# Fresh Tomatoes at Retail

# consumer packaged and bulk tomatoes bought in Berkeley studied for comparison of quality and price

Jessie V. Coles

Little difference was found in the average quality of tomatoes bought in packages and in bulk in a study of 255 packages and 449 samples of bulk tomatoes.

The study was made with samples purchased in representative Berkeley stores weekly over a period of a year.

The quality of the bulk tomatoes, as indicated by the proportion which was considered sound and of medium maturity, was slightly better than that of the tomatoes bought in packages. About 74% of the bulk tomatoes and 68% of the packaged tomatoes were considered sound.

Over 22% of the bulk tomatoes and 27% of the packaged tomatoes were considered defective but usable, and 4.1% of the bulk and 4.8% of the packaged samples were considered so defective as to be unusable or waste.

The quality of both bulk and packaged tomatoes varied somewhat during the year studied. The proportions of sound product indicated a seasonal trend in quality. As might be expected, the highest proportions of sound product were found during the summer and fall months and the lowest during the winter and spring months.

From May through November, 75% of the packaged tomatoes and 82% of the bulk tomatoes were considered sound. In each of these months almost 80% or more of the bulk tomatoes were considered in this category. The proportion of packaged tomatoes considered sound during these months varied from 64% in June to 84% in August. During the months from December through April, 65% of the packaged tomatoes and 62% of the bulk were considered sound. The monthly variation in quality of packaged tomatoes was somewhat more erratic than that in bulk tomatoes.

During the winter and spring months, December through April, the proportion of defective but usable bulk tomatoes averaged 34% whereas the proportion for packaged tomatoes was 30%. During the summer and fall months, 15% of the bulk tomatoes and 20% of the packaged tomatoes were in this category.

## Type and Size of Store

The type and size of the store in which the tomatoes were purchased affected their quality only slightly. The proportion of bulk tomatoes which was sound was slightly higher than the proportion of packaged tomatoes purchased in the same type or size of store. Likewise the proportion of bulk tomatoes which was defective but usable was slightly lower than the proportion of packaged tomatoes purchased in the same type or size of store.

The proportion of sound product in packaged tomatoes was slightly higher in tomatoes purchased in chain than in independent stores. On the other hand, the proportion of sound product in bulk tomatoes was slightly higher in tomatoes from independent than from chain stores.

**Quality of Packaged and Bulk Tomatoes** 

	Packaged	Bulk
Sound	68.1%	73.5%
Defective: usable	27.1	22.4
Overripe	8.5	7.5
Underripe	15.1	11.9
Other defects	3.5	3.0
Defective: unusable	4.8	4.1
Cores	1.2	1.1
Rotten	2.6	1.1
Other defects	1.0	1.9

There was a slight tendency for the proportion of sound product of both packaged and bulk tomatoes to be higher in samples from large stores than in those bought in the small stores.

#### **Defects**

Unsound maturity was by far the most common defect found in both bulk and packaged tomatoes, accounting for 26% of the total packaged product and 20% of the total bulk product studied. Almost 24% of the packaged tomatoes and over 19% of the bulk tomatoes were of unsound maturity but still usable. Underripe but usable product accounted for 15% of the packaged and for 12% of the bulk tomatoes studied. Over 8% of the packaged and over 7% of the bulk product were overripe but usable and 2.6% of the packaged and 1.1% of the bulk tomatoes were so overripe as to be considered rotten and therefore waste.

About 3% of both packaged and bulk tomatoes were frozen; between 1% and

2% were shriveled, scarred, or bruised and occasionally a wormy tomato was found. Hard, unusable cores constituted slightly over 1% of both packaged and bulk tomatoes.

#### Price

The average price per pound of the packaged tomatoes was higher than that of the bulk tomatoes, both as purchased and when only the edible tomatoes were considered. Packaged tomatoes averaged 32.9c per pound as purchased and bulk 23.0c; the edible portion of the packaged product averaged 34.6c and that of bulk 24.0c per pound.

The average monthly prices of both packaged and bulk tomatoes were lower during the summer and fall months than during the winter and spring. The lowest average price per pound of the packaged tomatoes — 15.5c — was in August and that of the bulk — 11.9c — in October. The highest average monthly price of both types was reached in February when the packaged tomatoes were 42.6c per pound and the bulk, 36.5c. Approximately the same relationships between the two types were maintained for the average prices of the edible tomatoes.

The average price per pound of the packaged tomatoes was higher than that of the bulk tomatoes during each month considering both the price as purchased at retail and the price of the edible product.

During the summer and fall season— May through November-when the proportions of sound product were highest, the packaged tomatoes, on the average, cost about 36% more than the bulk. The packaged product averaged 24.3c per pound and the bulk 17.9c as purchased while the edible portion of the packaged cost 25.5c and the edible portion of the bulk cost 18.6c per pound. During the winter and spring season — December through April — the average price of the packaged tomatoes, both as purchased and edible portion, was 20% more than that of the bulk. The former cost 36.7c and the latter 30.6c as purchased and 38.6c and 32.1c respectively for the edi-

The average price per pound of the packaged tomatoes was higher than that

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of the bulk tomatoes regardless of the type of store in which they were purchased. The difference in the price of the two types in independent stores was almost twice the difference in chain stores. The difference was also greater in the summer and fall months than in the winter and spring months. The packaged tomatoes cost 3.5c more per pound than the bulk tomatoes in chain stores from December through April, and 6.3c more

from May through November. In independent stores the packaged cost 7c more per pound than the bulk during the winter and 12.8c more in the summer months.

The packaged tomatoes also cost more than the bulk both as purchased and in edible tomatoes when the stores in which they were purchased were classified as large, medium, or small stores. The difference between the two types was smallest in the large stores and largest in the small stores.

Jessie V. Coles is Professor of Home Economics, University of California, Berkeley.

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