

No Chickens In The Veggies, Please!

Robbie Cranch
Fresno County Master Gardener
2014



You are happily harvesting from your home vegetable garden...



Or hauling home armfuls from your favorite farmers' market...



Or admiring the architectural elegance of your edible landscaping...



And you are wondering how to use
900 Meyers' lemons...

Or what seems like 10,000 pounds of
zucchini...



THE FRUITS AND
VEGGIES ARE ALL SO
COLORFUL, SO FRESH,
SO FLAVORFUL,
SOOOOOO GOOD FOR
YOU...

BUT ARE THEY



ALL SAY E?

We expect food from our grocery stores or farmers' markets to be safe:

- ✓ grown in a wholesome environment
- ✓ produced using safe practices
- ✓ harvested hygienically
- ✓ stored under sanitary conditions

And of course, we know that anything from our garden is automatically safe, correct?

Let's take a look!

FRESH FRUITS AND VEGGIES MAY BE A SOURCE OF FOODBORNE PATHOGENS (MICROORGANISMS THAT CAUSE ILLNESS)

PATHOGEN SOURCES INCLUDE

- Water
- Animals, wild and domestic
- Soil amendments (especially animal based)
- People



Our focus is on risk reduction, whether our produce is from a store, a farmers' market, a community garden, our own garden, or our edible landscaping.

Know your site

If your garden is a yard or a community garden, ask:

- ✓ What did the garden site used to be used for? Is there a risk?
- ✓ Who maintains the garden and who/what had access to it?
- ✓ Are there toilet and hand washing facilities easily accessible? Are hand washing instructions posted?
- ✓ Are rules against urinating and spitting in the garden enforced?
- ✓ Is there a well-stocked first-aid kit easily available?
- ✓ Are gardeners and visitors with contagious illness excluded?
- ✓ What is the harvesting protocol and how is it communicated?
- ✓ How is the produce stored?
- ✓ Who is eating to produce?

Know your water

- ✓ Is your water potable?
- ✓ From a city water system?
- ✓ From an inspected well?
- ✓ Grey water?
- ✓ From an uninspected well, spring, creek, river, or othersurface water source?
- ✓ Are your pipes and hose joints tightly fitting?
- ✓ Do you know the source and condition of your containers?
- ✓ Is water sprayed on the plants with contact with edible portions?
- ✓ Is water delivered to the base of the plants via drip lines?

Know your fertilizers

- ✓ Are you using commercial fertilizers, applied according to package instructions? (Remember, more is not better.)

- ✓ Are you using composted animal products?
 - ✓ Use waste only from herbivores---feces from dogs, cats, pigs, bears, humans and other carnivores & omnivores cannot be successfully composted in a home compost system. They may continue to carry pathogens.
 - ✓ “Cook” your compost for at least six months and preferable 12.
 - ✓ Let your compost heat up to at least 140 degrees.
 - ✓ Do not let pets roam in your garden area.
 - ✓ Do not allow wild animals access to your food garden.
 - ✓ If you have livestock, protect your garden for accidental contact with uncomposted feces. (Check boots and shoe, garden tools, trailers, etc.)

**Cow poop.
Yes, I have definitely
stepped in cow poop.**



Know your people.

No spitting, urinating or leaving other biohazards in or near your garden. Period. Use plumbing. Or a porta potty. And wash hands thoroughly afterward.

If someone has an overwhelming urge to be one with nature, they must do it someplace far, far away from a food garden.





<http://subdivisionwildlife.com/2008/12/21/deer-in-garden/>



Original Contributor



copyright 2012 Cal. Wisdom 101

So, sadly, all these critters also must stay outside your vegetable and low-growing fruit gardens.



Critter-proof fencing

Tightly woven sides



"A moral barrier"...



Side and top fencing

Let's hope there is also an electric fence here ...



Keeping chickens in and foxes out...note stones along base to prevent digging in





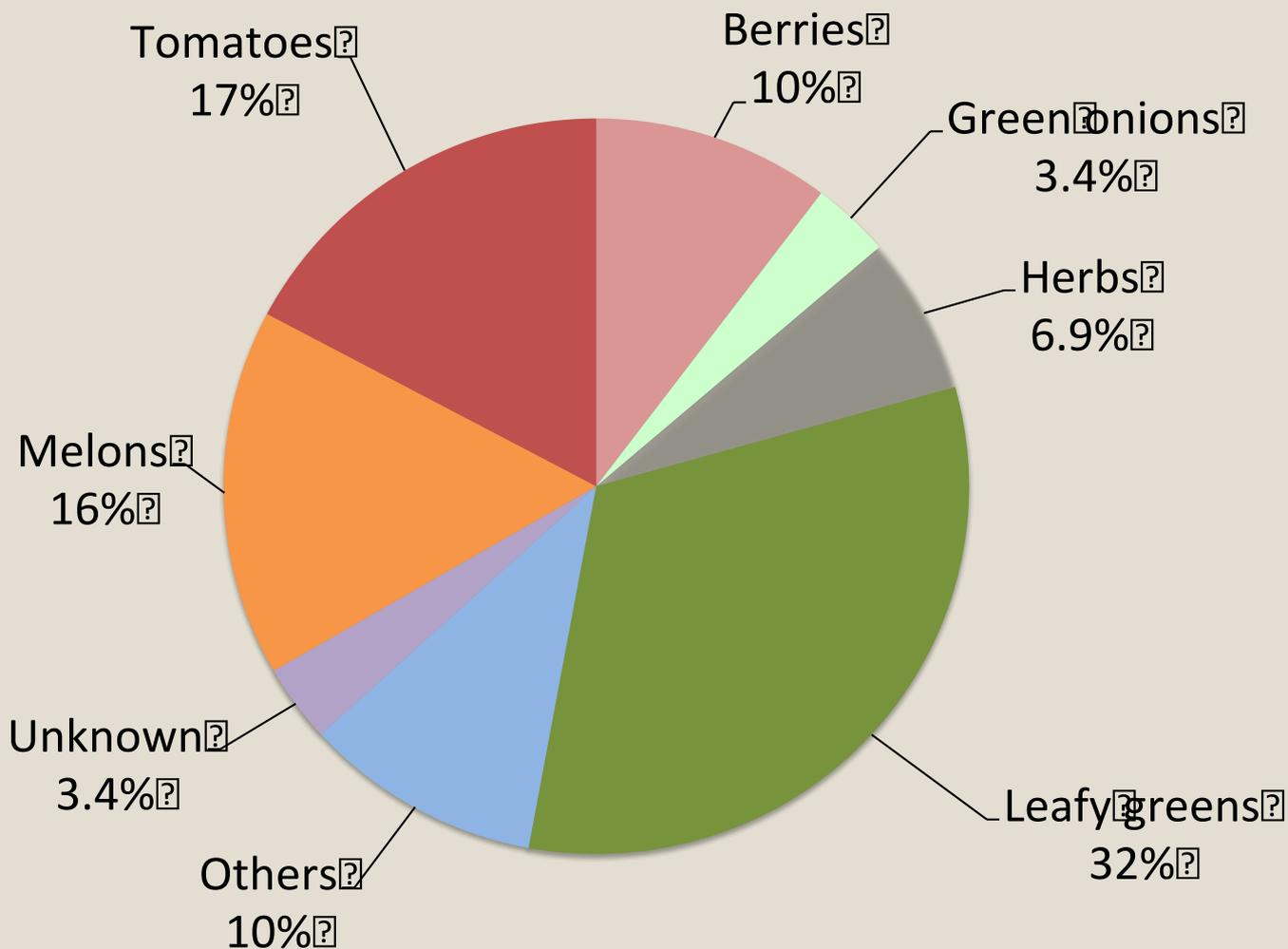
Then there are the critters you may not be able to keep out...but you don't want because of crop damage or fecal contamination.



Why be so
careful???



Types of produce associated with outbreaks of foodborne illness 1996-2009 (N=87)



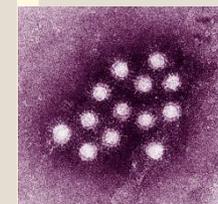
E. coli O157:H7



Salmonella spp.

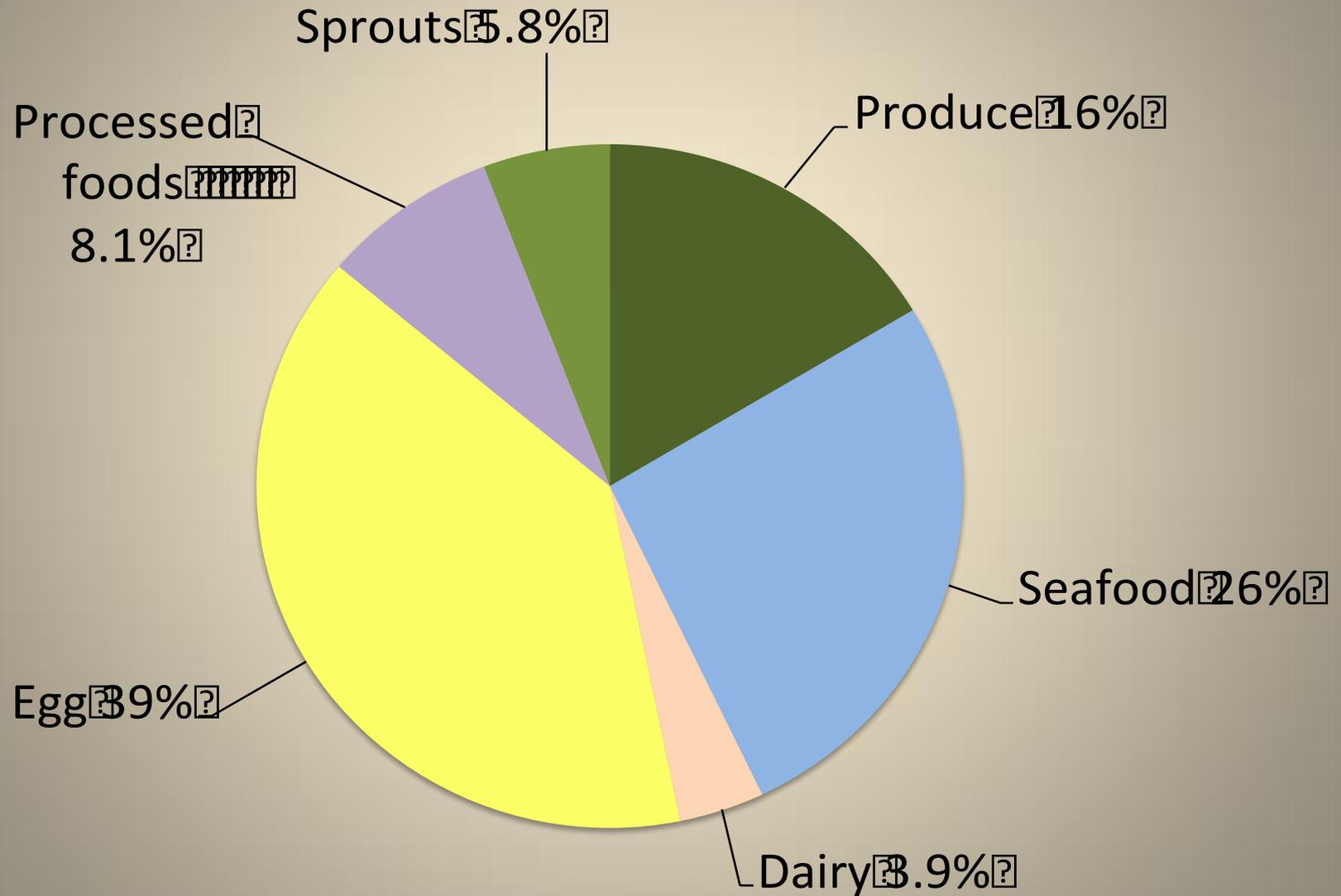


Listeria



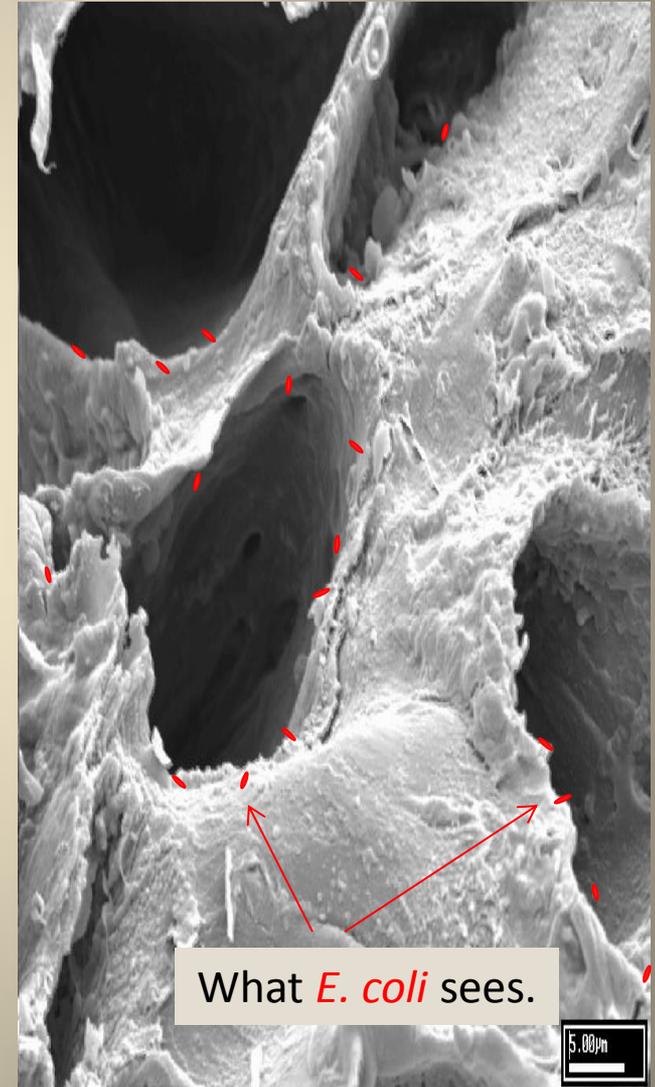
Hepatitis virus

Reported outbreaks of foodborne illness linked to FDA-regulated foods by vehicle 1996-2009 (N=532 outbreaks)



Post Harvest Handling

- Removal of microorganisms is difficult because produce surfaces are complex



Safe handling of produce:

- ✧ select or harvest your fruits and vegetables from gardens with maximum health safety practices
- ✧ Wash and disinfect your hands, tools, and containers before handling produce
- ✧ Wash all produce under cold running potable water, using a clean scrub brush if possible.
- ✧ Dish detergent or special produce soaps are not necessary
- ✧ Store berries unwashed, and wash just before use
- ✧ Wash most other fruits and veggies with smooth hard skins before refrigerating
- ✧ Store potatoes, onions, and other root vegetable unwashed; scrub thoroughly and/or peel before use.



Care after harvest

Wash hands, sanitize brushes, work surfaces, cutting boards and knives. Scrub or rub fruits and vegetables with a brush or hands under running water. Dry produce with paper towels before storage. Transfer to a sanitary container.

So food safety is all about prevention and care: when things are planted, when they are growing, when and how they are harvested, and what happens after they are harvested.

We in the San Joaquin Valley live close to Eden, with fresh fruits and veggies 12 months of the year. Enjoy our colorful, healthful, delicious bounty.



And outside of your garden, don't forget to hug your chicken.