THE UNIVERSITY OF GEORGIA
COOPERATIVE EXTENSION
Colleges of Agricultural and Environmental Sciences & Family and Consumer Sciences ®

Weights and Processed Yields of Fruit and Vegetables in Retail Containers

Retail or direct marketing at farmer's markets, roadside markets, stands and pick-your-own farms is an important and growing method of marketing fresh fruits and vegetables in Georgia. However, many of the containers used in the wholesale trade are not practical for direct marketing to consumers who desire fruits and vegetables in small quantities. The retail marketer has the option of selling his product in small volume containers or by count when scales are unavailable.

Containers available for retail marketing come in a wide range of sizes and materials. Some of the more common retail containers are presented in Table 1.

Table 1. *Common Retail Containers*

COMMON NAME	MATERIAL	COMMON SIZE(S)
Bags	Paper and polyethylene, often with handles	¼ peck to ½ bushel
	Kraft paper bags	Grocery bag - $^{2}/_{3}$ bushel No. 20 bag - 8 quarts No. 10 bag - 7 quarts No. 8 bag - 4 quarts No. 2 bag - 1 quart
Baskets	Wood	¼, ½ and 1 peck; ½ and 1 bushel
Boxes, Cartons and Hampers	Corrugated paper, often waved, or wood	from ½ peck to 1 bushel
Fruit and Vegetable Baskets	Corrugated paper with handles	2 to 8 quarts
Fruit Tills or Cups	Pulp, cardboard, plastic, corrugated paper or wood	½ pint to 4 quarts
Trays	Corrugated paper	6 to 8 quarts (10 to 15 pounds)

Under specific fruit and vegetable crops, retail containers are compared with the more common containers (bushels, lugs, etc.) that are used in the wholesale trade (tables 2 and 3). In addition, weights and approximate yields for canning and freezing of fruits and vegetables in some of the common retail containers are presented for use in retail marketing. Because processed yields can vary so much based on size of produce and processing method, consider the indicated yields to be approximate values.

Table 2. *Weights and Approximate Processed Yields for Fruits*

PRODUCT	RETAIL VOLUME	NET WEIGHT (LBS)	PROCESSED YIELD
Apples	bushel (bu.)	42 to 48	1 bushel = 15 to 18 qt. canned applesauce = 30 to 36 qt. frozen applesauce = 10 to 12 qt. juice
	½ bushel bag	24	1 peck (32 med. apples) = 4 qt. canned
	peck	10 to 14	1¼ to 1½ lb. fresh = 1 pt. frozen 2½ to 3 lb. fresh = 1 qt. canned 1 cup pared, sliced = ¼ lb.
Blackberries	6-qt. tray	10 to 12	1½ to 3 lb. = 1 qt. canned
	gallon	5 to 6	
	quart	1¼ to 1½	

PRODUCT	RETAIL VOLUME	NET WEIGHT (LBS)	PROCESSED YIELD
Blueberries	6-qt. tray	9 to 12	2¼ to 3 lb. = 1 qt. canned
	gallon	6 to 8	1 pt fresh = 1 pt. frozen
	quart	1½ to 2	1 cup = $^1/_3$ lb.
	pint	¾ to 1	1 cup = $^1/_3$ lb.
Cherries	lug	15 to 16	2 to 2½ lb. = 1 qt. canned, unpitted
	quart	1½ to 1¾	1 pt. = 1 pt. frozen, unpitted
	pint	1¼ to 1½	1 cup = $^1/_3$ lb.
Grapes (with stems)	bushel	44 to 50	1 bu. = 16 qt. of juice
	lug	24 to 28	1 cup (whole, stemmed) = $^1/_3$ lb.
	2-qt. basket	2½ to 3	
Peaches	bushel	48 to 52	1 bu. = 18 to 24 qt. canned
	½ bushel bag	24	2 to 2½ lb. = 1 qt. canned
	lug	19 to 22	1 to 1½ lb. = 1 pt. frozen
	peck	12 to 14	1 cup = $^2/_5$ lb.
Pears	bushel	48 to 50	1 bu. = 20 to 25 qt. canned
	lug	21 to 24	2 to 2½ lb. = 1 qt. canned
	peck	12 to 14	1 to 1½ lb. = 1 pt. frozen
			1 cup pared, sliced = $^2/_5$ lb.
Plums	bushel	50 to 56	1 bu. = 24 to 30 qt. canned
	peck	13 to 15	2 to 2½ lb. = 1 qt. canned
			1 cup halves = $^1/_3$ lb.
Raspberries	6-qt. tray	8 to 10	1 cup = $^1/_3$ lb.
	3-qt. tray	4	
	quart	1¼ to 1½	
	pint	¾	
Strawberries	quart	1¼ to 1½	1 lb. = 1 pt. frozen
	4-qt. basket	6	
	6-qt. basket	10 to 12	
	8-qt. basket	12 to 15	
	8-qt. flat	12	
	24-qt. crate	36	

Table 3. *Weights and Approximate Processed Yields for Vegetables*

PRODUCT	RETAIL VOLUME	NET WEIGHT* (LBS)	PROCESSED YIELD	COMMENTS
Asparagus	bushel (bu.)	24	1 to 1½ lb. = 1 pt. frozen	often sold in bunches weighing 1½ to 2 lb. each
	pyramid crate	32	3 to 4 lb. = 1 qt. canned	
Beans, Lima	bushel	30	1 bu. = 12 to 16 pt. frozen	
	peck	8 to 9	3 to 5 lb. = 1 qt. canned	
Beans, Snap	bushel	28 to 30	1 bu. = 30 to 45 pt. frozen	
	peck	8	1½ to 2½ lb. = 1 qt. canned	
			1 bu. = about 15-16 qt. canned	
Beets	bushel, topped	52	1 bu. = 35 to 42 pt. frozen	often sold in 2 lb. bunches with leaves
			2 to 3½ lb. = 1 qt. canned	
Broccoli	bushel	23 to 25	1 bu. = 10 to 12 qt. canned	usually sold by the head or bunch weighing 1 to 1½ lb.
			1 lb. = 1 pt. frozen	
Brussels Sprouts	carton, loose pack	25	1 qt. = 1½ pt. frozen	
	quart	1½		
Cabbage	flat crate	53 to 60	3 lb. = 1 qt. canned sauerkraut	often sold by the head, varying in size with variety and tightness of head, usually 2 to 6 lbs.
	carton	53	1 lb. = 2 cups cooked	
			1 lb. = 4 cups shredded	

PRODUCT	RETAIL VOLUME	NET WEIGHT* (LBS)	PROCESSED YIELD	COMMENTS
Carrots	bushel, topped	50	1 bu. = 32 to 40 pt. frozen	often sold in 1 lb. bunch with tops
	carton packed 2 doz. bunches of 1 lb. ea.	23 to 27	2 to 3 lbs. = 1 qt. canned	
Cauliflower	carton of 12 to 16 trimmed	18 to 24	2 med. heads = 3 pt. frozen, or 1½ qt. canned	usually sold as 1 to 1½ lb. heads
Collards	Sold by doz. bunches: 3 plants per bunch from N. Ga., 5-7 plants S. Ga. from direct-seeded crop		¾-1 lb. = 1 pt.	markets desire bunches to weigh 4 lbs.
Corn, Sweet	bushel	35	60 ears = 14 to 17 pt. frozen	usually sold by doz. which weigh 6 to 8 lb. in husk
	wirebound crates	42 to 50	1 doz. ears = 1 to 1½ qt. canned	
Cucumbers	bushel	48 to 50	1 bu. = 24 qt. of dill pickles	sometimes sold by count
	peck	12 to 13		
Eggplants	bushel	33 to 35		sometimes sold by count
Greens	bushel	18 to 20	1 to 1½ lb. = 1 pt. frozen	mustard, spinach, & turnip often sold in 1 to 1½ lb. bunches or bag
Kale	bushel	18	1 bu. = 6 to 9 qt. canned 12 to 18 pt. frozen	also sold in 1 to 1½ lb. bunches
Muskmelons	bushel	48		usually sold by count; vary widely in size by variety, 3 to 6 lb. each
Okra	tall bushel hamper	26 to 30	1 bu. = 17 qt. canned 34 to 40 pt. frozen	
	12 qt. basket	15 to 18		
Onions	dry, sack	50		
	bunch, green - 48 bunches	15 to 18		
Peas, English green (unshelled)	bushel	28 to 30	1 bu. = 12 to 15 pt. frozen 3 to 6 lb. = 1 qt. canned	
	peck	7 to 8		
Peas, Southern	bushel hamper	25	3½ - 4 = 1 qt.	
Peas, Edible Pod	peck	8 to 10		
	quart	1 to 1½		
Peppers, Green Hot	bushel	25 to 30 2/3	2/3 lb. = pt. frozen	Green (often sold by count) large peppers, 80-85 per bu; small peppers, 110 per bu.
	cartons	16 to 25		
Potatoes, Irish (mature)	sack	100	1 bu. = 20 qt. canned	
	bushel	60		
	peck	15		
Potatoes (new)	No. 10 bag	10		
Pumpkins	pie pumpkin ea.	5 to 15	3 to 4 lb. = 1 qt. canned	sold by count
	Jack o'lantern ea.	15 to 40		
Radishes	carton of 30 6 oz. film bags	12		also sold in bunches of ½ to ¾ lb.
Rhubarb	bunch	2 to 2 ½	1 lb. cooked = ¾ cup	
Rutabaga	bushel basket	56	1 lb. = 2 2/3 cups diced	usually sold by count
	peck	15		
Squash, Summer	bushel	40 to 44	1 bu. = 32 to 40 pt. frozen	zucchini, crookneck, Patty Pan, etc.
	8 qt. basket	10	2 to 4 lb. = 1 qt. canned	

PRODUCT	RETAIL VOLUME	NET WEIGHT* (LBS)	PROCESSED YIELD	COMMENTS
Squash, Winter	small ea.	1 to 4	3 lb. = 2 pt. frozen 2½ to 3 lb. = 1 qt. canned	usually sold by count and may be graded by size such as Acorn, Butternut, Buttercup
	intermediate ea.	6 to 12		such as Delicious, Golden Hubbard, Banana
	large ea.	15 to 40		such as Blue Hubbard, Jumbo Banana
Sweet Potatoes	bushel (cured)	50	$^2/_3$ lb. = 1 pt. frozen	
	peck	12 to 13	2 to 3 lb. = 1 qt. canned	
Tomatoes	bushel	53	2½ to 3½ lb. = 1 qt. canned	
	paperboard box	25	1 bu. = 15 to 20 qt. canned	
	8 qt. or peck basket	12 to 15		
Turnips	(without tops) mesh bag or bushel	50 to 56	1 lb. = $2^2/_3$ cups diced	wash - tie 6-8 turnips per bunch - roots to be 2-3" in diameter
	peck	12 to 15		
	bunched with tops – sold by doz. in paperboard box	18 doz.		
Watermelons	paperboard box	4 melons	usually sold by count	

*Net weight per container may vary slightly due to variation in product size. Net weight should not be less than the least stated weight listed.

Volumes and Conversions

- **Bushel** = 2,150 cubic inches = 8 gal. (dry) = 32 qt. (dry) = 64 pt. (dry) = 4 pecks
- **Peck** = ¼ bushel = 8 qt. (dry) = 538 cubic inches
- **Lug** = shallow containers, usually wood, that vary in size
- **Gallon** = 4 qt. = 231 cubic inches
- **Kilo** (or kilogram) = 2.205 lb.
- **Liter** = 1.057 qt. (liquid)

Acknowledgments and Selected References

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Learning for Life

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