

# Bulk Density Averages

	LBS./FT <sup>3</sup>	KG/M <sup>3</sup>		LBS./FT <sup>3</sup>	KG/M <sup>3</sup>		LBS./FT <sup>3</sup>	KG/M <sup>3</sup>
<b>Almonds</b>		See Nuts	<b>Cauliflower</b>			<b>Fish, Fresh Whole (cont.)</b>		
<b>Apples, Whole</b>	38	609	Whole Heads in Totes			(enough ice for normal inland journey,		
Dry Pomace	15	240	(with leaves)	18	288	and including allowance for box)		
Sliced	32	513	Whole Heads in Totes			Herring in bulk	58.2	932
Whole, Field Run, 2-1/2" diameter	30	481	(without leaves)	20	320	<b>Fish, Frozen</b>		
	20	320	Cuts, Before Blanch 27-31	37	593	Mackerel in bulk	50	801
Halves, Dried	28	449	Cuts, Blanched 32-35	32	513	Salmon in bulk	45	721
<b>Asparagus</b>			Frozen, 3/8" to 3/4"			Whole gutted cod single fish	25-30	401
Cut	34	545	(approx. 8000/ft <sup>3</sup> )	30	481	Whole gutted cod large blocks		
Whole	28	449	Frozen, 3/4" to 1-1/4"			Loosely packed	40	641
<b>Avocados, Fresh whole</b>	28	449	(approx. 2200/ft <sup>3</sup> )	29	465	Tightly packed	55	881
<b>Barley</b>	43	689	Frozen, 1-1/4" to 1-1/2"			Average	48	769
<b>Beans</b>			(approx. 800/ft <sup>3</sup> )	28	449	Fillet in large blocks	55-60	881
Castors, Whole	36	577	<b>Celery, Diced 3/8"</b>	35	561	Fillet in consumer packs	25	401
Cocoa	37	593	<b>Cereal</b>			in master carton with allowance		
Coffee, Roasted	26	417	Post Raisin Bran	6.25	100	for pallets, access, etc.		
Garbanzo, Dry	55	881	<b>Cheese</b>			Fish sticks in retail packs	25-30	401
Fava, Dry	50	801	Cubed, Granulated	72	1,153	Whole gutted halibut		
Navy, Dry	54	865	Curd	63	1,009	In wooden boxes	30-35	481
Navy, Small white	50	801	Grated	24	384	Stored loose	38	609
Pinto, Blanched 50 min.	44	705	Long Grain	30	481	Whole salmon		
Pinto, Dry	49	785	<b>Cherries</b>	40	641	In wooden boxes	24	384
Red Kidney, Soaked	42	673	<b>Chicken</b>			Stored loose	33-35	529
Soy, Field run	45	721	Bone-in Parts	55-60	881	Frozen shelled shrimp		
Speckled, Butter	52	833	Skins	69.5	1,113	in blocks	45-55	721
<b>Beets</b>			Breasts	70	1,121	Frozen breaded shrimp	25-30	401
Sliced	42	673	<b>Cocoa</b>			(in consumer packs in master carton)		
Sugar	60	961	Nibs	40	641	<b>Flour, Wheat</b>	35	561
Sugar (per Holly Sugar)	35	561	Powder	35	561	<b>Grapefruit</b>	35	561
Sugar, Dry pulp	15	240	<b>Coconut, Shredded</b>	25	401	<b>Grapes</b>	30	481
Sugar, Wet pulp	45	721	<b>Coffee Beans</b>	32	513	<b>Green Beans</b>		
<b>Whole</b>	40	641	Ground	25	401	Unsnipped, Fresh	18	288
<b>Blackberries</b>	45	721	Roasted Bean	26	417	Snipped, Whole Fresh		
<b>Blueberries</b>	45	721	<b>Corn</b>			(2 & 3 sieve)	21	336
<b>Bran</b>	16	256	Cob, Unhusked	18-25	288	Snipped, Whole Frozen		
<b>Bread Crumbs</b>	3-4	48	Cob, After Husker (full length)	26	417	(2 & 3 sieve) (approx. 2500/ft <sup>3</sup> )	24	384
<b>Broccoli</b>			Cob, Prior to Blanch			Cut, Fresh 1" (2, 3, & 4 sieve)	33	529
5" Blanched	29	465	(2-3/4" long)	33	529	Cut, Blanched 1" (2, 3, & 4 sieve)	35	561
2-1/2" Blanched	32	513	Cob, Blanched & Cooled			Cut, Frozen 1" (2, 3, & 4 sieve)		
1" Blanched	35	561	(2-3/4" long)	38	609	(approx. 11,700/ft <sup>3</sup> )	33	529
6" Field cut	16	256	Cob, Frozen (2-3/4" long)	35	561	French Beans		
1" Frozen	26	417	Cut, Washed Prior to Blanch	40	641	Sliced and Blanched	35	561
<b>Buckwheat</b>	42	673	Cut, Blanched & Key Air			French Beans, Frozen	20	320
<b>Brussel Sprouts</b>			Cooler	45	721	<b>Hamburger, Pellets Frozen</b>	35	561
Blanched	29	465	Cut, Frozen	37	593	(3/8-1/2" X 3/4-1-1/2")		
Pre-blanched	25	401	Meal, Dry	40	641	<b>Hops</b>		
Frozen	TBD		<b>Crab Tanner</b>			Dry	35	561
<b>Cabbage</b>	27	433	Cooked, Frozen Sections	20	320	Wet	55	881
<b>Cantaloupe</b>	38	609	Live Weight	29	465	<b>Ice, Crushed</b>	40	641
<b>Carrots</b>			At Pre-cooker	20	320	<b>Kiwi Fruit, Fresh</b>	55	881
Diced	TBD		Final Product (as packaged)	52	833	<b>Lemons</b>	40	641
Diced, Frozen	TBD		<b>Cranberries, Fresh</b>	40	641	<b>Lettuce</b>	23	368
Sliced	42	673	<b>Cucumbers, Fresh</b>	40	641	<b>Lima Beans</b>		
<b>Whole</b>	40	641	<b>Fish, Fresh Whole</b>			Dry	45	721
Whole, Baby Field Run			<b>Chilled fish muscle</b>	65.8	1,054	Frozen	TBD	
(roots, dirt, etc.)	26	417	Cod in bulk gutted	57.5	921	Green	34	545
Whole, Baby (washed & peeled)	42	673	Cod in bulk with ice/49.5 mix.	33	529	Unshelled	26	417
Whole, Baby Blanched			(2/3 fish - 1/3 ice by weight)					
(all sizes combined)	40	641	Cod Fillets in bulk	60	961			
Whole, Baby Frozen			Cod Fillets, Boxed with ice	30	481			
(all sizes combined)	31	497						

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<b>Malt</b>			<b>Onions (cont.)</b>			<b>Potatoes (cont.)</b>		
Dry ground 1/8" and under	22	352	Small, Whole Frozen			Sliced	52	833
Dry whole	30	481	5/8" to 7/8" diameter			Whole, Peeled	41-48	657
Meal	40	641	(approx. 2400/ft <sup>3</sup> )	36	577	<b>Whole, Unpeeled</b>	<b>40-43</b>	<b>641</b>
Wet	65	1,041	Small, Whole Frozen			Helical Cut, Wet	18	288
<b>Meat</b>			7/8" to 1-1/8" diameter			Helical Cut, Frozen	10	160
Ground	55	881	(approx. 1300/ft <sup>3</sup> )	35	561	Lattice Cut, Wet	30	481
Balls	16	256	<b>Oranges, Whole</b>	30	481	Lattice Cut, Frozen	20	320
<b>Milk</b>			<b>Orange Peel, Dry</b>	15	240	<b>Prunes, Dried 30% Moisture</b>	42	673
Dried Flakes	6	96	<b>Pasta</b>			<b>Pumpkin</b>	35	561
Malted	35	561	Hay & Straw	43	689	<b>Pretzels</b>	10	160
Whole powdered	28	449	Elbow, Shell	30-40	481	<b>Quinces</b>	44	705
<b>Millet, Birdseed</b>	<b>46</b>	<b>737</b>	Spaghetti, Flat	40	641	<b>Raisins</b>	39	625
<b>Mushrooms</b>			Macaroni			<b>Rhubarb</b>	34	545
Fresh whole (float)	15-17	240	Blanchd	65	1,041	<b>Raspberries</b>	44	705
Blanched whole (sink)	23-25	368	Elbow, Dry	34	545	<b>Rice</b>		
Sliced	48	769	Elbow, Cooked	48	769	<b>Dry</b>	<b>52</b>	<b>833</b>
Sliced, Frozen	TBD		Rotelli Spirals	42	673	Grits	45	721
<b>Mustard, Seed</b>	<b>48</b>	<b>769</b>	<b>Peaches, Freestone</b>	34	545	Hulled and Polished	48	769
<b>Mussel, Green Lip</b>	25	401	<b>Peanuts</b>	See Nuts		Rough	36	577
(10 oz. frozen in shell)			<b>Pears</b>	38	609	Wild White	48	769
<b>Noodles, Enriched</b>	46	737	<b>Peas</b>			<b>Rutabagas</b>	45	721
<b>Nuts</b>			Black-eyed	38	609	<b>Rye, Seed</b>	<b>45</b>	<b>721</b>
Almonds			Crowder	38	609	<b>Salt, Coarse</b>	40-55	641
Meat	30	481	Dried	48	769	Fine	70-80	1,121
Unshelled	20	320	<b>Green fresh</b>	<b>35</b>	<b>561</b>	<b>Sesame Seeds</b>	27	433
Cashews, Whole	37	593	Sugar Snap	27	433	<b>Shrimp</b>		
Hazel Nuts, Shelled	35	561	<b>Unshelled</b>	<b>24</b>	<b>384</b>	Frozen, Small (300 count)	30	481
Hickory Nuts, Wild	40	641	<b>Peppers</b>			Frozen, Shelled in Blocks	45-55	721
Macadamia Nuts			Chili Peppers, Whole	16	256	Frozen, Breaded	25-30	401
Fresh, unshelled	43	689	Whole green	18	288	(in consumer package)		
Dry, shelled	35	561	Whole blanched	23	368	<b>Soap, Detergent</b>	15-50	240
<b>Peanuts</b>			Diced	TBD		<b>Silica Flour</b>	80	1,282
<b>Shelled</b>	<b>45</b>	<b>721</b>	Diced Frozen	TBD		<b>Spinach</b>		
Unshelled Runners	17	272	Dried	8.6	138	Loose Leaf (dry on shaker)	8-8.5	128
Spanish	20	320	Halves	18	288	Loose Leaf, (wet on shaker)	10.5	168
Virginia	14	224	Halves, Blanched	23	368	Blanched	44	705
Walnuts			Strips, Blanched	23-47	368	<b>Squash</b>	35	561
In Shell	20	320	Jalapeno Fresh	21	336	<b>Strawberries</b>	44	705
Meats (Halved & Pieces)	25-30	401	Pepper Corns, Black	40	641	<b>Sugar</b>		
<b>Oats</b>	<b>26</b>	<b>417</b>	<b>Pepperoncini</b>	37	593	Brown	45	721
<b>Okra</b>			<b>Pimento, Whole</b>	26	417	Granulated	55	881
Breaded Nuggets	TBD		<b>Pickles</b>			Powdered	55	881
Whole	20	320	Chips	57	913	Raw Cane	65	1,041
Blanched 3 minutes	32	513	Sliced	46	737	Raw Cane, Knived	18	288
<b>Olives</b>	41	657	Whole	39	625	<b>Sunflower Seeds, Hulled</b>	<b>41</b>	<b>657</b>
<b>Onions</b>			<b>Pineapple</b>			<b>Tomatoes</b>	30-33	481
Winter Whites, 2-3/4" Small	35	561	Wedges 1/2" to 1"	55	881	<b>Tortilla Chips</b>	7	112
Medium 3-4"	19-31	304	Whole	29-30	465	<b>Turnips</b>	43	689
2" diameter	32	513	<b>Plums</b>	45	721	<b>Wheat</b>	<b>48</b>	<b>769</b>
Diced	36.5	585	<b>Potatoes</b>			Cracked	45	721
Small, Whole, Field Run			Chips	3.5-5.6	56	Germ	28	449
(with roots, dirt, etc)	<b>38</b>	<b>609</b>	Cut Strips, 3/8 cut	35	561	Flour	35	561
Small, Whole Prior to Blanch			Fried Strips	28	449	<b>Zucchini, Slices Frozen</b>	27.5	441
(all sizes)	40	641	Frozen Strips					
Small, Whole Frozen			1/2" Cut	21.5	344			
3/8" to 5/8" diameter			7/16" Cut	20	320			
(approx. 3800/ft <sup>3</sup> )	34	545	3/8" Cut	18.5	296			
			1/4" Cut	17	272			