ground pork (The Other Burger™), sausage, blade steak.



PICNIC SHOULDER

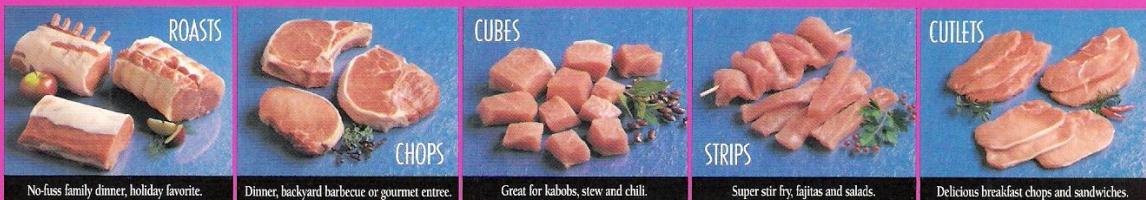
Upper row (l-r): smoked picnic, arm picnic roast.
Lower row: smoked hocks.

TASTE
WHAT'S
NEXT
pork

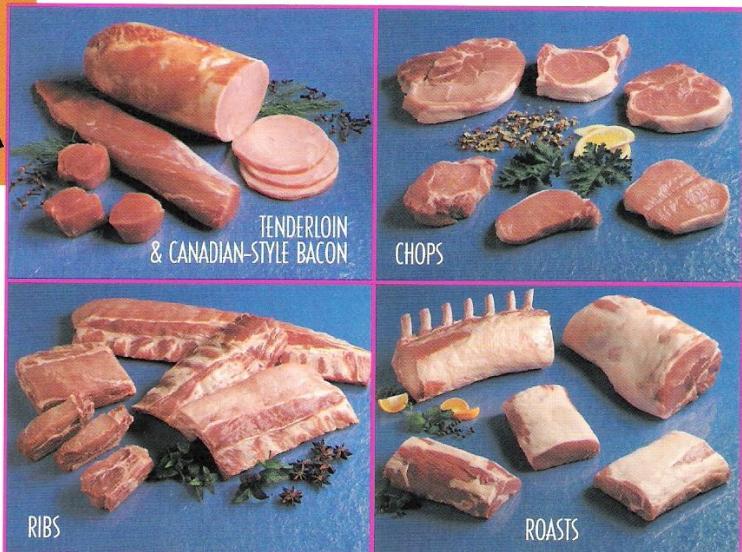
©1997 NATIONAL PORK PRODUCERS COUNCIL IN
COOPERATION WITH THE NATIONAL PORK BOARD.

THE MANY SHAPES OF PORK CUT LOOSE!

When shopping for pork,
consider cutting traditional roasts into
a variety of different shapes.



A Consumer Guide To Identifying Retail Pork Cuts.

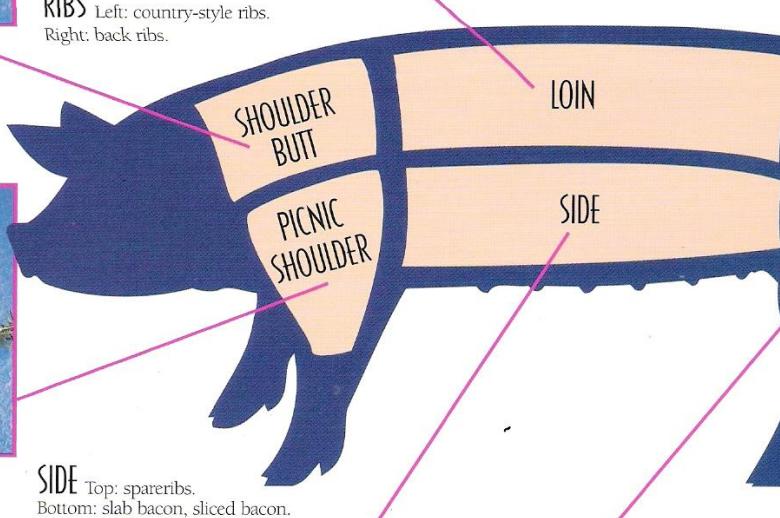


CHOPS

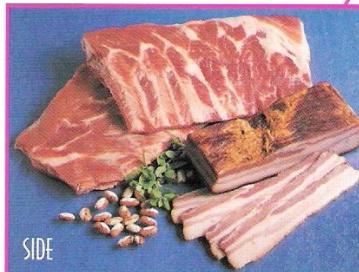
Upper row (l-r): sirloin chop, rib chop, loin chop.
Lower row (l-r): boneless rib end chop (Chef's Prime Filet™), boneless center loin chop (America's Cut™ - 1 1/4-1 1/2" thickness), butterfly chop.

ROASTS

Upper row (l-r): center rib roast (Rack of Pork), bone-in sirloin roast.
Middle: boneless center loin roast.
Lower row (l-r): boneless rib end roast (Chef's Prime™), boneless sirloin roast.



SIDE Top: spareribs.
Bottom: slab bacon, sliced bacon.



LEG

Upper row (l-r): bone-in fresh ham, smoked ham.
Lower row (l-r): leg cutlets, fresh boneless ham roast.

USDA Institutional Meat Purchase Specifications

Fresh Goat Series 11

IMPS Style	Carcass Weight Range	Recommended Skeletal and Muscular Cuts
Platter	15 lb. or less	 
Roasting	15 to 30 lb.	 
Barbeque	20 to 40 lb.	 
Food Service	30 to 40 lb.	 
Hotel	40 lb. or more	 

Yields and Dressing Percentages

It is important for anyone direct marketing meat to determine how much meat a market animal provides. The pounds of meat a farmers should get from an animal will be dependent upon the dressing percentage and the carcass cutting yields. A handy formula has been developed to help:
Pounds of Meat= (Dressing percent x Carcass cutting yield) x Live weight

The dressing percentage is the percent of the live animal that ends up as carcass. Generally, the carcass weight is taken immediately after skinning and evisceration and is commonly known as the hot hanging weight. There are a number of factors that will affect the percentage including how much the animal has eaten before it is weighed, how much mud or fiber is on the animal. These factors negatively correlate to the dressing percentage, by reducing the dressing percentage. The amount of fat and muscling will positively affect dressing percentage, the heavier or fatter an animal, the higher the dressing percentage. The dressing percentage can be calculated as such: Dressing Percentage (DP)= (Carcass Weight / Live Weight) x 100. Different species tend to average different DP's. Beef cattle average 62%, steers 59%, hogs 74% and market lambs 54%. Farmers can expect a 1000 pound steer to result in a 620 pound hanging carcass or a 140 pound market hog to produce a 103 pound carcass (140 x .74).

The carcass-cutting yield is the percentage of the carcass that actually ends up as meat. The carcass cutting yield is calculated by: (Pounds of meat/ Carcass weight) x 100. Cutting yields can vary significantly depending upon cutting specifications; cuts that are bone-in or boneless, will produce very different cutting yields. If the animal is excessively fat, then the cutting yield will be lower because the fat is removed and discarded. A more muscular animal will have a higher cutting yield. Aging, leaving the carcass to hang for an extended period of time will also impact cutting yields, as the carcass tends to shrink during the process. Cutting losses on a side of beef may range from 20 to 40 percent, and average around 28%.

Yield grades can help predict cutting yields. A yield grade measures the amount of boneless, trimmed retail cut from various parts of the carcass: the round, the loin, the rib and the chuck. The higher the yield grade the higher the carcass cutting yield percentage. A lower yield grade indicates a higher cutting yield. To employ the help of a yield grade to determine the amount of saleable meat lets consider the following example. A yield grade 2 on a 400 pound carcass would indicate saleable meat of 79.8% or 319 pounds of meat. If more cuts were left bone-in, then the actual carcass cutting yield would be higher than 79.8% and the pounds of meat would be higher than 319.

Yield Grade for Beef	Carcass cutting yield (%)
1	79.8 or more
2	75.2-79.7
3	70.6-75.1
4	66.0-70.5
5	65.9 or less

To help a farmer price his product, it is also important to know the average cut weights expected from breaking down a carcass. A 1000 pound steer will produce a 600 pound carcass. 400 pounds are lost in hide, blood, and inedible organs. From this 600 pound beef carcass a farmer should expect around the following: 27.5% chuck, 3.2% shank, 3.8% brisket, 9.8% ribs, 8.5%

short plate, 17.7% loin, 5.3% flank, and 22.8% round. He could also expect 425 pounds in retail cuts at a yield grade 3 (70.8%). These figures provide only an approximation, and are to be used as a guide. Farmers should keep good records of dressing percentages and carcass yields to help with farm management and the decision making process.

Value Added Products

FDA and Nitrate Usage

Many preservatives are regulated under the **Food Additives Amendment**, added to the **Federal Food, Drug, and Cosmetic Act of 1958**. The amendment strengthened the law to ensure the safety of all new ingredients that manufacturers add to foods. Under these rules, a food manufacturer must get FDA approval before using a new preservative, or before using a previously approved preservative in a new way or in a different amount. Food law says preservatives must be listed by their common or usual names on ingredient labels of all foods that contain them.

Manufacturers add preservatives mostly to prevent spoilage during the time it takes to transport foods over long distances to stores. Without such preservatives, food safety problems would get out of hand.

Preservatives serve as either antimicrobials or antioxidants—or both. As antimicrobials, they prevent the growth of molds, yeasts, and bacteria. As antioxidants, they keep foods from becoming rancid, browning, or developing black spots. Rancid foods may not make a person sick, but they smell and taste bad. Antioxidants suppress the reaction that occurs when foods combine with oxygen in the presence of light, heat, and some metals. Antioxidants also minimize the damage to some essential amino acids—the building blocks of proteins—and the loss of some vitamins.

Preservatives may not be used to deceive a consumer by changing the food to make it appear other than what it is. For example, preservatives that contain sulfites are prohibited on meats because they restore the red color, giving meat a false appearance of freshness. The food additive regulations require the preservative to be of food grade and be prepared and handled as a food ingredient. The quantity added to food must not exceed the amount needed to achieve the manufacturer's intended effect.

Regulations about the use of nitrites demonstrate the scrutiny given to the use of additives. Nitrites, are used in combination with salt, and serve as antimicrobials in meat to inhibit the growth of bacterial spores that cause botulism, a deadly food-borne illness. Nitrites are also used as preservatives, for flavoring and fixing color in a number of red meat, poultry, and fish products.

Since the original approvals were granted for specific uses of sodium nitrite, safety concerns have arisen. Nitrite salts can react with certain amines (derivatives of ammonia) in food to produce nitrosamines, many of which are known to cause cancer. A food manufacturer wanting to use sodium nitrites must show that nitrosamines will not form in hazardous amounts in the product under the additive's intended conditions of use. In addition, other antioxidants, such as sodium ascorbate or sodium erythorbate, may be added to inhibit the formation of nitrosamines.

Sodium nitrite and nitrate are listed as approved prior-sanctioned food ingredients in FDA's regulations based on their documented use for curing meat. This determination was made prior to 1958 where "meat" was defined as being from cattle, sheep, swine, goats, and equines. Because exotic or game species were not included in the definition, nitrites and nitrates cannot be used to manufacture products prepared only from non-amenable species. If a product made from non-amenable meat were to include more than 2% of a listed species (for example 2% pork fat) from an inspected and approved source, then the use of nitrites/nitrates would be allowed for that product and it would be required to be manufactured under an inspected process.

Sausages, Smoked Meats and Dried Meats

Fresh Sausages

A fresh sausage is lean ground meat combined with fat or lard or other binding agent and seasonings such as herbs and spices. Fresh sausage can be packed in bulk, formed into patties, or put into a casing and sold as links. Fresh sausage must be kept under refrigeration and cooked before being eaten.

Fresh red meat sausage may be prepared at a USDA inspected facility or at a 20-C licensed commercial kitchen. Fresh game and poultry sausage may be prepared at a USDA inspected facility, at a 5-A facility or at a 20-C commercial kitchen.

Cooked Smoked Sausages

Cooked smoked sausages include products such as hotdogs and bologna. It is advised to keep these products under refrigeration and to thoroughly heat before being eaten.

Fermented Sausages

Fermented Sausages are a class of chopped or ground meat products that, because of microbial fermentation of a sugar, have reached a PH of 5.3 and have undergone a drying/aging process to remove up to 25% of the moisture. These products are typically cured but are not necessarily cooked or smoked. The USDA regulates the moisture-to-protein ratio but does not formally define semi-dry or dry sausages.

Semi-dry sausages such as summer sausage, thuringer, cervelat, and landjaegar have a higher moisture content and should be refrigerated. They are generally cooked or smoked prior to sale or consumption. Dry sausages such as pepperoni or salami are generally shelf stable and may be consumed without additional heating.

Below is a partial list of fermented sausages:

- Alpina Salami: A spicy Italian-style sausage that originated in the US.
- BC Salami: Beef case Italian-style salami
- Blockwurst: A semi-dry sausage.
- Caserta Pepperoni: A southern Italian product generally 75% pork and 25% beef, linked in pairs much like landjaegar.

- Cervelat: This is a general class of semi-dry sausages, generally Swiss style, and includes Farm style, (summer sausage), Goettinger, Goteborg, Holsteiner, Landjaegar, and Thuringer.
- Cacciatore: This is a dry sausage historically prepared with wild game.
- Calabrese: An Italian Salami highly seasoned with hot peppers.
- Cotto Salami: This salami is not fermented or acidified, but rather cooked.
- D'Arles Salami; This is French salami stuffed in hog bungs and corded to show a distinct diamond pattern.
- Frizzes: A rough chopped, highly seasoned, dry sausage.
- Genoa Salami: This is primarily pork product that is not smoked, originating from Genoa, Italy.
- German Salami: This German style salami is heavily smoked, traditionally stuffed into calf bladders and corded with twine.
- Italian Salami: Regional differences result from the seasonings, stuffings and cording designs.
- Lola and Lolita: Dry garlic-seasoned sausage of Swiss origin. Lola is roughly one pound, and Lolita is two and a half pounds.
- Lombardia Salami: This salami has higher fat content and incorporates brandy into the recipe.
- Milano Salami: This sausage has an intricate cording pattern.
- Lyons Sausage: This is a French style using pork and pork fat seasoned with garlic.
- Metz Sausage: Made with beef, pork, and bacon.
- Pepperoni: This class of sausage must be treated and certified Trichina Free. Generally, it is not smoked or cooked.
- Salami: There are hundreds of types of salamis, usually made from pork and seasoned with garlic. Extenders and binders are permitted, and the product may or may not be cooked.
- Sopressata: A fermented sausage stuffed into hog casings with a wrinkled appearance.
- Soudjouk: A dry sausage of Turkish origin. Made from beef, water buffalo, and or mutton, usually containing 10% sheep fat.
- Summer Sausage: A farmer-style Cervelat, produced in the cooler months for summer eating.
- Touristenwurst: A semi-dry sausage.
- Ukrainian Sausage: A dry sausage containing pork and veal chunks, heavily seasoned with garlic, cooked and air-dried.

Smoked Meats and Sausages

Smoking adds desirable color, flavor, and aroma to fresh or fermented meats. Smoking may also a method of preserving meat but it should not be the only method employed, as any disruption to the smoked surface will destroy the preservation. Approved woods for smoking include hickory, oak, apple cherry (and other fruitwoods), mesquite, redwood and even corncobs. Liquid smoke

may be substituted for the actual smoking process. Products may be hot smoked or cold smoked. Products are cooked during the early stages of a hot-smoke process. Cold smoking at temperatures below 41°F is generally reserved for hams. Smoked meats should be kept refrigerated and thoroughly cooked before being consumed.

Jerky and Dried Meat

People have made jerky for hundreds of years. Native Americans combined jerky with animal fat to create Pemmican, a product known for its high energy qualities. Early European explorers prepared dried meats such as Charqui or Xarque. Biltong, an African version, was often produced using ostrich meat. Many of these early versions used salts and seasonings as rubs. Today's jerky is often prepared using marinades instead.

In general, jerky is prepared using lean muscle meats, cut with the grain of the muscle fiber. All visible fat must be removed to prevent rancidity. Jerky has a very low moisture level and may be cured, non-cured, smoked, non-smoked, rubbed, or marinated. Jerky can be made from amenable or non-amenable meat or poultry. Jerky may also be made from ground meat into a jerky-like product known as "formed jerky".

Kippered meats are similar to jerky but are allowed to have a higher moisture to protein level. Kippered meats are not shelf stable, and may need further heat processing and vacuum packaging to retain product integrity.

Snack sticks are generally made with shredded or ground meat, seasonings, and a cure. The mixture is stuffed into small diameter casings and hot smoked (cooked and dried). Because they may contain fat, they require antioxidants to control rancidity and vacuum packaging to limit oxygen exposure. Their tangy taste is usually attributed to lactic acid (or other organic acids) to help prolong shelf life.

USDA has a quick guide on jerky manufacturing for small and very small plants available at: http://www.fsis.usda.gov/pdf/compliance_guideline_jerky.pdf

Recipe Development and Considerations

Developing a great recipe takes time. Different ingredients, different fermentation, and drying techniques all add to the uniqueness of the end product. Spices, seasonings and other ingredients add additional interest. It helps to understand the sausage process when looking to experiment.

The usual procedure in the making of a sausage is to grind the various meats coarsely and then add the rest of the ingredients, mixing thoroughly. Generally, the other ingredients (spices and seasonings) are first made into a slurry using a small amount of water before being mixed into the ground meat. The product is then ground again to the desired consistency. Small batches (up to 25 pounds) are recommended so the cure and seasoning can be more evenly distributed.

Casings

It is not necessary to stuff fresh sausage meat. It can be left in bulk form or made into patties. Most sausage, however, is made by placing the ground ingredients in some type of forming device to give them shape and hold them together for thermal (heat) processing. The casing materials may be natural or manufactured. **Natural casings** are often the gastrointestinal tracts of cattle, sheep, and hogs. They are digestible and are very permeable to moisture and smoke.

Fibrous casings are more suitable for summer sausage and similar products because of their greater strength and the variety of sizes available. They are permeable to smoke and moisture and can easily be removed from the finished product. **Collagen casings** contain the attributes of both natural and fibrous casings. They have been developed primarily for use in products such as fresh pork sausage and pepperoni sticks. They are uniform in size, relatively strong and easy to handle. These casings also are used for the manufacture of dry sausages, because they are permeable and will shrink. For products that are water-cooked plastic casings impermeable to water are used.

Spice Selection

The success or failure of a value added meat product may be dependent upon the selection and combination of spices and seasonings used. Typical beef spices include: basil, bay leaves, chervil, coriander, cumin, dill, garlic, lovage, marjoram, parsley, sage, savory, shallot, tarragon, and thyme. Spices that compliment lamb include: basil, bay, dill, garlic, mint, marjoram, rosemary, parsley, savory, tarragon, and thyme. Pork is often seasoned with: anise, basil, bay, caraway, coriander, cumin, fennel, garlic, rosemary, sage, and thyme. Poultry seasonings include: basil, bay, burnet, caraway, chervil, chives, cumin, dill, garlic, marjoram, parsley, rosemary, sage, savory, shallots, tarragon, and thyme. Dried fruits such as cranberries, apples apricots, and tomatoes can also be considered. Various chilies, onions, and peppers can also add distinct flavors. Combinations of spices, seasoning and additions provide unique interest and lend to consumer appeal.

Packaging Options

All packaging materials in direct contact with food must be safe for their intended use under the **Federal Food, Drug, and Cosmetic Act (FFDCA)**. Meat and poultry products may not be packaged in a container that is composed of any substances that may adulterate the contents or be injurious to health. (In other words, garbage bags cannot be used.) Only FDA approved food grade packaging is allowed. It is the farmer's responsibility to see that approved packing materials are used.

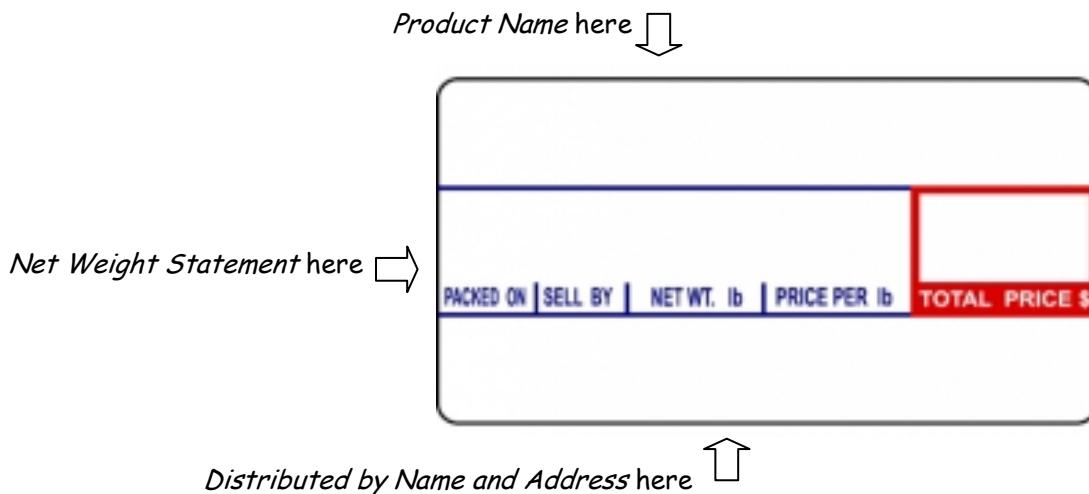
Proper wrapping and rapid freezing contribute to a longer lasting quality product. The goal is to prevent moisture loss from the meat (freezer burn) and keep air out. Packaging options for meat cuts include: Freezer paper, tray wraps, plastic wraps, barrier films and meat trays, and shrink bags, which are not vacuumed, are acceptable. Cryovac packaging (also known as reduced oxygen packaging), is allowed if certain conditions are met. (See below)

Vacuum Packaging

Vacuum packaging reduces the amount of air from a package and hermetically seals the package so that a near-perfect vacuum remains inside. This is also known as modified atmospheric packaging. Only USDA processors and 20-c retail food-stores are licensed to vac-pac. **Any facility in New York that is using reduced oxygen packaging must have a HACCP plan in place for this activity.**

Labeling

New York State has adopted the **USDA FSIS Mandatory Labeling Requirements**. The following items are required to be on the principal display panel (the main label) for all sales of meat or poultry, or meat or poultry products.



The following information must be on the label for those products sold in New York:

- **Product name** (example- Chuck Roast, Hot Italian Sausage, Chicken Breasts)
- **Inspection legend and establishment number** - For USDA inspection, this is the round purple stamp if amenable, or the triangular purple stamp if non-amenable. For 5-A the following wording must be on the label or carton, "Processed at a NYSDAM Article 5-A Facility". The 5-A plant number is optional. If it is poultry processed under the 1000 bird exemption, this does not need to be stated.
- **Net weight statement**- this includes packed on date, sell by date, price per pound, and net weight. Frozen meat does not require a sell-by date. Some products can be sold by the package (like sausage) as opposed to by the pound, but in this case the net weight must be on the package and the per pound price must be posted for all consumers to see.
- **Address line**- This must include the name and address of the distributor or the name and address of the farm, if the farmer is acting as a distributor (selling to the end customer). If the farmer is NOT the distributor, a second line can be added to indicate the farm from which the product came from.
- **Handling statement**- Packaged products that required special handling to maintain their wholesome condition must have prominently displayed on the principal display panel, the applicable handling statement: "Keep Refrigerated", "Keep Frozen", "Perishable- Keep Refrigerated or Frozen". Additional safe handling instructions are also required.

- **Ingredient statement**- This is only needed if the product is composed of more than one ingredient, so this is irrelevant for most fresh meat products. However, products like sausage fall into this category. This list of ingredients must show common names of all ingredients in descending order of their predominance.
- **Nutrition facts**- not essential for raw (fresh or frozen) meat but is required on meat and poultry processed products like sausage. A NY processor employing fewer than 100 employees or producing fewer than 100,000 units are exempt from nutritional labeling. USDA processors with fewer than 500 employees and producing fewer than 100,000 pounds (of one recipe) are exempt from nutritional labeling. **HOWEVER**, if a farmer makes a nutritional claim in any way, then he must have a nutritional label

USDA Mark of Inspection and Establishment Number

Meat unsound, unhealthful, unwholesome or otherwise unfit or unsafe for food shall not receive a Mark of Inspection. Meat may be adulterated with dyes, chemicals, preservatives, or ingredients, which render such product unfit for human consumption. The commissioner shall seize and destroy for food purposes any meat, meat by-product or meat food product that does not bear an official inspection legend affixed pursuant to a federal inspection. The transportation of dead animals, properly identified condemned carcasses and parts of carcasses, and other condemned or inedible products or materials to rendering plants is the only exception allowed.

It is unlawful for any person to possess, keep, or use an inspection legend, stamp simulating the inspection legend or meat label unless authorized to do so.

Meat that is sound, healthful, wholesome, and fit for sale and consumption shall receive a **Mark of Inspection** under a USDA inspection system. If an amenable meat, the mark of inspection shall be a circle, inside which is encrypted the identification number of the slaughtering or processing plant. If a non-amenable meat, the mark of inspection shall be a triangle, inside which will be encrypted the unique identification number of the slaughtering or processing plant.

Meat that has been federally inspected and passed for wholesomeness is stamped with a purple mark that is either round for amenable species or triangular for non-amenable species. The purple dye used to stamp the grade and inspection marks onto a meat carcass is made from a food-grade vegetable dye and is not harmful. (The exact formula is proprietary and owned by the maker of the dye.) The mark is put on carcasses and major cuts. After trimming, it might not appear on retail cuts such as roasts and steaks. However, meat that is packaged in an inspected facility will have an inspection mark that identifies the plant on the label.



**Inspection mark
raw meat**



**Inspection mark
raw poultry**



**Inspection mark
processed products**

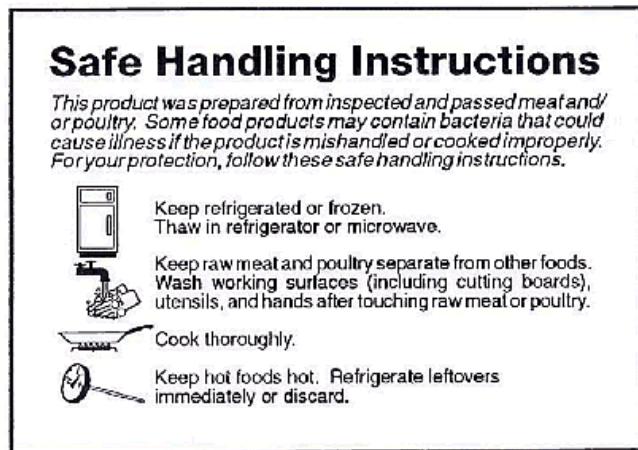


**Voluntary
Inspection mark**

Safe Handling Instructions: Required for Raw Meat and Poultry

The requirements in the new final rule on Pathogen Reduction and Hazard Analysis and Critical Control Point (HACCP) are designed to minimize the likelihood of harmful bacteria being present in raw meat and poultry products. However, some bacteria could be present and might become a problem if meat and poultry are not handled properly. To assist food handlers, both the USDA and NYSDAM require that **safe handling instructions** be put on all packages of raw and not fully cooked meat and poultry.

Safe handling instructions are required if the meat or poultry component of a product is raw or partially cooked (NOT considered Ready to Eat (RTE)). This additional label is required if the product is destined for household consumer or institutional users (including hotels and restaurants). Whole, halved and quartered carcasses are not considered packaged product and do not need a handling statement.



Labeling of Additives

A **food additive** is defined by the Food and Drug Administration (FDA) as any substance used to provide a technical effect in foods. The use of food additives has become more prominent in recent years, due to the increased production of prepared, processed, and convenience foods. Additives are used for flavor and appeal, food preparation and processing, freshness, and safety. At the same time, consumers and scientists have raised questions about the necessity and safety of these substances.

Before any substance can be added to food, its safety must be assessed in a stringent approval process. The Food Safety and Inspection Service (FSIS) of the U.S. Department of Agriculture (USDA) shares responsibility with FDA for the safety of food additives used in meat, poultry, and egg products. All additives are initially evaluated for safety by FDA. When an additive is proposed for use in a meat, poultry, or egg product, its safety, technical function, and conditions of use must also be evaluated by the Labeling and Consumer Protection Staff of FSIS, as provided in the Federal Meat Inspection Act, the Poultry Products Inspection Act, the Egg Products Inspection Act, and related regulations. Although FDA has overriding authority regarding additive safety, FSIS may apply even stricter standards that take into account the unique characteristics of meat, poultry, and egg products. Additives are never given permanent

approval. FDA and FSIS continually review the safety of approved additives, based on the best scientific knowledge, to determine if approvals should be modified or withdrawn.

The statutes and regulations to enforce the statutes require certain information on labels of meat and poultry products so consumers will have complete information about a product. **In all cases, ingredients must be listed on the product label, in the ingredients statement in order by weight, from the greatest amount to the least.**

Substances such as spices and spice extractives may be declared as "natural flavors", "flavors", or "natural flavoring" on meat and poultry labels without naming each one. This is because they are used primarily for their flavor contribution and not their nutritional contribution. Substances such as dried meat, poultry stock, meat extracts, or hydrolyzed protein must be listed on the label by their common or usual name because their primary purpose is not flavor. They may be used as flavor enhancers, binders, or emulsifiers. They must be labeled using the species of origin of the additive, for example, dried beef, chicken stock, pork extract, or hydrolyzed wheat protein. Color additives must be declared by their common or usual names on labels, e.g., FD&C Yellow 5, or annatto extract, not collectively as colorings. The labeling requirements help consumers make choices about the foods they eat.

Dating

Except for infant formula and some baby food, product dating is not required by Federal Regulations. There is no uniform or universally accepted system used for food dating in the United States. Although dating of some foods is required by more than 20 states (including New York) there are areas of the country where much of the food supply has some type of open date and other areas where almost no food is dated. (NOTE: New York does not have a date law, rather it has a wholesome law to assure quality and provide a manufacturing guarantee. It is up to the individual as to how this wholesome law is upheld. For this reason NYSDAM FSI requires some type of dating.) For frozen product, this is the packed on date and for fresh meat or poultry, this is either the packed on or used by date.

Open Dating uses a calendar date as opposed to a code. It is stamped on a food product's package to help the store determine how long to display the product for sale. It can also help the purchaser know if they are buying fresh product. Dates help consumers know when product is at its best. If a calendar date is used, it must express both the month and day of the month (and the year, in the case of shelf-stable and frozen products). If a calendar date is shown, immediately adjacent to the date must be a phrase explaining the meaning of that date such as "sell by" or "use before".

Types of Dates

- A "**Packed On**" date tells the consumer when the product was originally packaged.
- A "**Sell-By**" date tells the store how long to display the product for sale. Product should be purchased before the date stamped, as the product quality has expired.
- A "**Best if Used By (or Before)**" date is recommended for best flavor or quality. It is not a purchase or safety date.
- A "**Use-By**" date is the last date recommended for the use of the product while at peak quality. The date has been determined by the manufacturer of the product.
- "**Closed or coded dates**" are packing numbers for use by the manufacturer.

Nutrition Labeling

The Nutrition Labeling and Education Act of 1990 required nutrition labeling of most foods regulated by the Food and Drug Administration. The USDA's Food Safety and Inspection Service proposed to extend mandatory nutrition labeling to single-ingredient raw meat and poultry products, which are currently covered only under the voluntary nutrition-labeling program. Nutrition information for major cuts would be required either on their labels or at their point of purchase. Nutrition information for ground or chopped products such as ground beef would be required on package labels.

Extending mandatory nutrition labeling to these products would help consumers make food-purchasing decisions that may help to improve diet quality. The proposal also would allow industry to continue to use the "percent lean" nutrient content claim for ground or chopped meat or poultry products that do not meet the criteria for low fat. Many ground and chopped products have difficulty meeting the criteria for "low fat". The proposal also requires nutrition labeling on the packages of all ground or chopped meat and poultry products, such as hamburger, ground beef, ground beef patties, ground chicken, ground turkey, and ground chicken patties. Certain exemptions would apply to these requirements. Small businesses that qualify for the existing small business exemption from nutrition labeling requirements would be exempt from nutrition labeling requirements for ground or chopped products. However, the small business exemption would not apply to the major cuts of single-ingredient, raw products.

For the major cuts of meat and poultry products, nutrition information could be provided either on the package or at their point-of-purchase because consumers have reasonable expectations as to the nutrient content of these products. For ground or chopped products, however, nutrition labeling would be required on the package. Point-of-purchase labeling would not be permitted for ground or chopped products in order to make the nutrition labeling requirements for these products consistent with those for multi-ingredient and heat processed products, which have been covered under mandatory nutrition labeling requirements since 1993. Single-ingredient, raw ground or chopped meat and poultry products differ from other single-ingredient, raw meat, and poultry products because, in these products, certain parameters, such as their fat content, can be controlled precisely to obtain the desired product. In addition, FSIS has found that the nutrient and fat content of ground or chopped products varies so significantly that, without labeling, consumers could not assess the nutritional quality of these products to make informed comparisons.

The nutrition label would be comparable to that which appears on products today. The proposed requirements for the labels of major cuts are consistent with the current provisions of the voluntary nutrition labeling program, and the proposed requirements for the labels of ground or chopped products are consistent with the requirements for the labels on multi-ingredient or heat processed products. For example, FSIS is proposing that the nutrition information on labels of the major cuts be calculated on an "as packaged" or "as consumed" basis, while nutrition information of labels of ground or chopped products would be calculated on an "as packaged" basis.

SAMPLE LABEL WITH NUTRITIONAL LABELING

Nutrition Facts																							
Serving Size ½ cup (114g)																							
Servings Per Container 4																							
Amount Per Serving																							
Calories 90 Calories from Fat 30																							
% Daily Value*																							
Total Fat 3g	5%																						
Saturated Fat 0g	0%																						
Cholesterol 0mg	0%																						
Sodium 300mg	13%																						
Total Carbohydrate 13g	4%																						
Dietary Fiber 3g	12%																						
Sugars 3g																							
Protein 3g																							
Vitamin A 80% • Vitamin C 60%																							
Calcium 4% • Iron 4%																							
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:																							
<table> <thead> <tr> <th></th> <th>Calories: 2,000</th> <th>2,500</th> </tr> </thead> <tbody> <tr> <td>Total Fat</td> <td>Less than 65g</td> <td>80g</td> </tr> <tr> <td>Sat Fat</td> <td>Less than 20g</td> <td>25g</td> </tr> <tr> <td>Cholesterol</td> <td>Less than 300mg</td> <td>300mg</td> </tr> <tr> <td>Sodium</td> <td>Less than 2,400mg</td> <td>2,400mg</td> </tr> <tr> <td>Total Carbohydrate</td> <td>300g</td> <td>375g</td> </tr> <tr> <td>Dietary Fiber</td> <td>25g</td> <td>30g</td> </tr> </tbody> </table>				Calories: 2,000	2,500	Total Fat	Less than 65g	80g	Sat Fat	Less than 20g	25g	Cholesterol	Less than 300mg	300mg	Sodium	Less than 2,400mg	2,400mg	Total Carbohydrate	300g	375g	Dietary Fiber	25g	30g
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Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4																							

Country of Origin Labeling

On January 15, 2009 the USDA AMS published a final rule for all covered commodities combined (74 FR 2658) which became effective on March 16, 2009. The requirements do not apply to covered commodities produced or packaged before September 30, 2008. During the six-month period following the effective date of the regulation, AMS focused its resources on education and outreach or what is being termed, “informed compliance”. Country of Origin Labeling (COOL) compliance is required.

All retailers are required to comply with COOL. A retailer is defined as any person licensed as a retailer under the Perishable Agricultural Commodities Act (PACA). The PACA definition of a retailer includes only those retailers handling fresh and frozen fruits and vegetables with an invoice value of at least \$230,000 annually. **HOWEVER, all individuals selling meat and poultry are considered retailers, regardless of the amount sold.** The COOL law exempts food service establishments, including those within retail establishments, which includes restaurants,

cafeterias, lunchrooms, food stands, bars, salad bars, and delicatessens. Food enterprises located within retail establishments that provide ready-to-eat foods are also exempt. If an individual sells product to Canada, a different section of the rule will be required to be followed.

The following must be labeled:

- Muscle cuts of beef, veal, lamb, mutton, chicken, goat, and pork.
- Ground beef (including veal) ground lamb (including mutton), ground chicken, ground goat, and ground pork.
- Fish and shellfish (both wild and farm raised).
- Perishable agricultural commodities (fresh and frozen fruits and vegetables).
- Peanuts, pecans, and macadamia nuts.
- Ginseng.

While non-amenable meat is not required to be labeled under COOL, the USDA labeling office may require "Product of the U.S.A." to be added to the label of products derived from animals raised, slaughtered and/or processed in the United States.

The COOL law contains an express exclusion for an ingredient in a processed food item. Examples of processed food items excluded from COOL labeling requirements are: teriyaki flavored pork loin, breaded chicken tenders, and marinated chicken breasts. Retail items that meet the definition of a processed food item do not require labeling under the COOL final rule; however, many imported items are still required to be marked with country of origin information under the **Tariff Act of 1930** (Tariff Act). In addition, items such as marinated lamb loins that are imported in consumer-ready packages would also be required to be labeled with country of origin information as both **Customs and Border Protection** (CBP) and Food Safety and Inspection Service regulations require meat that is imported in consumer-ready packages to be labeled with origin information on the package. Country of origin labeling can be declared on a placard, label, band, tag, sign, sticker, twist tie, or other such item.

For many years, the label, "Product of the U.S.A." was applied to exported meat and poultry products in order to comply with the recipient's country-of-origin labeling requirements. The term was applicable to products that, at a minimum, were prepared (e.g., sliced, cut, heated) in the United States. For example, the labels of products made from imported cattle raised in U.S. feed lots, then slaughtered and processed in the United States could include the claim "Product of the U.S.A." The term also applied to products derived from cattle that originated in another country and were slaughtered and processed in the United States, as well as to products slaughtered in another country but processed in the United States. "Product of the U.S.A." was never construed by FSIS to refer to product derived only from animals born, raised, slaughtered, and processed in the United States. Under COOL, now only those products made from animals born, raised, and slaughtered in the United States can claim "Product of the U.S. (A.)".

Under the COOL requirements, product origin must be established. If raw material has different origins, the label must specify from which countries the raw material came from. For example, "Rib eye steaks from U.S., Canada and Mexico" or "Ground Meat from U.S., New Zealand, and Brazil". If animals were imported for immediate slaughter and are from multiple origins, then the label must note this. Because slaughter was conducted in the United States, the U.S. is listed last

on the label. For example "Pork Roast from Canada and U.S.". If the product is of foreign origin then it must be listed on the label as declared by the US Customs and Border Protection (CBP). For example, "Lamb chops from Australia".

FSIS regulations allow labeling of fresh beef products using terms such as "U.S.A. Beef", and "Fresh American Beef". FSIS interprets these terms to mean that the products are derived from cattle born, raised, slaughtered, and processed in the United States or in a specific geographic location in the United States. For example, "New York Beef" pertains to beef from cattle that were born, raised, slaughtered, and processed in New York. All such geographic claims must be substantiated before label approval through records documenting adherence to a producer's operational protocol, and through testimonials and affidavits.

*Additional information on COOL is available at <http://www.ams.usda.gov/cool>.
Questions can be submitted to cool@usda.gov*

UPC or Bar Codes

Universal Product Codes appear on packages as black lines of varying widths above a series of numbers. They are not required by regulation but manufacturers print them on most product labels because scanners at supermarkets can "read" them quickly to record the price at checkout. Bar codes are used by stores and manufacturers for inventory purposes and marketing information. When read by a computer, they can reveal such specific information as the manufacturer's name, product name, size of product and price. The numbers are not used to identify recalled products.

Regulatory Enforcement

Misbranding

One of the four goals of the USDA FSIS is to prevent products from being misbranded. The term misbranded may apply to any carcass, part thereof, meat or meat food product , poultry or poultry food product. A number of different circumstances can lead to a product being misbranded.

If a product is falsely labeled or is misleading in any way, then the product is misbranded. If a product is offered for sale under the name of another food then it is misbranded. Imitations must use the word "imitation" immediately thereafter the food being imitated or it is misbranded. A misbranded product may be in a container that is made, formed or filled so as to be misleading.

Mislabeling is also a form of misbranding. The label must show the name and place of business of the manufacturer, packer, or distributor; and an accurate weight statement (or numerical count if allowed) for it to be properly branded. If any statement or other information required on the label is missing, or is not in a conspicuous place, the product may be considered misbranded. FSIS requires that common names of optional ingredients be used (other than spices, flavoring, and coloring) for the purpose of understanding by the majority of individuals. Any label purporting or representing a special dietary use or making claims unless the label bears such information concerning its vitamin, mineral, and other dietary properties as is required may be considered misbranded.

Any product that contains any artificial flavoring, artificial coloring, or chemical preservative, and does not bear a label stating that fact; except as otherwise provided by the regulations may be considered misbranded.

Misbranding is a serious offense which the USDA does not take lightly. Civil penalties are set based on the offense, but may not exceed \$100,000 per each violation.

Failure to Comply: Selling Product from a Non-Approved Source

While the USDA enforces branding, the New York State Department of Agriculture and Markets works to ensure that product sold within the state comes from an approved source. Failure to comply will result in fines and the non-approved product will be seized. If the product is only misbranded or mislabeled NYSDAM will issue a \$600 fine and the product will be stamped with a seizure notice and released back to the owner for personal use.

Satisfying the Customer

What Are The Differences Between Inspection & Grading?

The inspection and grading of meat and poultry are two separate programs within the U.S. Department of Agriculture (USDA). Inspection for wholesomeness is mandatory and is paid for out of tax dollars. Grading for quality is voluntary, and the service is requested and paid for by meat and poultry producers/processors.

After the meat and poultry are inspected for wholesomeness, producers and processors may request to have the products graded for quality by a Federal grader. The USDA's Agricultural Marketing Service is the agency responsible for grading meat and poultry. Those who request grading must pay for the service. Grading for quality means evaluation of traits related to tenderness, juiciness, and flavor of meat; and, for poultry, a normal shape that is fully fleshed and meaty, and free of defects.

USDA grades are based on nationally uniform Federal standards of quality. So that no matter where or when a consumer purchases graded meat or poultry, it must have met the same grade criteria. The grade is stamped on the carcass or side of beef and is usually not visible on retail cuts. However, retail packages of beef, as well as poultry, will show the grade mark if they have been graded. The grade symbol and wording are no longer copyrighted; however, according to the Truth in Labeling Law, it is illegal to mislead or misrepresent the shield or wording.

USDA Grades for Meat and Poultry

The MGC branch uses university-researched, USDA-developed, and industry recognized standards. Grading determines the quality and yield of carcasses. Quality grades vary depending on the species.

Beef

Beef is graded as whole carcasses in two ways:

Quality grades - for tenderness, juiciness, and flavor; and

Yield grades - for the amount of usable lean meat on the carcass. There are eight quality grades for beef. Quality grades are based on the amount of marbling (flecks of fat within the lean), color, and maturity.

Quality Grades:



Prime grade

- is produced from young, well-fed beef cattle. It has abundant marbling and is generally sold in restaurants and hotels. Prime roasts and steaks are excellent for dry-heat cooking (i.e., roasting, broiling, and grilling).



Choice grade

- is high quality, but has less marbling than Prime. Choice roasts and steaks from the loin and rib will be very tender, juicy, and flavorful and are, like Prime, suited to dry-heat cooking. Many of the less tender cuts, such as those from the rump, round, and blade chuck, can also be cooked with dry heat, but be careful not to overcook them. Using a meat thermometer takes the guesswork out of cooking and assures a safe internal temperature: 145 °F is medium rare; 160 °F, medium; and 170 °F, well done.



Select grade

- is extremely uniform in quality and normally leaner than the higher grades. It is tender, but, because it has less marbling, it may lack some of the juiciness and flavor of the higher grades. Only the tender cuts (loin, rib, sirloin) should be cooked with dry heat. Other cuts should be marinated before cooking or cooked with moisture to obtain maximum tenderness and flavor.

Standard and Commercial grades – frequently are sold as ungraded or as "store brand" meat. **Utility, Cutter, and Canner** grades - are seldom, if ever, sold at retail but are used instead to make ground beef and processed products.



Yield grades:

Range from "1" to "5" and indicate the amount of usable meat from a carcass.

Yield grade 1 is the highest grade and denotes the greatest ratio of lean to fat; yield grade 5 is the lowest yield ratio. Yield grade is most useful when purchasing a side or carcass of beef for the freezer.

Veal/ Calf

There are five grades for Veal/Calf: prime, choice, good, standard, and utility. Prime and choice grades are juicier and more flavorful than the lower grades. Because of the young age of the animals, the meat will be a light grayish-pink to light pink, fairly firm and velvety. The bones are small, soft, and quite red. Cuts such as chops can be cooked by the dry-heat method of grilling or broiling.

Lamb

There are five grades for lamb. Normally only two grades are found at the retail level – prime and choice. Lower grades of lamb and mutton (meat from older sheep) – good, utility, and cull -- are seldom marked with the grade. Lamb is produced from animals less than a year old. Since the

quality of lamb varies according to the age of the animal, it is advisable to buy lamb that has been USDA graded.

Prime grade - is very high in tenderness, juiciness, and flavor. Its marbling enhances both flavor and juiciness.

Choice grade - has slightly less marbling than prime, but still is of very high quality. Most cuts of prime and choice grade lamb (chops, roasts, shoulder cuts, and leg) are tender and can be cooked by the dry-heat methods (broiling, roasting, or grilling). The less tender cuts – breast, riblets, neck, and shank – can be cooked slowly by the moist-heat method (braising) to make them more tender.

Pork

Pork is not graded with USDA quality grades as it is generally produced from young animals that have been bred and fed to produce more uniformly tender meat. Appearance is an important guide in buying fresh pork. Look for cuts with a relatively small amount of fat over the outside and with meat that is firm and grayish pink in color. For best flavor and tenderness, meat should have a small amount of marbling.

Pork's consistency makes it suitable for a variety of cooking styles. Chops can be prepared by pan-broiling, grilling, baking, braising, or sautéing. Ribs can be braised, roasted, or grilled. Slow cooking yields the most tender and flavorful results. Tenderloins are considered the most tender and tasty cut of pork.

Goat

There are no official USDA selection grades for live goats. However, there are USDA Agricultural Marketing Service Institutional Meat Purchase Specifications (IMPS) selection criteria for live goats and these are used by regional auction barns and livestock buyers and sellers to assign grades to live goats. These grades are based on the meat type conformation of the goat (how well muscled it is) regardless of fat cover. Selection 1 goats should have a pronounced bulging to the outside hind leg, a full, rounded back-strap, and a moderately thick outside shoulder. Selection 2 goats have moderate meat conformation while Selection 3 goats have inferior conformation. Some buyers will also put in a 4th grade for very unhealthy goats. Utility or “cull” goats are goats that are being culled for a serious unsoundness or appear very unthrifty.

USDA Selection Grades for Live Goats

		
Selection Grade 1	Selection Grade 2	Selection Grade 3

Fat covering does affect the suitability of slaughter goats for different marketing channels. In the example below, both Boer cross-market kids may qualify as Selection 1. However, the lean kid has little or no surplus fat. He may be ideal if he has been cheaper to raise than the plumper kid, and is being sold on-farm or at a live animal market to customers wanting any excess fat trimmed from the carcass that plan to consume the meat shortly after butchering. However, he has two disadvantageous, 1) his dressing percentage and hence his carcass weight would have been better if he had been fattened a few more weeks, and 2) his lean carcass will be somewhat susceptible to cold shock when put in the cooler. Cold shock (contraction or shortening of the muscles) may toughen up the meat. He is not “market ready” if the price paid is based on hanging carcass weight rather than live weight and he is to be slaughtered and chilled at a conventional slaughterhouse for sale to a restaurant chef putting a top priority on tenderness.

Lean kid



Carcass



Loin





More information on evaluating goat carcasses is available in the “Meat Goat Selection, Carcass Evaluation, and Fabrication Guide available through the Louisiana State University Agricultural Center or on the web at http://www.lsuagcenter.com/en/crops_livestock/livestock/sheep_goats/ .

Rabbit

Rabbit may be graded under the voluntary rabbit-grading program performed by the USDA’s Agricultural Marketing Service. It provides a national grading service based on official U.S. classes, standards, and grades for poultry. Rabbit may be graded only if it has been inspected and passed by the FSIS, or inspected and passed by any other inspection system that is acceptable to the USDA, such as State inspection. Consumer grades for rabbits are U.S. Grade A, U.S. Grade B, and U.S. Grade C.

Poultry

The USDA grades for poultry are **A**, **B**, and **C**.



Grade A is the highest quality and the only grade that is likely to be seen at the retail level. This grade indicates that the poultry products are virtually free from defects such as bruises, discolorations, and feathers. Bone-in products have no broken bones. For whole birds and parts with the skin on, there are no tears in the skin or exposed flesh that could dry out during cooking, and there is a good covering of fat under the skin. In addition, whole birds and parts will be fully fleshed and meaty.

The grade shield for poultry may be found on the following chilled or frozen ready-to-cook poultry products: whole carcasses and parts, as well as roasts, tenderloins, and other boneless and/or skinless poultry products that are being marketed. There are no grade standards for necks, wing tips, tails, giblets, or ground poultry.

Grades B and **C** poultry are usually used in further-processed products where the poultry meat is cut up, chopped, or ground. If sold at retail, they are usually not grade identified.

Quality Assurances

Quality assurance covers all the activities associated with getting the product to the consumer. From the calf in the womb to the prime rib on the plate, quality assurance involves all associated production, management, and inspection activities.

The goal of a Quality Assurance program is to fulfill or exceed customer expectations. Products should be tested for failure. What is the shelf life of a piece of jerky? At what temperature would a succulent steak be turned into a piece of shoe-leather? Knowing the answers to these questions will help the product from failing, or from the customer failing the product. Statistical analysis may be used to determine the probability of something going wrong. The current sample testing for BSE is one example of employing statistical analysis to test a percentage of animals to provide an extremely high probability of an accurate test of the entire population.

Some quality assurance programs have step-by-step protocols and record keeping requirements. Two examples are **Cold Chain Maintenance Programs** and **Facility Maintenance Programs**.

A Quality Assurance Program will include **Best Management Practices**. Generally, the industry establishes these baseline practices. The owner should also employ practices of **due diligence**.

Quality Assurance Programs should also include **customer service protocol**. How will product recalls be handled? How will product be delivered and what will happen to product stuck in transit?

Finally, a quality assurance program must address **inventory control**. Planning for inventory tracking, inventory turnover, package ID's, Lot ID's, storage time and pull dates are all crucial for maintaining high quality products, and thus must be part of the quality assurance program.

Certification Programs and Product Claims

Nutrient claims about a product such as "lean" or "low-fat", the claim must be verified at the producer's expense, and the producer must have documentation that the product meets the requirements for the definition. Producers who wish to make the claims "Naturally Raised", "Grass Fed", or "Free Range" must have approval from the Labeling and Review Branch of the USDA to make an animal production claim. Independent auditors will certify the specific claims including "Humanely Raised" or "Certified Organic". Provisions of the certifying agency must be complied with. There are no provisions to claim "Antibiotic Free" or "Hormone Free"; while "Chemical Free" is expressly prohibited.

The term "**certified**" implies that the USDA's Food Safety and Inspection Service and the Agriculture Marketing Service have officially evaluated a meat product for class, grade, or other quality characteristics (e.g., "Certified Angus Beef"). When used under other circumstances, the term must be closely associated with the name of the organization responsible for the "*certification*" process, e.g., "*XYZ Company's Certified Beef*".

"**Antibiotic Free**" is not an approvable USDA claim. "No antibiotics administered" or "raised without antibiotics" is permitted. This claim implies that the animal has not had any antibiotics administered within the course of its lifetime. There is no verification system in place currently.

no meat sold in the U.S. is allowed to have antibiotic residues, so therefore it is all "antibiotic-free". Because the USDA regulates language only on food labels, many companies get away with using unapproved terms in advertising and on their Web sites. Sufficient documentation must be provided by the producer to the Agency demonstrating that the animals were raised without antibiotics

Chemical-Free is expressly prohibited by the USDA as a label on any meat product including poultry. "No Chemicals Added" is not an official marketing claim, as it lacks a standardized definition and a certifying agency. This term creates confusion in the marketplace, as antibiotics are not considered chemicals.

"**Free Range**" "**Free Ranging**" or "**Free Roaming**" imply that the animal lived its life out of doors, in the open air, and was free to roam about, grazing, foraging and running about. There is no standard definition as it applies to amenable meat such as beef or pork. For poultry the term "free ranging" is regulated, and requires that the bird have access to the outdoors, but for an undetermined period each day. That means that the door to the coop or stall could be opened for five minutes a day and if the animal(s) did not see the open door or chose not to leave it could still qualify as "free range". Eggs, like beef and pork are not regulated. Producers must demonstrate to the Agency that the poultry has been allowed access to the outside.

"**Grass fed**" became an official marketing claim in October 2007. In order to be labeled as grassfed, the USDA Agricultural Marketing Service (AMS) requires that grass and forage be the sole feed source for the lifetime of the ruminant animal with the exception of milk consumed prior to weaning. Grass and forage are defined for the purpose of this label as: annual and perennial grasses, forbs, browse and cereal grain crops in the vegetative state. Hay, haylage, baleage, silage, crop residue without grain, and other roughage sources may also be included as acceptable feed sources. However, animals cannot be fed any grain or grain byproducts. In addition, animals must have continuous access to pasture during the growing season. Routine mineral and vitamin supplementation may be included in the feeding regimen. During times of adverse environmental conditions, an animal may receive incidental supplementation to ensure the animal's well being. The producer must fully document what was fed, the amount fed, the frequency of feeding. Producers should retain receipts, ingredient labels and tear tags for documentation purposes. Raising livestock on a forage diet with little or no grain supplementation may increase the amount of beneficial fatty acids (Omega 3 and CLAs) in their meat.

Hormone-Free is not an official marketing claim. All animal products contain naturally occurring hormones. The USDA has defined the use of the term and can hold manufacturers accountable for using the "hormone-free" on all meat products. Do not use this term. Pork and poultry producers cannot use hormones when raising these animals. "No hormones administered" would be the proper way to make this claim, and then only on products from animal species such as beef where administration of some hormones is permitted. While there is

no certifying agency for this claim, a producer using it can be held accountable to the USDA for improper use.

Meat that is certified as "**humanely raised and handled**" is from farms that have enrolled in a private certification program such as that of the Humane Farm Animal Care (www.certifiedhumane.com), a consumer certification and labeling program based on standards established by a scientific animal welfare committee. Private certification programs often require that a livestock producer sign an affidavit indicating that their livestock was raised under the agency's scriptures. "Free Farmed" is the certification program of the American Humane Association.

Meat Tenderness Marketing Claim Standards are being explored by the USDA Agricultural Marketing Service (AMS). On December 30, 2002, AMS published a Proposed Rule on this and other voluntary standards in the Federal Register with request for comments. As a result of comments and discussions, AMS has determined a need for such a claim and is currently garnering information to develop a proposed standard.

"**Natural**" is a food label that does not refer to how the animal was raised but rather to how it was processed. Natural products can contain no artificial ingredients, coloring agents, or chemical preservatives and must be minimally processed. Meat can be ground, smoked, roasted, dried, or frozen as long as these procedures do not fundamentally change the raw product. The USDA has defined the use of the term and can hold manufacturers accountable to the proper use of the claim but does not have a verification system in place. The label must explain the use of the term natural (such as - no added colorings or artificial ingredients; minimally processed.)

The USDA adopted the "**Naturally Raised**" label claim in January of 2009. Livestock used for the production of meat and meat products that have been raised entirely without growth promotants or antibiotics (except for ionophores used as coccidiostats for parasite control). These animals have never been fed animal by-products derived from the slaughter/harvest processes, including meat and fat, animal waste materials (e.g., manure and litter), and aquatic by-products (e.g., fishmeal and fish oil). If all stated conditions are met, then the product may be labeled Naturally Raised. The label must specifically incorporate information stating that no growth promotants were used, that no antibiotics were administered, and that no animal by-products were fed to the animals. Examples of coccidiostats that are ionophores are Rumensin® (monensin) and Bovatec® (lasalocid). Another common coccidiostat that is not an ionophore is Deccox® (decoquinate).

"**No Additives**" there is no government definition behind this term, nor is there any certifying agency. "No additives" is a general claim that may imply a product has not been enhanced with the addition of natural or artificial ingredients. There is no guidance for the use of the claim "no additives" from the US Food and Drug Administration (FDA) or the United States Department of Agriculture (USDA). However, additives are defined and regulated by these agencies.

“No Animal By-Products” implies that no animal parts from slaughtering or rendering were used to raise or manufacture the product. There is no clear, standard definition of the term and no certifying agency. Its use should be carefully considered, as one could be liable if a complaint were acted upon by the Federal Trade Commission under truth in labeling as many products are made with animal by-products. Traceability is essential if making this claim.

Pasture raised, sustainably raised, and locally grown are very loose claim terms. For example, farmer markets handling only “local” product may require that the product be raised within 30 miles; while supermarkets may consider product to be local if it can be transported to the store within a set number of hours.

Certified Organic

“Certified Organic” meats are from livestock that have been raised and certified in compliance with the **National Organic Program’s (NOP)** standards. Their production must be certified by an accredited state or private certifying agency. Strict guidelines must be met. For example, the use of dewormers and antibiotics is forbidden not only for the slaughter animal itself but also for its dam during the last third of pregnancy (gestation) and lactation. Only animals that have been raised as certified organic from their last trimester in the womb onwards can be sold as meat that is certified organic. Poultry must be managed organically from the second day of life. Animal health is maintained through high quality nutrition obtained predominately through pasture grazing and by supplementing with organically grown feeds. Organic farmers are required to provide humane treatment, which includes access to the outdoors. Sick animals are to be treated as necessary, but can no longer be marketed as organic if dewormer or antibiotic intervention was required. All feed and bedding must usually be obtained from certified organic sources.

Just like their conventional counterparts, organic livestock and poultry processed for consumption as meat and meat products, must be inspected under appropriate federal and state regulations. Organic meat and poultry slaughterhouses and processing plants must comply with the Federal Meat Inspection Act and the Federal Poultry Processing Act. In addition, the processing plant and processor must be certified organic in the same way that other organic processing facilities are certified. The certification is held by the producer (farmer), allowing a number of certified organic farmers to work with a given facility. Such a facility may be designated organic and process nothing but organic product. Alternatively, it may use separation of time and space in combination with a thorough wash down and clean ups to separate organic from conventional product processing. In general, organic processing is done first in the morning followed by non-organic processing.

In all cases, organic meat and poultry must be kept separate from non-organic meat. Hanging carcasses must be separated in the same way that frozen product cannot be co-mingled.

Documentation must follow the animal from the farm through slaughtering and onto butchering and product manufacturing. Traceability is necessary for organic certification. This requires extensive record keeping and impeccable inventory management.

The USDA defines “**cured**” meats as those to which synthetic nitrates and nitrites have been added in the form of sodium nitrite and sodium nitrate. Nitrites serve a vital public health function of blocking the growth of dangerous bacteria in processed meats, and give “cured” meats their characteristic color and flavor. However, sodium or potassium nitrates and nitrites, as well as sulfur additives are not allowed to be used in any certified organic product. While the USDA does not prohibit organic hams, frankfurters and bologna, the manufacturing of these types of products manufactured without a nitrate or nitrite cure must be labeled as “uncured”. Because some of these products depend upon the additives to achieve a specific color, taste, or shelf life, “uncured” products may not be an equal substitute. In other cases, meat-processing technology has developed means by which nitrate and nitrite can be indirectly added to these products to achieve very typical cured meat properties, which can be labeled as organic but must be labeled as “uncured”. However not all “uncured” products are organic, neither are all “uncured” products actually uncured.

Some “cured” organic products use a curing process that uses the nitrates naturally present in celery juice and many other vegetables, a lactic acid starter culture, and salt. During the old-fashioned process of wood smoking, the naturally occurring nitrates in the celery juice are converted to nitrites through a lactic acid fermentation process.

Other Labels

Here, from USDA's Food Safety and Inspection Service (FSIS), is a glossary of meat and poultry labeling terms. FSIS is the agency responsible for ensuring the truthfulness and accuracy in labeling of meat and poultry products. Knowing the meaning of labeling terms can make purchasing of meat and poultry products less confusing.

BASTED or SELF BASTED: *Bone-in* poultry products that are injected or marinated with a solution containing butter or other edible fat, broth, stock or water plus spices, flavor enhancers and other approved substances must be labeled as basted or self basted. The maximum added weight of approximately 3% solution before processing is included in the net weight on the label. Label must include a statement identifying the total quantity and common or usual name of all ingredients in the solution, e.g., “*Injected with approximately 3% of a solution of _____ (list of ingredients)*”. Use of the terms “basted” or “self-basted” on *boneless* poultry products is limited to 8% of the weight of the raw poultry before processing.

FRESH POULTRY: The USDA/FSIS published a rule in August 1995 attempting to modify the definition of “fresh” to refer to poultry whose internal temperature has never been below 26 °F. The rule stated that poultry whose internal temperature is between 26 °F and 0 °F cannot be called “fresh” but must be called “hard-chilled” or “previously hard chilled”. In January 1996, the final rule was published in the Federal Register. However, Congress did not appropriate money for enforcing the rule. On August 8, 1996, Congress asked FSIS to revise the final rule. FSIS has now amended the Poultry Product Inspection Act to prohibit the use of the term “fresh” on the labeling of raw poultry products whose internal temperature has ever been below 26 °F. In addition, labels of raw poultry products whose temperature has ever been below 26 °F, but above 0 °F, will not be required to bear any specific, descriptive labeling terms, including “hard chilled” or “previously hard chilled”. To comply with the revised rule, raw poultry products that are labeled as “fresh” but have ever had an internal temperature *below 26 °F* will have to have

the "fresh" designation deleted or removed from labeling on the package. The final rule also sets a temperature tolerance for raw poultry products. The temperature of individual packages of raw poultry products labeled "fresh" can vary as much as 1°F below 26 °F within inspected establishments or 2 °F below 26 °F in commerce. The revised final rule went into effect in December 17, 1997.

FROZEN POULTRY: Temperature of raw poultry is 0 °F or below.

IRRADIATED MEAT: The international symbol for irradiation is called a radura. On a food label, this symbol is accompanied by the words "Treated by Irradiation" or "Treated with Radiation".



"MEAT" DERIVED BY ADVANCED MEAT/BONE SEPARATION AND MEAT

RECOVERY SYSTEMS: The definition of "meat" was amended in December 1994 to include as "meat" product derived from advanced meat/bone separation machinery that is comparable in appearance, texture, and composition to meat trimmings and similar meat products derived by hand. Product produced by advanced meat recovery (AMR) machinery can be labeled using terms associated with hand-deboned product, e.g., beef trimmings and ground beef. The AMR machinery cannot grind, crush, or pulverize bones to remove edible meat tissue and bones must emerge essentially intact. The meat produced in this manner can contain no more than 150 milligrams of calcium per 100 grams product. Products that exceed the calcium content limit must be labeled "*mechanically separated pork*". In 2004 as part of the precautions implemented to protect against possible BSE transmission, the USDA limited mechanical separation of beef. The following year they prohibited all mechanical separation of beef.

MECHANICALLY SEPARATED MEAT: is a paste-like and batter-like meat product produced by forcing bones with attached edible meat under high pressure through a sieve or similar device to separate the bone from the edible meat tissue. Mechanically separated meat has been used in certain meat and meat products since the late 1970s. In 1982, a final rule published by FSIS on mechanically separated meat said it was safe — restrictions on level of use and products it can be used in are based on safety. Mechanically separated meat must be labeled as "mechanically separated beef or pork".

MECHANICALLY SEPARATED POULTRY: is a paste-like and batter-like poultry product produced by forcing bones with attached edible tissue through a sieve or similar device under high pressure to separate bone from the edible tissue. Mechanically separated poultry has been used in poultry products since 1969. In 1995, a final rule on mechanically separated poultry said it would be used without restrictions. However, it must be labeled as "mechanically separated chicken or turkey" in the ingredients statement. The final rule became effective November 4, 1996.

OVEN PREPARED: Product is fully cooked and ready to eat.

OVEN READY: Product is ready to cook.

Wholesale Market Opportunities

Marketing of Live Slaughter Animals

The responsibilities incurred by wholesale marketing differ depending on whether a farmer is marketing live animals or whole carcasses. Marketing live animals is straightforward, whereas marketing carcasses requires more responsibility on the part of the seller. Many farmers prefer to market live animals wholesale to dealers, packers, wholesalers, or retailers for a set price rather than risking uncertain prices at local or regional auctions. When selling livestock wholesale it is important to know

- Legal obligations
- What sort of information and duties will be expected
- Legal recourse in case of nonpayment, and
- How to locate buyers

The Players

In the Northeast United States, there are several businesses willing to buy small ruminants directly from producers. However, swine and beef farmers may find that the market for their livestock species is more consolidated with fewer middlemen competing for their products. Wholesale demand for live rabbits and poultry varies widely across the state.

Livestock dealers specialize in buying and reselling live animals. **Livestock brokers** serve the same role but do not take actual ownership of the animal. Instead, they charge a consignment fee to arrange sale of the animals to prospective buyers. Some brokers and dealers arrange the processing of purchased livestock at a USDA slaughterhouse and resell the animals as carcasses rather than live. Many **producer cooperatives** essentially act as specialized brokers and charge a commission to undertake the processing and sale of carcasses from livestock. These commissions are expected to pay the operating costs of the cooperative. Dealers often pick up straight from the farm while cooperatives may expect farmers to deliver animals to the slaughterhouse they patronize.

In contrast, **packers** resell only carcasses or retail cuts. They are businesses that own their own processing plant and buy animals from producers, dealers, and auctions to slaughter and process and resell to wholesalers and retailers. **Wholesale businesses** usually order live animals or carcasses through a packer, dealer, or broker. They often have particular slaughterhouses they butcher through and generally retail all parts of the carcasses through a variety of retailers, restaurants, etc. **Retailers** sell directly to the end consumer. Many retailers are interested only in specific cuts or do not have the time or contacts to arrange for trucking and slaughtering of animals. Others, however, specialize in hothouse carcasses and prefer to purchase live animals directly from the farm.

The Concern: Sufficient Supply

One of the biggest constraints in dealing with any of these markets is having a sufficient quantity of animals to interest them in coming to the farm to purchase animals, as opposed to shipping the animals to an auction barn. Packers, wholesalers, and retailers needing a steady supply of animals year round normally depend on dealers or order buyers at auctions to meet their regular demand. However, large farms will often find dealers who are willing to deal directly with them.

These same dealers may be interested in dealing directly with smaller farms if farms can pool their animals and assign a market coordinator to insure that all animals available for pick-up at a centralized point meet the market's criteria. At certain times of the year when seasonal demand peaks, even wholesalers and retailers may seek live animals direct from farmers. One example of this is the demand for sucking kids and lambs for Easter holidays. During Easter and Christmas, several dealers, wholesalers, and even retailers seek livestock directly from farms with sufficient quantity and quality.

A Farmer's Legal Obligations

There are a few legal regulations that farmers must follow when selling livestock wholesale. Amenable livestock need to be identifiable by a unique number, which will allow each animal to be traced back to the farm of origin where the year of birth can be confirmed. In the case of lambs and goats, this number is their official scrapie identification ear tag or tattoo, if over 18 months. Technically sheep and goats under 18 months that are going direct from the farm to a slaughterhouse for processing do not need scrapie identification, but they will still need an ID. Tattoos may be used instead of ear tags for some species. Other species may be required to have dual tags. Currently identification is requested for all livestock entering the human food chain.

Farmers may also need to obtain a premise identification code from USDA.

A Wholesalers License (Article 20 – Farm Products Dealer License) is required if annual purchases of livestock, meats, poultry from other New York producers raised by them and sold wholesale exceeds \$10,000. If livestock is purchased at posted livestock auction markets (regulated by P&S) and/or product is sold wholesale interstate (constitutes a flow in commerce), the producer is subject to USDA-Packers & Stockyards (P&S) as to their payment and any unfair trade practice requirements. There are no filing and bonding requirements unless annual purchase volume exceeds \$500,000. A wholesaler's license (Article 20-Farm Products Dealer License) is not required of a producer selling his/her own product.

If a farmer buys animals from another farmer to meet their market obligations, they may need to obtain a **Domestic Animal Health Permit** from the NYSDAM Division of Animal Industry. This is critical if the animals will be in the care of a farmer for any length of time or loaded on a farmer's transport vehicle or trailer, even if for a limited time. This permit requires that records be kept on the individual animals so that they can be traced back to the original owner if necessary.

Anyone transporting livestock is reminded to stay within the weight restrictions for the vehicle to avoid traffic violations. Farm vehicles may need to be identified by the New York State Department of Transportation if specific conditions are met. Transporters are encouraged to contact the DOT for more information.

Information and Responsibilities

When selling livestock wholesale, it is imperative to accurately describe the animals offered for sale. This means knowing exactly how many animals are available for sale, their weights and quality. A scale will allow a farmer to give buyers good estimates of animal weights when talking with prospective buyers. Weight tapes usually provide sufficient approximations for large ruminants but are less reliable with small ruminants. Most dealers will use their own scales to weigh animals during the actual transaction so farms scales do not need to be certified.

If the buyer does not have a certified scale, technically they cannot buy the animal based on a price per pound of live body weight. However, one option in this situation is to use the uncertified scale to estimate body weight and calculate price over the entire group being sold and then to divide the total sum by the number of animals being sold. This will result in a receipt based on a per head price that is similar to payment by weight. A farmer who has his own scales is able to verify that the dealer's scale is reliable.

Farmers will also need to know the current market price for animals of similar type and quality. Farmers should be clear on why they need a particular price for their animals. Try not to attack a buyer personally when bickering over price. It is hard to come back to the same buyer if he has been accused of cheating. Instead, farmers should focus on their animals, the expense, and time they have put into them, and their need to receive a certain price in order to remain in business. Point out that financial sustainability is mutually important. If price cannot be agreed upon, the conversation should be ended on a friendly note. Remember, the wholesaler is dealing with a clientele they know well and if that clientele will not pay a sufficient price to satisfy everyone's financial needs, then it is best not to push.

If the buyer does not seem particularly interested in the livestock, then a farmer might ask them if they can recommend another buyer. Producers can also ask what time of year their demand is biggest and what sort of livestock they desire at that time. Following up a phone call with a business card that includes a snapshot of the typical slaughter animals offered by a farm for sale is often helpful.

One question that will arise is whether to be paid on a live animal or dressed carcass basis. An advantage of being paid on a live animal price is that animals can be weighed on farm or upon delivery and the farmer paid right then by cash or check. If a farmer arranges to be paid by either dressing percentage or by the weight of the animals when walked over the scale at the processing plant, then they are taking a larger financial risk - particularly if they have no control over how the animals are handled on their way to the plant and how much shrinkage takes place in the interim. In the worst-case scenario, slaughter may be delayed several days or animals may lose their identification and the wrong animals identified. Another disadvantage to being paid by dressed carcass weight is that the buyer may decide that they are buying carcasses rather than live animals. If so, it is a farmer's responsibility that those carcasses fall within the buyer's parameters, otherwise there may be severe price penalties if the carcasses are too large or small. It is a good idea to record on-farm weights to cross-reference with the weights that are later reported by the buyer.

When a buyer comes to the farm or a centralized pickup point and views the animals live, then they usually pay a live weight price based on the animals live appearance and weight and the farmer's obligations end there. The buyer may request that the farmer sign an official paper indicating that they have adhered to the proper drug withdrawal periods for any medications or

wormers administered to the animal. If the animal is sold as Halal or pasture raised, the buyer may require that the farmer sign an affidavit stating that the animal was managed accordingly.

If a buyer is picking up the animals directly from the farm, keep in mind that 1) he or she is taking on the transport expenses, and 2) on-farm weights will not reflect any transport shrinkage (live weight losses during transport). If the payment is based on on-farm weight, these two factors are advantageous to the farmer. Prior to selling, make sure there is a clear understanding on when the animals are being picked up and how long the farm is willing to hold on to them. If the reliability of the buyer is questionable, then the farmer should request that the animals be picked up prior to the last good auction dates in their area. For example, if Easter lambs are being shipped, then the farmer might propose a pick-up date that is before the last Easter auction in his/her region.

Legal Recourse in Case of Nonpayment

Unless the buyer is paying cash during the transaction, it is very important that a paper trail be established. All farmers should know and understand the **Packers & Stockyards Act**. Check with the regional P & S representative or the appropriate state's Department of Agriculture to see whether the buyer is bonded or licensed with an official agency.

By law, all packers that purchase \$500,000 worth of livestock annually are required to be bonded. The bonds usually amount to the value of livestock purchases they make in two average working days, with a minimum bond of \$10,000 being required. Before actually selling to a packer, farmers are encouraged to check out the financial status of their buyer with the regional Packers and Stockyards agent. Is the packer's bond in good standing or has it been revoked by the bonding company? Are they currently being investigated for failure to pay a producer? Are there any citations out on them? Is the agent aware of any alleged complaints against them? Agents help investigate charges of no payment against all packers. Therefore, agents can often advise about the complaint status of smaller, unbonded packers.

In order to qualify for P & S protection, do not extend credit, do not use threats or intimidation to negotiate price, but do get an invoice or other proof that the animals were delivered. The invoice should include seller's and buyer's names, number or pounds of animals delivered, and sale price per unit. It is good to have the buyer sign it. However, a buyer signature is not required for P & S to file a complaint. If there is no buyer's signature on the invoice, then try to have the trucker or someone working at the slaughter plant where the animals were dropped off, sign the invoice stating that the animals were received. If there is no one there when the animals were delivered, then farmers need to be sure to note on the invoice the time, date and place of delivery. Farmers need be sure to cover themselves in case a buyer tries to claim that they never received the animals. Although, P & S can file a complaint on a farmers' behalf, there is little chance of getting payment if the packer already owes their bond to several other farmers or has declared bankruptcy.

About the only way to establish the financial reliability of smaller wholesalers or retailers is to pay for a private credit check on them. These credit checks are often available via the web. Farmers can also check with other producers who have sold to them or auctions and county agricultural educators who may work with them on a regular basis.

Locating Buyers

Sellers of small ruminants in the New York State area, might want to check out the Small Ruminant Marketing Directory, available on the web at <http://www.sheepgoatmarketing.info>. This resource also lists slaughterhouses, live animal markets, auctions, packers, livestock dealers, etc.

One way to locate packers is to contact the regional Packers and Stockyards office (the office for the Eastern US can be reached by phone at (404)562-5840). Ask them for help contacting a local resident agent. As of January 2010, the supervisor for the Northeastern US was Cindy Bertoli at 315-720-2668. Resident agents may be able to provide farmers with a list of bonded Packers in their region. Farmers can then contact these packers to see what sort of animals they purchase.

Another way to locate middlemen is to contact local USDA and custom slaughterhouses. There is a USDA FSIS Directory of USDA processing plants on the web at http://www.fsis.usda.gov/Regulations %26 Policies/Meat_Poultry_Egg_Inspection_Directory/index.asp. However, the disadvantage of this directory is that it does not sort processing plants by state. The district office for USDA FSI can sometimes provide a list of federally and state inspected plants. District offices can be located by phoning the main office at (202)720-9904 or on the web at http://www.fsis.usda.gov/Contact_Us/Office_Locations_&_Phone_Numbers/index.asp. Sellers can then call individual slaughterhouses and ask them if they slaughter livestock for any wholesalers, retailers, or dealers who buy direct from farmers and whether they would be willing to help contact these buyers. Several slaughterhouses operate as packers and buy livestock direct from farmers for the businesses they serve.

Wholesalers of small ruminants such as goats and lambs might be found by stopping at restaurants that serve goat or lamb and asking whom they purchase their carcasses from. Cornell Cooperative Extension livestock can also provide advice about packers or dealers who buy in a particular region.

Retailers can generally be located by looking under meat market listings in the web or telephone yellow pages for large metropolitan areas. Many large cities have restaurant directories on the web, which can be searched using key words such as "veal" or "goat meat".

There are also some live animal markets in areas such as NYC that sell live sheep, goats, deer, rabbits, and poultry direct to consumers. These markets are not to be confused with auction houses. Rather, these are retail businesses where direct consumers can go and view penned animals, make their pick, and have the animal slaughtered at an on-site custom slaughterhouse. Because they take ownership of the animal prior to slaughter, the animal does not have to be slaughtered in a USDA federally inspected plant. Instead, the animals are slaughtered under the "custom exemption" in the federal code, which provides that the owner of an animal does not have to have the carcass federally inspected if the meat is going directly back to the owner's household for consumption. The meat is stamped "not for resale" and then bagged for the customer to take home. Live animal markets usually buy from dealers or order buyers at regional auctions. However, sometimes they buy direct from producers. Some goat and sheep farms have

built on-farm custom slaughterhouses and become rural versions of live animal markets. These farms often purchase livestock direct from other farmers.

Marketing Carcasses Wholesale

Farmers can opt to sell carcasses directly to wholesale and retail businesses. By doing so, they will receive a higher price, but take on much more responsibility. Farmers marketing wholesale will need to make all slaughter, processing, and transport arrangements and pay these expenses up front. The price negotiated must consider these additional expenses.

Farmers will also need to accurately predict the carcass yield of their live animals. These buyers will be requesting specific sized carcasses and can legally penalized or reject carcasses if they do not fall within the agreed upon weight range. Be sure that there is clear agreement on the penalty for carcasses outside the specified weight range. It may be beneficial to have a disinterested third party available to witness the carcass weights.

A seller will have to accurately predict the dressing percentage of the animals. Make sure that the buyer's definition of a dressed or hanging carcass is fully understood. Does it include the hide, head, and/or organs? Is it the weight of the carcass immediately after slaughter (hot carcass weight) or of the cold carcass upon delivery to the retail store after chilling in a cooler for a few days? If the later, then cooler shrinkage must be planned for.

Success in this market will depend on the availability and affordability of a USDA federally inspected slaughter facility to work with and an economical, legal, and reliable way to get the meat to the buyer. Sellers will need to judge how trustworthy their buyer is, as even under good conditions there will be a time lapse between delivery and payment.

Some slaughterhouses have refrigerated trucks that regularly deliver carcasses to metropolitan areas. In this case, a farmer may be able to pay an extra fee to have them deliver carcasses. If the delivery business operates as a packer, then they may be interested in purchasing the carcasses directly.

It is important to learn if the buyer wants carcasses hung or stacked for transport. Do swine and beef always have to be hung? How high can they be safely stacked? Are the carcasses to be shrouded or packaged? If so, who will pay the slaughterhouse for these extra services?

If selling to the buyer on a year round basis is there any chance of negotiating a yearly contract with them? Again, as with live slaughter animals, Packers & Stockyards is the main recourse in the event of nonpayment.

Retail Market Opportunities

Direct farm marketing is a preferred business because of the flexibility and economic returns it provides. Direct farm marketing lets producers become price setters, selling "products"; as opposed to being price takers, selling "commodities". Direct marketing provides farmers interaction with their customers. Through direct interaction, farmers can adjust their product lines for specific consumers demand. This is known as market driven agricultural production. There are a number of direct marketing options available. A farmer will need to decide whether to market live animals, carcasses, or retail cuts. It is common for farmers to be involved in many

different forms of direct marketing. The factors mentioned below will all need to be considered when making this decision:

- the products available for sale,
- a farmer's location relative to the people who will buy the products,
- the processing options available,
- the farmer's time available for marketing relative to the time spent on production,
- the cost which may be assumed,
- the level of customer interaction required by each market option,
- the risks the farmer is willing to accept,
- the level of support from the local community.

Direct Marketing Live Animals

Direct on-farm marketing of smaller livestock such as sheep, goats, and rabbits can be time consuming and stressful depending on how many of its inherent responsibilities a farmer ends up assuming. However, it is also a great chance to meet new folks and learn about a diverse range of cultures and ethnic groups. Producers can market their animals directly to the end consumer either through 1) on-farm sales where customers come to the farm and pick out an animal, or 2) the "freezer trade" where a customer orders an animal to be picked out for them and delivered to a slaughterhouse for slaughter and processing according to their cutting instructions. These channels work well for farm families who enjoy dealing with numerous customers one-on-one and meeting new cultures. In all cases, farm liability is necessary.

Live Animal Markets

In some regions near high concentrations of ethnic populations, there are live animal markets. These markets are not to be confused with auctions. Rather, these are retail businesses where direct consumers can go and view penned animals, make their pick, and have the animal slaughtered at an on-site custom slaughterhouse. Because they take ownership of the animal prior to slaughter, the animal does not have to be slaughtered in a USDA federally inspected plant. Instead, the animals are slaughtered under the "custom exemption" in the federal code, which provides that the owner of an animal does not have to have the carcass federally inspected if the meat is going directly back to the owner's household for consumption. The meat is stamped "not for resale" and then bagged for the customer to take home. Several sheep and goat farms in New York operate as "live animal market". They have custom exempt slaughter and meat processing facilities on site. Often they use these facilities to process white tail deer during the hunting season.

On-Farm Slaughtering

Initially a producer will need to advertise and actively seek clientele. It is a good idea to have the slaughter animals separated from the breeding stock or to have an easy way for customers to identify which is which. Posting prices and sticking with them will help cut down on time spent attempting to bargain. Farmers will need to decide if they are able and/or willing to be involved in the slaughter process at all or if customers are simply going to pick up their animal and be on their way.

If the plan is to be involved in the slaughter process, check with the state to find out the state regulations on 1) allowing customers to slaughter on-farm, and/or 2) transporting purchased animals to a custom slaughterhouse for a customer. Some states have stricter interpretations of the “custom exemption” than the federal code and require that only the person “who has raised the animal” qualify as the owner. Some states allow a customer who has purchased an animal to slaughter the goat at their own premises but not on the producer’s farm. If there are any questions about state requirements on this topic ask for a printed copy of the regulation and a layperson’s interpretation of it. It is also a good idea to find out how other nearby producers handle these transactions.

In New York it is permissible for a farmer to let a consumer come to the farm and to pick out an animal which will be butchered immediately on the farm. It is also permissible for farmers to take an order from a direct consumer and to then select out an animal for the customer and deliver that animal to a custom or USDA butcher for them. The farmer must keep impeccable records of the transaction including the consumer’s name and address for each animal delivered. Ownership of the animal can be split among multiple consumers.

If a farmer allows for on-farm slaughter, it is critical that the farmer not help in the slaughter process in any way. Farmers may only permit the new owner the right to slaughter the animal on their land. It is helpful to have an area where the carcasses can be hung, potable water, and a sanitary, legal way to dispose of any offal. Disposal of blood and offal must not pollute any water sources or conflict with local ordinances. It is best to check with officials to ensure disposal is done in accordance with any local regulations.

In states such as New York where composting of offal is legal, many farms opt to compost the offal in a high carbon material such as wood chips. On farm livestock composting activities in New York do not require solid waste permits and are exempt from DEC regulations. Jean Bonhotal at the Solid Waste Management Center at Cornell University (<http://cwmr.css.cornell.edu/>) can provide the current recommended procedures for dealing with on-farm disposal of offal. Other options are to provide a pre-dug trench or pay a rendering company to pick up offal.

Freezer Trade

A customer, who purchases a live animal for his or her own personal use, is a freezer trade consumer. Freezer trade customers after purchasing the live animal have it sent for slaughtering and processing, with many deciding to have the animal butchered at a custom slaughterhouse.

Freezer trade customers may purchase the animal by the head or by live weight. Processing and transportation costs may be added to the cost, but it is recommended that the customer pay the processor directly. It is important that customers understand how much meat they can expect and how the retail cuts will be distributed. Providing forms that allow the customer to choose how they want the meat processed can help. Ethnic customers using animals for curry dishes may want the carcass processed into 1 ½-inch chunks of meat and bone on a band saw, while other customers may want roasts, chops, steaks with the remainder deboned for either stew or ground meat.

A farmer selling meat, rather than the slaughter animal, is not considered conducting freezer trade and is required to follow other regulations. In the case of red meat, amenable livestock such

as sheep, goats, pigs, and cattle must be slaughtered and inspected at a USDA slaughterhouse and processed at either a USDA facility or 20-C commercial kitchen depending on the end buyer.

Community Supported Agriculture

Farmers first offered Community Supported Agriculture (CSA) shares in 1985, revolutionizing direct marketing possibilities for small-scale farmers. Typical CSAs provide vegetables to a group of customers who have paid a “subscription fee” in exchange for receipt of a share of farm product, each week throughout the “season”. Subscribers assume some of the risk for a small harvest, but many are willing to do so in exchange for knowing exactly where their food comes from, how it was raised, and the farmer who raised it.

Offering meat as a CSA share or in partnership with a CSA farm, presents marketing and processing alternatives to livestock raisers. Farmers might use the CSA subscription base to attract freezer trade customers, allowing for use of a custom exempt facility. Individuals of the CSA can get together and decide to “share” an animal that they purchase from the farmer, but it is up to these individuals to ensure that the portions are “equal”. Those farmers with USDA inspected retail cuts might set up a stand where the CSA pick-up is scheduled.

Still other producers have decided to offer meat and poultry as part of the CSA share itself. A farmer who secures subscriptions in the early spring can have the cash on hand to purchase feeder animals in time for the grass flush, and the peace of mind of knowing that the animals have already been sold.

Farmers offering meat shares may have pre-designed splits, and therefore, they are able to describe how much of each cut will be in a box based on a 4-person or 6-person share for example. Others have creatively offered high-end shares (with steaks and tenderloins) and low-end shares (of stew and ground). Some shares are multi-species and farmers are able to offer meat and poultry when it’s the freshest; like lambs in spring, chickens in the summer and beef in late fall and winter

Farmers who operate large CSAs caution those considering this venture not to underestimate the time needed to maintain continued contact with CSA customers. Other problems arise with CSAs; the biggest concern is if a CSA member goes on vacation and therefore does not pick up his/her share. Farmers are not allowed to restock left-behind-product and must instead donate it to food kitchens or eat it themselves.

The issue of who actually produces the animal or the products in question is not a primary consideration. The main concern in insuring the safety of the products being marketed and protecting the consumers from food safety risks and misbranded and adulterated products. To the extent that producers try to circumvent or avoid inspection requirements or other food safety rules that apply to their meat and meat products, creating the potential for public health risks, they can expect government officials to enforce the rules.

There are many CSA types and contracts and each would need to be read carefully and thoroughly to determine exactly the risks and entitlements of the shareholder. In most true-to-

form CSAs, the burden of risk is shared equally between the producer and the consumer. However, if the CSA contract states that the shareholder does not legally own the animal in any way, then custom cutting options are not available legally to either party.

Farm Cooperative

A farmer might opt to form a cooperative. In this case the financial transaction does not involve the purchasing of end product in advance like a CSA arrangement, but rather the money is used to purchase a share of the farm business, which includes not only the live animals but also the obligation to participate in the management and operation of the farm business. In this way, a cooperative shareholder may be required to participate in the care and feeding of the animals, and/or on-farm slaughtering of animals he/she owns. Product from animals slaughtered under this arrangement are not eligible for sale, but must be designated for personal consumption. Liability and other risks are of concern and should be addressed in the written cooperative agreement. Specific rental or insurance requirements may be necessary.

Contract Raising of Livestock

Contract raising is when a business contracts with individual producers to raise meat animals for them. The producers generally follow specific management protocols required by the business in order to insure that animals from different farms will yield a consistent product. In some cases, the business supplies the animals and even the feed.

Contract raising is used primarily by large agri-business corporations with large agri-business growing houses. Depending on the contract, the burden of risk is often shouldered by the growing house (or producer) up until the animals are delivered to the slaughtering facility. As most far exceed the legal threshold for small-scale production, the delivery typically takes place to a USDA plant often owned and operated by the corporation itself. An example of this arrangement is the poultry industry. Agri-business corporation giants, Purdue and Tyson, often contract with large grow-out houses. These growers then deliver the finished birds to Purdue or Tyson owned and operated USDA inspected plants. This gives the agri-business vertical integration advantages without all of the risks.

Auctions

Live market auctions are an easy way to market live animals. A farmer generally expends almost no effort in finding a buyer and in return, they are guaranteed timely payment by a bonded entity. Of course, farmers will also have no control over the price they may receive. It may be a good idea to seek out larger regional sales or graded holiday sales where more buyers are likely to compete for the animals presented. Auctions do require that animals be identified individually. For example, sheep and goats must have official scrapie ear tags or tattoos.

Farmers should review past market reports for a particular auction. Animals may be sold by the head or by the pound, and this may vary by species. Sometimes prices are reported for an “estimated weight range” because the animals are really being sold by the head. Make a commitment to call the sale barn manager in advance to get their advice on best date to come and gauge their enthusiasm for the product offered. If possible, farmers should use the auction to

introduce themselves directly to the buyers. This means staying for the bidding and talking to the bidders. Farmers should be prepared with business cards to hand out. Farmers looking for future buyers should converse with the buyers, and let them know if more animals are available and when. Payment based on live weight could be part of the discussion.

Retailing the Cuts

Sometimes farmers are confused about the difference between retail and wholesale marketing of meat. When marketing to a retail outlet directly the farmer becomes a wholesaler. Another example of wholesale marketing is when selling to another wholesaler who then sells product to a retailer. Still another example of wholesale marketing is when a **food broker** handles the sales between the supplier and another wholesaler who then deals directly with the retailer is. A **distributor** is a business that handles the transportation of the finished product from one physical location to another but generally does not facilitate contracts between buyers and sellers. If a farmer sells his/her product to a retail store or wholesaler either directly or via a distributor, then they are also selling wholesale rather than retail. In these cases, refer back to the previous chapter on wholesale marketing.

Retail Markets: From the farm stand to the upscale grocery store

A farmer may chose to operate a retail market himself or market his products to a non-related retail outlet. Retail outlets can range from the very simple to the very elaborate. When selling meat in a retail outlet this can be anything from a freezer separate from the family's on the back porch, to an upscale, gourmet grocery. Retail outlets tend to be fixed physical locations, although selling from a freezer truck, which is regularly parked at a specific location, may be considered a retail outlet. The best example of this type of outlet is a parked freezer truck offering fresh fish for sale. At this type of outlet, there are no other vendors and the market is not run on public property or by a public authority.

Local zoning must be consulted before starting a retail outlet to ensure that the operation of such does not violate any local, county, or state zoning or planning ordinance. In addition, some municipalities have strict signage requirements on the number, placement, size, or type of sign allowable. The products requiring tax collection as well as the tax rate may differ from county to county. Anyone operating a retail operate must contact their local and county health departments.

Retail sales of meat in New York require that cuts of amenable red meat and value added products be USDA inspected. Non-amenable meat and meat products must be either USDA inspected or processed at a New York State Department of Agriculture and Market Licensed 5-A facility where it is labeled with an Article 5-A Exemption Claim. Determination of which facility used is determined by the ingredients used to manufacture the product.

If a farmer sells meats from animals not raised herself, she will need a 20-C retail license. If there is any further processing of the meat a producer receives from a USDA inspected or NY State licensed slaughterhouse, then a 20-C license is needed. If eggs, dairy, or cheese is sold in addition to meat, then NYSDAM requires a 20-C license. If a farmer is simply selling meat from animals that they raised and had appropriately inspected in addition to selling baked goods, jams, jellies and other non-hazardous products then this license is not need.

Back porch/ Classic Farm-stand

Roadside stands and on-farm outlets are not considered by NYSDAM to be “retail food stores”, rather, they are considered an extension of the farm. As such, these market outlets are not required to meet the strict sanitary guidelines required by regular retail food stores or food processing establishments. Such stands and on-farm outlets are permitted to sell farm-produced foods such as fresh whole fruits and vegetables (uncut), eggs (cleaned and refrigerated at 45 degrees or less), grains and legumes, honey and maple syrup.

As long as the red meat is inspected, a farmer may sell it from a freezer from his/her home. Poultry may be sold out of an on-farm freezer that has not been USDA inspected as long as it was slaughtered under the 1000 bird exemption or one of the 5-A exemptions. For poultry there is a dollar amount attached to the limitation set by FSIS. There is no dollar limitation for amenable meat. There is also a **retail store limitation** for meat and meat products of \$56,900 and \$46,700 for poultry.

Storage of product may be monitored and inspected by NYSDAM.

If any product is not the farmer’s who raised the animal and who is doing the selling, then that farmer must have a wholesaler’s license regardless of volume.

The Department permits businesses (including farms) with a 20-C retail licenses to sell other foods, including perishable products like meat and dairy if products are:

- Processed at an approved processing facility
- Prepackaged and properly labeled
- Kept at the required cold temperature (below 41° F) to prevent spoilage or contamination.

No packaging, cutting, slicing or portioning of fruits, vegetables, meat, dairy products or ready to eat foods is permitted unless proper retail food store or commercial kitchen sanitary facilities are provided. These facilities must include running hot and cold water, equipment cleaning and sanitizing facilities, hand-washing facilities and toilet facilities. NYSDAM will sometimes consider a variance from the requirement for toilet facilities if the farm household’s toilet facilities are easily accessible.

Farmers Markets

Farmers’ markets are considered an extension of the farm; therefore, only the farmer or his/her employees can sell the meat or poultry products raised on the farm. The only exception is in the case of meat products that are both slaughtered and processed under USDA inspection. These products can be sold at a shared stand when the owner of the meat is not present assuming that the market allows joint or group ownership of booths.

Meat, poultry, and farm-raised game offered for sale at a farmers’ market must be slaughtered and processed at an approved source. Only those wild game animals identified by the DEC may be sold. Hunter harvested venison cannot be sold in New York State. (Refer to the section on wild game). The sale of custom slaughtered and/or custom processed cuts of meat is forbidden. (Please refer to the chapter on slaughter and processing for your particular type of animal for information on where animals must be butchered and processed in order to be sold as retail cuts direct to consumers.)

Fresh, frozen, and processed meats are allowed to be sold at NYS Farmers' Markets, but the cold chain must never be broken when selling meat. Fresh meat must be kept below 41° F. Frozen meat must be kept below 32° F. This requirement can usually be met at a Farmers' Market by 1) keeping the meat in a plugged in freezer on the back of a pickup or delivery truck if the market has electrical outlets or 2) keeping the meat in highly efficient coolers (check the rating) with cold packs or dry ice.

Cleanliness is also important and most market protocol (enforced by market managers) will require farmers to have a hand wash station at a minimum if any sampling is permitted.

Some markets may prefer that samples (for example, summer sausage) be precut rather than being cut up at the market itself. A farmer must use inspected product when selling cooked product at this farmers' market stall.

If selling meat by the pound farmers will need a NYS Department of Weights and Measurers Certified scale unless the meat is marked prior to the market or sold by the package.

Hotels, Restaurants and Institutions (HRI)

Farmers are allowed to sell meat and poultry directly to hotels, restaurants and institution in some cases and within specified parameters. These sales are allowed under specific exemptions listed in the FMIA and the PPIA.

Under some poultry exemptions, poultry and poultry products can be sold directly to hotels, restaurants, or institutions. There are some limitations depending upon the exemption the birds were processed under and there are limits to the amount of product which may be sold.

A farmer can sell USDA inspected red meat quarters, primals, cuts or value added product directly from a USDA slaughter and/or processing facility to any HRI establishment without limitations. The farmer can also take USDA inspected carcasses and quarters of red meat to his 20-C licensed facility for further processing for HRI sales. Sales of red meat from a 20-C facility to an HRI kitchen is limited to normal retail amounts and can not in aggregate exceed one-half a carcass. For cattle one-half carcass equates to 300 pounds, for calves 37.5 pounds, for sheep 27.5 pounds, for swine 100 pounds, and for goats 25 pounds. In addition, less than 25% of sales in terms of dollar value, can be sold to HRI customers and HRI total annual sales can not exceed the dollar limitation set by the Administrator for a given year.

Meat processed at a 20-C facility and sold HRI is limited to products that are sliced, trimmed, cut or ground. Adding spices to ground meat to manufacture a fresh sausage is allowed. Products that have been cooked, cured, smoked, marinated etc. at the 20-C facility can only be sold to a household consumer. The seller has to hold the 20-C license

If a restaurant is located on a particular farm and such restaurant is operated by the same farm entity that is licensed to operate a 20-C facility then the USDA slaughtered red meat processed by a farm at his own 20-C establishment may be used at his own restaurant. The meat may also be used at his own farmer's market food stand – for example, if he sells pork sausage sandwiches made from his own USDA slaughtered pigs and processed at his own 20-C facility.

If a farmer is selling their own meat only HRI, no wholesaler license necessary. If a farmer is selling red meat from other farms to HRI, then he/she will need a **wholesaler's license**. A

wholesalers license (Article 20 – Farm Products Dealer License is required if annual purchases of livestock, meats, poultry from other New York producers raised by them and sold wholesale exceeds \$10,000). If livestock is purchased at posted livestock auction markets (regulated by Packers & Stockyards) and/or product is sold wholesale interstate (constitutes a flow in commerce), the producer is subject to USDA-Packers & Stockyards (P&S) as to their payment and any unfair trade practice requirements. There are no filing and bonding requirements unless annual purchase volume exceeds \$500,000.

A recent interpretation (May 2006) by NYSDAM no longer permits the sale in New York of on-farm processed whole poultry carcasses to restaurants unless the birds have been processed at either a 5-A poultry plant or USDA federally inspected plant. This interpretation identified the diner or restaurant patron as the ultimate retail customer.

Farm to School

Currently, Farm to School efforts are competing with the USDA Commodity Program. It is exceptionally difficult for small, local producers to compete with this program in terms of both volume and price. In addition insurance requirements and third party audits may pose barriers. However, limited opportunities may exist for banquets, fund-raising dinners or in the a-la carte line via snack sticks or jerky. Products must be labeled, including nutritional guidelines, and be approved by both the school administration as well as the cafeteria manager. Price must be competitive and the product should fall within “**Wellness Policy**” guidelines for nutritional content.

Fundraising Dinners

If the dinner is a free will offering, then the meat does not have to be either federally or state inspected. However, if tickets are sold at a set price all meat, poultry and game must be appropriately processed as legally required for sale to restaurants or caterers. However, it is advisable - based on inherent risk - to use the appropriate inspection channels.

Donations of Product

With the exception of whitetail deer donated from hunters after delivery for inspection to custom processing plants, all donated meats to food banks and missions must comply with legal requirements for selling that particular species of meat. The FDA has proposed revising the requirements for processing of donated foods. It would require multi-state processors to enter into National Processing Agreements and would permit processors to substitute donated beef and pork with commercially purchased beef and pork of U.S. origin and of equal or better quality than the donated food for use in value added products

Fairs and Festivals

Fairs and festivals are different from Farmers’ Markets in that most products sold are in the ready-to-eat form. Cooking can be done at an on-site facility or at an off-site facility and then appropriately transported to the location. Vending permits as well as appropriate County Health Department Permits are required. In order to receive such a permit some counties may require specific training, a HACCP plan, or other documentation as requested. All meat, poultry, and game must have been appropriately processed as legally required for sale to caterers or restaurants.

Mail Orders

Refrigerated foods must be mailed cold or frozen in a foam or heavy cardboard box with a cold source included. The package must be labeled "Perishable: Keep Refrigerated". The package should be mailed for next day delivery. When mailing by private carrier, do not use a postal address, use a house or apartment number to make sure the package is received in person. Keep tracking records and shipping records. It is best to alert the customer that the package is in the mail and to remind them to promptly refrigerate or freeze upon receipt. All meat, poultry, and game must have been appropriately processed as legally required for retail sales.

Direct marketers in this market channel will need to investigate the cheapest and safest ways to handle payment (including credit cards and/or paypal accounts), shipping materials and containers (including labels), and shipping costs (including getting the product to the shipping point). An accurate real-time inventory system is essential.

Finding a Specialty (Niche) Market for Meat and Poultry

Breaking into a specialty food store, a gourmet restaurant or even finding a reputable wholesaler to buy livestock or produce takes a lot of hard work and persistence. Successful farmers are often reluctant to share their sales secrets and information because many have earned the privilege of doing business with niche customers through the school of hard knocks. Simply handing such information out freely seems to invite competition to what a farmer-marketer is doing. However, more and more small-scale farmers are going out on their own, doing their own marketing, and trying to make a sale where they are able.

Marketing is a hard job and a time consuming one. Anyone thinking any different is entirely wrong. In many cases, over half a farmer's time can be spent on marketing, promotion, and sales if a farmer decides they are going to move their product directly without the use of an intermediary. Some farmers find this frustrating and give up. Other farmers do not account for the time they spend in this aspect of their business and therefore are not adequately compensated. So how does one go about getting into a niche market?

The first step to getting into any establishment is to get a referral. This is not an easy task, but it must be done. Chefs are a tight knit group, and a referral is paramount to success.

With referral in hand, farmer-marketers should do their homework and learn as much as possible about the customer. Farmers should be encouraged to look for a good "fit" between their products and of those of the intended customer. Farmers should consider the establishment's existing product line, price range, and determine the probability that the intended customer would purchase their farm product. Farmer-marketers should find out who actually does the purchasing and ordering- as it may be the owner, the purchasing agent, the chef, or the sous chef. Farmers should not waste their time or their customer's time. It is a farmer's responsibility to check on these details before making any contact with the intended customer.

Once a producer has a referral and they have investigated the proposed customer, then they should send a cover letter that is very short and to the point - chefs do not like to take the time to read lengthy brochures, letters, etc. Farmers need to make sure that they include the referral in the letter. Farmers might also send a very well written brochure and of course their price list. All

material sent must look professional. There is a lot of competition out there, and direct marketing farmers are competing with the big boys, some of them global suppliers.

Farmers should allow several days - up to one week - for the intended customer to read the material sent. Farmers are encouraged to follow up with a phone call. Sometimes farmers will receive a flat out rejection, but other times they just might get a foot in the door. At this point farmers should make an appointment to see the intended customer. (Farmers are encouraged to set a specific time and date. Some might even want to send a postcard as a reminder of their meeting.)

The meeting itself is very important. Farmers must be prepared to answer any question asked of them such as: What quantities, what qualities, who else is using it, what makes it different, how can it be used (recipe suggestions can be helpful in some situations), what is the nutritional profile, how will it be delivered, how much does it cost, what are shipping terms, what are the payment terms? These are just some of the many questions that buyers will ask. Farmers must be prepared and know the answers. If the perspective customer is sincerely interested, then a sample should be offered. Do not waste money on handing out samples if the intended buyer is truly not interested.

Give the prospective customer a day or two to try the product. If a great sales pitch was delivered, samples will be tried immediately. Farmers are encouraged to follow up on their visit with a phone call. At this point, a good salesperson will not only securely hook their customer but will also get them to place an order. Without a commitment, there is a significant risk that the customer will be lost. Salespersons must act tactfully as no-one likes to feel pressured. Farmers should practice their sales pitch with some good friends, including those who like to play the devil's advocate. Farmers need to be sure that they and the buyer are describing the same cuts of meat and that the buyer understands the expected size/weight of particular retail cuts.

With an initial order, make sure everything is as promised, or better. Follow the order up with a phone call to make sure the customer has received their delivery and to insure that everything was satisfactory. Farmers should consider an additional phone call, about a week later, to see how the customer liked the product, how the response was, and if the buyer is in need of more products.

Very few customers will call the farm to place an order. Farmers have to do the calling and they have to do it without being "annoying". Never call a chef during lunch or dinner, and never call on weekends. There are hours of the day that are more convenient for meeting with certain customers. Each customer will have a personal preference. Farmer-marketers should keep a notebook for each customer, noting when calls were made, when orders were placed, what the customer ordered, and the feedback received.

Generally, customers will develop a routine, or a usage schedule that can be predicted. Some big restaurants place weekly orders, others bi-weekly, and still others monthly. Some chefs have products on the weekly menu; others run "specials" or featured dishes.

The farmer must do all he/she can so as not to lose contact with the customer; this is especially true if a farmer is marketing a seasonal product. If a farmer sells meats only in the fall and winter, contact during the spring or summer is still necessary. Farmers should be in regular contact with their customers, so that they can adjust their level of production especially if demand increases or decreases dramatically.

Farmer-marketers need to remember that building a relationship with a chef is more important than building one with the restaurant. If a chef leaves, a farmer should do whatever it takes to find where the chef has moved. Even if he/she has moved, a loyal chef will remain a valuable customer, especially if a great product is involved. Farmers might even pick up a second customer, by contacting the new chef at the same restaurant.

Holidays are very important at restaurants. By knowing the clientele of the restaurant, a farmer will have some idea of the market demand. During holidays, this demand will increase dramatically. Farmers should anticipate the increased needs and do what they can to ensure that they can supply product at that time. Holidays are a good time to get into a restaurant as a product “special” if they are not already a regular buyer. If the chef likes the product enough, the farmer has a good chance of repeat sales.

Ethnic restaurants have very specific needs, and not just any product will do. Farmers must ask the specific requirements from these types of customers. Farmers should also watch the calendar for the holidays of such ethnic markets. It is a good idea to call well in advance, (two to three weeks ahead), to get an idea of a restaurant’s anticipated holiday orders.

Marketing to restaurants and retail specialty stores is not for everyone. It takes a lot of commitment and many, many hours on the phone and in the car traveling. For some, group or regional marketing makes more sense. In this situation, one individual represents several farmers and a wide array of various products. Farmers need to help each other, not step on each other. However, this is difficult without understandings - some of which may be needed to be in writing. There are many markets out there waiting to be explored. The entire east coast from Boston to Richmond, Virginia is a potential market waiting to be developed. It is not endless but it is vast. Farmers should not be fighting amongst themselves for a market in just one of these cities. Farmers should work together.

Safe Product Handling

Temperature and the Cold Chain

Meat, meat by-products, and meat food products must be transported in an enclosed vehicle in such a manner to assure delivery and wholesomeness of those products while maintaining product integrity.

Products must be transported and stored at 0 F or below if frozen, or 41 F or colder if refrigerated. The product must be transported to and maintained at these temperatures for all sales and re-sales. Frozen products must remain frozen and no meat and meat products must rise above 40 ° F unless the product is temperature insensitive because it is manufactured, processed, or packaged in such a way to prevent adulteration or unwholesomeness.

There are special thresholds for jerky and other shelf stable type products. For example, jerky with a moisture level less than .91 is for the most part (though not entirely) temperature insensitive. A moisture level below .85 required to render the product totally temperature insensitive, providing it is packaged in airtight packaging. Jerky that is not air-tight packaged must have a moisture level below .80

For more information on jerky please refer to that section.

Transporting Products

This can be accomplished by either a freezer or an ice chest/cooler. While a freezer is generally preferred, a heavy-duty ice chest/cooler may also be used, provided sufficient ice is available to maintain safe product temperatures. Styrofoam coolers are not approved. All units holding frozen or refrigerated product should contain a thermometer in order to monitor the temperature of the product at all times.

If an ice chest is used, the meat must be covered in the ice. Provisions must be made to drain away melted ice from the product. The meat should NEVER be sitting or floating in melted ice water. Additionally, vendors should ensure that juices from one species (i.e., chicken) do not drip onto and contaminate another species (beef). Storing product in dedicated species-specific coolers or freezers reduces the risk of cross-contamination from one species to another.

Storage

Inspected meat must be kept separate from non-inspected meat. It must either be stored in a separate freezer/cooler from non-inspected meat or stored in a separate area of the freezer/cooler to minimize any risk of contamination. For example, if stored in an upright freezer, inspected meat should be stored on the top shelves to avoid any leakage from non-inspected meat.

Expiration Dates

Except for "use-by" dates, product dates do not always refer to home storage and use after purchase. However, even if the date expires during home storage, a product should be safe, wholesome and of good quality -- if handled properly and kept at 40° F or below. See the accompanying refrigerator charts for storage times of dated products.

- Purchase the product before the date expires.
- If perishable, take the food home immediately after purchase and refrigerate it promptly. Freeze it if the product cannot be used within times recommended on chart.
- Once a perishable product is frozen, it does not matter if the date expires because foods kept frozen continuously are safe indefinitely.
- Follow handling recommendations on product.
- Consult the following storage chart.

Refrigerator Home Storage (at 40° F or below) of Fresh or Uncooked Products

If product has a "Use-By Date", follow that date.

If product has a "Sell-By Date" or no date, cook or freeze the product by the times on the following chart.

Storage of Fresh or Uncooked Products	
Product	Storage Times After Purchase
Poultry	1 or 2 days

Beef, Veal, Pork and Lamb	3 to 5 days
Ground Meat and Ground Poultry	1 or 2 days
Fresh Variety Meats (Liver, Tongue, Brain, Kidneys, Heart, Chitterlings)	1 or 2 days
Cured Ham, Cook-Before-Eating	5 to 7 days
Sausage from Pork, Beef or Turkey, Uncooked	1 or 2 days
Eggs	3 to 5 weeks

Refrigerator Home Storage (at 40° F or below) of Processed Products Sealed at Plant

If product has a "Use-By Date", follow that date.

If product has a "Sell-By Date" or no date, cook or freeze the product by the times on the following chart.

Storage of Processed Products Sealed at Plant		
Processed Product	Unopened, After Purchase	After Opening
Cooked Poultry	3 to 4 days	3 to 4 days
Cooked Sausage	3 to 4 days	3 to 4 days
Sausage, Hard/Dry, shelf-stable	6 weeks/pantry	3 weeks
Corned Beef, uncooked, in pouch with pickling juices	5 to 7 days	3 to 4 days
Vacuum-packed Dinners, Commercial Brand with USDA seal	2 weeks	3 to 4 days
Bacon	2 weeks	7 days
Hot dogs	2 weeks	1 week
Luncheon meat	2 weeks	3 to 5 days
Ham, fully cooked	7 days	slices, 3 days; whole, 7 days
Ham, canned, labeled "keep refrigerated"	9 months	3 to 4 days

Ham, canned, shelf stable	2 years/pantry	3 to 5 days
Canned Meat and Poultry, shelf stable	2 to 5 years/pantry	3 to 4 days

Safe Handling

There are four components to safe food handling.

The first relates to cleanliness. Hands must be cleaned with warm water and soap. Wash cutting boards, dishes, countertops, and utensils with hot soapy water. The work area must also be kept clean.

Second, do not cross contaminate. Keep raw meat away from prepared products. Do not place cooked food on a plate or dish that previously held raw meat, poultry or eggs unless it was washed with hot, soapy water.

Third, keep products at their safe temperatures. This means keeping perishable food refrigerated. It also means cooking food to their proper degree of doneness. Food is safely cooked when it reaches a high enough internal temperature to kill the harmful bacteria that cause food-borne illness. (For whole muscle red meat, the internal temperature should rise to 145°F, 160°F for ground meats, and 165°F for poultry.) Use a food thermometer to measure the internal temperature of cooked foods at the thickest point. Sauces, gravies, and even leftovers should be reheated to 165°F. If using a microwave for reheating, the food should be stirred to make sure there are no cold spots.

Finally, food should be refrigerated promptly. Meat should be frozen or refrigerated as soon as possible; this means on immediate return from shopping. Never let meat sit out longer than two hours at room temperature (one hour if the outside temperature is over 90°F). Food should be defrosted in the refrigerator and not on the countertop. Other defrosting methods, neither of which work well for meat, include submersion in water or use of the microwave. Foods that are marinating should be kept under refrigeration. It is important that the refrigerator temperature be checked regularly. The optimal refrigeration temperature is 40°F. There should be plenty of space for the cool air to circulate within the appliance. Do not over-stuff the refrigerator!

*A pictorial guide to thermometer placement and reading can be found at:
http://www.fsis.usda.gov/Is_It_Done_Yet/Termometer_Placement_and_Temps/index.asp*

Mishandling

Foods can develop an off odor, flavor, or appearance due to spoilage bacteria. If a food has developed such characteristics, it should not be used for quality reasons. If foods are mishandled, however, food borne bacteria can grow and cause food borne illness -- before or after the date on the package. For example, if hot dogs are taken to a market and left out several hours, they would not be safe if used thereafter, even if the date has not expired.

Other examples of potential mishandling are products that have been defrosted at room temperature more than two hours; cross-contaminated; or handled by people who do not use

proper sanitary practices. Make sure to follow the handling and preparation instructions on the label to ensure top quality and safety.

Sampling and Slicing

In New York, the sampling and slicing of meat by-products and meat food products is at the discretion of County Health Department. Some departments require a food certification to carry out slicing of product for sampling. Some will require the product be sliced in a licensed commercial kitchen, while others will require the product to be sliced on site. Product that will be sampled must be USDA inspected, prepared under 5-A inspection, or be prepared in a state licensed commercial kitchen (a 20-C facility).

Additional Retailing Concerns

Product Distribution

Anytime a farmer moves finished product to the consumer, it is considered “**distributing**”. If a customer come to the farm and bought a large quantity of birds for his own use, but had no way to get them home, the farmer would be allowed to transport them as a service to the customer.

It is acceptable if a customer comes to the farm and says he wants to buy and slaughter himself a large number of animals, some of which are for his friends. As long as his friends asked him (and he did not ask his friends) it is OK. He should tag each animal with the name of each one of his friends and transport them in that manner. If he does not know the people, he is becoming a distributor, which is illegal.

Product Inventory and Record Keeping

Farmers should anticipate keeping accurate records of sales, deliveries, shipments, and products in inventory. Some of this additional record keeping requirement stems from farmers who complained they were not getting all their meat back. Some of this stems from bio-terrorism record keeping requirements, and some of this is COOL.

Farms should be using lot numbers. They should date product as it comes in. They should track product in and product out, and they should be using a first-in-first-out (FIFO) inventory system. If NYSDAM ever get a complaint because someone got sick on a product, then the more information the farmer can give the inspector, the better it will be for the farmer. Farmers must make sure to use approved and required labeling and good record keeping. As a responsible merchandiser, farmers must keep records and track their inventory.

Premise Registration

The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (the Bioterrorism Act) directed the Secretary of Health and Human Services to take steps to protect the public from a threatened or actual terrorist attack on the U.S. food supply. To carry out the provisions of the Bioterrorism Act, FDA published, on October 10, 2003, an interim final regulation, Registration Of Food Facilities, which requires domestic and foreign facilities that

manufacture/process, pack, or hold food for human or animal consumption in the United States to register with the FDA. Under this interim final regulation, all affected facilities must register.

The following premises are exempt and do NOT have to register:

- ***Private residences of individuals***, even though food may be manufactured, processed, packed, or held there.
- ***Transport vehicles that hold food only in the usual course of their business as carriers***.
- ***Farms***, i.e., facilities in one general physical location devoted to the growing and harvesting of crops, the raising of animals (including seafood), or both. Washing, trimming of outer leaves, and cooling of produce are considered part of harvesting. The term "farm" also includes facilities that pack or hold food, provided that all food used in such activities is grown, raised, or consumed on that farm or another farm under the same ownership, and facilities that manufacture/process food, provided that all food used in such activities is consumed on that farm or another farm under the same ownership. A farm-operated roadside stand that sells food directly to consumers as its primary function would be exempt from registration as a retail food establishment.
- ***Restaurants***, i.e., facilities that prepare and sell food directly to consumers for immediate consumption, including pet shelters, kennels, and veterinary facilities that provide food directly to animals. Facilities that provide food to interstate conveyances, such as commercial aircraft, or central kitchens that do not prepare and serve food directly to consumers are not restaurants for purposes of the rule.
- ***Retail food establishments***, such as groceries, delis, and roadside stands that sell food directly to consumers as their primary function meaning that annual sales directly to consumers are of greater dollar value than annual sales to other buyers. An establishment that manufactures/processes, packs, or holds food and whose primary function is to sell food directly to consumers, including food that the establishment manufactures/processes, from that establishment is a retail food establishment and is not required to register.
- ***Nonprofit food establishments***, which are charitable entities that meet the terms of § 501(c)(3) of the Internal Revenue Code and that prepare or serve food directly to the consumer or otherwise provide food or meals for consumption by humans or animals in the U.S. Central food banks, soup kitchens, and nonprofit food delivery services are examples of nonprofit food establishments.
- ***Facilities regulated exclusively and throughout the entire facility by the U.S. Department of Agriculture***, that is, facilities handling only meat, poultry, or egg products.

Facilities can register online via the Internet, by completing a paper form, or submitting to FDA a CD-ROM with relevant registration information. For assistance with online registration: in the U.S call 1-800-216-7331 or 301-575-0156; from elsewhere call 301-575-0156; or send a fax to 301-210-0247. Requests for assistance also may be emailed to furls@fda.gov.

By Product Marketing Opportunities for Consideration

Not all raw material may be resold by the farmer or processor. Some items may be considered hazardous risk material and be required to be condemned such as skulls and spinal cords. Please check specific requirements for the species under consideration. Other organs which do not pose a public health hazard may be claimed by the farmer, but only if the slaughterhouse has a HACCP plan in place which allows for this. *Please refer to the earlier section on Organ Meats and Specified Risk Materials.*

Raw Material	Manufactured Material	Potential Buyers
Raw Hides		Hide pools, Tanners, Leather Supply Houses, Taxidermists, Drum Manufacturers, Crafters
	Tanned Hides	Leather Supply Houses, Upholstery Shops, Crafters, Sewing Centers, Garment Makers
Hair		Fly-Tiers, Upholsterers, Taxidermists, Heritage Demos
Raw Fleece		Wool pools, Crafters
	Cleaned Fleece	Knitters, Craft Centers, Manufacturers
Skulls		Crafters, Religious and Ceremonial Users
Antlers		Antler Pools, Crafters, Furniture Manufacturers, Vitamin companies
Hooves		Crafters
Feathers		Crafters, Bait and Tackle Shops, Outfitters, Schools
Teeth		Crafters
Bones		Dog Food Companies, Museums, Researchers
	Smoked Bones	Pet Food Suppliers
Hearts, Liver and other offal		Dog Food Companies, Pet Owners, Breeders, Kennel Clubs, Hunting Clubs, Veterinarians, Researchers,
	Dehydrated Pet Treats and Cookies	Pet Owners
Tallow		Crafters, Soap and Candle Makers, Muzzle-Loading Clubs, Feed Manufacturers
	Soaps and Candles	Farmers Markets, Retail Outlets, Gift Shops

Pet Food

In order to understand pet food regulations, it is important to understand some specific terminology.

"Commercial feed" means all un-adulterated materials used as feed or manufactured into a feed, which includes pet food and specialty pet food.

"Manufacture" means to grind, mix or blend, or further process a commercial feed for distribution. If whole muscle meats are ground, then this is considered manufacturing, and NYSDAM rules for "commercial feed" apply.

Pet food is defined as any commercial feed prepared and distributed for consumption by pets. By definition, pet food includes raw ground meat.

Specialty pet food refers to commercially prepared food prepared for specialty pets which includes those pets maintained in a cage or tank such as gerbils, hamsters, canaries and other birds, tropical fish and gold fish, as well as snakes and turtles.

Whole Muscle Raw Meat as Pet Food

By definition, single ingredient products that are not changed in any way (such as whole beef livers) do not qualify as "commercial feed". There is no difference from what species the meat comes from. For example, whole rabbit intended for dogs is not defined as "commercial feed". Raw meat and raw animal tissues for animal food do not require pre-marketing approval or certification under current law.

Any meat which is ground would qualify under NYSDAM's definition as a commercial feed and then would be further qualified as pet food. Such a product must follow both the guidelines for commercial feed and the additional guidelines for pet food. (*See NYSDAM Circular 941 and 943 relating to commercial feeds*).

There are no FDA or NYSDAM regulations on manufacturing and distribution of commercial feed if only whole raw meat is sold for pet food. Rather than mandating legally enforceable responsibilities, the FDA provides "guidance". The following is **FDA Guidance on the Manufacturing and Labeling of Raw Meat Foods For Companion and Captive Non-Companion Carnivores and Omnivores**, and should be viewed as recommendations only. None of what follows regarding the sale of whole muscle raw meat as pet food is required.

The FDA recognizes three acceptable sources of ingredients for dog food: meat obtained directly from human food processing facilities; meat from animal that have died by means other than slaughter; and meat originally offered but no longer suitable for human consumption. Products made from tissues of animal origin not inspected and passed for human consumption may be subject to USDA regulations for transporting and denaturing (9 CFR Part 325). In addition, any pathogens present must be removed, or the meat is defined as "adulterated". There are several ways to remove pathogens, but they all involve manufacturing. Thus, the FDA recommends that any raw meat intended to be fed raw be USDA FSIS inspected and passed for human consumption. The FDA recommends grinding all bones and hard materials. They also require that all other ingredients should be suitable for use in animal feeds.

The manufacturing facility should take all measures to prevent adulteration of the raw product. This could include irradiation; participating in the USDA voluntary inspection program for Certified Products for Dogs, Cats and other Carnivora (9 CFR Part 355); following good manufacturing practices (as found in 21 CFR Part 110); or implementing a HACCP plan.

Unless the raw product is freeze-dried, the FDA recommends that it remain frozen at all times prior to use. Product should be transported and stored in a manner to avoid microbial contamination and growth.

Labels must conform to all pertinent FDA regulations and statutes, in the case of raw meat there are none, thus the FDA recommends that all labels conform to all AAFCO model regulations. The FDA (along with NYSDAM) strongly suggests the following labels on raw meat products intended for pet food.

Storage and Handling Information Statements:

- It is recommended that raw frozen meat and/or poultry bear a statement “Keep Frozen” displayed in a prominent manner on the principal display panel.
- It is recommended that raw frozen meat and/or poultry products for animal consumption bear a statement “Handling Guidelines for Safe Use” which include the wording, “Some raw food products may contain bacteria that could cause illness to you or the animals you are feeding, if mishandled. For your protection follow these instructions for safe use:
 - Keep Frozen until ready to use
 - Thaw in refrigerator or microwave.
 - Keep raw meat and poultry separate from other foods.
 - Wash working surfaces, utensils (including cutting boards), hands, and any other items that touch or contact raw meat or poultry with hot soapy water.
 - Refrigerate leftovers immediately or discard.

Ingredients and Guarantees

- Ingredients must be listed in descending order of predominance by weight using their common or usual names.
- The label can indicate that the product was made with USDA inspected product, but unless the product was made under USDA voluntary inspection (9 CFR Part 355), the label cannot claim that the product is “USDA Inspected”.
- A nutritional adequacy or purpose of product per Model Regulation PF7 must be listed, except when the product is clearly and conspicuously identified on the principal display panel as a “snack” or “treat”. The nutritional adequacy statement must consist of a claim that is substantiated as proved for by the Model Regulation or the statement “This product is intended for intermittent or supplemental feeding only”.

Nutritional Adequacy

The nutritional adequacy of the product should be substantiated. The FDA has not issued regulations specifying the requirements for substantiating nutritional adequacy of sole source food, but AAFCO has developed Model Regulations for Pet Food and Specialty Pet Food.

FDA Regulation of Pet Food

The FDA's regulation of pet food is similar to that for other animal feeds. **The Federal Food, Drug, and Cosmetic Act (FFDCA)** requires that pet foods, like human foods, be safe to eat, produced under sanitary conditions, contain no harmful substances, and be truthfully labeled. In addition, canned pet foods must be processed in conformance with the low acid canned food regulations to ensure the pet food is free of viable microorganisms (see Title 21 Code of Federal Regulations (CFR), Part 113).

There is no requirement that pet food products have pre-market approval by the FDA. However, FDA ensures that the ingredients used in pet food are safe (non-adulterated) and have an appropriate function in the pet food. Many ingredients such as meat, poultry and grains are considered safe and do not require pre-market approval. Other substances such as sources of minerals, vitamins or other nutrients, flavorings and preservatives, or processing aids may be generally recognized as safe (GRAS) for their intended use. GRAS substances are permitted to be used in pet foods, because of their long history of safe use in foods. (See Title 21 CFR 582 and 584). Additives in pet food must be approved by FDA based on scientific evidence that supports their safety and utility. *Regulations that apply specifically to food additives in animal pet foods are published in Title 21, Part 573 of the CFR.*

Pet food labeling is regulated at two levels: the federal level and the state level. Many of the FDA labeling regulations are based on a model provided by the **Association of American Feed Control Officials (AAFCO)**. AAFCO provides a mechanism for developing and implementing uniform and equitable laws, regulations, standards and enforcement policies for regulating the manufacture, distribution and sale of animal feeds; resulting in safe, effective, and useful feeds. The discussion of New York State requirements is discussed in the section following.

The current FDA regulations require proper identification of the product, net quantity statement, name, and place of business of the manufacturer or distributor, and a proper listing of all the ingredients in the product in order from most to least, based on weight.

A product clearly identified as a "snack" or "treat" does not require a nutritional adequacy statement, but it must meet the other pet food regulations. **Dog biscuits** are not exempt unless they are identified as a "snack" or "treat". As long as no risky ingredients (like meats) are manufactured into the snack or treat involved, the producer can use a home kitchen, just as he or she would for baking cookies to be offered for sale at a farmers market.

Dog chews made from rawhide, bone or other animal parts are still considered "food" under FDA law. As long as the label for the chew does not include any reference to nutritional value (like high in protein), it does not have to follow the AAFCO pet food regulations. For products sold in bulk, the required labeling information should appear in a placard on the bin or container.

Please contact the FDA and the AAFCO for specific requirements if drugs or other additives are added, or if specific labeling claims are made.

New York State Regulations for the Manufacturing and Distribution of Commercial Feed -Including Pet Food:

Products must be labeled.

In New York, there are two labeling options for commercial pet feed. Generic Pet Food labels are required for generic batches of feed. A Customer Formula Feed Label is required if the product is manufactured at the customer's request.

NY Labeling Requirements for Generic Feed

All commercial feed, except a customer-formula feed, shall be accompanied by a label bearing the following information:

- (a) The net weight.
- (b) The product name and the brand name
- (c) The guaranteed analysis stated in terms determined by commissioner and verified by laboratory analysis by the testing methods published by the Association of Official Analytical Chemists. This needs to include: crude protein, crude fat, crude fiber, minerals, vitamins, and sugars.
- (d) The common or usual name of each ingredient used in the manufacture of a commercial feed.
- (e) The name and principal mailing address of the manufacturer or the person responsible for distributing the commercial feed.
- (f) Adequate directions for use.
- (g) Such warning or caution statements as the commissioner by regulation determines are necessary for the safe and effective use of the commercial feed. This is known as the "Statement of Responsibility".

Each commercial feed item produced or manufactured must have a nutritional analysis including protein, fat, fiber, moisture, and ash content. Analysis of minerals, vitamins, and sugars may also be required. The analysis should be performed by a Feed-Testing Laboratory (there are eight such labs in New York). Nutritional analysis should be reported as a percentage and must be expressed as a "minimum guarantee". This nutritional information must be included on an approved label. Different batches must be identical in their analysis. Pet treats and snacks, in addition to raw meat, is exempt from this labeling requirement.

If any drugs are used in or on the feed, then

1. The word "medicated" must follow the product name.
2. The purpose of the drug must be provided in the statement claim.
3. The direction for use must be provided (if required).
4. A precautionary statement or reference to its location must be provided (if required).

NY Labeling Requirements for Customer-Formula Feed

Customer-formula feed shall be accompanied by a label, invoice, delivery slip or other shipping document, bearing the following information:

- (a) Name and address of the manufacturer.
- (b) Name and address of the purchaser.
- (c) Date of delivery.

- (d) The product name and brand name, if any, AND the net weight of each registered commercial feed used in the mixture, AND the net weight of each other ingredient used.
- (e) Adequate directions for use for all customer-formula feeds containing drugs and for such other customer-formula feeds as the commissioner may require by regulation as necessary for their safe and effective use.
- (f) Such warning or caution statements as the commissioner by regulation determines are necessary for the safe and effective use of the customer-formula feed.

Commercial feed (including pet food) must not be adulterated.

A feed is deemed **adulterated** if:

- 1) It bears or contains any poisonous or deleterious substance which may render it injurious to health;
- 2) It bears or contains any added poisonous, added deleterious or added non-nutritive substance that is unsafe as per the FFDCA definition of “un-safe”.
- 3) It is or bears or contains any food additive that is unsafe as per the FFDCA definition of “un-safe”.
- 4) It is a raw agricultural commodity and bears or contains a pesticide chemical that is unsafe per the FFDCA definition of “un-safe”.
- 5) It is or bears or contains any color additive that is unsafe per the FFDCA definition of “un-safe”.

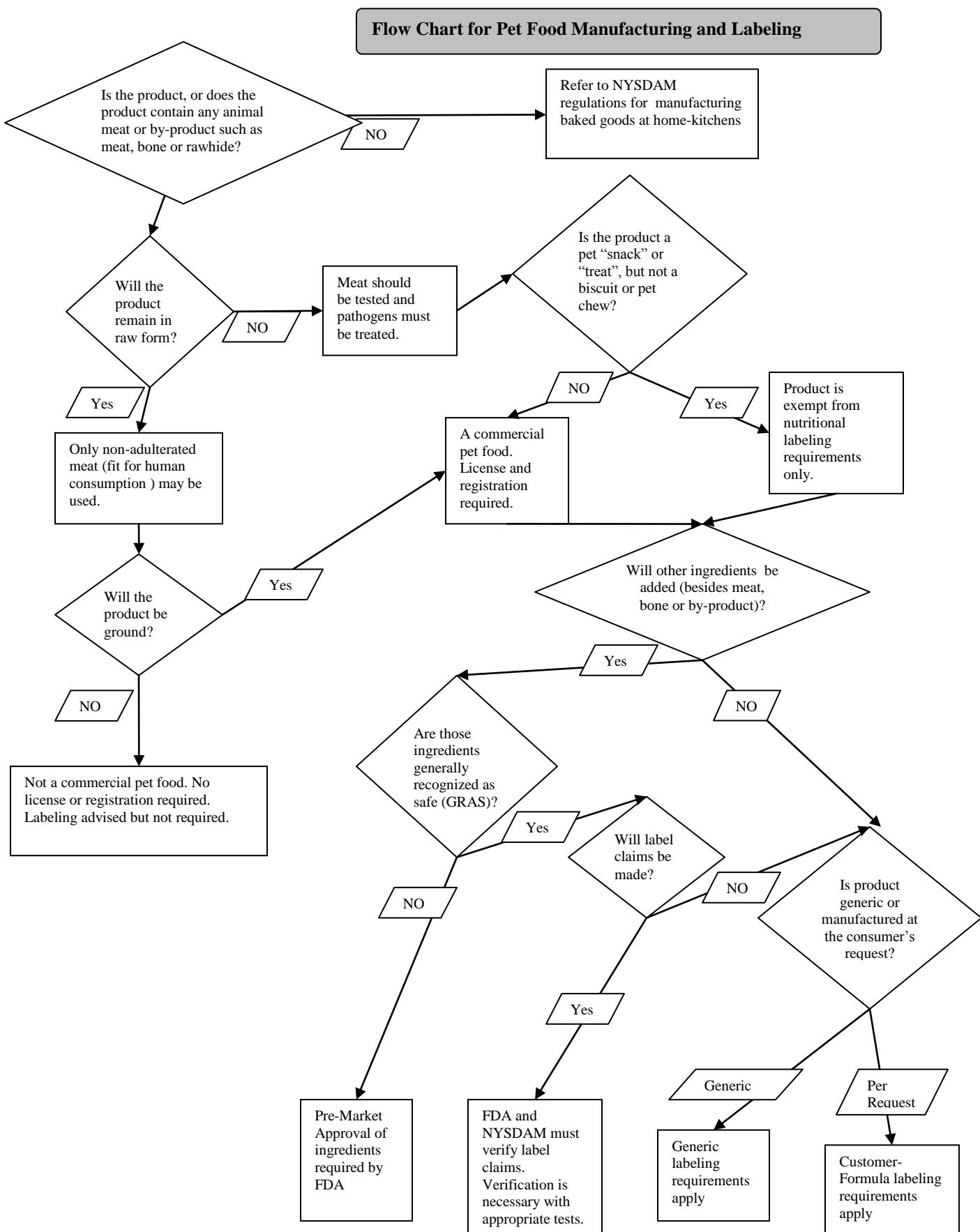
Note: Products containing tissues from animals that have died other than by slaughter are adulterated under section 402(a) of the FFDCA and are unfit for consumption, unless further processed to remove pathogenic contaminants. FDA regulations state that meat scraps or other similar animal by-products are adulterated when they are found to be contaminated with Salmonella microorganisms (21 CFR 500.35).

Registration, Licensing, Inspection and Record Keeping

In New York State, anyone who manufactures any commercial feed must hold a NYSDAM issued license. The cost of such license is \$100.00 and renewal is annual. Manufacturers are subject to inspection in accordance with section 135-A. Any publication or advertisement - published in regards to the sale of commercial feed - must be accompanied by the licensee's license number. Commercial feed licenses, like other licenses, must be conspicuously displayed.

Anyone who offers for sale, sells, exchanges or barters commercial pet food, including ground meat for animal consumption, is considered a **pet food distributor**. Every business selling or distributing pet food of any kind must register with the New York State Department of Agriculture and Markets. Both the business and every brand and/or variety of commercial pet feed must be registered individually. The biennial business registration fee is \$100. Product registration fee is \$100 each, with an annual renewal. A license is needed in every state where the product is sold in.

Every manufacturer, distributor and transporter of commercial feed, shall maintain records and submit reports to NYSDAM regarding origin, manufacturing, movements, storage, distribution, and disposition of commercial feed.



Ensuring Meat Safety - HACCP, SOP and GMP

Most of the US food safety programs are risk based to ensure that the public is protected from health risks of unsafe foods. Risk assessment is used in estimating the magnitude of the problem faced, and in determining the appropriate risk management response. This is true for both the inspection process as well as insurance recommendations.

Hazard Analysis Critical Control Point (HACCP)

The Hazard Analysis and Critical Control Point (HACCP) system is a logical, scientific approach to controlling hazards in meat, meat products, poultry and poultry products . HACCP is concerned with food safety. It does not deal directly with facilities, equipment or employees. HACCP is a preventive approach for assuring that safe food products are produced.

Introduction to HACCP

The application of HACCP is based on technical and scientific principles that assure food safety. An ideal application would include all processes from the farm to the table. The principle of HACCP can be applied to production, meat slaughter and processing, shipping and distribution, food service and in home preparation.

Prevention of hazards cannot be accomplished by end product inspection. The most important aspect of HACCP is that it is a preventative system rather than an inspection system of controlling food safety hazards. Controlling the production process with HACCP offers the best approach for many processors.

HACCP is a systematic preventative system that uses common sense application of scientific principles. The application of HACCP is systematic because a plan is structured based on potential hazards identified and preventive measures implemented. The process is common sense in that each processor understands their own operation and is best able to assess how to control the process to ensure food safety. HACCP is also science-based, as the controls that are placed in the process should be based on scientific information.

The HACCP system has two major components. The HA of HACCP represents the logic in the hazard analysis, and is identified with the where and the how of the hazards. The CCP of HACCP represents the critical control point that provide the control of the process and the proof of control.

The end objective of HACCP is to make the product as safe as possible and to be able to prove that the product was processed as safely as possible. This does not mean that HACCP provides 100% assurance of food safety to consumers, but it does mean that a meat processing company is doing the best job possible for safe food production. The assurance of safety comes from the process of identifying the hazards, establishing controls for the identified hazards, monitoring the controls, and periodically verifying that the system works.

HACCP Testing

The USDA FSIS requires only two tests as part of a HACCP plan to ensure food safety. The first is a generic ecoli test for slaughtered carcasses. The second is a food contact surface test for ready to eat products. All other tests are required by the establishment to ensure the product is

safe. All other tests support the establishment's HACCP plan and are required by plant managers.

Section 310.25 discusses post mortem ecoli testing for livestock and Section 381.94 addresses testing for poultry.

HACCP Assistance

New York no longer provides HACCP assistance at the Geneva Food Venture Center. As the position in New York is vacant, those needing assistance are advised to contact:

*Dr. Catherine Nettles Cutter, Ph.D. (Coordinator)
Associate Professor and Food Safety Extension Specialist-Muscle Foods,
Department of Food Science, Pennsylvania State University,
433 Food Science Building
University Park, PA 16802
Phone: (814) 865-8862
Fax: (814) 863-6132
cnc3@psu.edu*

*USDA State HACCP Contacts and Coordinators can be found at:
http://www.fsis.usda.gov/Contact_Us/State_HACCP_Contacts_&_Coordinators/*

Hazards

HACCP focuses on three types of hazards: biological hazards, chemical hazards and physical hazards. Biological hazards are the type of hazards that receive the most attention in the HACCP system and which also present the greatest risk of severity and occurrence. Biological hazards include hazards from pathogens such as bacterial, viruses, yeast, and molds. Bacteria that receive the greatest attention in the United States include E. Coli 0157:H7, Listeria Monocytogenes, Salmonella, Staphylococcus auerus and Campylobacter. Chemical hazards in meat products could result from the misuse of antibiotics in production, contamination with sanitizers or cleaning agents, or environmental contamination from hydraulic fluids. Physical hazards are probably the most recognized by consumers as they usually find this hazard. Glass, metal and plastic are physical hazards that can occur in meat products.

The seven principles of HACCP are:

1. Conduct a Hazard Analysis
2. Identify Critical Control Point (CCP)
3. Establish Critical Limits for CCP
4. Establish Monitoring Procedures
5. Establish Corrective Actions
6. Establish Recordkeeping Procedures
7. Establish Verification Procedures

*More information on HACCP is available at:
http://www.extension.org/pages/Food_Safety_%2F_HACCP*

Standard Operating Procedures (SOP)

Standard Operating Procedures (SOPs) are descriptions of particular tasks undertaken in a food processing operation. A specific SOP should address the following: the purpose and frequency of doing a task, which individual will do the task, a description of the procedure to be performed including all the steps involved, and the corrective actions to be taken if the task is performed incorrectly. USDA mandated **Sanitation Standard Operating Procedures (SSOPs)** for Meat and Poultry Operations effective January 27, 1997. The rule calls on plant management to develop SSOPs that address daily routine sanitary procedures, before and during operations to prevent direct product contamination or adulteration. Procedures should be specific for each plant and can be as detailed as the plant wants to make them.

Good Manufacturing Practices (GMP)

Good manufacturing practices (GMP) refers to a set of procedures and measures taken by a plant to ensure that the food is not adulterated: In a plant environment, all SOPs should take GMPs into account when being written and as such, SOP's and GMPs are used in conjunction with each other. FDA mandates GMPs but not SOPs. NYSDAM also has its own set of rules and regulations identifying GMP's as they relate to Human Foods (1NYCRR, PART 261).

Any operations which manufactures, processes, packs, labels or holds human food is obligated to follow NYSDAM's GMPs. On farm retail establishments that hold food are required to:

- Keep the grounds about a food plant free from conditions that may result in the contamination of food. This requires proper storage of equipment, litter, waste, refuse, and cutting of weeds and grass within the immediate vicinity of the building or plant. Dusty roads, yards and lots may also constitute a source of contamination as would excessively muddy or inadequately drained areas.
- Design and construct plant buildings and structures to be suitable in size, to facilitate maintenance and sanitary operation and include for proper storage of equipment and supplies.
- Clean and maintain equipment to preclude adulteration of foods.
- Equip plants with sanitary facilities and accommodations including water supply, sewage disposal, plumbing, hand washing facilities, toilets, and rubbish and offal disposal.

Sanitary Operations include planning for general maintenance, animal and vermin control, sanitation of equipment and utensils, and storage and handling of equipment and utensils.

End Product Testing

Prior to the de-regulation of product testing by the Clinton Administration, it was the responsibility of Federal Inspectors to test product for market readiness. The transition to a HACCP based system put the burden of inspection on the plants themselves. It was strongly debated if this would encourage more or less end-product testing. Basing their reputation and livelihoods on product quality, product testing largely continued and expanded as the increased number of recalls would indicate. Eventually corrections and adjustments were made within plants and recall numbers declined in subsequent years.

Bacteria have a specific range of environmental factors in which they can grow and survive. Environmental tests performed include measuring temperature, oxygen levels, water activity (or the water available for microbial growth), acidity, nutrient availability, bacterial levels already present and the presence of competitive microbes.

Today, plants test products for various microbial pathogens such as clostridium botulinum, staphylococcus aureus, listeria monocytogenes, Escherichia coli 0157-H7, and salmonella species. Foreign materials such as spinal cords, bone fragments or other items may also be screened for.

Risk Management and Insurance Considerations for Farmers Selling Direct

Risk Management

Try to identify how and where risks might exist. By doing so a farmer can consider how any risks can be eliminated or reduced and contingency plans can be prepared in case something does go wrong. There are many ways direct farm marketers can get into legal trouble. Here are the eight common pitfalls according to the Drake Law Center:

- a. conducting a “commercial” business in an area not zoned for such use
- b. not carrying sufficient liability insurance
- c. allowing unsafe conditions to exist on the property when customers are allowed to visit
- d. selling processed foods which have been produced at an unlicensed facility
- e. failing to observe rules designed to protect food safety and quality
- f. selling more products at your stand which were produced by others, and not raised yourself
- g. failing to comply with labor rules
- h. failing to comply with record keeping and paperwork rules for tax or labor laws

Drake also recommends making SIX PHONE CALLS BEFORE BEGINNING DIRECT FARM MARKETING

- The local land use planning authorities
- Your insurance agent
- The state food inspection and licensing officials
- The state labor commissioner
- The state department of agriculture and marketing
- Your attorney

Insurance

There are at least two types of insurance a farmer should carry. In addition, there other policies or riders to consider such as the Frozen Foods Rider just in case the electricity goes out!

General Liability Insurance

Commercial General Liability covers four types of injuries:

- bodily injury that results in actual physical damage or loss
- property damage or loss
- personal injury (slander or damage to reputation)
- advertising injury (charges of negligence that result from the promotion of your own goods or services)

Product Liability Insurance

The basic premise of product liability is that companies have a duty to protect consumers from potential hazards, even if the damage is primarily caused by consumer negligence or deliberate misuse. Courts have held that manufacturers generally have more innate knowledge about their products, so it falls on them to assume financial responsibility for injuries and property damage.

Product liability cases generally fall along three separate lines. The first consideration is a design flaw. The second consideration is manufacturing liability. The third line of reasoning is called "failure to warn". Modern product liability laws enacted in the 1960s work on the principle of "strict liability", which means manufacturers bear much more responsibility for the safety of their products, even if some consumers use the product irresponsibly.

Licenses to Consider

Food Establishment Licenses

The NYSDAM Division of Food Safety and Inspection is responsible for the licensing and inspection of food establishments. These licenses are issued by the Division, are usually renewed every two years (except disposal and transportation licenses which are issued annually), and can be revoked by the Department for violations. The NYSDAM Division of Food Safety and Inspection may issue the following licenses for the following types of operations:

Article 20-C Food Processing Establishments

Retail food stores or commercial kitchens that conduct any type of food preparation such as meat or cheese grinding, heating foods, sandwich making, operate beverage-dispensing machines, prepare sushi, salad bars, or other ready to eat exposed food packaging activity.

Wholesale bakeries.

Wholesale food manufacturers of any product that is not under the jurisdiction of the USDA Federal Meat and Poultry Inspection Program or the New York State Department of Agriculture and Markets Division of Milk Control.

Beverage plants that produce soft drinks, flavored waters, beer, wine, fruit juice, etc.

Article 28 Retail Food Stores

Any Retail Food Store within the State where food and food products are offered to the consumer and intended for off-premises consumption. As defined in Article 28, a retail food store does not include establishments that handle only pre-packaged, non-potentially hazardous foods, roadside markets that offer only fresh fruits and vegetables for sale, food service establishments, or food and beverage vending machines.

In addition, retail food stores licensed by the Department pursuant to Article 20-C (Food Processing Establishments) are exempt from licensure under this Article. area license is required if offering for sale potentially hazardous foods, which can include any of the following: milk, shell eggs, and refrigerated or frozen meats.

NOTE--Farmers who sell their own meat slaughtered, cut, processed, packaged and labeled under the appropriate inspection facility (5-A or USDA) do NOT need either an Article 28 or an Article 20-C license. However, if a farmer sells the product of another farmer then he or she will need this Article 28 license. If a farmer repackages his meat or further process federally inspected carcasses from animals he raised (for example, cut, debone, grind, or cure the meat products), then than farmer is operating as a commercial kitchen and needs a 20-C license.

Article 28 Food Warehouses

Any food warehouse facility within the State in which food is held for commercial distribution is considered a warehouse and must apply for this license.

Article 17-B Food Salvager

A business that receives distress or damaged food or food use products for reconditioning, culling, and or sorting for the purpose of resale of satisfactory products is considered a food salvager.

Article 19 Refrigerated Warehouse/Locker Plant

A facility that offers refrigerated storage space for rent in their building for the storage of food commodities or produce owned by other businesses is a refrigerated warehouse or food locker. The commodities being held must be lot coded and not held for over two years without approval for extended storage. Produce-only facilities pay a reduced license fee compared to other facilities.

Article 5-C Licensing of Rendering Plants

Disposal plants that process animals or inedible meat for other than human consumption require this license. In addition, businesses that operate a transportation service for transporting for hire unprocessed animal bodies or meat products not intended for human consumption.

Other Departments Farmers May Need to Contact

State Jurisdiction

NYS Department of Weights and Measures will need to certify the scales used in the business. Scales are sealed and a sticker is adhered showing their expiration date. A small fee is charged for the inspection.

NYS Department of Taxation and Finance. Farms and/or businesses will need to file an Income Tax Return with the NYS Department of Tax and Finance. Farmers may opt to report their income as a self-employed business owner-operator on Form 1040 Schedule C or 1040 Schedule F if the operation is conducted as part of the farm operations itself. Farmers may wish to file for a Federal Identification number separate from your social security number when filing these forms under a business name. If a business name is used, and a separate legal entity such as

a partnership or corporation is not created, then it is important to file a DBA (doing business as) with the county.

NYS Department of Labor will need to know if any employees are involved. There are forms that will need to be filed, in addition to quarterly reports, if employees are part of the operation.

County Jurisdiction

The County Health Department will want to know if a farm is selling meat and meat products in any form. Each county has different regulations so a farmer must be very specific about his or her intentions when they contact the Health Department to make sure they are in compliance.

The County Planning and Zoning Office may or may not allow the retail establishment under consideration. Before beginning any retail outlet, farmers should contact this office to learn what is permissible and what is not.

Glossary Of Terms

The Act. The Federal Meat Inspection Act, as amended, (34 Stat. 1260, as amended, 81 Stat. 584, 84 Stat. 438, 92 Stat. 1069, 21 U.S.C., sec. 601 *et seq.*).

Adulterated Generally, impure, unsafe, or unwholesome; however, the Federal Food, Drug, and Cosmetic Act, the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Egg Products Inspection Act contain separate language defining in very specific (and lengthy) terms how the term “adulterated” will be applied to the foods each of these laws regulates. Products found to be adulterated under these laws cannot enter into commerce for human food use.

Agricultural Marketing Act of 1946 The Agricultural Marketing Act of 1946 (AMA) (as amended) provides USDA with the authority to inspect, certify, and identify the class, quality, quantity, and condition of agricultural products (including food animal products) in interstate commerce on a voluntary, fee-for-service basis that covers program costs.

Amenable Includes cattle, swine, sheep, goats, horses, mules, and other equines. USDA requires and provides ante mortem and postmortem inspection of these species as a condition for retail sale.

Animal means cattle, swine, sheep, goats, horses, and other large domesticated mammals.

Animal food. Any article intended for use as food for dogs, cats, or other animals derived wholly, or in part, from the carcass or parts or products of the carcass of any livestock, except that the term animal food as used herein does not include: (1) Processed dry animal food or (2) Livestock or poultry feeds manufactured from processed livestock byproducts (such as meatmeal tankage, meat and bonemeal, bloodmeal, and feed grade animal fat).

Ante Mortem Inspection “Ante” means “before” “Mortem” means “death” All animals presented for slaughter must receive ante mortem inspection by a FSIS inspector. The purpose of ante mortem inspection is to determine whether welfare has been compromised or there is any sign of any condition that might adversely affect human or animal health. The term refers to the examination that USDA meat and poultry inspectors are required to conduct of all live animals prior to slaughter.

Article 5-A Exemption. A New York State Agriculture and Markets rule as relating to the Licensing of Slaughterhouses. (Often quoted when referring to the on-farm exemption of poultry slaughter)

Carcass means all parts, including viscera of a slaughtered animal that are capable of being used for human food.

Certification The term “*certified*” implies that the USDA’s FSIS and the Agriculture Marketing Service have officially evaluated a meat product for class, grade, or other quality characteristics (e.g., “Certified Angus Beef”).

Cooperative Meat and Poultry Inspection Program Establishments have the option to apply for Federal or State inspection. Under the agreement, a State's program must enforce requirements "at least equal to" those imposed under the Federal Meat and Poultry Products Inspection Acts.

Custom Exempt Custom exempt establishments are slaughter and processing establishments that are not subject to the routine inspection requirements of the Federal Meat Inspection Act and Poultry Products Inspection Act.

Custom Slaughter- means a person, firm corporation or association who or which operates a place or establishment where animals are delivered by the owner thereof for slaughter exclusively for use, in the household of such owner, or him and members of his household and his non-paying guests and employees, provided that such custom slaughter does not engage in the business of buying or selling any carcasses, parts of carcasses meat or meat products of any animal.

Custom Slaughtered Meat- means meat from animals that have been slaughtered by a custom slaughterer for the owner exclusively for use, in the household of such owner, by him and members of his household and his non-paying guests and employees.

Cutting Any division of any carcass or part thereof, except that the trimming of carcasses or parts thereof to remove surface contaminants is not considered as cutting up.

Domestic Game Bird "Domestic game bird" means ducks, geese, brant, swans, pheasants, quail, wild turkey, ruffed grouse, Chukar partridge and Hungarian or European gray-legged partridge, propagated under a domestic game bird breeder's license pursuant to section 11-1901 or a shooting preserve license pursuant to section 11-1903, or propagated on a preserve.

Dying, diseased, or disabled livestock. Livestock which has or displays symptoms of having any of the following: (1) Central nervous system disorder; (2) Abnormal temperature (high or low); (3) Difficult breathing; (4) Abnormal swellings; (5) Lack of muscular coordination; (6) Inability to walk normally or stand; (7) Any of the conditions for which livestock is required to be condemned on ante-mortem inspection in accordance with the regulations in part 309 of this subchapter.

Domestic Game Bird "Domestic game bird" means ducks, geese, brant, swans, pheasants, quail, wild turkey, ruffed grouse, Chukar partridge and Hungarian or European gray-legged partridge, propagated under a domestic game bird breeder's license pursuant to section 11-1901 or a shooting preserve license pursuant to section 11-1903, or propagated on a preserve.

Edible and For Human Consumption shall apply to any carcass or part or product of a carcass, of any animal unless it is denatured or otherwise identified as required by regulations prescribed by the commissioner to deter its use as human food, or is naturally inedible by humans.

Exemption The Secretary shall, by regulation and under such conditions as to sanitary standards, practices, and procedures as he may prescribe, exempt from specific provisions of federal and state law.

Exotic Animal Producer means any interested party that engages in the raising and/or marketing of an exotic animal for commercial purposes.

Exotic species. FSIS regulations identifies reindeer, elk, deer, antelope, water buffalo and bison as exotic animals eligible for voluntary inspection

Export - to send to a foreign country. Carcasses and live slaughter animals originating in the US but exported to another country are subject to additional regulations depending on the specifications of the importing country.

Farm Dressed Meat means meat from animals slaughtered by a bona fide farmer who, as an incident of such farm operations, slaughters his own domestic animals on his own premises exclusively for use, in his household, by him and members of his household and his non-paying guests and employees.

Federal Inspection means the meat inspection or poultry and poultry products inspection maintained by the United State Department of Agriculture.

Federal Law refers to the Federal Meat Inspection Act and all acts amendatory thereof and supplementary thereto.

Federal Meat Inspection Act The FMIA mandates that USDA inspect cattle, sheep, swine, goats, horses, mules, and other equines, and the food products thereof, slaughtered and prepared in Federal establishments and foreign establishments exporting such products to the United States, that are intended for distribution in commerce (21 U.S.C. 601 et seq.). The Federal meat inspection regulations (9 CFR Subchapter A) implement the provisions of the FMIA. The Federal meat inspection regulations (9 CFR 301.2) define "livestock," "meat," and "meat food products" as being of cattle, sheep, swine, goat, horse, mule, or other equine origin. The FMIA provides for exemptions from inspection of the slaughter of animals and the preparation of the carcasses, parts thereof, for meat, and meat food products at establishments conducting such operations for commerce when such products are exclusively used by an individual or households and, thus, are not sold. This provision is referred to as the custom operation exemption. The FMIA also provides an exemption from the definition of "meat food product" for products that contain meat or other portions of such carcasses only in a relatively small proportion or historically have not been considered by consumers as products of the meat food industry, and that can not be represented as meat food products. The Federal meat inspection regulations (9 CFR Part 303) also address exemptions from the requirements of the FMIA with

regard to inspection, including custom operations and products that are exempt from the definition of "meat food product".

Federal Plant Used synonymously for a USDA FSIS or FDA inspected facility.

Field Ante Mortem Inspection means the ante-mortem inspection of an exotic animal away from the official exotic animal establishment's premises.

Field Designated area. This is the area on a farm designated for animal viewing by a licensed and practicing veterinarian to certify that the animal is healthy and can enter the food chain.

Field Harvest means dispatching the animal on the farm in a special designated area by a single specifically placed shot.

Food and Drug Administration (FDA) is an agency of the United States Department of Health and Human Services and is responsible for regulating food, dietary supplements, drugs and more. FDA derives all of its authority and jurisdiction from various acts of Congress. The main source of the FDA's authority is the Federal Food, Drug, and Cosmetic Act.

Food Safety and Inspection Service (FSIS) Under authority of the Federal Meat, Poultry and Egg Products Inspection Acts, FSIS inspects and monitors all meat, poultry and egg products sold in interstate and foreign commerce to ensure compliance with mandatory U.S. food safety standards and inspection legislation.

Foreign Trade. Commerce with a foreign country.

Further processing. Smoking, cooking, canning, curing, refining, or rendering in an official establishment of product previously prepared in official establishments.

Game or Wild Game means an animal, the products of which are food, that is not classified as cattle, sheep, swine, goat horse, mule, or other equine, as defined by the Federal Meat Inspection Act, the Poultry and Poultry Products inspection Act or as fish. Game animals include mammals such as reindeer, elk, deer, antelope, water buffalo, bison, squirrel, opossum, raccoon, nutria or muskrat or non-aquatic reptiles such as land snakes, bear, coyotes, or as defined in section 11-0103 of the Environmental Conservation law, taken by lawful hunting.

Grading a means for quality evaluation of traits related to tenderness, juiciness, and flavor of meat; and, for poultry, a normal shape that is fully fleshed and meaty and free of defects. Grading for quality is **voluntary**, and the service is requested and paid for by meat and poultry producers/processors.

Generally Recognized as Safe (GRAS): is an FDA designation that a chemical or substance added to food is considered safe by experts, and so is exempted from the Federal Food, Drug, and Cosmetic Act (FFDCA) food additive tolerance requirements.

Hazard Analysis Critical Control Point (HAACP) is a safeguarding management system that prevents food hazards of a biological, chemical or physical nature.

Inedible. Adulterated, uninspected, or not intended for use as human food.

Inspection refers to the examination of an animal, meat and meat product by an official inspector to certify wholesomeness and condition. Every part of the manufacturing process of meat and poultry must be carefully inspected. All ingredients and their amounts must be approved, as well as the handling and storage of processed meat products.

Inspection Legend—means a mark or a statement authorized by the provisions of the federal law, on a carcass, meat, meat by-product or meat food product indicating the product has been inspected and passed.

Inspector an employee of the government who ensures the safety of the nation's meat, poultry, and egg products. FSIS inspectors examine animals before and after slaughter, preventing diseased animals from entering the food supply and examining carcasses for visible defects that can affect safety and quality. Inspectors also test for the presence of harmful pathogens and drug and chemical residues.

Inter-state movement of products exclusively within a states boundary.

Intra-state movement of products across state lines.

Label. A display of written, printed, or graphic matter upon the immediate container (not including package liners) of any article.

Labeling All brands and labels applied to carcasses, processed meat, wholesale cuts, and edible meat by-products must be approved by the FSIS. Inspection labels must contain the common name of the product, the name and address of the meat processor, and a list of ingredients in descending order of their content. Meat products from state inspected plants must also bear state approved labels which have similar requirements to those for federally inspected products

Livestock. Cattle, sheep, swine, goat, horse, mule, or other equine.

Mandatory Inspection This is an inspection of wholesomeness of animals, meat and food products that fall under the jurisdiction of the USDA FSIS. These inspections are paid for by tax dollars.

Mark of Inspection Meat that has been federally inspected and passed for wholesomeness is stamped with a purple mark known as the Mark of Inspection.

Meat means the edible part of the muscle of cattle, swine, sheep, goats, horses and other large domesticated animals which is skeletal or which is found in the tongue, diaphragm, in the heart or in the esophagus with or without the accompanying or overlying fat, and the portions of bone, skin, nerve and blood vessels which normally accompany the muscle tissues which are not separated from it in the process of dressing. It does not include the muscle found in the lips, snout or ears. Any edible part of the carcass that has been manufactured, cured, smoke, processed, or otherwise treated shall not be considered meat.

Meat broker. Any person engaged in the business of buying or selling carcasses, parts of carcasses, meat or meat food products of livestock on commission, or otherwise negotiating purchases or sales of such articles other than for his/her own account or as an employee of another person.

Meat by-product means any edible part other than meat, which has been derived from cattle, swine, sheep, goats, horses, and other large domesticated animals. This term shall apply only to those parts that have not been manufactured, cured, smoked, processed, or otherwise treated.

Meat food product- means any product capable of use as human food which is made wholly or in part, from any meat or other portion of the carcass of any animal, excepting products which contain meat or other portions of such carcasses only in a relatively small proportion or historically have not been considered by consumers as products of the meat food industry, and which are exempted from definition as a meat food product by the commissioner under such conditions as he may prescribe to assure that the meat or other portions of such carcasses contained in such product are not adulterated and that such products are not represented as meat food products.

Meat Label- means a display of written, printed, graphic matter authorized by the provision of the federal law on a container indicating the meat, meat by-products, or meat food products contained therein have been inspected and passed.

Multi-species product consists of two percent or more cooked meat or poultry obtained from one of the amenable species, three percent or more of fresh meat or poultry or 30 percent or more amenable fat.

New York State Department of Agriculture and Markets (NYSDAM) the regulatory agency for agriculture and agricultural products in the state of New York.

Nitrite Sodium nitrite is a salt and used to cure meat and poultry products such as bologna, hot dogs, and bacon. Nitrite adds flavor and gives meat cured meat their characteristic color. Sodium Nitrite helps prevent the growth of *Clostridium botulinum*, which can cause botulism in humans.

Nitrate Sodium nitrate, a “chemical cousin” of nitrite, was used as a curing ingredient but is rarely used to cure meat today.

Non-amenable Any species other than cattle, sheep, swine, goats, horses, mules, other equines, ratites (emus, rhea, and ostrich), and domesticated poultry (turkeys, chickens, ducks, geese, and guinea fowl). Examples of non-amenable species include bison, deer, quail, and rabbit. The USDA does not require ante mortem and postmortem inspection of non-amenable species as a condition for retail sale as it does for amenable species. A producer or processor can voluntarily request USDA inspection of non-amenable species for a fee

Nonfood compound. Any substance proposed for use in official establishments, the intended use of which will not result, directly or indirectly, in the substance becoming a component or otherwise affecting the characteristics of meat food and meat products, excluding labeling and packaging materials as covered in part 317 of the subchapter.

Not for Sale Stamp – indicates that a carcass was slaughtered without inspection under the custom exemption and that all meat products from it are ineligible for resale and are for consumption of the animal owner, immediate family and non-paying guests

Official certificate. Any certificate prescribed by the regulations in this subchapter for issuance by an inspector or other person performing official functions under the Act.

Official device. Any device prescribed by the regulations in part 312 of this subchapter for use in applying any official mark.

Official establishment. Any slaughtering, cutting, boning, meat canning, curing, smoking, salting, packing, rendering, or similar establishment at which inspection is maintained under the regulations in this subchapter.

Official exotic animal establishment means any slaughtering, cutting, boning, curing, smoking, salting, packing, rendering, or similar establishment at which inspection is maintained

Official import inspection establishment. This term means any establishment, other than an official establishment as defined in paragraph (zz) of this section, where inspections are authorized to be conducted as prescribed in §327.6 of this subchapter.

Official inspection legend. Any symbol prescribed by the regulations in this subchapter showing that an article was inspected and passed in accordance with the Act.

Official mark. The official inspection legend or any other symbol prescribed by the regulations in this subchapter to identify the status of any article or animal under the Act.

Packaging Any cloth, paper, plastic, metal, or other material used to form a container, wrapper, label, or cover for meat products.

Person. Any individual, firm, or corporation.

Post Mortem Inspection As used in the meat and poultry inspection program, the phrase refers to the inspection that Food Safety and Inspection Service inspectors are required to conduct of all animal carcasses immediately after they are killed.

Poultry The term "poultry" means any domesticated bird, whether live or dead

Poultry Products Inspection Act The PPIA mandates that USDA inspect "poultry," i.e., any domesticated bird, and food products thereof, slaughtered and prepared in Federal establishments and foreign establishments for export to the United States that are intended for distribution in commerce (21 U.S.C. 451 et seq.). The Federal poultry products inspection regulations (9 CFR Part 381) implement the provisions of the PPIA. The Federal poultry products inspection regulations (9 CFR 381.1) define poultry as meaning any domesticated bird (chickens, turkeys, ducks, geese, ratites, or guineas or squabs), whether live or dead. The PPIA also provides for exemptions from inspection of the slaughter of poultry and the preparation of poultry products, i.e., poultry carcasses or parts thereof. Among the exemptions, the PPIA provides for the exemption from inspection of the custom slaughter of poultry and the preparation of carcasses and parts thereof at establishments conducting such operations when such products are used exclusively by households and individuals and are not sold. Different from the provisions of the FMIA, the PPIA contains specific criteria for such exemptions based on the volume of poultry slaughtered or processed. The PPIA also includes an exemption from the definition of "poultry product" for products that contain poultry ingredients only in a relatively small proportion or historically have not been considered by consumers as products of the poultry food industry, and that can not be represented as poultry products. The Federal poultry products inspection regulations address exemptions from inspection, including an exemption from the definition of "poultry product" of certain human food products containing poultry, such as those containing less than 2 percent cooked poultry meat (9 CFR 381.15), and an exemption from inspection for custom operations (9 CFR 381.10).

Prepared. Slaughtered, canned, salted, rendered, boned, cut up, or otherwise manufactured or processed.

Process authority. A person or organization with expert knowledge in meat production process control and relevant regulations. This definition does not apply to subpart G of part 318.

Process schedule. A written description of processing procedures, consisting of any number of specific, sequential operations directly under the control of the establishment employed in the manufacture of a specific product, including the control, monitoring, verification, validation, and corrective action activities associated with production. This definition does not apply to subpart G of part 318.

Processing The terms "processed" and "processing" refer to operations in which the carcasses of slaughtered animals are, cut-up, skinned, boned, canned, salted, stuffed, rendered, or otherwise manufactured or processed.

Product. Any carcass, meat, meat byproduct, or meat food product, capable of use as human food.

Religions Exemption is intended to prevent conflicts between religious dietary laws and regulatory requirements.

Renderer. Any person engaged in the business of rendering carcasses or parts or products of the carcasses of any livestock except rendering conducted under inspection or exemption under Title I of the Act.

Retail The sale of commodities to ultimate consumers, usually in small quantities.

Sausage Kitchen This term applies to inspected establishments where sausage is made.

Seafood The term "fish" includes all fresh or saltwater finfish, molluscan shellfish, crustaceans, and other forms of aquatic animal life. Birds are specifically excluded from the definition because commercial species of birds are either nonaquatic or, as in the case of aquatic birds such as ducks, regulated by USDA. Mammals are also specifically excluded because no aquatic mammals are processed or marketed commercially in this country.

Shipping container. The outside container (box, bag, barrel, crate, or other receptacle or covering) containing or wholly or partly enclosing any product packed in one or more immediate containers.

Slaughtering The term slaughter refers to the act of killing livestock or poultry for use as human food.

State. Any State of the United States or the Commonwealth of Puerto Rico.

State Inspection Establishments have the option to apply for Federal or State inspection. Under the agreement, a State's program must enforce requirements "at least equal to" those imposed under the Federal Meat and Poultry Products Inspection Acts. However, product produced under State inspection is limited to intrastate commerce. FSIS provides up to 50% of the State's operating funds, as well as training and other assistance. State programs (about half the states use them) must be certified by USDA to be at least equal to federal inspection requirements. However, products from state-inspected plants (most of them are relatively smaller operations) cannot be sold outside of the state.

Supervision. The controls, as prescribed in instructions to Program employees, to be exercised by them over particular operations to insure that such operations are conducted in compliance with the Act and the regulations in this subchapter.

Territory. Guam, the Virgin Islands of the United States, American Samoa, and any other territory or possession of the United States, excluding the Canal Zone.

Transport Vehicle refers to any vehicle used to transport animals.

U.S. Condemned. This term means that the livestock so identified has been inspected and found to be in a dying condition, or to be affected with any other condition or disease that would require condemnation of its carcass.

U.S. Inspected and Condemned (*or any authorized abbreviation thereof*). This term means that the carcass, viscera, other part of carcass, or other product so identified has been inspected, found to be adulterated, and condemned under the regulations in this subchapter.

U.S. Passed for Cooking. This term means that the meat or meat byproduct so identified has been inspected and passed on condition that it be cooked or rendered as prescribed by the regulations in part 315 of this chapter.

U.S. Passed for Refrigeration. This term means that the meat or meat byproduct so identified has been inspected and passed on condition that it be refrigerated or otherwise handled as prescribed by the regulations in part 311 of this subchapter.

U.S. Retained. This term means that the carcass, viscera, other part of carcass, or other product, or article so identified is held for further examination by an inspector to determine its disposal.

U.S. Suspect. This term means that the livestock so identified is suspected of being affected with a disease or condition which may require its condemnation, in whole or in part, when slaughtered, and is subject to further examination by an inspector to determine its disposal.

United States. The States, the District of Columbia, and the Territories of the United States.

USDA United States Department of Agriculture, responsible for the oversight of food safety in the US

Wholesale The sale of commodities in large quantities to retailers or jobbers rather than to end consumers directly.

Glossary of Commonly Used Meat and Poultry Additives and Terms

Note: Pesticide chemical, food additive, color additive, raw agricultural commodity. These terms shall have the same meanings for purposes of the Act and the regulations in this subchapter as under the Federal Food, Drug, and Cosmetic Act.

ANTIOXIDANT - substances added to foods to prevent the oxygen present in the air from causing undesirable changes in flavor or color. BHA, BHT, and tocopherols are examples of antioxidants.

ARTIFICIAL COLORING. A coloring containing any dye or pigment, which dye or pigment was manufactured by a process of synthesis or other similar artifice, or a coloring which was manufactured by extracting a natural dye or natural pigment from a plant or other material in which such dye or pigment was naturally produced.

ARTIFICIAL FLAVORING. A flavoring containing any sapid or aromatic constituent, which constituent was manufactured by a process of synthesis or other similar artifice.

BHT (butylated hydroxytoluene), BHA (butylated hydroxyanisole), TOCOPHEROLS (VITAMIN E) - antioxidants that help maintain the appeal and wholesome qualities of food by retarding rancidity in fats, sausages, and dried meats, as well as helping to protect some of the natural nutrients in foods, such as vitamin A.

BINDER - a substance that may be added to foods to thicken or improve texture.

BROMELIN - an enzyme that can dissolve or degrade the proteins collagen and elastin to soften meat and poultry tissue. It is derived from pineapple fruit and leaves, and is used as a meat tenderizer.

CARRAGEENAN - seaweed is the source of this additive. It may be used in products as binder.

CHEMICAL PRESERVATIVE. Any chemical that, when added to a meat or meat food product, tends to prevent or retard deterioration thereof, but does not include common salt, sugars, vinegars, spices, or oils extracted from spices or substances added to meat and meat food products by exposure to wood smoke.

CITRIC ACID - widely distributed in nature in both plants and animals. It can be used as an additive to protect the fresh color of meat cuts during storage. Citric acid also helps protect flavor and increases the effectiveness of antioxidants.

CORN SYRUP - sugar that is derived from the hydrolysis of cornstarch. Uses include flavoring agent and sweetener in meat and poultry products.

EMULSIFIER - substance added to products, such as meat spreads, to prevent separation of product components to ensure consistency. Examples of these types of additives include lecithin, and mono- and di-glycerides.

FICIN - enzyme derived from fig trees that is used as a meat tenderizer.

GELATIN - thickener from collagen that is derived from the skin, tendons, ligaments, or bones of livestock. It may be used in canned hams or jellied meat products.

HUMECTANT - substance added to foods to help retain moisture and soft texture. An example is glycerin, which may be used in dried meat snacks.

HYDROLYZED (SOURCE) PROTEIN - flavor enhancers that can be used in meat and poultry products. They are made from protein obtained from a plant source such as soy or wheat, or from an animal source, such as milk. The source used must be identified on the label.

MODIFIED FOOD STARCH - starch that has been chemically altered to improve its thickening properties. Before the starch is modified, it is separated from the protein through isolation techniques; therefore, the source of the starch used is not required on the label.

MONOSODIUM GLUTAMATE (MSG) - MSG is a flavor enhancer. It comes from a common amino acid, glutamic acid, and must be declared as monosodium glutamate on meat and poultry labels.

PAPAIN - an enzyme that can dissolve or degrade the proteins collagen and elastin to soften meat and poultry tissue. It is derived from the tropical papaya tree and is used as a meat tenderizer.

PHOSPHATES - the two beneficial effects of phosphates in meat and poultry products are moisture retention and flavor protection. An example is the use of phosphates in the curing of ham where approved additives are sodium or potassium salts of tripolyphosphate, hexametaphosphate, acid pyrophosphate, or orthophosphates, declared as "phosphates" on labels.

PROPYL GALLATE - used as an antioxidant to prevent rancidity in products such as rendered fats or pork sausage. It can be used in combination with antioxidants such as BHA and BHT.

RANCID/RANCIDITY - oxidation/breakdown of fat that occurs naturally causing undesirable smell and taste. BHA/BHT and tocopherols are used to keep fats from becoming rancid.

SODIUM CASEINATE - used as a binder in products such as frankfurters and stews.

SODIUM ERYTHORBATE - is the sodium salt of erythorbic acid, a highly refined food-grade chemical closely related to vitamin C, synthesized from sugar, and used as a color fixative in preparing cured meats. (Note: Erythorbate is NOT earthworms. Perhaps the spelling or pronunciation has contributed to this misconception because the Hotline receives many calls related to this concern.)

SODIUM NITRITE - used alone or in conjunction with sodium nitrate as a color fixative in cured meat and poultry products (bologna, hot dogs, and bacon). Helps prevent growth of Clostridium botulinum, which can cause botulism in humans.

SUGAR (SUCROSE) - used as sweetener in an endless list of food products.

TEXTURIZERS/STABILIZERS/THICKENERS - used in foods to help maintain uniform texture or consistency. These are substances that are commonly called binders. Examples are gelatin and carrageenan.

WHEY, DRIED - the dried form of a component of milk that remains after cheese making. Can be used as a binder or extender in various meat products, such as sausage and stews.

RESOURCES and REFERENCES

Code of Federal Regulations (CFR):

TITLE 9--ANIMALS AND ANIMAL PRODUCTS

CHAPTER III--FOOD SAFETY AND INSPECTION SERVICE

[300 Agency mission and organization](#)

[301 Terminology; Adulteration and misbranding standards](#)

[302 Application of inspection and other requirements](#)

[303 Exemptions](#)

[304 Application for inspection; grant of inspection](#)

[305 Official numbers; inauguration of inspection; withdrawal of inspection; reports of violation](#)

[306 Assignment and authorities of program employees](#)

[307 Facilities for inspection](#)

[309 Ante-mortem inspection](#)

[310 Post-mortem inspection](#)

[311 Disposal of diseased or otherwise adulterated carcasses and parts](#)

[312 Official marks, devices and certificates](#)

[313 Humane slaughter of livestock](#)

[314 Handling and disposal of condemned or other inedible products at official establishments](#)

[315 Rendering or other disposal of carcasses and parts passed for cooking](#)

[316 Marking products and their containers](#)

[317 Labeling, marking devices, and containers](#)

[318 Entry into official establishments; reinspection and preparation of products](#)

[319 Definitions and standards of identity or composition](#)

[320 Records, registration, and reports](#)

[321 Cooperation with States and territories](#)

[322 Exports](#)

[325 Transportation](#)

[327 Imported products](#)

[329 Detention; seizure and condemnation; criminal offenses](#)

[331 Special provisions for designated States and Territories; and for designation of establishments which endanger public health and for such designated establishments](#)

[335 Rules of practice governing proceedings under the Federal Meat Inspection Act](#)

[350 Special services relating to meat and other products](#)

[351 Certification of technical animal fats for export](#)

[352 Exotic animals; voluntary inspection](#)

[354 Voluntary inspection of rabbits and edible products thereof](#)

[355 Certified products for dogs, cats, and other carnivora; inspection, certification, and identification as to class, quality, quantity, and condition](#)

[362 Voluntary poultry inspection regulations](#)

[381 Poultry products inspection regulations](#)

[390 Freedom of information and public information](#)

[391 Fees and charges for inspection services and laboratory accreditation](#)

[416 Sanitation](#)

[417 Hazard Analysis and Critical Control Point \(HACCP\) Systems](#)

[424 Preparation and Processing Operations](#)

[430 Requirements for specific classes of product](#)
[441 Consumer Protection Standards: Raw Products](#)
[500 Rules of Practice](#)
[590 Inspection of eggs and egg products \(Egg Products Inspection Act\)](#)

NARA (U.S. National Archives and Records Administration) - <http://www.archives.gov/>

Federal Food and Drug Administration Food Drug and Cosmetic Act
<http://www.fda.gov/opacom/laws/fdact/fdctoc.htm>

Federal FDA: Federal Meat Inspection Act of 1906
<http://www.fda.gov/opacom/laws/meat.htm>
http://www.fsis.usda.gov/regulations_&_policies/Federal_Meat_Inspection_Act/index.asp

Federal FDA: Poultry Products Inspection Act
<http://www.fda.gov/opacom/laws/pltryact.htm>
http://www.fsis.usda.gov/regulations/Poultry_Products_Inspection_Act/index.asp

Perishable Agricultural Commodities Act of 1930 (fruit and vegetables specifically)
<http://agriculture.senate.gov/Legislation/Compilations/AgMisc/PACA30.pdf>

The Agricultural Marketing Act of 1946 (voluntary reimbursable inspections)
<http://agriculture.senate.gov/Legislation/Compilations/AgMisc/AGMAR46.pdf>

Humane Slaughter Act of 1958
<http://www.agr.state.il.us/Laws/slaughter.pdf>

Fair Packaging and Labeling Act of 1966
<http://www.ftc.gov/os/statutes/fplajump.html>

Farm to Consumer Direct Marketing Act of 1976
<http://agriculture.senate.gov/Legislation/Compilations/AgMisc/FTCDMA76.pdf>

Consumer Right to Know Act of 2001 (Country of Origin Labeling Act)
<http://www.theorator.com/bills107/s280.html>

Cooperative Meat and Poultry Inspections Program
http://www.fsis.usda.gov/regulations_&_policies/Reviews_of_State_Programs/index.asp

USDA Concept Paper “Extending USDA’s Inspection Program to Additional Species”
http://www.fsis.usda.gov/OPPDE/NACMPI/May2000/Concept_Paper_Attch1.html
www.fsis.usda.gov/oppde/nacmpi/nov2000/papers/species.htm

USDA FSIS Directive: Religious Exemption for the Slaughter and Processing of Poultry
<http://www.fsis.usda.gov/OPPDE/rdad/FSISDirectives/6030.1Rev1.pdf>

USDA FSIS Notice 15-06 and 14-91

http://www.fsis.usda.gov/regulations_&_Policies/Notice_15-06/index.asp

USDA TSC Q&A FSIS Notice 26-06 (clarifies 15-06, which replaces 14-91)

http://www.fsis.usda.gov/HELP/FAQs_TSC_Note15_06/index.asp

USDA FSIS: Retail Exemption- Preparation of Meats

http://www.aamp.com/regulatory/documents/PreparationofMeatProducts-askFSIS_000.pdf

USDA FSIS BSE Information: Using Dentition to Age Animals

http://www.fsis.usda.gov/OFO/TSC/bse_information.htm

USDA FSIS FACT SHEET: Food Product Dating

http://www.fsis.usda.gov/Factsheets/Food_Product_Dating/index.asp

USDA FSIS FACT SHEET: Inspection and Grading of Meat and Poultry: What are the Differences?

http://www.fsis.usda.gov/Fact_Sheets/Inspection_&_Grading/index.asp

USDA FSIS FACT SHEET: Game from Farm to Table

http://www.fsis.usda.gov/Factsheets/Farm_Raised_Game/index.asp

USDA FSIS FACT SHEET: Rabbit from Farm to Table

http://www.fsis.usda.gov/factsheets/Rabbit_from_Farm_to_Table/index.asp

USDA AMS Cattle and Swine Trucking Guide for Exporters

<http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELDEV3008268>

USDA APHIS Scrapie Eradication Uniform Methods and Rules

http://www.aphis.usda.gov/publications/animal_health/content/printable_version/scrapumr05.pdf

USDA APHIS Bovine Tuberculosis Eradication Uniform Methods and Rules

http://www.aphis.usda.gov/animal_health/animal_diseases/tuberculosis/downloads/bovtbumr.pdf

USDA APHIS Bovine Brucellosis Eradication Uniform Methods and Rules

http://www.aphis.usda.gov/animal_health/animal_diseases/brucellosis/downloads/umr_bovine_bruc.pdf

USDA APHIS Swine Brucellosis Eradication Uniform Methods and Rules

http://www.aphis.usda.gov/animal_health/animal_dis_spec/swine/downloads/sbrrumr.pdf

USDA APHIS Cervidae Brucellosis Eradication Uniform Methods and Rules

http://www.aphis.usda.gov/animal_health/animal_diseases/brucellosis/downloads/bcervumr.pdf

FDA Guide to Nutritional Labeling and Education Act (NLEA) Requirements

http://www.fda.gov/ora/inspect_ref/igs/nleatxt.html

FDA Guidance for Industry #122 (Non-Binding) Manufacture and Labeling of Raw Meat Foods for Companion and Captive Non-companion Carnivores and Omnivores
<http://www.fda.gov/downloads/AnimalVeterinary/GuidanceComplianceEnforcement/GuidanceforIndustry/UCM052662.pdf>

FDA Safe Food Recovery, Handling and Preparation Guidelines for Wild Game
<http://www.fhf.org/chapter-rs/Food-Banks/FDA%20Guidelines%20for%20Wild%20Game.pdf>

New York State Department of Agriculture and Markets (NYSDAM) -
<http://www.agmkt.state.ny.us/>

NYSDAM ARTICLE 5-C --- Licensing of Rendering Plants
<http://www.agmkt.state.ny.us/FS/pdfs/circs/art5c.pdf>

NYSDAM Article 5-C Disposal Plants and Transportation Services
<http://www.agmkt.state.ny.us/FS/industry/04circs/meatinspection5C.pdf>

NYSDAM Article 17 Food Sanitation Requirements
<http://www.agmkt.state.ny.us/FS/industry/sanitary.html>
<http://www.senate.state.ny.us/lbdcinfo/senconstitution.html>

NYSDAM Article 17 B Food Salvagers
<http://www.agmkt.state.ny.us/FS/industry/04circs/17b.pdf>

NYSDAM Article 4-D Liability for Canned, Perishable Food or Farm Products Distributed Free of Charge <http://www.agmkt.state.ny.us/FS/pdfs/circs/art4d.pdf>

NYSDAM PART 68 Captive Cervid Health Requirements/ Chronic Wasting Disease Regulations <http://www.agmkt.state.ny.us/AI/AILaws/1NYCRR%20Part68%20Sept06.pdf>

NYSDAM Circular 831 Refrigerated Warehouses and Locker Plants (Article 19) (May 2004)
<http://www.agmkt.state.ny.us/FS/industry/04circs/RefrigWarehouseCIR831.pdf>

NYSDAM Circular 911 Food and Food Products (Article 17) (Aug 1999)
<http://www.agmkt.state.ny.us/FS/industry/04circs/Art17foodprodCIR911.pdf>

NYSDAM Circular 914 Rules and Regulations Relating to the Sale of Meat (Article 5-B) and the Sale of Poultry and Poultry Products (Article 5-D) (June 1993)
<http://www.agmkt.state.ny.us/FS/industry/04circs/Art5BsaleofmeatCIR914.htm>

NYSDAM Circular 916 (Article 26) Relating to the Cruelty of Animals [Section 601 of the Vehicle and Traffic Law] (October 2009)
<http://www.agmkt.state.ny.us/AI/AILaws/Art%2026%20-%20Circ.%20916%20Cruelty.pdf>

NYSDAM Circular 925 Relating to the Licensing of Slaughterhouses (Article 5-A) (September 2006)

<http://www.agmkt.state.ny.us/AI/AILaws/Article%205A%20%28Circ%20925%29%20Licensing%20of%20Slaughterhouses.pdf> also at
<http://www.agmkt.state.ny.us/FS/industry/04circs/licofslaughterhousesCIR925.htm>

NYSDAM Circular 933 Rules and Regulations Relating to Human Foods: Current Good Manufacturing Practice (October 2000)

<http://www.agmkt.state.ny.us/FS/industry/04circs/goodmanufpracticesCIR933.pdf>

NYSDAM Circular 934 Meat for Sale at Retail (Article 17 Part 5-B) (Dec 1991)

<http://www.agmkt.state.ny.us/FS/industry/04circs/meatforsaleatretailCIR934.pdf>

NYSDAM Circular 936 Advertising and Marketing of Food for Sale at Retail (Part 272) (Dec 1991) <http://www.agmkt.state.ny.us/FS/industry/04circs/Part272AdandfoodCIR936.pdf>

NYSDAM Circular 941 Manufacture and Distribution of Commercial Feed (May 2009)

<http://www.agmkt.state.ny.us/FS/industry/04circs/manufanddistfeedCIR941.pdf>

NYSDAM Circular 942 Unit Pricing of Certain Consumer Commodities Sold at Retail (July 1997) <http://www.agmkt.state.ny.us/FS/industry/04circs/unitpriceandmpriceCIR942.pdf>

NYSDAM Circular 943 Rules and Regulations Relating to the Manufacture and Distribution of Commercial Feed (May 2007) <http://www.agmkt.state.ny.us/FS/industry/04circs/CIR943.pdf>

NYSDAM Circular 945

Part 53 Requirements Governing Importation of Cattle Statutory Authority: Agriculture and Markets Law Sections 18, 72, 74

<http://www.agmkt.state.ny.us/AI/AILaws/1NYCRR%20%20Part%2053%20-%20Cattle%20Import%20Regs.pdf>

PART 62 Health Requirements Governing Importation of Sheep, Goats, Llamas and Deer Agriculture and Markets Law Sections 16, 18, 72, 74

<http://www.agmkt.state.ny.us/AI/AILaws/1NYCRR%20%20Part%2062%20-%20Sheep,%20Goats,%20Llamas,%20Deer%20Importation.pdf>

Part 63 Health Requirements Governing Importation of Swine

<http://www.agmkt.state.ny.us/AI/AILaws/AI-440%20Part%2063%20Swine%20Importation.pdf>

NYSDAM Circular 951 Article 20-C Licensing of Food Processing Establishments

<http://www.agmkt.state.ny.us/FS/industry/04circs/Art20CLicofFooCIR951.pdf>

NYSDAM Circular 962 Rules and Regulations Relating to Retail Food Stores

<http://www.agmkt.state.ny.us/FS/pdfs/circs/962.pdf>

NYSDAM Circular 1029 Record Keeping and Product Coding Requirements for Food Processing Establishments Licensed Under Article 20-C (April 1989)
<http://www.agmkt.state.ny.us/FS/industry/04circs/recordkeepingCIR1029.pdf>

NYSDAM Meat and Poultry Safety
<http://www.agmkt.state.ny.us/FS/pdfs/meatand.pdf>

NYSDEC Environmental Conservation Law Article 11 Fish and Wildlife
<http://assembly.state.ny.us/leg/>

The Legal Guide for Direct Farm Marketing by Neil D. Hamilton, Drake University Agricultural Law Center, prepared under a grant from the USDA SARE, 1999

Direct Marketing of Meat: A Resource for Direct Market Meat Producers in Wisconsin published April 2003 <http://www.ams.usda.gov/tmd/FSMIP/FY2000/WI0312manual.pdf>

ATTRA Bison Production Livestock Production Guide: Bison Meat Inspection and Processing
<http://www.attra.org/attra-pub/bison.html>

ATTRA Beef Marketing Alternatives <http://www.attra.org/attra-pub/beefmark.html>

FSIS (USDA Food Service and Inspection Service) - <http://www.fsis.usda.gov/>

Inspection and Grading What's are the Differences?
http://www.fsis.usda.gov/Fact_Sheets/Inspection_&_Grading/index.asp

HACCP Resources - <http://www.fsis.usda.gov/OA/haccp/imphaccp.htm>

Federal Regulation of the Food Industry: Part 2, Federal Regulatory Agencies
<http://edis.ifas.ufl.edu/FS121>

Background & History On Interstate Shipment of State-Inspected Meat and Poultry Products And Meat and Poultry Inspection Programs <http://www2.nasda.org/NR/exeres/C3FB6395-60DE-493D-A4AF-5AAF40BCFC27.htm>

Did the Locker Plant Steal Some of My Meat? By Duane M. Wulf, Ph.D. Department of Animal and Range Sciences, South Dakota State University <http://ars.sdstate.edu/MeatSci/May99-1.htm>

Retail Cutting Charts provided by the National Livestock and Meat Board National Live Stock & Meat Board Consumer Information Department, 444 North Michigan Avenue, Chicago, Illinois 60611 (312) 467-5520

Beef Chart provided by the National Cattlemen's Beef Association, 444 North Michigan Street, Chicago, Illinois 60611 (312) 467-5520.

Listing of Slaughterhouses in New York provided by the Northeast Sheep and Goat Marketing Program <http://sheepgoatmarketing.info/>

Northeast Center for Food Entrepreneurship Good Manufacturing Practices for Fermented Meats (sausage) and Dried Meats (jerky) By Denny Shaw, Cornell University; Larry Decker, NYSDA; and Dr. Olga Padilla-Zakour, New York State Food Venture Center

USDA Agricultural Marketing Service Meat Grading and Certification
“Standards, Quality Grades and Yield Grades” <http://www.ams.usda.gov/lsg/mgc/grade.htm>

Small Scale Sausage Production <http://www.fao.org/docrep/003/x6556e/X6556E00.htm#TOC>

Small Scale Poultry Processing by Anne Fanatico
<http://attra.ncat.org/attra-pub/poultryprocess.html>

Sebranek, Joseph and James Bacus. (2007). “Natural and Organic Cured Meat Products: Regulatory, Manufacturing, Marketing, Quality and Safety Issues.” AMERICAN MEAT SCIENCE ASSOCIATION WHITE PAPER SERIES NUMBER 1 (16 pp). Available at: www.meatscience.org/.../wp_001_2007_Natural_Organic_Cured_Meat.pdf

Organic Monitor. (2006) “The North American Market for Organic Meat Products” Report Description provided by Research and Markets. Available at:
http://www.researchandmarkets.com/reportinfo.asp?report_id=41558

Agencies to Contact for Additional Information

USDA Food Safety and Inspection Service (FSIS). The FSIS, a public health regulatory agency, protects consumers by ensuring that meat and poultry products are safe, wholesome, and accurately labeled. <http://www.fsis.usda.gov/>

- **FSIS Policy Development Division**
http://www.fsis.usda.gov/Contact_Us/index.asp
- **State Officials - Cooperative Meat and Poultry Inspections Programs**
Lists the State Agriculture Commissioners and State Directors for Cooperative Meat and Poultry Programs
http://www.fsis.usda.gov/Regulations_&_Policies/State_Officials/index.asp

Environmental Protection Agency (EPA). The EPA protects human health and safeguards the natural environment. Grant and fellowship opportunities are available at <http://www.epa.gov/epahome/grants.htm>.

National Marine Fisheries Service (NMFS) NOAA Fisheries Service is dedicated to the stewardship of living marine resources through science-based conservation and management, and the promotion of healthy ecosystems. <http://www.nmfs.noaa.gov/>

USDA Agricultural Marketing Service (AMS) AMS commodity programs oversee marketing agreements and orders, administers research and promotion programs, and purchases commodities for Federal food programs. AMS collects and analyzes data about pesticide residue levels in agricultural commodities. The Transportation and Marketing Program works to ensure that there is an efficient transportation system for rural America that begins at the farm gate, moves agricultural and other rural products through the Nation's highways, railroads, airports, and waterways, and into the domestic and international marketplace. This program enhances the overall effectiveness of the food marketing system, provides better quality products to the consumer at reasonable cost, improves market access for growers with small-to medium-sized farms, and promotes regional economic development. <http://www.ams.usda.gov/>

USDA Grain Inspection, Packers and Stockyards Administration (GIPSA) The Grain Inspection, Packers and Stockyards Administration (GIPSA) facilitates the marketing of livestock, poultry, meat, cereals, oilseeds, and related agricultural products and promotes fair and competitive trading practices for the overall benefit of consumers and American agriculture. <http://www.gipsa.usda.gov/>

USDA Animal and Plant Health Inspection Service (APHIS) The Animal and Plant Health Inspection Service is a multi-faceted Agency with a broad mission area that includes protecting and promoting U.S. agricultural health, regulating genetically engineered organisms, administering the Animal Welfare Act and carrying out wildlife damage management activities. http://www.aphis.usda.gov/about_aphis/

USDA Agricultural Research Service (ARS). The ARS is the principal research agency of the U.S. Department of Agriculture. ARS is charged with extending the Nation's scientific knowledge across a broad range of program areas that affect the American people on a daily basis. <http://www.ars.usda.gov/main/main.htm>

USDA Cooperative State Research, Education, and Extension Service, (CSREES) The CSREES, in cooperation with partners and customers, provides the focus to advance a global system of research, extension, and higher education in the food and agricultural sciences and related environmental and human sciences to benefit people, communities, and the Nation. <http://www.reeusda.gov/pas/programs/foodsafety>.

Centers for Disease Control and Prevention (CDC). The CDC serves as the national focus for developing and applying disease prevention and control, environmental health promotion and education activities designed to improve the health of the people of the United States. <http://www.cdc.gov>

Department of Health and Human Services (HHS). HHS is the U.S. government's principal agency for protecting the health of all Americans and providing essential human services, especially for those who are least able to help themselves. <http://www.hhs.gov/>

Office of Regulatory Affairs, Division of Federal-State Relations. The Food and Drug Administration, Office of Regulatory Affairs, Division of Federal-State Relations, interacts with, and serves as the focal point for cooperating state and local officials, and associations of those state officials, to promote cohesive and uniform policies and activities in food and drug-related matters. Information on grant funds for the support of innovative food safety projects are available at http://www.fda.gov/ora/fed_state/innovative_grants.html

Food Safety <http://www.foodsafety.gov/foodsafte.html>

USDA Meat and Poultry Hotline (1-800-535-4555; 1-800-256-7072/TTY) - Helps consumers prevent food borne illness by answering their questions about safe storage, handling, and preparation of meat and poultry products.

ASK FSIS (1-800-233-3935) - Provides answers to questions from regulatory and public health officials concerning products under FSIS' jurisdiction, with emphasis on meat, poultry, and egg product safety, from farm to table. The staff responds to technical and regulatory questions on the raising of animals, the slaughter of animals, the processing of products from those animals, and the handling of such products during transportation, storage, retail, and food service operations. The Help Line is staffed from 6:00 AM to 6:00 PM, CST, Monday through Friday. <http://askfsis.custhelp.com/>

State, Local and Other Agencies

[Federal Government Partners in Food Safety](#)

National Association of State Meat and Food Inspection Directors (NASMFID)

The NASMFID is an organization of directors, assistant directors, and professional employees of state meat and poultry inspection programs.

Association of Food and Drug Officials (AFDO)

AFDO fosters uniformity among jurisdictions in the adoption and enforcement of food, drug and other laws and regulations that protect public health and safety. AFDO and its six regional affiliates provide a forum for addressing a wide range of issues concerning food safety and consumer protection. Members include officials of Federal, State and local regulatory agencies.

Conference for Food Protection (CFP)

The CFP provides a public forum for a discussion of issues relating to retail food safety policies and requirements. The CFP provides recommendations to the Federal agencies on policies and changes to the Food Code. Members consist of state and local regulators, industry representatives, consumer representatives, and academia.

Food Safety Training and Education Alliance (FSTEA)

FSTEA is an organization of government, industry, consumer, and academic institutions dedicated to improving food safety training and education at the retail level. The Alliance coordinates efforts of its members to remove barriers to communication by facilitating information exchange, strengthening communication networks and alliances, and coordinating collaborative projects.

Directory of State and Local Officials - 2001

Health, Agriculture, Board of Pharmacy and other State Departments

State Food Safety Task Forces

State Food Safety Task Forces foster communication and cooperation among the food safety regulatory agencies within the states. FSIS and FDA participate with the states in addressing food safety issues at the state and local level that are being addressed at the national level.

"State Food Safety Task Force ... A Compilation of Progress Reports, II, Summer 2001"

provides updates on state food safety task force activities. A list of state contacts is provided.