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AVERAGE WEIGHT OF A MEASURED CUP OF VARIOUS FOODS

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Prepared by

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AVERAGE WEIGHT OF A MEASURED CUP OF VARIOUS FOODS

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INTRODUCTION

Average weight and standard deviation of a measured cup of various prepared foods are presented in tabular form to assist food technologists in the development, standardization, and testing of recipes. The information will be useful to food service managers, teachers, students, home economists engaged in test kitchen research and education programs, dietitians, and consultants concerned with advising consumers on the use and purchase of food.

Some of the cookbooks for quantity food service have lists of approximate measures for given weights of commonly used foods; but, in general, this type of information is not readily available.² Unpublished data collected by the Human Nutrition Research Division and others were used by the American Home Economics Association in compiling a listing of weights of one cup of a limited number of foods.³ These data are also used in deriving the nutritive values of foods in common household measures.⁴

These data on the actual weights of one cup of a number of food materials in various forms were obtained in the food laboratory during the last 12 years. The data reflect the normal variation in measuring volumes of food materials. The cooked foods for which data are given were not in all cases prepared from the same lot of food as the uncooked foods. The number of samples of each food varied from two to 510.

The foods are listed in alphabetical order. The form of the food as purchased is given in the first column of the table. Fresh is used to describe foods that are purchased without being processed. Canned or bottled and frozen, dehydrated, or dry are used to describe processed forms of the foods. To further describe the form of the food when purchased, other terms such as slices, sweetened, and low moisture are used when applicable. To describe the variety or kind of a food, the terms such as Fordhook and all-purpose are used.

In the second column of the table, the way the food is prepared for use is described. Preparation procedures indicate the method of cutting the food into finer pieces, such as chopping, dicing, or mashing, whether the food was uncooked or cooked and whether sugar or other ingredients were added during the cooking process. Cooked foods were prepared by either household or quantity cooking procedures. All foods that were drained before measuring are described as "drained solids." Foods containing liquid that were not drained are described as "solids and liquid." When possible terms used to describe the various forms of a food are the same as those given in tables of food composition published by the U.S. Department of Agriculture.⁵

¹ The authors express their appreciation to Karen L. Berke (resigned) and Patricia K. Vandersall (resigned) for assistance in the laboratory and to Helen Crutchfield for assistance in compiling the data for publication.

² Fowler, S. F., West, B. B., and Shugart, G. S. *Food for fifty*. 4th Ed. 446 pp. John Wiley and Sons, Inc., New York 1961.

Kotschevar, Lendal H. *Standards, principles and techniques in quantity food production*. 695 pp. Edward Brothers, Inc., Michigan 1964.

³ American Home Economics Association. *Handbook of food preparation*. 71 pp. Washington, D.C. 1964.

⁴ U.S. Agricultural Research Service. *Nutritive value of foods*. U.S. Dept. Agr., Home and Garden Bul. 72, 36 pp.

⁵ U.S. Agricultural Research Service. *Composition of foods--raw, processed, prepared*. U.S. Dept. Agr., Agr. Handb. 8, 190 pp. 1963.

The average weight of one cup of the food material, the number of samples tested, and the standard deviation of the weight (a measure of the variation of the data on all samples weighed), and the item number are included for each food.

Dry food items were measured in cups that measured one cup at the top rim. The cup was filled with the food material, and the top was leveled with the thin edge of a metal spatula. All materials were spooned lightly into the cup unless a special measuring technique, such as dipping, is included in the description of the food item. Liquid food materials and foods in juice were measured in glass measuring cups filled to the one-cup mark. Food items were weighed to the nearest gram or were converted to grams from weights recorded to the nearest one-eighth or one-fourth ounce.

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Almonds	Chopped	127	5.4	18	1
Blanchd, salted . . . . .	. . . . .	157	5.1	10	2
Coated:					
Chocolate . . . . .	. . . . .	180	3.0	10	3
Chocolate and candy . . . . .	. . . . .	197	4.6	10	4
Apples:					
Fresh, all varieties	Uncooked, pared:				
	Diced	109	3.6	11	5
	Quartered.	122	8.2	5	6
	Cooked, sugar added, sauce	252	10.5	9	7
Canned:					
Slices	Solids and liquid	225	15.7	24	8
	Drained solids	213	13.3	6	9
Dehydrated:					
Regular-dried:					
Rings	Uncooked	86	6.9	24	10
Slices	Cooked, chilled:				
	Solids and liquid	242	2.7	11	11
	Drained solids	243	7.2	11	12
Low-moisture:					
Slices	Cooked, chilled:				
	Solids and liquid	240	8.5	7	13
	Drained solids	228	19.0	7	14
Applesauce:					
Canned . . . . .	. . . . .	259	6.1	12	15
Dehydrated:					
Low-moisture	Cooked, chilled:				
	Solids and liquid	235	8.9	9	16
	Drained solids	231	10.6	9	17
Apricots:					
Fresh	Halves	156	7.7	6	18
	Whole	115	11.8	5	19
Canned, in sirup:					
Halves	Solids and liquid	252	8.5	8	20
	Drained solids	217	15.1	12	21
Whole	Solids and liquid	258	7.0	9	22
	Drained solids	225	14.5	9	23
Dehydrated:					
Regular-dried:					
Halves	Uncooked	127	3.0	10	24
	Cooked:				
	Solids and liquid	245	5.7	31	25
	Drained solids	249	6.8	24	26
	Drained solids, chopped	220	19.2	10	27
Low-moisture:					
Slices	Cooked, chilled:				
	Solids and liquid	245	10.0	10	28
	Drained solids	247	8.2	9	29
Asparagus:					
Fresh	Cooked, drained solids, spears	187	12.4	18	30
Frozen:					
Cuts and tips	Cooked, drained solids	181	11.6	15	31
Canned:					
Spears	Drained solids	215	12.3	5	32
Avocado, fresh	Diced	147	4.8	7	33
	Mashed	231	1.5	6	34

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Baking powder:					
Phosphate . . . . .	.....	217	2.8	38	35
SAS-phosphate . . . . .	.....	177	4.3	27	36
Tartrate . . . . .	.....	181	2.6	10	37
Bananas, fresh:					
Chunks . . . . .	.....	143	3.1	7	38
Mashed . . . . .	.....	222	8.5	9	39
Slices . . . . .	.....	146	24.1	5	40
Beans:					
Great Northern:					
Dry	Uncooked	178	9.7	22	41
	Cooked	170	3.7	10	42
Green:	Uncooked:				
Fresh	French style	79	4.6	10	43
	1-1/2 to 2-in. pieces	105	3.1	8	44
	Cooked, drained solids, 1-1/2-to 2-in. pieces.	137	18.7	17	45
Canned:					
Cut	Drained solids	141	12.9	12	46
Frozen:					
Cut	Cooked, drained solids	161	17.4	22	47
Kidney:					
Canned	Solids and liquid	256	6.4	10	48
	Drained solids	180	5.7	11	49
Dry	Uncooked	186	13.1	24	50
	Cooked, drained solids	185	9.7	20	51
Lima:					
Fresh	Cooked, drained solids	169	6.4	10	52
Canned	Drained solids	174	7.4	11	53
Frozen:					
Fordhook	Cooked, drained solids	168	11.2	14	54
Baby	Cooked, drained solids	173	8.7	18	55
Dry:					
Baby	Uncooked	192	5.5	13	56
Large	Uncooked	177	2.0	12	57
Mung, dry.	Uncooked	210	4.6	10	58
Navy, dry	Uncooked	207	4.2	22	59
	Cooked, drained solids	191	1.5	20	60
Pinto, dry.	Uncooked	192	7.7	40	61
	Cooked, drained solids	164	4.1	17	62
Wax, fresh	Cooked, drained solids, 1-in. pieces	162	4.4	9	63
Beans sprouts, canned					
	Solids and liquid	160	31.1	14	64
	Drained solids	142	11.8	13	65
Beef, fresh:					
Ground	Uncooked	226	12.8	14	66
Roast	Cooked:				
	Chopped	128	2.0	12	67
	Diced	143	6.3	6	68
Beets:					
Fresh	Cooked, pared:				
	Chopped or diced	180	5.9	6	69
	Sliced	205	11.3	14	70
Canned:					
Diced	Drained solids	163	7.7	7	71
Sliced	Drained solids	176	12.9	13	72
Whole	Drained solids	159	9.9	15	73

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Blackberries:					
Fresh	Uncooked:				
	Unwashed	128	2.9	8	74
	Washed, drained solids	146	8.6	14	75
	Cooked:				
	Solids and liquid	259	3.7	7	76
	Drained solids	203	9.9	5	77
Canned, in sirup	Solids and liquid	260	4.1	9	78
	Drained solids	175	6.0	8	79
Frozen, sweetened	Cooked, solids and liquid	252	6.8	7	80
Blackeye peas (cowpeas):					
Fresh	Uncooked	144	3.5	4	81
	Cooked, drained solids	163	—	3	82
Frozen	Cooked, drained solids	171	14.4	10	83
Dry	Uncooked	168	5.1	16	84
Blueberries:					
Fresh	Uncooked	146	4.0	8	85
Canned, wild, in sirup	Solids and liquid	250	2.0	10	86
	Drained solids	170	7.2	10	87
Frozen:					
Unsweetened	Uncooked, solids and liquid	155	9.3	32	88
Sweetened	Uncooked:				
	Solids and liquid	228	13.6	10	89
	Cooked:				
	Solids and liquid	246	13.2	7	90
	Drained solids	163	—	2	91
Bread crumbs	Dry	102	15.9	7	92
	Soft	46	5.7	10	93
Bread stuffing:					
Mix, herb-seasoned, crumb-type.	Unprepared	71	9.4	20	94
	Stuffing prepared from mix:				
	Dry type	141	9.2	20	95
	Moist type	203	32.2	20	96
Broccoli, frozen:					
Chopped	Cooked, drained solids	188	21.3	10	97
Spears	Cooked, drained solids	185	13.6	15	98
Brussels sprouts, fresh	Cooked, drained solids	180	5.9	9	99
Buttermilk		242	3.7	10	100
Butteroil		204	3.8	20	101
Cabbage, fresh	Uncooked:				
	Chopped	89	10.3	16	102
	Shredded	61	4.5	31	103
	Slices	82	11.4	20	104
	Cooked, drained solids:				
	Shredded	146	13.1	12	105
	Slices	144	22.0	18	106
	Wedges	184	19.6	18	107
Cantaloup, fresh	Cubed	162	15.3	5	108

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Carrots:					
Fresh	Uncooked:				
	Chunks	138	3.4	10	109
	Diced	144	6.8	11	110
	Shredded	109	22.8	13	111
	Slices	127	5.9	9	112
	Strips	117	8.3	18	113
	Cooked, drained solids:				
	Chunks	164	12.3	13	114
	Diced	140	7.6	16	115
	Slices	153	7.9	7	116
Canned:					
Diced	Drained solids	159	5.8	7	117
Frozen:					
Diced	Cooked, drained solids	165	9.8	9	118
Catsup		282	3.6	5	119
Cauliflower:					
Fresh	Uncooked, slices	83	4.9	11	120
	Cooked, drained solids, flowerets	125	30.7	24	121
Frozen	Cooked, drained solids	179	9.0	12	122
Celery, fresh	Uncooked:				
	Chopped or very finely diced	119	11.3	16	123
	Diced or cut in chunks	121	9.5	21	124
	Slices	106	5.4	11	125
	Cooked, drained solids:				
	Diced or cut in chunks	153	17.3	26	126
	Slices	168	5.1	6	127
Celery cabbage, fresh	Uncooked, strips	59	3.7	20	128
Cereals, ready-to-eat: ¹					
Corn:					
Cocoa Puffs		30	.8	10	129
Corn Chex		29	.6	10	130
Corn Flakes		29	2.2	10	131
Corn Kix		19	.5	10	132
Frosted Flakes		43	2.1	10	133
Hi-Pro		23	1.2	10	134
Sugar Pops		31	.8	10	135
Trix		33	.9	10	136
Mixed:					
Alpha Bits		34	1.1	10	137
Concentrate		79	2.3	10	138
Grape Nuts		109	2.9	10	139
Grape Nut Flakes		39	2.1	10	140
Oat Flakes		41	2.1	10	141
Special K		23	.6	10	142
Oat:					
Cherrios		28	1.3	10	143
Life		46	3.4	10	144
Rice:					
Puffed Rice		13	.6	10	145
Rice Chex		33	2.8	10	146
Rice Honeys		37	.9	10	147
Rice Krinkles		43	1.6	10	148
Rice Krispies		27	1.0	10	149

See footnote at end of table.

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Cereals, ready-to-eat ¹ —continued					
Wheat:					
All-bran		61	3.6	10	150
Bran Buds		75	1.9	10	151
40% Bran Flakes		34	1.6	10	152
Puffed Wheat		12	.7	10	153
Raisin Bran		57	5.1	10	154
Shredded Wheat		35	2.5	10	155
Sugar Crisp		35	1.5	10	156
Wheat Chex		56	4.4	10	157
Wheat Germ		113	1.4	10	158
Wheaties		32	2.0	10	159
Flakes	Crushed	70	1.1	10	160
Chard, Swiss, fresh	Cooked, drained solids	191	9.7	9	161
Cheese:					
American and Cheddar	Diced	131	13.3	4	162
	Shredded	111	18.9	19	163
Cottage		233	2.3	10	164
Cream		230	4.8	8	165
Parmesan, grated		106	3.4	6	166
Cherries:					
Bing, fresh	Unpitted	158	6.9	19	167
	Pitted	163	6.8	17	168
Dark, sweet:					
Canned, in sirup, with pits.	Drained solids:				
	Unpitted	191	7.5	6	169
	Pitted	208	16.3	2	170
Canned, in sirup, without pits.	Solids and liquid	235	9.1	11	171
	Drained solids	176	8.3	11	172
Maraschino, canned:					
Large	Drained solids	178	8.0	10	173
Small	Drained solids	192	13.4	10	174
Red Sour:					
Canned:					
Pitted, water pack	Solids and liquid	215	16.0	6	175
	Drained solids	177	7.9	9	176
Frozen:					
Pitted, sweetened	Uncooked:				
	Solids and liquid	259	7.1	10	177
	Drained solids	210	14.1	10	178
	Cooked:				
	Solids and liquid	274	8.5	10	179
Royal Anne:					
Canned, in sirup	Solids and liquid	260	8.3	11	180
	Drained solids	191	5.1	9	181
Chicken:					
Fresh or frozen:					
Whole	Cooked, deboned:				
	Chopped	143	6.5	13	182
	Diced	134	7.2	5	183
	Ground	113	1.2	10	184
Breasts	Fried, deboned	144	15.6	14	185
Chickpeas, dry	Uncooked	200	3.5	10	186

See footnote at end of table.

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Chicory, fresh	Cut in pieces	53	5.9	13	187
Chili sauce . . . . .	. . . . .	247	9.6	12	188
Chop suey vegetables, canned .	Solids and liquid	228	9.1	5	189
	Drained solids	188	9.6	6	190
Clam liquor, canned . . . . .	. . . . .	236	5.8	10	191
Cocoa . . . . .	. . . . .	86	8.9	14	192
Cocoa mix . . . . .	. . . . .	139	3.4	7	193
Coconut:					
Fresh	Grated	80	4.9	6	194
Canned, shredded . . . . .	. . . . .	92	10.9	29	195
Dehydrated, shredded . . . . .	. . . . .	94	4.5	12	197
Frozen, shredded . . . . .	. . . . .	77	7.2	30	196
Collard greens, frozen, chopped	Cooked, drained solids	170	21.5	12	198
Cookies:					
Ginger snap	Crumbs	115	2.0	21	199
Graham cracker	Crumbs	86	13.8	9	200
Corn, white:					
Canned:					
Cream-style	Heated	250	6.0	13	201
Whole kernel:					
Vacuum pack	Heated	212	4.9	10	202
With liquid	Heated, drained solids	159	5.4	11	203
Corn, yellow:					
Fresh	Cut from cob, cooked, drained solids	166	7.4	6	204
Canned:					
Cream-style	Heated	253	5.9	16	205
Whole kernel, with liquid.	Drained solids	173	10.6	7	206
Frozen:					
Whole kernel	Cooked, drained solids	182	11.8	19	207
Cornmeal:					
White, degerminated. . . . .	. . . . .	129	11.5	14	208
White, self-rising, wheat flour added.	. . . . .	141	3.7	10	209
Yellow, degerminated. . . . .	. . . . .	148	9.2	25	210
Corn sirup, light . . . . .	. . . . .	325	10.7	33	211
Cranberry sauce, canned . . . . .	. . . . .	271	6.5	13	212
Cucumber, fresh	Pared, diced	144	8.7	10	213
Dates, dehydrated, regular-dried	Chopped	174	11.9	10	214
Eggplant, fresh	Cooked, drained solids, diced	201	10.2	18	215

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Eggs, large, shell	Shelled:				
	Whites	255	5.6	8	216
	Whole	251	6.0	8	217
	Yolks	240	3.3	8	218
Escarole, fresh	Shredded or broken in pieces	71	6.2	6	219
Figs:					
Canned, whole	Solids and liquid	253	17.8	14	220
	Drained solids	208	17.4	10	221
Dehydrated, regular-dried	Chopped	171	13.0	32	222
Fish, <u>see</u> individual listings					
Flour:					
Rice	Stirred, spooned	158	4.1	43	223
Rye:					
Dark	Unstirred	128	3.4	10	224
	Stirred.	127	2.5	10	225
Light	Unsifted, spooned	101	10.0	41	226
	Sifted, spooned	88	7.4	20	227
Tapioca	Unsifted, spooned	107	.8	10	228
Wheat:					
All-purpose ²	Unsifted:				
	Dipped	143	4.8	300	229
	Spooned	126	2.8	510	230
	Sifted, spooned	116	1.9	500	231
Bread	Unsifted:				
	Dipped	136	6.5	40	232
	Spooned	123	3.5	40	233
	Sifted, spooned	117	4.2	41	234
Cake ²	Unsifted:				
	Dipped	119	3.1	300	235
	Spooned	111	2.4	300	236
	Sifted, spooned	99	1.6	300	237
Gluten.	Unsifted:				
	Dipped	142	4.0	10	238
	Spooned	135	2.6	10	239
	Sifted, spooned	136	1.5	10	240
Self-rising.	Unsifted:				
	Dipped	130	4.4	10	241
	Spooned	127	4.1	10	242
	Sifted, spooned	106	2.7	10	243
Whole wheat	Stirred, spooned	137	5.9	23	244
Fruits, <u>see</u> individual listings					
Fruit cocktail:					
Canned, in sirup	Solids and liquid	256	6.5	13	245
	Drained solids	213	15.2	15	246
Fruits for salad, canned, in sirup.	Solids and liquid	246	9.4	6	247
Gelatin, flavored . . . . .	. . . . .	187	13.9	8	248
Grapefruit:					
Fresh	Sections:				
	Solids and liquid	226	12.8	13	249
	Drained solids	200	15.0	14	250

See footnote at end of table.

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Grapefruit—continued					
Canned, sections, sweetened	Solids and liquid	256	2.9	6	251
	Drained solids	241	3.7	8	252
Frozen, sections, unsweetened	Solids and liquid	241	6.9	24	253
	Drained solids	219	12.6	14	254
Grapes, seedless, fresh.	Halves	171	8.9	16	255
	Whole	174	8.4	14	256
Hominy grits	Uncooked	156	5.1	43	257
	Cooked	236	6.5	48	258
Honey, strained		326	10.9	12	259
Honeydew melon, fresh.	Diced	168	9.7	17	260
Kale:					
Canned	Drained solids	163	16.2	12	261
Frozen	Cooked, drained solids	184	16.5	11	262
Lemon juice:					
Canned, plastic lemon		227	1.6	12	263
Lemons, fresh	Juice	250	4.0	13	264
Lemonade, frozen concentrate	Thawed	283	6.8	10	265
	Reconstituted	242	4.1	10	266
Lentils, whole, dry	Uncooked	191	5.8	11	267
	Cooked, drained solids	202	16.9	6	268
Lettuce, iceberg, fresh	Leaves	66	5.0	24	269
	Chopped	59	4.4	6	270
	Chunks	74	7.1	20	271
Luncheon meat	Chopped	136	9.2	9	272
	Diced	141	3.3	11	273
Macaroni, elbow	Uncooked.	136	6.2	26	274
Mango, fresh	Diced	163	—	2	275
	Sliced	163	5.7	4	276
Margarine		226	2.9	6	277
Meat, <u>see</u> individual listings.					
Melon balls, frozen, in sirup	Solids and liquid	231	20.1	10	278
Milk:					
Whole:					
Fresh fluid		241	8.5	47	279
Dry, spray process	Packed	145	4.5	20	280
	Spooned	121	4.7	30	281
Nonfat dry:					
Crystals		75	2.0	80	282
Spray process.	Dry	134	13.2	8	283
	Reconstituted	240	9.0	19	284
Molasses		309	11.3	24	285

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Mushrooms, fresh	Uncooked, slices	68	4.7	18	286
	Cooked, drained solids, slices	175	19.5	22	287
Mustard greens:					
Fresh	Cooked, drained solids	221	14.8	7	288
Frozen:					
Chopped	Cooked, drained solids	214	16.5	8	289
Nuts, <u>see</u> individual listings.					
Oats, rolled:					
Quick	Uncooked	71	4.8	60	290
	Uncooked, ground	109	1.6	11	291
Regular	Uncooked,	72	6.2	60	292
Oil, cooking		210	4.7	7	293
Okra:					
Fresh	Cooked, drained solids:				
	Slices	160	8.2	7	294
	Whole	177	15.3	6	295
Canned	Drained solids	171	25.8	7	296
Frozen:					
Cut	Cooked, drained solids	184	17.3	14	297
Whole	Cooked, drained solids	138	1.1	10	298
Olives, ripe	Slices	135	4.0	14	299
Onions:					
Green, fresh	Uncooked slices	99	19.5	5	300
Mature:					
Large	Uncooked:				
	Chopped	173	37.1	26	301
	Grated	231	9.0	10	302
	Ground	238	6.2	11	303
	Slices	113	18.8	8	304
	Cooked, drained solids:				
	Halves or pieces	179	11.0	13	305
	Whole	209	10.7	13	306
White, pearl	Whole, cooked, drained solids	185	5.2	10	307
Dehydrated, low-moisture, slices.	Dry	64	—	6	308
	Reconstituted, drained solids	143	12.1	12	309
Orange juice:					
Fresh		246	3.1	10	310
Frozen concentrate	Thawed	268	5.2	11	311
	Reconstituted	245	3.8	7	312
Oranges, fresh	Juice	244	1.8	15	313
	Sections, solids and liquid	241	12.1	5	314
	Diced or slices, drained solids	219	12.5	13	315
Oranges, mandarin, canned, sections	Solids and liquid	247	8.8	12	316
	Drained solids	186	5.4	11	317
Parsnips, fresh	Cooked, drained solids, cut in pieces	211	14.7	8	318

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS--Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Peaches:					
Fresh	Uncooked:				
	Diced	266	1.8	12	319
	Slices	177	14.5	38	320
	Cooked, sugar added, slices:				
	Solids and liquid	241	4.9	17	321
	Drained solids	223	3.1	6	322
Canned, in sirup:					
Halves	Solids and liquid	255	14.7	6	323
	Drained solids	224	19.0	8	324
Slices	Solids and liquid	253	6.9	30	325
	Drained solids	218	16.1	17	326
Frozen, in sirup:					
Halves	Cooked, solids and liquid	250	7.2	6	327
	Uncooked:				
	Solids and liquid	236	8.9	20	328
	Drained solids	219	2.2	10	329
	Cooked:				
	Solids and liquid	240	16.6	17	330
	Drained solids	228	2.3	9	331
Dehydrated:					
Regular-dried, halves	Uncooked	176	10.0	10	332
	Uncooked, ground	217	16.2	9	333
	Cooked, chilled:				
	Solids and liquid	242	7.7	24	334
	Drained solids	232	14.9	24	335
Low-moisture, slices	Cooked, chilled:				
	Solids and liquid	249	9.8	11	336
	Drained solids	247	8.2	9	337
Peanut butter		251	14.6	32	338
Peanuts	Chopped	138	3.8	26	339
Pears:					
Fresh	Uncooked:				
	Unpared, slices	164	10.1	13	340
	Pared, slices	170	8.8	10	341
	Cooked, pared, halves:				
	Solids and liquid	236	8.4	9	342
	Drained solids	215	10.1	9	343
Canned, in sirup, halves	Solids and liquid	229	13.0	6	344
	Drained solids	227	27.3	6	345
Peas:					
Green:					
Fresh	Uncooked	138	4.3	6	346
	Cooked, drained solids	163	7.5	13	347
Canned	Drained solids	172	5.5	5	348
Frozen	Uncooked	145	10.3	14	349
	Cooked, drained solids	167	8.5	19	350
Split, green or yellow:					
Dry	Uncooked	203	8.7	42	351
	Cooked, drained solids	194	17.4	12	352
Peas and carrots:					
Canned	Drained solids	160	5.2	11	353
Frozen	Cooked, drained solids	174	6.3	12	354
Pecans	Chopped	105	3.5	11	355

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Peppers, chili, green, canned . . .	Drained solids	237	7.2	10	356
Peppers, sweet, green, fresh . . .	Uncooked:				
	Chopped	150	26.0	12	357
	Slices	82	18.8	16	358
	Strips	98	2.9	6	359
	Cooked, drained solids, strips	135	13.7	6	360
Pickle relish	Solids and liquid	243	16.2	16	361
Pickles, sweet.	Chopped	148	10.5	10	362
Pineapple:					
Fresh	Diced	155	11.5	13	363
Canned, in sirup:					
Chunks	Drained solids	202	10.9	10	364
Crushed	Solids and liquid	262	15.3	6	365
	Drained solids	254	18.5	8	366
Slices	Solids and liquid	278	15.3	10	367
	Drained solids	186	27.9	15	368
Tidbits	Solids and liquid	258	9.2	10	369
	Drained solids	187	13.6	10	370
Frozen, in sirup, chunks . . .	Solids and liquid	246	12.9	13	371
	Drained solids	204	16.9	6	372
Pistachios, in shell	In shell	133	7.1	10	373
	Shelled	125	4.7	10	374
Plums, blue:					
Fresh	Halves	159	18.1	13	375
Canned, in sirup, whole . . .	Solids and liquid	234	4.4	6	376
	Drained solids	223	22.7	8	377
Plums, red:					
Fresh	Diced	164	10.0	15	378
	Halves	176	14.8	13	379
	Slices	169	10.0	15	380
Pork:					
Fresh	Uncooked:				
	Diced	234	8.8	14	381
	Strips	233	10.4	15	382
	Cooked, chopped	142	3.2	10	383
Smoked ham, cook-before-eating.	Uncooked, ground	170	3.9	10	384
	Cooked:				
	Chopped	138	8.1	10	385
	Diced	147	13.4	8	386
	Ground	109	1.9	11	387
Potatoes:					
Fresh	Uncooked:				
	Chopped	147	11.6	13	388
	Diced	157	19.6	13	389
	Slices	149	8.0	11	390
	Cooked, drained solids:				
	Diced	156	7.4	14	391
	Mashed	207	25.0	19	392
	Riced	227	4.3	12	393
	Slices	159	9.8	11	394

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Potatoes—continued					
Canned:					
Small, whole	Drained solids	179	7.2	6	395
Dehydrated:					
Flakes	Dry	46	2.2	10	396
	Reconstituted	214	6.7	9	397
Granules	Dry	201	7.2	10	398
	Reconstituted	210	10.9	17	399
Poultry, <u>see</u> individual listings.					
Prunes:					
Canned	Solids and liquid	266	7.7	15	400
	Drained solids	190	8.0	15	401
Dehydrated:					
Regular-dried, with pits.	Uncooked:				
	Whole	187	12.6	11	402
	Pitted:				
	Chopped	150	5.0	11	403
	Ground	274	1.1	5	404
	Cooked:				
	Unchilled:				
	Solids and liquid	258	43.9	5	405
	Drained solids:				
	Pitted	210	27.7	12	406
	Chopped or ground	223	25.0	12	407
	Chilled:				
	Solids and liquid	249	6.5	49	408
	Drained solids	229	9.6	50	409
Low-moisture, pitted	Cooked, chilled:				
	Solids and liquid	251	8.2	10	410
	Drained solids	246	8.6	9	411
Pumpkin:					
Fresh	Cooked, mashed	247	5.3	6	412
Canned . . . . .	. . . . .	243	7.0	9	413
Dehydrated flakes . . . . .	. . . . .	105	5.9	5	414
Radishes, fresh	Slices	114	5.3	6	415
	Whole	132	9.7	5	416
Raisins	Uncooked:				
	Chopped	162	20.2	14	417
	Ground	269	11.5	8	418
	Whole	143	11.0	13	419
	Cooked, chilled:				
	Solids and liquid	243	7.1	13	420
	Drained solids	182	7.8	12	421
Raspberries, red:					
Fresh	Uncooked	144	5.1	9	422
Frozen, sweetened	Uncooked:				
	Solids and liquid	249	6.4	21	423
	Drained solids	218	7.4	8	424
Rhubarb:					
Fresh	Cooked, sugar added, solids and liquid	240	33.1	24	425
Frozen, in sirup	Uncooked:				
	Solids and liquid	220	27.6	20	426
	Drained solids	168	13.7	12	427
	Cooked:				
	Solids and liquid	248	10.9	15	428

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Rice:					
Long-grain	Uncooked.	198	15.1	15	429
	Cooked	169	18.0	20	430
Precooked	Cooked	140	14.6	18	431
Romaine, fresh	Shredded and broken in pieces.	48	4.6	6	432
Rutabagas, fresh	Uncooked, diced.	139	5.6	12	433
	Cooked, drained solids:				
	Diced	171	8.8	11	434
	Mashed	243	17.0	24	435
Salad dressing:					
Blue cheese:					
Bottled, regular		248	6.7	10	436
Bottled, low-calorie:					
5 Cal. per tsp.		257	3.4	10	437
1 Cal. per tsp.		244	4.8	10	438
Cooked, bottled		233	3.4	10	439
French:					
Bottled, regular		248	4.2	10	440
Bottled, low-calorie:					
12 Cal. per tsp.		236	3.6	10	441
6 Cal. per tsp.		259	4.7	10	442
1 Cal. per tsp.		243	5.3	10	443
Italian:					
Bottled, regular		233	8.8	10	444
Bottled, low-calorie,					
3 Cal. per tsp.		241	5.4	10	445
Mayonnaise, bottled, regular		221	2.8	10	446
Mayonnaise, imitation,					
bottled, low-calorie,					
7 Cal. per tsp.		251	3.0	10	447
Russian, bottled		247	2.4	10	448
Thousand Island:					
Bottled, regular		250	5.0	10	449
Bottled, low-calorie, 11					
Cal. per tsp.		247	2.7	10	450
Salt, free running		292	3.0	27	451
Sandwich spread, bottled		246	4.7	10	452
Sauerkraut, canned	Drained solids	142	15.0	24	453
Sirup, chocolate, canned		301	5.6	10	454
Soup:					
Beef-flavored noodle,	Reconstituted	229	6.2	10	455
dehydrated.					
Chicken noodle, dehydrated	Reconstituted	230	5.9	10	456
Chicken rice, dehydrated	Reconstituted	228	3.9	10	457
Green pea, dehydrated	Reconstituted	242	6.3	10	458
Onion, dehydrated	Reconstituted	230	5.8	10	459
Tomato-vegetable,	Reconstituted	228	6.9	10	460
dehydrated.					
Sour cream		241	7.4	14	461
Spaghetti	Uncooked, broken.	71	8.1	20	462

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Spinach:					
Fresh	Uncooked:				
	Chopped	52	5.2	13	463
	Whole leaves	33	6.0	27	464
	Cooked, drained solids, whole leaves . . .	156	8.1	9	465
Canned	Drained solids	223	14.1	11	466
Squash:					
Acorn, fresh	Cooked, drained solids, mashed	231	3.3	13	467
Hubbard:					
Fresh	Cooked, drained solids:				
	Diced	235	3.1	5	468
	Mashed	244	3.7	7	469
Frozen, cooked	Heated	241	3.8	13	470
White summer, fresh	Cooked, drained solids, mashed	238	2.2	10	471
Yellow summer, fresh	Cooked, drained solids:				
	Diced	205	10.1	8	472
	Slices	176	17.8	18	473
Zucchini, fresh	Cooked, drained solids, slices	152	7.6	6	474
Strawberries:					
Fresh	Whole	144	13.2	17	475
Frozen, sweetened:					
Slices	Solids and liquid	254	4.3	10	476
	Drained solids	239	11.5	8	477
Whole	Solids and liquid	253	13.1	19	478
	Drained solids	204	20.8	10	479
Succotash, frozen	Cooked, drained solids	192	13.6	18	480
Sugar:					
Brown	Packed	212	23.0	104	481
Brownulated . . . . .	. . . . .	152	1.7	8	482
Confectioner's	Unsifted	123	5.5	8	483
	Sifted	95	3.4	24	484
Granulated . . . . .	. . . . .	195	7.7	72	485
Sweetpotatoes:					
Fresh	Cooked, drained solids:				
	Mashed	253	7.2	23	486
	Slices	159	13.3	21	487
Canned, in sirup	Drained solids	200	17.7	16	488
Dehydrated flakes	Dry	116	5.2	22	489
	Reconstituted	253	4.9	21	490
Tangerines, fresh	Sections, without membrane	193	7.6	9	491
Tartar sauce, bottled . . . . .	. . . . .	231	5.9	10	492
Tomatoes:					
Fresh	Slices	181	14.3	18	493
Canned, whole	Solids and liquid	238	6.9	24	494
Canned, paste . . . . .	. . . . .	258	10.6	6	495
Canned, puree . . . . .	. . . . .	250	10.4	20	496
Topping, chocolate fudge, canned.	. . . . .	300	5.9	10	497
Turkey, fresh or frozen	Cooked:				
	Chopped	141	12.5	15	498
	Diced	135	6.6	9	499
	Broth	237	3.4	8	500

AVERAGE WEIGHT AND STANDARD DEVIATION OF A MEASURED CUP OF VARIOUS FOODS—Continued

Food item and form purchased	Form of food prepared for use	Weight of 1 cup	Standard deviation	Number of samples	Item number
		<i>Grams</i>	<i>Grams</i>		
Turnip greens:					
Canned	Drained solids	159	19.6	20	501
Frozen	Cooked, drained solids	163	26.5	15	502
Turnips:					
Fresh	Uncooked, slices	127	5.6	20	503
	Cooked, drained solids:				
	Diced	157	7.9	10	504
	Mashed	228	6.1	12	505
Vegetables, <u>see</u> individual listings					
Vegetables, mixed:					
Canned	Drained	163	11.7	15	506
Frozen	Cooked, drained solids	182	13.8	15	507
Vinegar		239	3.2	10	508
Walnuts	Chopped	119	5.4	11	509
Watercress, fresh.		33	1.7	5	510
Watermelon, fresh	Diced	160	6.6	8	511
Whey, liquid		244	1.5	10	512
Wheat, rolled:					
Hard	Uncooked	87	10.9	59	513
	Cooked	217	12.4	6	514
Soft	Uncooked	89	6.0	70	515
White sauce:					
Thin	Prepared from standard formula ³	250	3.8	10	516
Medium	Prepared from standard formula ³	255	8.4	10	517
Thick	Prepared from standard formula ³	247	6.1	10	518
Yeast, active dry		148	6.3	12	519
Yoghurt:					
Whole milk		246	4.6	10	520
Whole milk, butter-fat partly removed.		249	5.1	10	521

¹ Ready-to-eat cereals are listed by brand name only as a means of identification.

² From Matthews, Ruth H., and Batcher, Olive M. Sifted versus unsifted flour. Jour. Home Econ. 55 (2): 123-24. 1963.

³ United States Department of Agriculture. Food. U.S. Dept. Agr. Yearbook 1959. 736 pp.

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