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PROCEDURES FOR CALCULATING NUTRITIVE VALUES OF HOME-PREPARED FOODS:

As Used in Agriculture Handbook No. 8,
"Composition of Foods-Raw, Processed, Prepared,"
Revised 1963

Agricultural Research Service
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FOREWORD

This publication explains the calculation of the nutritive values for home-prepared foods listed in Agriculture Handbook No. 8, "Composition of Foods--Raw, Processed, Prepared," as revised in 1963. The formulas for these home-prepared foods, the table of vitamin retentions, the examples of calculations, and other information contained in the publication will be helpful to dietitians and others who use Handbook 8. The information will be especially useful to research dietitians who need to calculate the nutritive value of home-prepared foods that contain ingredients different in kind or proportion from those used in the Handbook. The term "formula" refers to the kinds and amounts of ingredients used in calculating the nutritive values of home-prepared foods.

The report was prepared under the supervision of Dr. Bernice K. Watt, research leader for the development of tables of food composition.

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PROCEDURES FOR CALCULATING NUTRITIVE VALUES OF HOME-PREPARED FOODS:

As Used in Agriculture Handbook No. 8, "Composition of Foods--Raw, Processed, Prepared,"

Revised 1963

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INTRODUCTION

The U.S. Department of Agriculture Handbook No. 8, "Composition of Foods ... Raw, Processed, Prepared," revised 1963 (6), includes nutritive values that were calculated for approximately 250 of the home-prepared food items that it contains. Chemical analyses for the 250 home-prepared foods were lacking or incomplete; thus, calculated

values were necessary. The present publication provides information on the formulas and procedure used in these calculations. Information is also provided here on the procedure used to convert the nutritive values of concentrated fruit juices to the values for their diluted forms.

CALCULATING THE NUTRITIVE VALUE OF HOME-PREPARED FOODS FROM FORMULAS

The procedure followed in calculating the nutritive values of home-prepared foods was to--

- (1) Select formulas of ingredients that are suitable for family-size use,
- (2) Convert the measures of the ingredients to corresponding weights,
- (3) Multiply the weights of the separate ingredients by their nutritive values per gram (derived from the values as given in table 1 of Handbook No. 8),
- (4) Adjust the total weight and nutritive values of the combined ingredients for weight changes and losses of vitamins during cooking, and
- (5) Convert the net totals to the "100-gram" basis (table 1 of Handbook 8).

The procedure is illustrated in table 1 of this publication.² This table shows the calculation of selected nutrients for a 100-gram portion of sponge cake, item 540 in Handbook 8. In the cal-

culation, data (table 2, p. 3) were used for calculating the retention of vitamins during baking. The caloric value as derived in table 1 illustrates one of the methods that can be used in calculating the energy value of a mixture of ingredients. (See also Methods for Calculating Caloric Values, p. 2.)

Selection of Formulas

The formulas used in deriving the nutritive values of home-prepared foods for Handbook 8 were chosen as reasonable, or standard, combinations of ingredients for these products. They were based on recipes from many sources and are shown here in tables 3 to 26 (pp. 9 to 32). The weights assigned to volume measures in the formulas were adapted from the Handbook of Food Preparation published by the American Home Economics Association (1), from table 3 in the 1950 edition of Handbook 8 (5), and from other published and unpublished sources.

¹ Underscored numbers in parentheses refer to Literature Cited, p. 8.

² References to tables refer to those in this publication, unless otherwise specified,

Table 1. -- Sample Caiculation of the Composition of a Home-Prepared Food From Ingredients (Sponge Cake)

Ingredient and other data	Measure	Weight	Water	Food energy	Protein	Fat	Total carbo- hydrate	Ash	Calcium	Thia- mine	Ribo- flavin	Niacin
		Grama	Grams	Calories	Grama	Grams	Granus	Grams	Milli- grams	Milli- grama	Milli- grams	Milli- grams
Eggs. Sugar. Flour, cake or pastry Salt Lemon Juice.	5 large 1 c. 1 c. 1/4 tsp. 2 1/2 tbsp.	250 200 100 1.5 37.5	184.2 1.0 12.0 Trace 34.1	408 770 364 0 9	32.2 0 7.5 0	28.8 0 .8 0	2.2 199.0 79.4 0 3.0	2.5 Trace .3 1.5	135 0 17 4 3	0.275 0 .03 0 .01	0.750 0 .03 0 Trace	0.25 0 .7 0 .04
Total		589.0	231.3	1,551	29.9	29.7	283.6	4.4	159	0.315	0.780	0.99
Losses in baking1		64.5	64.5							0.063	0.039	0.10
Baked sponge cake: Total cake		524.5 100	166.8 31.8	1,551 296	39.9 7.6	29.7 5.7	283.6 2 54.1	4.4	159 30	.252	.741 .14	.89

Evaporation, 11 percent. (See footnote 12, table 7.) Vitamin destruction based on retentions in eggs and flour: Thiamine, 80 percent; riboflavin, 95 percent; niacin, 90 percent. (See table 2, p. 3.)
 Adjustment made on carbohydrate to total 100 g. of product. See Carbohydrate, p. 164, Agriculture Handbook No. 8, revised.

Weight Change During Cooking

Changes in weight during cooking represent either a loss in weight, by evaporation of water, or an increase due to absorption of water.

The percentage losses in weight are shown in footnotes to the tables of formulas. For the foods in tables 3, 20, and 21, in which an absorption of water occurs during cooking, the amount of increase is shown as the ratio of the weight of the cooked product to the weight of the food in its dry form.

For many reasons, the amount of water that evaporates during cooking of food varies. Experimental data of this type were not available for all home-prepared foods in the Handbook.

When information on the change in weight that occurs in cooking was lacking for a prepared food but data were available on its water content, the loss by evaporation was estimated. The estimate was made from an equation based on the calculated total weight and total water content of the uncooked ingredients in the formula in relation to the percentage of water noted in analyzed values for the cooked product. This equation would not apply to foods in which more than one change occurs, such as french-fried potatoes, for which the weight change during cooking involves both a loss of water and a gain of fat.

The equation in which X represents the grams of water evaporated during cooking is as follows:

Known percentage water content of cooked product

Total weight of water in ingredients in formula minus X

Total weight of ingredients in formula minus X

For example, if the evaporation loss during cooking is unknown for sponge cake but the water content (31.8 percent) is known, the amount of water that evaporates can be calculated as follows from the data given in table 1:

 $0.318 = \frac{231.3 \text{ grams - X}}{589.0 \text{ grams - X}}$ X = 64.5 grams

When information on both weight change during cooking and water content was lacking, the loss by evaporation was estimated from the loss found for a similar type of food.

Vitamin Retention in Cooked Foods

One of the problems encountered in preparing Handbook 8 was the assessment of vitamins in cooked foods. The amounts of vitamins retained in cooked products vary with the kind of preparation given the food before cooking, the method of cooking, the length of cooking time, and the amount of water added.

Data on nutrient retention were compiled from suitable studies reported in the literature. From these data, a table of factors has been prepared for estimating the retentions of several vitamins in foods cooked according to some of the more usual methods. These factors which were used in the calculations for cooked foods in Handbook 8 are presented here as table 2.

Methods for Calculating Caloric Values

The food energy obtained for a product (sponge cake) in the illustrative table 1 above was calculated according to one of the methods of estimating the energy value of foods with-more than one ingredient. The method followed the same procedure as that described on p. 1 for nutrients. That is, the energy value per gram of each ingredient was multiplied by the weight of the ingredient in a formula and the sum of the energy values of the ingredients converted to 100 grams of cooked product.

In the method used to calculate the caloric values for the prepared foods in Handbook 8, weighted energy factors for protein, fat, and carbohydrate were derived that represented the kinds and the proportions by weight of these nutrients contributed by the several ingredients to the prepared food. These weighted energy factors were derived

Table 2. -- Factors Used to Estimate the Retention of Vitamins in Cooked Foods Listed in Handbook 8, Revised 1963

		Reten	tion factors f	or	
Food or food group	Vitamin A Value	Thiamine	Riboflavin	Niacin	Ascorbic Acid
Foods of animal origin:	Percent	Percent	Percent	Percent	Percent
Eggs:	,,,,,		06	00	Ì
Baked (as in custard)	100	80 85	95 95	90 95	
Poached	100	80	85	85	
Milk	100	90	100	100	75
Mosta poultry Clab.					
Meats, poultry, fish: Meats:	1				
Beef cuts and ground meat:			l		
Prepared without added water: Oven-roasted	75	60	85	75	
Pan-or oven-broiled:					
Cuts (steaks) Ground beef (hamburgers)	75 75	65 80	90 95	85 90	
Prepared with added water:	"] 30	,,,	,,,	
Braised (pot roast); simmered (stew meat)	75	40	80	60	
Lamb cuts: Prepared without added water:					
Oven-roasted		65	85	75	
Pan-or oven-broiled (chops)		65	85	80	
Prepared without added water:					
Oven-roasted		45	85	75	
Pan-or oven-broiled (chops)		75	90	85	
Braised (spareriba)		40	80	60	
Simmered (picnic)		45	85	75	
Pork cuts, cured: Prepared without added water:					
Oven-roasted (ham)		55	80	75	
Veal cuts: Prepared without added water:]		
Oven-roasted (rib roast)		65	85	85	
Pan-or oven-broiled (loin, round with rump)		40	75	65	
Prepared with added water; Braised (chuck roast) ²		40	75	65	
Simmered (stew meat)		25	65	50	
Miscellaneous meat items:		1.5	95	90	
Broiled (bacon) Broiled (frankfurters)		45 95	100	90	
Broiled (sausage)		85	95	75	
D 34					i
Poultry: Chicken:					
Prepared without added water;		1			
Roasted, broiled, fried	75	70	85	80	
Prepared with added water: Stewed ²	75	40	75	65	
Turkey:					
Prepared without added water: Roasted		60	85	75	
		30	"		
Fish, shellfish: Baked, broiled, fried		75	90	85	1
Stewed (oysters)		90	100	100	
oods from plant sources: Beans, peas, other legumesmature, dry (boiled)		60	90	90	
Vegetables;		""			
Potatoes: Prepared from raw:		1			
Baked in skin		75	95	95	80
Boiled in skin		90	100	100	80
Boiled, pared before cookingFried, including french-fried		90 60	90	100	80 50
Hash-browned4		40	85	80	25
Mashed		90	90	80	50
Scalloped and au gratinPrepared from frozen:		75	95	95	80
Diced (raw), hashed-browned		60	100	100	50
French-fried, heated		75	95	95	80
Mashed, heated		90	100	100	70
Baked in skin	75	75	90	90	85
Boiled in skin	90	90	100	100	80
Vegetables, other than potatoes and sweetpotatoes (cooked in small or moderate amount of water until tender):			1	1	
Prepared from raw, drained (except tomatoes):					1
Greens'	100	75	80	90	55
sugar content6	95	75	85	85	70
Tomatoes (solids and liquid)	95 95	95	100	100	90
Other. Prepared from frozen, drained:	95	75	85	85	65
Greens ⁵	100	80	85	90	60
Roots, bulbs, other vegetables of high starch and/or sugar content ⁶	100	80	90	90	70
	100	85	90	90	80
Other ⁷			1	1	1 -
fruits, fresh or dried:	75.	40	90	90	20
	75	80	90	90	70
Fruits, fresh or dried:	75	80	90	90	70

Table 2. -- Factors Used to Estimate the Retention of Vitamins in Cooked Foods Listed in Handbook 8. Revised 1963 -- Continued

		Reter	ntion factors fo	or	
Food or food group	Vitamin A Value	Thiamine	Riboflavin	Niacin	Ascorbic Acid
Foods from plant sourcesContinued Grain ProductsContinued	Percent	Percent	Percent	Percent	Percent
Flours and meals (wheat, corn, rye, buckwheat, other) in baked products	90	80	95	90	
Oatmeal or rolled oats, cooked		95	100	100	
Regular, cooked (including wheat, commeal and grits, other).	90	90	100	100	
Quick and instant, cooked		95	100	100	
Cooked, excess water discarded		55	75	80	
Cooked, water completely absorbed		85	90	90	

¹ Percentage retentions apply to drained meat. When the drippings are utilized, the retentions are: 75 percent for vitamin A, 60 percent for thiamine, 100 percent for riboflavin, 90 percent for niacin.

Percentage retentions apply to drained meat. When the drippings are utilized, the retentions are: 60 percent for thiamine, 95 percent

each for riboflavin and niacin. ³ Percentage retentions apply to drained meat. When the drippings are utilized, the retentions are: 50 percent for thiamine, 100 percent each for riboflavin and niacin.

4 Retentions are based on product prepared from boiled pared potatoes held overnight, and represent the total vitamin losses occurring from boiling, holding, and hash-browning.
5 Vegetables such as spinach, beet greens, swiss chard, collards, kale, mustard greens, New Zealand spinach, spoon or pakchoy cabbage, turnip greens, land cress, and other wild greens.
6 Vegetables such as beets, carrots, parsnips, rutabagas, turnips, onions, sweet corn, winter and summer squashes, eggplant, salsify, and

lima beans, green peas, and other immature seeds of the legume group.

7 Vegetables such as asparagus, snap beans, broccoli, brussels sprouts, cabbage, cauliflower, celery, cowpea pods, kohlrabi, okra, edible podded peas, sweet peppers, and bean sprouts.

Note. -- The retention factors shown in this table have been developed over a period of years by the staff responsible for preparing food composition tables.

for each of the energy-providing nutrients by applying, from table 6 of Handbook 8, the appropriate energy factor to the gram weight of the nutrient in each ingredient. The total calories contributed to the formula by each nutrient were divided by the total weight of the nutrient to obtain its weighted energy factor.

For example, the weighted factor used for determining the energy value of carbohydrate in sponge cake for Handbook 8 was obtained as follows:

		Total	carbohyd	lrate
Kind of data	Weight	Weight	Specific energy factor	Energy value
	<u>G</u> .	<u>G</u> .	Cal./g.	Cal.
Ingredients:				
Eggs	250	2.2	3.68	8.10
Sugar	200	199.0	3,87	770.13
Flour, cake			·	
or pastry.	100	79.4	4.12	327.13
Lemon Juice	37.5	3.0	2.70	8.10
Total		283.6		1,113.46
Weighted				
energy factor (per gram)				3,93

In a similar way, the weighted energy factors 4.30 and 9.00 were derived, respectively, for protein and fat in sponge cake. The weighted energy factors for carbohydrate, protein, and fat were then applied to the amounts of these three nutrients in the cake to obtain its caloric value. The energy value, 297 calories, for 100 grams of sponge cake obtained by this method is essentially the same as the 296 calories (table 1) obtained by the alternative method.

Weighted energy factors had to be derived for determining caloric values of the commercially prepared foods in Handbook 8, because the weights of the ingredients were not known. Data were available, however, regarding kinds of ingredients and percentages of protein, fat, and carbohydrate in the food. By estimating weights for the ingredients it was possible to derive the weighted energy factors to apply to the nutrient contents for obtaining the approximate energy value for the kind of product. To be consistent, weighted factors were also used for calculating the energy values of the 250 home-prepared foods, although either of the two methods described for obtaining energy values for home-prepared foods is suitable.

CALCULATING THE NUTRITIVE VALUE OF FRUIT JUICES DILUTED FROM CONCENTRATED FORMS

Nutritive values were included in Handbook 8 for several single-strength fruit juices reconstituted from frozen and canned (nonfrozen) concentrates. These values for diluted juices were calculated from analyzed data for the concentrated form. Directions on the labels of the frozen concentrates call for dilution by volume of 1 + 3, that is, one can of the concentrate plus three cans of water. The composition of the reconstituted juice in terms both of 100 grams and 100 milliliters may be calculated as illustrated here by using the data for concentrated unsweetened frozen orange juice,

item 1436 in Handbook 8. To simplify the illustration, the calculations are limited to one nutrient, ascorbic acid.

The average content of ascorbic acid for orange juice concentrated to 41.8 percent soluble solids (a concentrate having a Brix value of 41.8°) was found, as reported in Handbook 8, to be 158 milligrams per 100 grams. The specific gravity, 1.1878 (at 20/20° C.), corresponding to 41.8° Brix, was read from the reference table 'Degrees Brix, specific gravity, and degrees Baumé of sugar solutions,' in the standard reference 'Official

Methods of Analysis of the Association of Official Agricultural Chemists" (2). A volume of the orange juice concentrate measuring 100 milliliters would weigh 118.78 grams (100 ml. X specific gravity); and would contain 1.1878 X 41.8, or 49.65 grams of soluble solids, and 1.1878 X 158, or 187.7 milligrams of ascorbic acid. These values for 100 milliliters of the concentrate, together with the procedure for calculating the corresponding values for 100 grams and 100 milliliters diluted juice, are shown below:

Kind of data	Volume measure	Weight	Soluble solids	Ascorbic acid
(a) Orange Juice concentrate	M1. 100 300	<u>G</u> . 118.78 300.00	<u>G</u> . 49.65	Mg. 187.7
(c) Diluted Juice (single-strength) Nutrients in 400 ml. diluted Juice calculated to the basis: 100 g. (Divide figures in line (c) by	400	418.78	49.65	187.7
factor 4.1878)	95.5	100.0	11.9	44.8
100 ml. (Divide figures in line (c) by factor 4.00)	100.0	104.7	12.4	46.9

As illustrated, the amounts of nutrients present in 100 grams of the diluted juice differ from the amounts in 100 milliliters.

Values for nutrients per 100 grams of diluted juice are used for calculations of 1 pound or other avoirdupois weights. Values for 100 milliliters are converted readily to other units of volume measures—to 1 cupful, for example, by multiplying the values for 100 milliliters by 2.37 (1 cup, or 8 fluid ounces, is approximately 237 ml.).

As data on composition become available for concentrated fruit juices in addition to those listed in Handbook 8, the nutritive values of the diluted forms can be calculated from the concentrate as described here for orange juice. For practical dietary calculations, the content of total solids (100 percent minus percentage of water) may be used to estimate the content of soluble solids or the degrees Brix for fruit juice concentrates. When neither total solids nor degrees Brix is known, the specific gravity can be determined by dividing the weight of a volume measure of the concentrate by the weight of an equal volume of water.

TABLES OF FORMULAS FOR HOME-PREPARED FOODS IN HANDBOOK NO. 8

Application of Formulas

The formulas listed in tables 3 to 26 for home-prepared foods should not be regarded as recommended or tested recipes. They provide the basis for determining the extent to which the nutritive values for an item in Handbook 8 may be applied to the product made according to recipes that differ in kind or proportion of ingredients. For some products, the recipes may have proportions and ingredients sufficiently different to require a complete recalculation of nutritive values. In

other cases only certain nutritive values may need to be changed. For food mixtures involving fairly standard proportions, as white sauce, the nutritive values of the Handbook would be expected to apply.

The formulas permit the dietitian who plans therapeutic diets, and others who must control the content of certain nutrients in a dietary regimen, to estimate the effect of alternate ingredients on the content of nutrients in the finished product. For example, they permit estimating the difference in caloric value when a food product is made with nonfat milk instead of whole milk, or the content of

saturated and unsaturated fatty acids when a substitution is made in the kind of oil or fat used in the formula.

They may be used also as the basis for understanding the level of nutrients in a prepared product; for example, the higher vitamin A value of rice pudding when eggs are an ingredient as compared with the value when eggs are not included.

Development of the Tables of Formulas

The formulas in tables 3 to 26 for home-prepared food items are grouped according to similarity of ingredients or customary use in meal planning.

For this publication some of the descriptions of prepared foods in Handbook 8 were shortened. Reference can be made to the Handbook for a more complete description of an item.

In most of the tables the quantities of ingredients in the formulas are presented both as volume measures and as proportions of total weight. The volume measures are included to facilitate their comparison with those in other family-size recipes. The weights, expressed as percentages of the total weight of the ingredients, are provided to assist the dietitian in deciding how nearly the nutritive values in Handbook 8 apply to products prepared on an institutional scale.

The procedure for converting volume measures in a formula to proportional weights is illustrated by the following formula for waffles, item 2409:

Ingredient	Measure	Weight	Proportion of total weight of ingredients
		Grams	Percent
Flour, all- purpose Milk, fluid,	1 1/2 c.	165	30
whole	1 c.	244	44
Eggs	2 large	100	18
Fat, cooking	2 tbsp.	25	4.5
Sugar, granu-	·	J	
lated	1 tbsp.	12.5	2
Baking powder.	1 1/2 tsp.	6	1.08
Salt	1/2 tsp.	3	.54
Total		555.5	100.12

Rounding the percentages of ingredients to the nearest whole number was the general plan followed in the calculation. However, some exceptions were necessary. Percentages for salt, baking powder, and soda were carried to two decimal places. Content of sodium in ready-to-serve home-prepared products would differ significantly from figures shown for them in Handbook 8 if the calculations were based on any further rounding for these three ingredients. For some other ingredients

that are concentrated sources of important nutrients, percentages were not rounded to whole numbers if doing so would lead to an erroneous estimate of the nutrients supplied by the ingredient. Because of rounding, the percentages for the ingredients do not always add to exactly 100.

Notes on specific ingredients.--Ingredients such as milk, eggs, vegetables, and fruits were not described if the basic form was used; i.e., whole fluid milk, whole fresh eggs, raw vegetables, and raw fruits. Unless otherwise indicated, quantities of all ingredients are in terms of the edible part.

Flour and sugar when not described refer to enriched all-purpose flour and to white granulated sugar. Table fat may be either butter or margarine; cooking fat is hydrogenated fat of plant origin, item 999 in Handbook 8.

One kind of baking powder was used in all formulas having this ingredient—the kind that contains sodium aluminum sulfate with monocalcium phosphate monohydrate, item 130 in the Handbook.

Minute quantities of seasonings other than salt were not included in the formulas. The composition of many of the seasonings was not known, but presumably in the amounts used in the formulas their composition would have no important effect on those nutritive values shown in the Handbook for the home-prepared food items.

The Formulas: Tables 3 to 26 and Explanatory Notes

Alimentary pastes and other cereal products.—For some years, the trend has been toward "quick cooking" and "instant" cereals to supplement or replace the products that require longer cooking. This practice has brought about changes in the proportions of cereal and water used in preparation. In this rapidly developing area of new food items, more changes may be anticipated.

The nutritive values of the 33 items for alimentary pastes and other cooked cereals in Handbook 8 as revised in 1963 were based on the proportions of cereal and water stated on the package labels. The proportions shown for these items in table 3 apply to products marketed before 1963. To facilitate comparisons, the quantities listed in the table relate either to an 8-ounce package of alimentary paste or to 1 cup of other cereal in dry form.

The proportion of water to cereal in a cooked alimentary paste or other kind of cooked cereal is variable. To identify the items more specifically, the proportions of ingredients in the cooked products have been included; also, the ratio of the weight of cooked cereal to the weight of uncooked dry cereal.

When weights before and after cooking are known for other samples of these same cereals, the proportions of cereal and water in their cooked form can be compared with those given in table 3. This comparison will show whether the dilutions represented in these other samples of cooked cereals

are sufficiently different to affect the nutrient content.

In table 3, for example, 1 cup of dry regular farina weighing 180 grams yields around 1,580 grams of a cooked product of fairly thick consistency, or 8.8 times the weight of the dry cereal. The dry cereal represents approximately 11 percent of the weight of the cooked cereal $(1 \div 8.8 = 11.4 \text{ percent})$. If a thin farina gruel is prepared from 1 cup of regular farina, the yield of cooked gruel is around 3,000 grams, 16.7 times the weight of the dry farina. In this thinner product, the dry cereal represents 6 percent $(1 \div 16.7 = 6.0 \text{ percent})$ of the weight of the cooked cereal. A nutritive value in 100 grams of this obviously different product can be calculated by multiplying the nutritive value for 100 grams of dry cereal by the percentage of dry cereal (6.0 percent) in the weight of the cooked product. The thiamine value should be adjusted for loss, which occurs in cooking all the regular-type cereals. (See table 2.)

Similarly, calculations can be made of the composition of cooked macaroni or other alimentary paste when the proportions differ from the ones shown in table 3. Adjustments should be made for losses of vitamins from destruction and leaching in these cooked drained products. (See table 2.) Some leaching of other water-soluble nutrients presumably occurs, but specific information is lacking.

Cakes, cake icings, and fillings.—Formulas in tables 7 to 10 show separately the cake and icing portions of the cakes listed in Handbook 8, pages 19 and 20. In table 11 the proportions of cake and icing are given in percentages of their combined weight both before and after cooking. These proportions are based on family-size recipes in which the weights of ingredients vary with the kind of cake and icing. Therefore, it is not practical to obtain a constant proportion of cake and icing that would apply to all cakes.

A basis is provided for comparing nutrients in cakes of similar type, because the same kinds of basic ingredients (as cooking fat, item 999) were used in the formulas for all cakes. The formulas of table 7 are the basis of nutritive values of the cakes compared in tables 3 and 12 of Handbook 8. In these latter two tables the fatty-acid content and the vitamin A value of cakes made with cooking fat are compared with the same items for cakes made with table fat.

In making these comparisons for Handbook 8, table fat was substituted for cooking fat on an equal-volume basis, except for old-fashioned pound cake. For that item, substitution of fat was on an equal-weight basis.

Measures and proportions of ingredients added to cake mixes in table 8 are typical for products available in 1960.

Dessert pies.--Tables 14 and 15 show the formulas, respectively, for crust and for fillings of the pies prepared from home recipes. Table 16

gives the proportions in which crust and filling are combined in the unbaked pies.

The formula for piecrust, in table 14, having a calculated weight of 205 grams, is based on 1 cup of flour. For the proportions of unbaked crust shown for 9-inch-diameter pies in table 16, 195 grams of the basic piecrust formula was used in the one-crust pies and 345 grams (approximately 1 2/3 times the basic formula) in the two-crust pies. The different pie fillings, listed in table 15, vary in weight, accounting for the differences that are shown in the proportions of filling and crust in table 16.

Salt was considered an optional ingredient in many of the formulas for pie fillings. If the customary amount of salt were added to those formulas in table 15 for pie fillings that contain no added salt, the resultant pies would have sodium contents approximately one and one-half times the values shown for them in Handbook 8.

Data in table 17 apply to a pie (8-inch diameter) prepared from a commercial mix for crust and filling.

Fruits, dried and dehydrated.—Widely different proportions of fruit, water, and sugar may be used in the cooking of dried or dehydrated fruits. The proportion of ingredients used in calculating the nutritive values of the several cooked fruits in Handbook 8 are shown in table 20.

The proportions of water and sugar in the formulas were related to 1 pound of the dried or dehydrated fruit rather than to a volume measure of it. A volume measure of fruit is variable in weight, depending on the kind and size of fruit and the form, such as halves, slices, or nuggets.

Table 20 also shows the proportions of drained fruit and drained liquid in the cooked dried fruits. This information was not available for the dehydrated fruits.

Legumes, dry.--The nutritive values in Handbook 8 for the several cooked legumes, excepting cowpeas, apply to products that have absorbed all of the cooking water. The values for cooked cowpeas apply to a product that includes residual cooking liquid in an amount approximately one-third the weight of the combined solids and liquid. All products are completely rehydrated except lima beans, as noted in footnote 1 of table 21.

Only fragmentary data were available on the composition of cooked dry legumes. Values for these items were calculated from the composition of the dry legumes by applying factors to adjust for the dilution with water absorbed during cooking.

These factors were derived from published data on water content and weight of legumes before and after cooking. The factors were obtained by dividing either the solids content (100 minus water content) of the cooked legume by the solids content of the dry product, or the weight of the dry legume by the weight of the cooked food. For example, the factor 0.348 was derived to apply to dry white beans in the calculation of nutritive

values shown for the cooked form, item 155 in Handbook 8. The factors for dilution are shown as percentages of dry legume in the cooked product (table 21).

In calculating the nutrient content of the cooked legumes, values for vitamins were adjusted for some destruction by heat, according to the information in table 2, p. 3. No loss of nutrients by leaching occurs unless residual cooking liquid is discarded.

Main course dishes.--Formulas for many of the home-prepared products in Handbook 8 that are served as part of the main course of meals are shown in table 22.

Potpies and pizzas are not included in table 22; but formulas for the crusts of these are in table 23, and those for the toppings and fillings in table 24. The proportions of the two parts that are combined to make the potpies and pizzas are in table 25.

Likewise, the formulas for the extensive group of cooked fish and shellfish items, excepting oyster stew, are not included in table 22. The nutritive values in Handbook 8 for most of these items were based on composition data and formulas published in U.S. Department of the Interior Circular 29 (3). The values for the proximate constituents were taken from table 1 of the Circular; values for the minerals and vitamins were calculated from information on ingredients provided in table 2 of the publication. Attention is called here

to two of the items in Handbook 8--lobster and tuna salads (items 1282 and 2326). Salad dressing of the mayonnaise type (item 1940) was used in the formulas of these two salads, instead of mayonnaise itself as was erroneously indicated in footnotes 96 (p. 39) and 164 (p. 63) to table 1 of Handbook 8.

The derivation of the nutritive values for cooked meats is not explained here as the method, applied to beef, is presented in detail in a separate publication (4).

Proportions specified by individual manufacturers for preparing "ready to serve" mashed potatoes from flakes or granules varied too greatly to develop representative formulas. Instead, nutritive values were derived for them from the composition data calculated for the different brands of flakes or granules when they were prepared as directed on the package.

Information on preparation of boiled vegetables' has not been included here. Problems encountered and procedures followed in obtaining values for nutrients in cooked vegetables are discussed on pages 176–177 of Handbook 8.

Dilutions used to prepare ready-to-serve soups from their canned, dehydrated, and frozen forms are stated in table 1 of Handbook 8. This information is sufficient for identifying these products and for calculating their nutritive values.

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Table 3. -- ALIMENTARY PASTES AND OTHER CEREAL PRODUCTS: Proportions of ingredients in formulas and the cooked product

Item				ngredients					tion of we ooked cere		Ratio of
No. in AH 8, rev.	Description		Propor-		Propor-		Propor-	Cereal,	Water	Salt	Cooked to dry
		Measure	tion	Measure	tion	Measure	tion	dry form	WALEI	Sart	cereal
			Percent		Percent		Percent	Percent	Percent	Percent	
863, 865	Corn grits, degermed, enriched or unenriched, cooked. ²	1 c.	12	5 c.	88	1 tsp.	0.44	14	85	0.53	7.1:1
886, 888	Cornmeal, degermed, enriched or unenriched, cooked. ²	1 c.	13	4 c.	86	1/2 tsp.	.27	14	86	.28	7.3:1
	Farina, cooked: Enriched:										
992 `	Regular	³ 1 c.	11	³ 6 1/2 c.	89	1 tsp.	.35	11	88	.37	8.8:1
994	Quick-cooking	1 c.	11	6 c.	89	l tsp.	.38	12	88	.41	8.5:1
996	Instant-cooking	l c.	14	5 c.	86	l tsp.	.43	15	84	.48	6.6:1
998	Unenriched, regular	3 1 c.	11	³ 6 1/2 c.	89	l tsp.	.35	11	88	. 37	8.8:1
1299, 1302	Macaroni, enriched or unenriched: Cooked, firm stage (8-10 minutes).	8 02.	11	8 c.	89			4 40	4 60		2.5:1
1300, 1303	Cooked, tender stage (14-20 minutes).	8 oz.	11	8 c.	89			4 31	4 69		3.2:1
1378, 1380	Noodles, egg noodles, enriched or unenriched, cooked.	੪ oz.	11	8 c.	89			4 32	4 68		3.1:1
	Oat products used mainly as hot breakfast cereals, cooked:								·		
1383	Oat cereal with toasted wheat germ and soy grits.	1 c.	15	3 c.	84	1 tsp.	.71	16	84	.89	6.2;1
1385	Oat flakes, maple-flavored, instant-cooking.	1 c.	17	2 c.	83	1/4 tsp.	.26	18	82	.28	5.5:1
1387	Oat granules, maple- flavored, quick-cooking.	1 c.	15	3 c.	85	1/4 tsp.	.18	16	84	.19	6.4:1
1389	Oat and wheat cereal, quick- cooking.	1 c.	17	2 c.	82	1/2 tsp.	.42	18	82	.43	5.6:1
1391	Oatmeal or rolled oats	1 c.	14	2 c.	86	1/2 tsp.	. 54	14	85	.56	7.1:1
1870	Rice, cooked: Brown ⁵	i c.	31	1 2/3 c.	68	2/3 tsp.	.69	33	66	.72	3.0:1
1872	White (fully milled or polished): Enriched: Common commercial	1 c.	28	2 c.	71	l tsp.	.90	30	69	.96	3.3:1
10.2	varieties, all types.5	1 0.		2 0.		ı csp.		, ,	0,	. 50	7.7.1
1874	Parboi led	1 c.	24	2 1/2 c.	75	1 tsp.	.76	29	70	.92	3.5:1
1876	Precooked (instant)	1 c.	28	l c.	71	1/3 tsp.	.68	29	70	.70	3.4:1
1878	Unenriched, common commercial varieties, all types.5	1 c.	28	2 c.	71	l tsp.	.90	30	69	.96	3.3:1
1883	Rice, granulated, added nutrients, cooked.	1 c.	13	5 c.	87	l tsp.	.44	13	87	.45	7.7:1
2158,	Spaghetti, enriched or unenriched: Cooked, firm stage, "al	8 oz.	11	8 c.	89			4 40	4 60		2.5:1
2161 2159, 2162	dente" (8-10 min.). Cooked, tender stage (14-20 min.).	8 oz.	11	8 c.	89			4 31	4 69		3.2:1
2449	Wheat, rolled, cooked ² 6	1 c.	19	1 1/2 c.	80	1/2 tsp.	.68	22	77	.79_	4.5:1
2451	Wheat, whole-meal, cooked	l c.	11	5 c.	89	l tsp.	.45	13	86	.54	7.7:1
2453	Wheat and malted barley, toasted, cooked: Quick-cooking	1 c.	16	3 c.	84	1/4 tsp.	.18	17	83	.18	6.0:1
2455	Instant-cooking	1 c.	20	2 c.	80	1/4 tsp.	.25	21	79	.26	4.7:1

Sodium Mg./100 g.

Percentage of total weight of ingredients.

2 Except for values for sodium, the chemical composition of the items for cooked corn grits, cornmeal, and rolled wheat listed in Handbook 8 were calculated from formulas containing sait as shown in this table. For these cooked cereals, the contents of sodium, adjusted for the added salt, are as follows:

Applies to drained product.

Formula based on long-grain type.

Applies to regular type of rolled wheat weighing 84 g. per cup. A quick-cooking type currently on the market weighs around 90 g. per cup. The proportions used for this latter product in cooking are 1 c. dry cereal, 2 c. water, and 2/3 tap. salt; or by weight, 16,83, and 0.71 percent, respectively. In terms of cooked weight, the proportions in the same order for the 3 ingredients are 17, 82, and 0.76 percent and the ratio of the cooked yield to dry cereal is about 5.81. This quick-cooking type would have the following values per 100 g. cooked cereal: Water, 83.8 percent; food energy, 58 Cal.; protein, 1.7 g.; fat, 0.3 g.; total carbohydrate, 13.1 g.; fiber, 0.4 g.; ash, 1.1 g.; calcium, 8 mg.; phosphorus, 59 mg.; iron, 0.5 mg.; sodium, 295 mg.; potassium, 65 mg.; vltamin A value, (0); thiamine, 0.06 mg.; riboflavin, 0.02 mg.; niacin, 0.7 mg.; and ascorbic acid, (0).

Table 4. -- BREADS; Formulas based on home recipes1

[Percentage losses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

Item								Ingrequents	nts						
No. in	To see the second secon	Flour	Jur.	3	Liquid		Cooking fat	fat	Eggs	10	Sugar		Ot	Other	
rev.		Measure	Propor- tion ²	Kind	Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²	Kind	Measure	Propor-
	Bicuits, baking nowder, made with-		Percent			Percent		Percent		Percent		Percent			Percent
410,	Enriched or Unenriched flour.	2 c.	97	Wilk, skim, fluid.	3/4 c.	37	5 3/4 tbsp.	17	;	:	;	:	Baking powder	3 tsp. 1/2 tsp.	2.43
715	Self-rising flour, enriched 3	2 c. (self- rising).	67	Wilk, skim, fluid.	2/3 c.	37	5 tbsp.	14	1	1	1	1	1	:	:
876	Cornbread: Cornbread, southern style, made with Whole-ground cornmeal	1	ŀ	Buttermilk	.0	56	2 1/3 tbsp.	3.4	2 large	12	;	:	Cornmeal, unbolted	. o .	27
													SodaBaking powder	1/2 tsp. 2 tsp. 1 tsp.	.69 .69
877	Degermed corrmeal, enriched '	:	;	Buttermilk	2 c.	53	2 1/3 tbsp.	3.2	2 large	11	:	:	Cornmeal (item 885).	2 c.	31
									_				: : :	1/2 tsp. 2 tsp. 1 tsp.	22.85.
878	Johnny cake (northern style cornbread), made with enriched,	 	:	Buttermilk	2 c. 1 tbsp.	512	2 tbsp.	8*₹	2 large	10.6	2 tbsp.	2.6		۵.	31
	yellow degermed corrmeal.												SodaSalt	1 tsp. 1 1/2 tsp.	.95
879	Corn pone, made with white, whole- ground cornmeal.	; ;	:	Water	1 1/3 c.	55	1 1/3 tbsp.	٣	:	:	:	1	Cornmeal, unbolted (item 883)	2 c.	41
													Baking powder	2 tsp. 1/2 tsp.	1.31
880	Spoonbread, made with white, whole-ground commmes1.6	; :	1	Water	3/4 c. 1 1/2 c.	21 43	3 tbsp.	7.7	3 large	17	1	1	Corrame al, unbolted	J C.	77
													(item 883). Baking powder Salt	l tsp. l tsp.	4; £
13%, 13%,	Muffins: 3 Plain, made with Enriched or Unenriched flour.		37	Mik, skim, fluid.	1 c.	7.7	3 1/2 tbsp.	7	l large	8.4	2 tbsp.	4	Baking powder	2 tsp. 1/2 tsp.	1.28
1345	Blueberry, made with enriched flour.	1 1/8 c	31	мак	1/2 c.	31	1 1/2 tbsp.	2	l large	ដ	2 1/2 tbsp.	80	Blueberries, frozen,	1/4 c.	10
													unsweetened. Baking powder Selt	1 tsp. 2/3 tsp.	1.02

1 0. 17 1 1/2 1.57 1 45p. 12 1 bbp. 12	1 1/2 tsp41 1 1/3 c. 30 3 tsp. 1.72 1/2 tsp47	1 1/3 c. 26 3 tsp. 1.83 1/2 tsp50	1 1/2 tsp. 1.12 1/2 tsp59	1/4 tsp32	1/3 oz8 1 tsp57	
Eran, added 1 c. thismire (item 439). Bading powder 1 1/2 Molasses 2 1/4	Cornmeal, yellow 1 (item 885). 3 Salt 1/	Corrmeel, 1 yellow, unbolied (item 883). Badding powder 3 Sælt 1/	Baking powder 1	Salt	Yeast, dry 1/ Salt 1	
1	4	7	2.4	1		
1	2 tbsp.	2 tbsp.	l thep.	;	1/4 c.	
7.	7.5	∞	7.6	12	50	
4.6 large 14	l large	l large	l large	2 large	l large	
7.6	٠	~	٠,	2.7	9	
4 tsp.	3 tbsp.	2 1/2 tbsp.	2 tbsp.	l tbsp.	5 tbsp.	
Ж	39	17	87	52	5%	
1/2 0.	٦ .	1 6.	1 6.	1 6.	1/4 0.	
M1k 1/2 c.	Miss	MIK	Milk, skdm, fluid.	Milk	Water	
51	21	ສ	33	7.7	K	
1/2 0.	2/3 c.	2/3 c.	1 1/2 c.	1 c.	5 c. plus l tbsp.	
Bran, made with enriched flour 1/2 c.	Corn, made with- Enriched degermed corrmeal.	Whole-ground cornmesl	Pancakes, made with Enriched or Unenriched flour.7	Popovers4	Rolls and burs, made with milk and enriched flour.	
1346	1347	1348	1453,	1657	1898	

2 Percentage of total weight of ingredients.
2 Parcentage of total weight of ingredients.
3 Loss of 16 percent applied for evaporation in balding.
4 Loss of 20 percent applied for evaporation in balding.
5 Loss of 25 percent applied for evaporation in balding.
6 Loss of 25 percent applied for evaporation in balding.
7 Loss of 9 percent applied for evaporation in balding.
8 Loss of 25 percent applied for evaporation in balding.
9 Loss of 23 percent applied for evaporation in balding.

Table 5. -- BREADS: Formulas based on mixes and added ingredients 1

[Percentage losses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

Item					Ingred	ients					
No. in AH 8,	Description	Mix				Liquid		Eg	gs	Cookin	g fat
rev.		Kind	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²
416	Biscuits, made with	Biscuit mix with en-	2 c.	Percent 65	Milk, skim.	1/2 c.	Percent 35		Percent 		Percent
	milk. ³	flour (item 415).			fluid.						
882	Cornbread, made with egg, milk.	Cornbread mix with en- riched or unenriched yellow degermed corn- meal (item 881).	12 oz.	39	Milk	2 c.	56	l large	6.		
1350	Corn muffins: Made with egg, milk ⁴	Corn muffin mix with yellow degenmed corn- meal and enriched flour (item 1349).	12 oz.	62	Milk	2/3 c.	29	l large	9		
1352	Made with egg, water. ⁴	Corn muffin mix with yellow degermed cornmeal, cake flour, nonfat dry milk (item 1351).	14 oz.	64	Water	3/4 c.	28	l large	8		
1456, 1459	Pancakes: Plain and butter- milk, made with Milk*	Pancake and waffle mix with enriched (item 1455) or unenriched flour (item 1458).	1 c.	26	Milk	1 1/4 c.	71			l tbsp.	3
1457, 1460	Egg, milk ⁴	Pancake and waffle mix with enriched (item 1455) or unenriched flour (item 1458).	1 c.	27	Milk	1 c.	59	l large	11	l tbsp.	3
1462	Buckwheat, made with egg, milk. 5	Pancake mix with buck- wheat and other cereal flours (item 1461).	1 c.	31	Milk	1 c.	55	l large	11	l tbsp.	3
1916	Rolls, made with water ⁶	Roll mix with enriched or unenriched flour (item 1915).	14 1/4 02.	63	Water	1 c.	37				
2413, 2415	Waffles: Made with water?	Waffle mix, with en- riched (item 2412) or unenriched flour (item 2414).	9 oz. (approx. 2 1/8 c.)	45	Water	1 1/3 c.	55				
2417, 2419	Made with egg, milk ⁸	Pancake and waffle mix with enriched (item 2416) or unenriched flour (item 2418).	2 c.	32	Milk	1 2/3 c.	58	l large	7	2 tbsp.	3

¹ See p. 6, Notes on Specific Ingredients.

Table 6.--BREAD STUFFING: Formulas based on mix and added ingredients 1

[Percentage loss from evaporation in cooking is given as a footnote to the items in this table. This loss was applied to the formulus in calculating the nutritive values of the cooked foods listed in Handbook 8. The loss was derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

					Ingred	lients			
Item No. in AH 8,	Description	Bread st		Wat	er	Table	e fat	Egg	;s
rev.		Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²
	Bread stuffing:3		Percent		Percent		Percent		Percent
478 479	Dry and crumbly, prepared with water, table fat. Moist; prepared with water, egg, table fat	8 oz. 8 oz.	39 22	1 c. 2 3/4 c.	41 63	1/4 lb.	20 11	l large	5

See p. 6, Notes on Specific Ingredients.

Percentage of total weight of ingredients.
 Loss of 12 percent applied for evaporation in baking.
 Loss of 9 percent applied for evaporation in baking.

Loss of 5 percent applied for evaporation in baking.
 Loss of 17 percent applied for evaporation in baking.
 Loss of 30 percent applied for evaporation in baking.
 Loss of 28 percent applied for evaporation in baking.

Percentage of total weight of ingredients.

Loss of 20 percent applied for evaporation in baking.

Table 7. -- CAKES: Formulas for uniced cakes based on home recipes1

[Percentage losses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

								Ing	Ingredients							
Item No. in	Description		Flour			Liquid		Sugar	BT	Cooking fat	fat	Eggs		10	Other	
AH 8, rev.		Kind	Measure	Propor-	Kind	Measure	Propor-	Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²	Kind	Measure	Proportion2
521	Angelfood ³	Cake	٦ .	Percent 18	1	1	Percent	, t	Percent 36	1	Percent	7-8 whites, large, or	Percent	Cream of tartar. Salt	2/3 tsp. 3/8 tsp. 1 tsp.	0.4 0.4 .9
522	Boston cream pie (cake portion).4	Cake	1 2/3 c.	56	Milk	1/2 c.	19	٠.	23	2/4 c.	7.7	2 large	a	Baking powder. Salt	1 1/2 tsp. 1/4 tsp. 1 tsp.	.23
523	Caramel, without icing. 5 6	Cake	1 3/4 c.	54	мітк	1/2 c.	17	l c., brown.	30	1/2 c.	77	2 large	14	Baking powder. Salt	1 3/4 tsp. 1/2 tsp. 1 tsp.	.90
525	Chocolate (devil's food), without icing.6 7	Cake	2 °.	19	Milk	l c.	23	1 1/2 c.	28.6	1/2 c.	5.6	2 large	10	Baking powder. Chocolate, bitter. Sali	3 1/2 tsp. 3 oz. 1/2 tsp. 1 tsp.	1.27 8.1 2.9
528	Cottage pudding, without sauce.4 &	All-purpose	1 1/2 6.	×	маж	1/2 c.	25	1/2 c.	21	3 tbsp.	7.7	l large	10	Baking powder. Salt	1 1/2 tsp. 1/4 tsp. 1 tsp.	1.24
	Fruit cake:	All-purpose		71	Cider Cream, light, sour.	1,72 °.	44	J c.	φ		7.3	5 large	«о	Molasses, light. citron. Raisins Raisins Courants Almonds chopped. Baking powder. Soda Salt Spices candied. Pecans, chopped.	1 c. 4 cz. 1 1b. 1 1 1b. 1 2 tsp. 1 2/3 tsp. 1 2/3 tsp. 1 2/3 tsp. 1 2/3 tsp. 1 2/3 tsp. 1 2/3 tsp.	10.5 3.6 14.6 14.6 16.6 2.9 2.9 2.9 2.0 1.0 1.8

See footnotes at end of table.

Table 7, --CAKES: Formulas for uniced cakes based on home recipes1--Continued

re given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the mutritive values of the cooked foods listed in it he section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]	
Percentage losses from evaporation in cooking are given as footnotes to specific i Mandbook 8. The losses were derived as explained in the section, Weight Change Du	

		22.	2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.33 .522 .522	.35	.18	64: 1:	:25
		Propor-	<u>Percent</u> 0.11 .07 .57 10.6 12 8.5 8.5	&	٦			.,
	Other	Measure	1/4 1sp. 2 1sp. 1 c. 1 c. 1 c. 2 ised- 1 loss 2 c. 1 loss 2 c. 1 loss 3 c. 2 c. 2 c. 2 loss 1 loss 4 c. 2 c. 2 c. 1 tsp.	1 c. 1 tsp. 7/8 tsp. 3/8 tsp. 2 1/2 tsp.	2 1/4 tsp. 1/2 tsp. 1 1/2 tsp.	1/2 tsp. 1 tsp.	5/8 tsp. 1/6 tsp. 1/8 tsp.	1/4 tsp.
	#10	Kind	Salt	Molasses, light. Bating powder. Soda. Salt.	Baking powder. Salt	SaltFlavoring	Baking powder. Salt	Salt
		Propor- tion ²	ll.6	ω	я	27	26.4	75.7
	8 33 3	Measure	5 whites, medium.	2 medium	2 medium	9 large	3 large	5 large
	g fat	Propor- tion ²	7.5	8.7	10.1	. 72	ជ	:
	Cooking fat	. Measure	.، 2/2 ه.	1/2 c.	7 thep.	2 6.	3/8 c.	:
Ingredients		Propor- tiom ²	D5	6	56	72	56.4	35
In	Sugar	Measure	. o	1/2 c.	1 1/4 c.	2 6.	3/4 c.	, c.
		Propor- tion ²	Percent 9	23	72	:	7.2	7.9
	Liquid	Measure	2/2 °.	1 c.	7/8 c.	:	2 2/3 tbsp.	2 1/2 tbsp.
		Kind	Cream, light, sour.	Weter	Milk	;	Milk	Lemon juice
		Propor-	16.4	72	72	72	56.4	17
	Flour	Measure	. 2	2 1/2 c.	2 1/8 c.		1 1/2 c.	1 c.
		Kind	All-purpose	All-purpose	Cake	Cake	Cake	Cake
	Description		Light ⁶	Gingerbread ⁶	Plain cake or cupcake, without icing. 4 9	Pound: Old-fashioned ^{6 10}	Modified ¹¹	Sponge ^{1,2}
	No. in	AH 8, rev.	532	533	534	538	539	3,5

1.63	1.43
3 tsp. 1/4 tsp. 1 1/2 tsp.	2 tsp. 1/4 tsp. 1 tsp.
Balling powder. 3 tsp. $\chi \ell$ tsp. Salt $1 \chi / 2$ Flavoring 1 $\chi / 2$ tsp.	Baking powder. 4 tsp. Salt 1/4 tsp. Flavoring 1 tsp.
16	6
4 whites, medium, or 1/2 c.	2 large
13.6	7.6
1/2 c.	1/2 c.
23	28
1 c.	1 1/2 c.
17	23
1/2 c.	٦ د.
Milk	мык
77	28
1 3/4 c.	3 c.
Cake	Cake 3 c.
White, without icing. 4 13 Cake 1 3/4 c. 24	Yellow, Without icing.14 15
543	7,5

2 See p. 6, Notes on Specific Ingredients.
2 Percentage of Votal weight of ingredients.
3 Loss of L0 percent applied for evaporation in baking.
4 Loss of 10 percent applied for evaporation in baking.
5 Loss of 10 percent applied for evaporation in baking.
6 Loss of 10 percent applied for evaporation in baking.
6 Loss of 10 percent applied for evaporation in baking.
7 Used also for cited chocolate elevit is food) sets. Item 526, with fruit sauce (strawberry).
8 Used also for cottage pudding: Item 529, with chocolate foring: item 536, with fruit sauce (strawberry).
9 Used also for ited plain cake or uppaise: Item 529, with chocolate foring: item 536, with marking.
12 Loss of 12 percent applied for evaporation in baking.
14 Used also for ited white comut icing; item 546, with encodate icing.
15 Loss of 10 percent spplied for evaporation in baking.
16 Loss of 10 percent spplied for evaporation in baking.
17 Loss of 10 percent spplied for evaporation in baking.
18 Loss of 9 percent spplied for evaporation in baking.
19 Loss of 9 percent spplied for evaporation in baking.
19 Loss of 9 percent spplied for evaporation in baking.

Table 8. -- CAKES: Formulas for uniced cakes based on mixes and added ingredients1

[Percentage losses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

						Ingre	dients				
Item lo. in	Description	Min			Liquid		Egg	8		Other	
AH 8, rev.		Mesaure	Propor- tion ²	Kind	Mesaure	Propor- tion ²	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²
			Percent			Percent		Percent			Percent
550	Angelfood, made with water, flavoring.	16 02.	62	Water	1 1/4 c.	38			Almond fla- voring.	5/8 tap.	0.4
552	Chocolate malt, made with eggs, water.	20 02.	63	Water	1 c.	26	2 large	11			,
554	Coffeecake, made with egg, milk.5	10 1/2 02.	63	Milk	1/2 c.	26	1 large	11			
556	Cupcake, made with egg, milk.) 6	11 3/4 02.	66	Milk	1/2 c.	24	1 large	10			
559	Devil's food, made with eggs, water.?	20 oz.	63	Water	1 0.	26	2 large	11			
561	Gingerbread, made with water.	14 2/3 02.	64	Water	1 c.	36					
563	Honey spice, made with eggs, water.4	20 oz.	61	Water	1 1/8 c.	28	2 iarge	11			
565	Marble, made with eggs, water.4	20 oz.	61	Water	1 1/8 c.	28	2 large	11			
567	White, made with egg whites, water.4	20 oz.	63	Water	1 1/8 c.	30	≥ whites, large.	7			
569	Yellow, made with eggs, water.	20 02.	63	Water	1 c.	26	2 large	11			

Table 9. -- CAKE ICINGS AND FILLINGS: Formulas based on home recipes1

[Percentage iosses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied a illustrated in table 1, p. 2]

							_	Ingredi	enta					
No. in	Description		Sugar			ITdrīq		Egg	8	Table	: fat	Ot	her	
AH 8, rev.		Kind	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²	Messure	Propor- tion ²	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²
				Percent			Percent		Percent		Percent			Percent
522	Custard filling for Boston cream pie. 3 4	Cane, granulated.	1/2 c.	15	Milk	2 c.	66	2 large	13			FlourSaltVanilla	1/3 c. 1/4 tsp. 1 tsp.	.02 .6
570	Cake icings; Caramel 5 6	Brown	3/4 c.	64	Milk	5 thap.	30			1 tbsp.	5.5	Vanilla	1/4 tap.	.4
571	Chocolste 7 5	Cane, granulated.	1 c.	51	Milk	1/2 c.	31			l tbsp.	3.5	Chocolate, bitter Vanilla	2 og. 1/2 tap.	14
72	Coconut ⁹ 10 11	Cane, granulated.	1 c.	56	Water	1/4 c.	17	l white, large.	9			Salt	1/8 tsp. 2 os. 1/2 tsp.	.22 17
573	White: Uncooked ¹²	Cane, powdered.	2 c.	80	Cream, light, coffee or table.	3 thap.	14			1 tbsp.	4.4	Vanilla	l tsp.	1.3
574	Boiled ¹¹ 13	Cane, granulated.	1 c.	68	Water	1/4 c.	20	l white, large.	11			Salt	1/8 tap. 1/2 tap.	.27

See p. 6, Notes on Specific Ingredients.
 Percentage of total weight of ingredients.
 Loss of 10 percent applied for evaporation in baking.
 Loss of 18 percent applied for evaporation in baking.

Loss of 4 percent applied for evaporation in baking.
 Used also for cupcake: Item 557, with chocolate icing.
 Loss of 13 percent applied for evaporation in baking.

I See p. 6, Notes on Specific Ingredients.

Percentage of total weight of ingredients.

Percentage of total weight of ingredients.

Approximately 1/3 the yield (27 percent) from this formula was combined with the baked cake and sugar topping for Soston cream pis. (Also see table 11.)

Loss of 10 percent applied for evaporation in cooking:

Used also for the following cakes with consult sing: Caramel, item 524; yellow, item 545; honey spice, item 563.

Loss of 17 percent applied for evaporation in cooking.

Used also for the following cakes with coccount cing: Chocolate (devil's food), item 526; plain cake or cupcake, item 535; yellow, item 546; cupcake (from mix), item 557; devil's food (from mix), item 559; white (from mix), item 567; yellow (from mix), item 569.

Loss of 16 percent applied for evaporation in cooking.

Boiled white frowting with cocount sprinkled on top.

Boiled white frowting with cocount sprinkled on top.

Used also for white cake with cocount ising: Item 542.

Loss of 15 percent applied for evaporation in cooking.

Loss of 15 percent applied for evaporation in cooking.

Boiled white frowting with cocount sing: Item 542.

Loss of 15 percent applied for evaporation in cooking.

Boiled white frowting with cocount sprinkled on top.

Boiled white frowting with cocount sing: Item 542.

Loss of 15 percent applied for evaporation in cooking.

Boiled white frowting with cocount sing: Item 542.

Loss of 15 percent applied for evaporation in cooking.

Boiled white frowting with cocount sing: Item 542.

Loss of 15 percent applied for evaporation in cooking.

Boiled white frowting with cocount sprinkled on top.

Boiled white frowtin

Table 10, -- CAKE ICINGS: Formulas based on mixes and added ingredients'

[Percentage loss from evaporation in preparation is given as a footnote to the items in this table. This loss was applied to the formulas in calculating the nutritive values of the prepared foods listed in Handbook 8. The loss was derived as explained in the section, weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

-				Ingredi	ents		
ltem No. in		MI	x	Wat	er	Table	fat
AH 8, rev.	Description	Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²
576	Chocolate fudge, made with water, table fat.	14 02.	Percent 78	5 tbsp.	Percent 14	3 tbsp.	<u>Percent</u>
578 579	Creamy fudge (contains non- fat dry milk): Made with water, table fat.	6 1/2 oz. 6 1/2 oz.	87 7 7	2 tbsp. 2 tbsp.	13	2 tbsp.	11.6

Table 11. -- CAKES: Proportions of cake and of icing or filling in uncooked and cooked product

		Propo	rtion of w	eight of	cake
Item No.in	Description	Uncoo	ked	Cook	ed
AH 8,		Cake	icing or	Cake	loing or
		Percent	Percent	Percent	Percent
	Cakes baked from home recipe:	71	1 29	71	1 29
522	Boston cream pie with custard filling and powdered-sugar topping.	, ,,			
524	Caramel with caramel icing Chocolate (devil's food):	74	26	76	24
526	with chocolate icing	73	27	75	25
527	With uncooked white icing	77	23	75	25
529	With chocolate sauce2	75	25	73	27
530	With fruit sauce (strawberry) Plain or cupcake;	79	21	78	22
535	with chocolate icing	69) 31	70	30
536	with boiled white icing	75	25	76	24
537	With uncooked white icing White:	73	27	71	29
542	with coconut icing	67	4 33	68	4 32
543	With uncooked white icing Yellow:	70	30	68	32
545	With caramel icing	81	19	82	18
546	With chocolate icing	73	27	75	25
552	Chocolate malt with uncooked white icing.	74	26	70	30
557	Cupcaka with chocolate icing	68	3 32	70	3 30
559	Devil's food with chocolate icing.	70	30	71	29
563	floney spice with caramel icing	78	22	78	22
565	Marble with boiled white icing	76	24	75	25
567	White with chocolate icing	70	30	69	31
569	Yellow with chocolate icing	70	30	71	29

¹ Custard filling, 27 percent (approximately 1/3 the yield from the formula given in table 9); powdered-sugar topping, 2 percent.
2 Chocolate sirup, thin type: Item 760.
3 Strawberries, frozen, sweetoned, aliced: Item 2219.
4 On uncooked basis, 27 percent boiled white icing, 6 percent coconut; on cooked basis, 26 percent boiled white icing, 6 percent coconut.
3 Chocolate icing, approximately 2/3 the yield from the formula given in table 9.

Table 12. -- COOKIES: Formulas based on home recipes1

[Percentage losses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

Item								Ir	ngredients						
No. in	Description	Flo	ur		Liquid		ىبىق	ar	Cooking	fat	Egg	8	01	ber	
rev.		Measure	Propor- tion ²	Kind	Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²	Kind	Measure	Propor-
			Percent			Percent		Percent		Percent		Percent			Percen
813	Brownies with nuts, with enriched flour. 3	3/4 c.	14				1 c.	32	1/3 c.	11	2 medium	15	Chocolate, bitter. Baking powder. Salt Pecan halves. Vanilla	1/2 tsp. 1 c.	9 .31 .48 17 .7
817	Chocolate chip, with enriched flour.4	1 1/8 c.	22				6 tbsp., white. 6 tbsp., brown.	14 15	1/2 c.	18	l large	9	Salt	1/2 tap. 1/2 tap. 1/4 c.	.54 .36 6
831	Sugar, soft, thick, with enriched flour.	2 1/4 c.	35	Milk	1/2 c.	17	2 c.	28	7 tbsp.	12	l medium	6	Baking powder. Salt Flavoring	2 tsp. 1/2 tsp. 1/2 tsp.	1.12 .35

See p. 6, Notes on Specific Ingredients.
Percentage of total weight of ingredients.
3 Uncooked; loss of 1 percent applied for evaporation in preparation.

See p. 6, Notes on Specific Ingredients.
Percentage of total weight of ingredients.
Loss of 5 percent applied for evaporation in baking.
Loss of 8 percent applied for evaporation in baking.
Loss of 17 percent applied for evaporation in baking.

Table 13. -- COOKIES: Formulas based on mixes and added ingredients 1

[Percentage losses from evaporation in cooking are given as footnote, to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

						I	ngredient	9				
Item No. in	Description		Mix			Liquid		Egg	ζs		Other	
AH 8, rev.	Description	Kind	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²
835	Brownies, with enriched flour: Made with water, nuts.	Brownie mix, complete (item 834).	10 1/2 oz.	Percent 69	Water.	1/3 c.	Percent 17		Percent	Pecans, chopped,	1/2 c.	Percent 14
837	Made with egg, water, nuts.	Brownie mix, incomplete (item 836).	16 02.	73	Water.	1/4 c.	10	l large	8	Pecans, chopped.	1/2 c.	10
839	Plain cookies, with unen- riched flour: Made with egg, water. 5	Cookie mix, plain (item 838).	11 oz.	84	Water.	l tbsp.	4	l small	10	Flavoring	1 1/8 tsp.	1.5
840	Made with milk4	Cookie mix, plain (item 838).	11 oz.	89	Milk	2 tbsp.	9			Flavoring	1 1/8 tsp.	1.6

Table 14. -- PIECRUST: Formula based on home recipe 1

[Percentage loss from evaporation in cooking is given as a footnote to the item in this table. This loss was applied to the formula in calculating the nutritive values of the cooked food listed in Handbook 8. The loss was derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

Item						Ingred	ients			
No. in AH 8,	Description	Flo	our	Cookir	g fat	Wat	er		Other	
rev.		Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²
1597, 1599	Piecrust or plain pastry (unbaked), 3 4 made with Enriched or Unenriched flour.	1 c.	Percent 54	5 tbsp.	Percent 30	2 tbsp.	Percent 14	Salt	1/2 tsp.	Percent 1.46

See p. 6, Notes on Specific Ingredients.
 Percentage of total weight of ingredients.
 Loss of 5 percent applied for evaporation in baking.
 Loss of 8 percent applied for evaporation in baking.
 Loss of 11 percent applied for evaporation in baking.

¹ See p. 6, Notes on Specific Ingredients.
2 Percentage of total weight of ingredients.
3 Baked piecrust, items 1598 and 1600, had the same formula before baking. Loss of 7 percent allowed for evaporation in baking of pie shell.

4 Used also for the crust portion of various pies: Items 1566-1588. See table 16.

Table 15, -- PIE FILLINGS: Formulas based on home recipes 1

Quantities listed represent amounts required to prepare a 9-inch-diameter pie. From evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nut. A values of the cooked foods listed in Mandbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

Item							Ingred							
o. 1n AH 8,	Description	Fruit, veg	etable, or n	ut	Egg	rs .	Suga	r		Liquid			Other	,
rev.		Kind	Messure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²	Kind	Messure	Propor tion ²
	Fillings for 1- crust pies:		2 medium	Percent	2 medium	Percent	1/2 c.	Percent 11	Milk	1 3/4 c.	Percent 48	Cornstarch	2 1/3 tbsp.	Percen 2
1567 1570	Banana custard ⁴ Butterscotch: ⁴ Filling por-	Benenes	2 medium	29	2 yolks,	3	1 c.,	20	Milk	2 0.	44	flour	1/2 c.	5
	tion.				large.	6	brown.	4	Water.	3/4 c.	16	Table fat.	2 tbsp.	2.5
	Meringue por- tion.				large.	28		32			31	Gelatin	l thep.	1.3
1572	Chocolate chiffon. 4				4 medium	20	l c. less l tbsp.	32	Water.	3/4 c.	,,,	Chocolate, bitter. Vanilla	1 1/2 oz. 1/4 tsp.	7.5
573	Chocolate me- ringue; 5 Filling por-				2 yolks,	4	3/4 c.	17	M3.1k	2 a.	55	Chocolate,	2 02.	6.4
	tion.				medium.				Water.	1 tbsp.	1.6	bitter. Flour Salt Vanilla	3 tbsp. 1/4 tsp. 1 tsp.	2.3
	Meringue por-				2 whites, medium.	7	1/4 c.	6						
1574	Coconut custard4,	Coconut, dried, sweetened.	1 1/4 oz.	4	3 large	18	7 tbsp.	9	Milk	2 1/2 0.	67	Salt Cornstarch Vanilla	1/8 tsp. 1 2/3 tbsp. 1 3/4 tsp.	.1 1.5 .8
1575	Custard4				3 large	18	7 thep.	10	Milk	2 5/8 c.	70	Cornstarch Salt Vanilla	1 2/3 tbsp. 1/3 tsp. 1 3/4 tsp.	1.5 .2 .8
1576	Lemon chiffon4	Lemon juice Lemon rind, grated.	5 1/3 tbsp. 1/2 tsp.	.2	5 medium	36	1 c.	33	Water.	6 tbap.	15	Celatin Cornstarch	1 thep. 1 tap.	1.3
1577	Lemon me- ringue: ' Filling por- tion.	Lemon juice	1/4 c.	7.5	3 yolks, large.	6	3/4 c.	18.4	Water.	1 1/2 c.	44	Cornsterch Salt Butter	4 tbsp. 1/4 tsp. 1 tbsp.	4 .2 1.7
	Meringue por- tion.				3 whites, large.	12	1/4 c.	6						
1580	Peasn ⁶	Pecans	1 1/2 c.	23	2 large	14	4 tsp.	2.3	Water.	2 1/3 tbap.	5	Flour Corn sirup	2 1/3 tbsp. 1 c. plus 3 tbsp.	2.6 53
1582	Pineapple chif- fon ⁴	Pineapple juice, canned, un- sweetenad.	ll thep.	30	4 medium	32	3/4 c.	25	Water.	4 1/2 tbsp.	11.4	Gelatin	l tbsp.	1.4
1583	Pineapple cus- tard: 4 Filling por- tion.	Pineapple, canned, crushed, light- sirup pack.	3/4 c.	20	2 yolks, large.	3.3	2/3 a.	13.6	Milk Water.	1 1/3 c. 3/4 c.	33 18	Flour	4 tbsp.	3.1
	Meringue por- tion.				2 whites, large.	6.5	2 thap.	2.5						
1584	Pumpkin ⁶	Pumpkin, canned	1 1/2 c.	42	2 large	12	1/2 c.	12	Milk	1 c.	30	Table fat. Spices	2 tbsp. 2 1/4 tsp.	3.4
587	Strawberry ⁷	Strawberries Lemon juice	3 c. 1 tbsp.	78 2.6			1/2 c.	17				Cornstarch	1 1/2 tbsp.	2.1
588	Sweetpotato ⁶ ,	Sweetpotatoea, boiled, riced. Lemon juice	1 1/2 c. 2 tsp.	33.4	2 large	10.2	1/4 c.	5	Milk	2 c.	47.3	Table fat. Spices	2 tbsp. 1/2 tsp.	2.
1566	Fillings for 2- crust pies: 6 Apple	Apples, sliced	3 1/4 c.	62			3/4 c.	19	Water.	1/2 c.	16	Cornstarch Sult Table fat.	1 1/3 tbsp. 1/8 tsp. 1 tap.	1.
1568	Blackberry	Blackberries, canned, water pack. Lamon juice	2 1/2 c. 2 tsp.	81			1/2 c. plus 1 tbsp.	15				Cornstarch	2 1/3 tbsp.	2.
569	Blueberry	Blueberries, canned, water pack.	2 1/2 c.	81			1/2 c. plus 1 tbsp.	15				Cornstarch	2 1/3 tbsp.	2.
1571	Cherry	Cherries, canned, water pack.	2 tsp.	77			11 1/3 tbsp.	19				Cornstarch Salt Table fat.	1/8 tap.	2.

See footnotes at end of table.

Table 15. -- PIE FILLINGS: Formulas based on home recipes 1-- Continued

[Quantities listed represent amounts required to prepare a 9-inch-diameter pie. Percentage losses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

							Ingre	ilents						
tem o. in	Description	fruit, vege	table, or nu	t	ER	z s	Suga	аг		Liquid			Other	
AH 8, rev.	0.00117410	Kind	Messure	Propor- tion ²	Measure	Propor- tion?	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²	Kind	Mnasure	Propor- tion ²
	_			Percent		Percent		Percent			Percent			Percent
	Fillings for 2- crust pies6 Continued													
578	Mince	Apples, dehy- drated,sulfured Haisins	1/2 c. 2/3 c. seeded or 5/8 c.	9			1/2 c., brown.	ט	Water Vine- gar.	1 3/4 c. 1 1/3 tsp.	58 .9	Flour Molasses Spices Suet	4 tsp. 2 1/4 tsp. 1 3/4 tsp. 1/4 oz. 2/3 tsp.	1.3 2.1 .6 .9
		iemon peel, grated. Orange peel, grated.	seedless. 1/2 tbsp. 1/2 tbsp.	.4										
579	Feach	Feaches	5 3/4 medium or 3 1/2 c. sliced.	78			11 1/2 tbsp.	19				Cornstarch	2 2/3 tbsp.	2.9
581	Pineapple	Pineapple, crushed, canned, light-sirup pack.	1 3/4 c.	60			1/2 c.	13	Water	9 thap.	18	Corn strup Cornstarch	2 1/3 thep. 2 thep.	6.6
585	Raisin	Haisins	l 1/2 c. seeded or l 1/4 c. seedless. l tbsp.	26			1/2 c.	13	Water	1 7/8 c.	58	Cornstarch Salt	l tbsp. Dash	.9 .04
1586	Mhubarb	fhubarb, (rozen	2 1/2 c. or 21 os.	80			7 tbsp.	12	Water	2 1/3 tbsp.	5	Cornstarch	2 1/2 tbsp.	. 3

¹ See p. 6. Notes on Specific Ingredients.
2 Percentage of total weight of ingredients.
3 Losses applied for evaporation in cooking are given in this table only for 1-crust pies in which the crust and filling are cooked separately before being combined into pie. Losses applied for 1-crust pies in which the crust and filling are baked together are given in table 16.
5 Loss of 20 percent applied for evaporation in cooking.
6 Losses applied for evaporation in cooking, representing loss from both filling and crust, are given in table 16 for 2-crust pies and for 1-crust pies in which the cruct and filling are baked together.
7 Loss of 2 percent applied for evaporation in cooking.

Table 16. -- PIES (BASED ON HOME RECIPES): Proportions of crust and of filling in uncooked product

[Proportions listed represent amounts of crust and filling required to prepare a 9-inch-diameter pie. Percentage losses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

Item No. in	Description		of weight oked piel	Item No. in	Description		of weight
AH 8, rev.	Description .	Crust	Filling	AH 8,		Crust	Filling
		Percent	Percent			Percent	Percent
1567	One-crust pies: Banana custard	1		1585	Two-crust pies: Raisin ^{6 7}	30	70
1570	Butterscotch	18	2 82	1566	Apple ⁸	,	1
1574 1575	Custard		1	1568	Blackberry ⁸	Н	1
1583	Pineapple custard	J	1	1569 1571	Blueberry ⁸	11	
1577	Lemon meringue	1		1578	Mince ³ 7	32	68
1584	Pumpkin ³	19	4 81	1579	Peach ⁸	11	}
1588	Sweetpotato ³	ı		1581	Pineapple 7 8	IJ	į.
1573	Chocolate meringue	20	5 80	1,000	National Province		
1580	Pecan ³	21	79				
1572	Chocolate chiffon	1				}	1
1576	Lemon chiffon	25	75	11	1	1	1
1582	Pineapple chiffon	1		11	1		ì
1587	Strawberry	1				L	

¹ Percentage of total weight of ingredients in both crust and filling except for butterscotch pie (item 1570), chocolate meringue pie (item 1573), and pineapple custard pie (item 1583). For butterscotch pie filling, approximately 80 percent of the total weight of ingredients was used; for chocolate meringue and pineapple custard fillings, 90 percent.

2 This proportion for butterscotch pie represents 74 percent filling and 8 percent meringue; for pineapple custard, 75 percent filling

Table 17. -- PIE (COCONUT CUSTARD): Formula based on mix and added ingredients1

Quantities listed represent amounts required to prepare an 8-inch-diameter pie. Percentage loss from evaporation in cooking is given as a footnote to the item in this table. This loss was applied to the formulas in calculating the nutritive values of the cooked food listed in Handbook 8. The loss was derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

					Ingredien	ts			
Item No. in	Description	Mi	x			Liquid		Fggs	3
AH 8, rev.	eser i peron	Kind	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²	Measure	Propor- tion ²
				Percent			Percent		Percent
1596	Coconut custard pie: 3 4	Coconut custard pie mix (item 1595);							
	Crust, water added	Crust portion	5 1/2 oz.	81	Water	2 1/2 tbsp.	19		
	Filling, egg yolk, milk added.	Filling portion.	5 1/2 oz.	19	Milk	2 1/2 c.	76	2 yolks, large.	4.3

See p. 6, Notes on Specific Ingredients.
 Percentage of total weight of ingredients.
 The proportions of crust and filling in the unbaked pie were 16 and 84 percent, respectively. Approximately 3/4 of the formula given in this table was used for the crust portion of the pie.

For evaporation in cooking, 11 percent loss was applied to the weights of unbaked crust and filling.

Table 18. -- DESSERTS, MISCELLANEOUS: Formulas based on home recipes

Percentage losses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed

									Ingre	Ingredients							
Item No. in	Description	Cez	Cereal, tapioca			Liguid		Sugar		Eggs			Fruit			Other	
AH 8, nev.		Kind	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²
				Percent			Percent		Percent		Percent			Percent			Percent
52	Apple brown betty³	Bread- crumbs, soft.	3 3/4 c.	15	Wa ter	3 1/2 tbsp.	8	1/2 c.	0	1	:	Арріев	5 1/3 c.	89	Table fat Salt	2 tbsp. 1/6 tsp. 2/3 tsp.	2.5
927	Bread pudding with raisins3	Bread- crumbs, dry, grated.	2 c.	11	Milk		61	1/2 c.	6.3	3 large	7.6	Raisins, seed- less.	1 C•	10	Table fat Salt Vanilla	2 tbsp. 1/4 tsp. 1 tsp.	1.8 .09
3	Charlotte russe, with lady- fingers, whipped-cream filling.	Lady. fingers.	*	75	1	;	;	-	:	:	1	;	:	:	Whipped-cream filling.	3 1/3 c.	58
	Whipped-cream filling (ingredient in item 641).	1	1	:	water	1/2 c.	29	4 tbsp., powdered.	89	:	1	:	1	1	Geletin Wanills Whipping cream, whipped.	1 1/2 tbsp. 1 tsp. 2 c.	3.5
934	Cream puffs with custard filling: Shell 3.	Flour 1 1/4	1 1/4 c.	18	интк	1 c.	33	ł	ł	5 large	35	1	:	ŀ	Cooking fat	9 2/3 tbsp. 1/8 tsp.	21 II.
	Oustard filling ³	Cornstarch 1/4	1/4 c.	7.7	יייאנזאי	2 0.	- 69	1/2 c.	77	2 large	14	:	1	;	Vanilla	1/2 tsp.	e.
876	Custard, baked ³	:	:	t	אנטע	2 c.	78	3 tbsp.	9	2 large	16	:	ŧ	;	SaltVanilla	Desh 1/4 tsp.	.2
596	Eclairs with cuctard filling, chocolate icing: Shell ³	Flour	1 1/4 c.	18	Milk) c.	33	!	1	5 large	34	1	1	!	Cooking fat Salt	9 2/3 tbsp. 1/8 tsp.	\$1 11.
	Oustard filling ³	Cornstarch 1/4	1/4 c.	7.7	MIX	2 °.	67	1/2 c.	14	2 large	14	+	1		Vanilla	1/2 tsp.	ú.
	Chocolate icing7	1	1	1	млк	1 1/3 c.	71	1 c.	57	1	-	:	:	:	Chocolate, bitter. Corn sirup Table fat	1 oz. 1 tbsp. 1 tbsp. 1/2 tsp.	6.3
1822	Prune whip ⁸ 9	1	:	:	1	:	1	3 tbsp.	ri .	3 whites, medium.	27	Prune pulp, cooked. Lemon	3/4 c. 1 tbsp.	58	&1t	1/8 tsp.	.23
												Juice.				į.	

					ı		
0.7 3.7 .02	ġώ	ø. v.	;	1	%	οι.	
1 tsp. 3 1/2 tbsp. Dash 1/2 tsp.	1/8 tsp. 1/2 tsp.	l tsp. l tablet	:	1	Dash	1/8 tsp.	1/4 tsp. 1 tsp.
Table fat Cocoa, high fat. Salt	Salt	Vanilla	i	+	Salt	Salt 1/8 tsp.	Salt 1/4 tsp.
1	;	:	65	17	ø	17	ł
:	:	:	2 c.	2 °.	5 tbsp.	1 c.	;
ł	1		Rhubarb 2 c.	Rhubarb, frozen.	Raisins 5 tbsp.	Apples, diced.	1
ł	:	:	;	:	:	1	15
1	;	1	:	:	1	-	2 large
15	7	2	27	18		12.8	10
1/2 c.	3 tbsp.	3 thep.	1/2 c.	5 tbsp.	4 tbsp.	1/2 c.	1/3 c.
73 2.2	89	2.7	₩	T.	63	. 19	72
Milk 2 c. Water 1 tbsp.	2 c.	Milk 2 c. Water l tbsp.	2 tbsp.	2 1/2 tbsp.	2 c.	2 c.	2 c.
Milk	MIK	Milk Water	Water. 2 tbsp.	Water. 2 1/2 tbsp.	Water.	₩ater	м: лк
ĸ	3.6	:	;	:	σ	2.6	2.1
4 tbsp.	2 1/2 tbsp.	;		;	3/8 c.	1/2 c.	1 1/2 tbsp.
Cornstarch	Cornstarch 2 1/2 tbsp.	1		ł	Nice, long- grain, raw (item 1877).	Tapioca, granu- lated.	
Puddings with starch base: Chocolate 10	Vanilla (blanc mange)3	Rennin dessert, home-prepared	Khubarb: Raw, cooked, added sugar 9	Frozen, sweetened, cooked, added sugar. 11	Rice pudding with raisins ⁶ 9	Tapioca desserts: Apple tapioca ⁶ %	Taploce cream pudding3 granu- granu- lated.
1823	1824	1860	1866	1868	1891	5269	2270

1 See p. 6, Notes on Specific Ingredients.
2 Percentage of total weight of ingredients.
3 Loss of 10 percent applied for evaporation. The percentage loss applies to the "eight of the ingredients excluding the whipped cream.
4 Loss of 2 percent applied for evaporation. The percentage loss applies to the ingredients so in the ingredients excluding the whipped cream.
5 Proportions by weight of shell, filling, and infine used in eclairs: 47, 46, and 7 percent, respectively, in the uncooked or cooked product.
6 Proportions by weight of shell, filling, and infine used in eclairs: 47, 46, and 7 percent, respectively, in the uncooked product, 6 Proportions by weight of shell, filling, and infine shown in this table.
7 Loss of respect applied for evaporation in cooking.
8 Baked product.
9 Loss of 20 percent applied for evaporation in cooking.
10 Loss of 5 percent applied for evaporation in cooking.
11 Loss of 4 percent applied for evaporation in cooking.
12 Loss of 5 percent applied for evaporation in cooking.
13 Loss of 5 percent applied for evaporation in cooking.

Table 19. -- DESSERTS, MISCELLANEOUS: Formulas based on mixes and added ingredients1

[Percentage losses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

Item					Ingr	edients				
o. in	Description	A	Aix		L	iquid			Other	
Н 8, rev.		Kind	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²	Kind	Messure	Propor- tion ²
				Percent			Percent			Percent
1032	Gelutin desserts: Plain Plain	Gelutin dessert powder (item 1031).	3 oz. (1/2 c.).	15.5	Water	2 c.	84.5			
1033	With fruit added	Gelatin dessert powder (item 1031).	3 oz. (1/2 c.).	10	Water	2 e.	53	Hananas, sliced Grapes4	1 c. 1 c.	18 17
1826	Puddings: With starch base: Chocolate, regular ²	Chocolste pudding, regular (item 1825).	4 oz.	19	Milk	2 c.	81			
1828	Chocolate, instant	Chocolate pudding, instant (item 1827).	4 1/2 02.	21	Milk	2 c.	79			
1830	With vegetable gum base: Custard-dessert ³	Custard-dessert (item 1829).	4 1/2 uz.	17	Milk	2 1/2 c.	83			
1862	Rennin desserts; Chocolate	Rennin dessert, chocolate (item 1801).	2 02.	11	Milk	2 c.	89			
1864	Other flavors (vanilla, caramel, fruit flavorings).	Rennin desserts, other flavors (1tem 1863).	1 1/2 oz.	8	Milk	2 6.	92			

Table 20.--FRUITS, DRIED AND DEHYDRATED: Proportions of ingredients in formulas and the cooked product

Item				ingredients	in formula			Proport		Ratio of weights
No. in AH 8,	Description	Fre	it	Wate	r	Sug	ar	of cooke		Cooked to
rev.		Measure	Propor- tion1	Measure	Propor- tion1	Measure	Propor- tion 1	Drained fruit	Drained liquid	dried or dehydrated fruit
20	Apples: Dehydrated; cooked, with added sugar	l 1b.	Percent 13	12 1/2 c.	Percent 82	l c.	Percent 5	Percent	Percent 	6.9;1
22	Dried, cooked: Without added sugar	1 lb.	21	7 c.	79		15	68	32	3.5:1
23	With added sugar	1 16.	20	7 c.	72	I c.	9	68	32	4.0:1
38	Apricots: Dehydrated; nugget-type and pieces, cooked, with added augur.	1 lb.	16	9 c.	77	1 c.	7			4.2:1
40 41	Dried: Cooked, without added sugar Cooked, with added sugar	1 lb.	28 25	5 c.	72 64	î c.	ii -	61	39 40	3.1;1 3.5;1
1486	Peaches: Dehydrated; nugget-type and pieces, cooked, with added sugar.	1 1b.	16	9 c.	77	1 c.	7			4.2:1
1488	Dried: Cooked, without added Sugar	l 1b.	28	5 c.	72			60	40	3.2:1
1489	Cooked, with added sugar	1 1b.	25	5 c.	64	1 c.	11	60	40	3.6:1
1510	Pears, dried: Cooked, without added sugar	1 16.	39	Э с.	61			81	19	2.1;1
1511	Cooked, with added sugar	1 1b.	.16	Эс.	56	1/2 c.	8	81	19	2.3;1
1817	Prunes: Dehydrated; nugget-type and pieces, cooked, with added sugar.	í 16.	16	9 c.	77	1 c.	7			2.9;1
1819	Dried ("softenized"): Cooked, without added sugar	1 15.	39	3 с.	61			65	35	2.0:1
1820	Cooked, with added sugar	1 1b.	33	3 с.	52	1 c.	15	65	35	2.4:1
1847	Raisins, natural (unbleached), cooked with added sugar	1 15.2	33	3 c.	52	l c.	15	72	28	2.1;1

Percentage of total weight of ingredients.
Seedless raisins.

See p. 6, Notes on Specific Ingredients.
 Percentage of total weight of ingredients.
 Loss of 3 percent applied for evaporation in cooking.
 European type (adherent skin), item 1085.
 Loss of 7 percent applied for evaporation in cooking.

Table 21. -- LEGUMES, DRY: Proportions of dry legume and of water in cooked product

Item No. in	Description	weig	tion of ht of legume	Ratio of weights
AH 8, rev.	-	Dry legume	Absorbed water	Cooked to dry legume
-	Beans, common; mature seeds, dry, cooked:	Percent	Percent	
155	White	35	65	2.9:1
160	Red	35	65	2.9:1
177	Beans, lima; mature seeds, dry, cooked 1	40	60	2.5:1
904	Cowpeas, including blackeye peas; mature seeds, dry, cooked, solids and liquid	22	² 78	4.5:1
1533	Peas; mature seeds, dry, split, cooked	33	67	3.0:1
2140	Soybeans; mature seeds, dry, cooked	32	68	3.1:1

¹ A partially rehydrated product for use as an ingredient in a mixed dish that requires additional cooking. If completely rehydrated, the proportions of dry beans and absorbed water in the cooked product and the ratio of the cooked yield to the dry legume would be about the same as noted for items 155 and 160. The composition of fully rehydrated lima beans is as follows: Water, 69.1 percent; food energy, 119 Cal.; protein, 7.0g.; fat, 0.6g.; total carbohydrate, 22.0 g.; fiber, 1.5 g.; ash, 1.3 g.; calcium, 25 mg.; phosphorus, 133 mg.; sodium, 1 mg.; potassium, 527 mg.; vitamin A value, trace; thiamine, 0.12 mg.; riboflavin, 0.05 mg.; niacin, 0.6 mg.; and ascorbic acid, --.

Represents residual cooking liquid as well as absorbed water.

Table 22. -- MAIN COURSE DISHES: Formulas based on home recipes 1

Percentage losses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

	7	in Handbook 8.	The losses	were derive	The losses were derived as explained in the section, Weight Change During Cooking, p.	in the sectio	n, Weight	Change Durin	g Cooking, p. 2,	and appl:	and applied as illustrated in table 1, p. 2]	rsted in to	able 1, p.	.5]		
,								Ingr	Ingredients							
No. in	Description	Meat or	meat alternate ²	te2		Cereal			Vegetable		1	Liquid			Other	
rev.		Kind	Measure	Proportion ³	Kind	Measure	Proportion3	Kind	Measure	Propor- tion ³	Kind	Measure	Propor-	Kind	Weasure	Proportion3
				Percent			Percent			Percent			Percent			Percent
371	Beef and vegetable stew, cooked (with lean beef chuck).	Beef, arm, choice grade.	12 02.	72	1	}	1		2 (5 1/2"x 1") 1 medium 2/3 c.	\$ \$ \$ \$ \$ \$ \$ \$	Water	2 c.	32	!	ı	:
								green. Tomatoes,	7 tbsp.	6.8						
								Potatoes	2 medium	17						
383	Beef, dried, chipped, creamed.5	Beef, dried, chipped.	3 1/2 oz.	12.6	Flour	3 1/2 tbsp.	3.3	:	:	:	MEDA	2 1/2 c.	E	Table fat.	3 2/3 tbsp.	6.7
658	Cheese fondue7	Cheese, Cheddar,	1 c.	20	Bread- crumbs.	1 c.	80	:	:	:	млк	J c.	3	Table fat.	2 tsp.	1.7
		grated. Eggs	3 large	56	soft.											
659	Cheese souffle ⁸	Cheese, Chedder,	3/4 c.	16	Flour	3 tbsp.	7	;	;	:	Milk	1 c.	57	Table fat.	3 tbsp. 1/4 tsp.	8 .28
		grated. Eggs	3 large	27											•	
278	Chicken a la king 5	Chicken,	J c.	28	Flour	3 tbsp.	2.8	Mushrooms,	1/2 c.	17	Chicken	1/6 c.	5.6	Cooking	3 tbsp.	5.2
		canned.	l large	2.4				Pimfento, canned.	l pimiento	5.3	Milk	1/2 c.	17	Salt	1/2 tsp.	.42
											light.					
674	Chicken fricassee5	Chicken, boned,		75	Flour	1/2 c.	т	:	:	:	Chicken broth,	3 1/2 c.	4	Chicken	1/2 c.	40
		canned.									Water	1/2 c.	9			
752	Chicken and noodles5	ð	1 c.	27	Noodles, enriched,	1 1/2 c.	33	Onion, chopped.	l tbsp.	ч	Chicken broth.	1 c.	33	Chicken fat.	2 1/2 tbsp.	4
		canned.			cooked.	2 tbsp.	0							Selt	1/3 tsp.	ц.
762	Chop suey, with meat5	Beef, cooked	4 1/4 02.	17	Flour	2 tbsp.	2	Pepper,	l medium	0	Broth	1/4 c.	7	Table fat.	3 tbsp.	40.4
								chopped.	2 4/1					cannas for	·den >	n
		Pork, cooked (item	3 1/2 02.	12				Onion, chopped.	1/2 c.	σ	-					
		1752).						Celery, diced.	J c.	ដ		-				
								Bean	1 c.	11						
								(mung)	00/5	,					_	
								Mushrooms,		4						

.06	71	18	17	18	6. 18.	1.6	.38	3.28	07.	3.28
2 tsp. 1/2 tbsp. 1 tsp. Dash	6 tbsp. 1	6 tbsp. 1	6 tbsp.	6 tbsp.]	1 tsp. 2 tsp. 1/2 tsp.	1 tbsp. 1 tsp.	1/2 tsp. Dash	1/2 tsp. Desh	Desh	1/2 tsp. Desh
Soy sauce. 2 Cooking 1/ oil. 3 Sugar Da	French 6 dressing (litem 1944).	French dressing (item 1932).	Mayon- 6 naise.	Selad 6 dressing (item 1940).	Table fat. 1 Baking 2 powder. Salt	Cooking 1 fat. Salt 1	Table fat. 1/ Salt Da	Table fat. 1/ Salt De	Salt Da	Table fat. 1/ Salt Da
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1	:	:	:	51	4.7	:	28	;	28
1/2 tbsp.	1	:	:	:	1/2 c.	1 1/2 c.	1	1 1/3 tbsp.	1	1 1/3 tbsp.
Water 1/2 c. Water 1/2 tbsp.				1	Milk	Milk	1	Milk	;	M 1k
5 6 9	83	82	83	82	75	75	ı	:	1	:
] c. 1/2 c. 3 tbsp. 2 tbsp.	. 5 7	۲ د.	۲ د.		, s	2 c.	:	1	:	:
Bean sprouts (mung). Celery, diced. Chion, chopped. Mushrooms, canned.	Cabbage ¹⁰ .	Cabbage 10.	Cabbage ¹⁰ .	Cabbage ¹⁰ .	Corn, canned, drained solids.	Corn, canned, drained solids.	;	1	;	:
0.3	1	:	;	:	58	1.8	:	:	;	:
1/2 tsp.	1	1	:	1	2 c.	2 tbsp.	1	1	:	1
Cornstarch 1/2 tsp.	1	:	1	:	Flour	Flour	:	1	:	-
32	+	1	:	1	ជ	4.9	96	69	9.66	69
3/£ c.	:	:	:	:	2 large	l large	l large	l large	l large	l large
Chicken, borned, canned.	1	:	;	;	Eggs	Egg 1 large	383	 Egg	Egg	Egg
Gnow mein, chicken (without noodles).9	Coleslaw, made with French dressing (homemade).	French dressing (commercial).	Mayonnaise	Selad dressing (mayonnaise type).	Corn fritters ²¹	Corn pudding	Egg: Fried 9	Omelet %	Posched	Scrambled 9
\$	801	802	803	708	851	875	973	975	976	277

See footnotes at end of table,

Table 22. --MAIN COURSE DISHES: Formulas based on home recipes1 -- Continued

[Percentage Lasses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and appl as illustrated in table 1, p. 2]

					.		,	.						,		
								Ingr	Ingredients	ļ						
No. in	Description	Meat or	Meat or meat alternate ²	te ²		Cereal			Vegetable			Liquid		0	Other	
rev.		Kind	Меаѕите	Proportion3	Kind	Measure	Proportion3	Kind	Measure	Proportion ³	Kind	Measure	Propor- tion3	Kind	Measure	Propor-
				Percent			Percent			Percent			Percent			Percent
1108	Ham croquette ¹²	Ham,	2 c.	4.6	Flour	4 tbsp.	4 4	Parsley,	l tsp.	6.0	Lemon	1 tsp.	0.7	Salt	1/2 tsp.	0.45
		diced (item 1771).			dry, grated.	.70 7/1	<u> </u>	Onion juice.	Few drops	۲:	Milk		36.6	Cooking fat.	r tosp.	36.6
1304	Mecaroni and cheese, baked, from home recipe.	Cheese, Cheddar, chopped.	2 c. or 1/2 lb.	15	Mecaroni, cooked, firm	. o c	57	:		t	Mik	2 c.	31	Table fat.	5 tbsp. 1 tsp.	4.5
					Flour Breadcrumbs, dry, grated.	2 tbsp.	u w						<u> </u>			
1451	Oyster stew:14 1 part cysters to 2 parts milk by volume.	Oysters, raw.	l pt.	32	!	;	1	1	:	:	M 1k	l 9t.	\$	Table fat.	4 tbsp. 1 1/2 tsp.	3.7
1452	l part oysters to 3 parts milk by volume.	Oysters, raw.	1 pt.	77	;	1	:	:	:	:	Wilk	3 pt.	73	Table fat.	3 tbsp. 1 tsp.	2.1
1547	Peppers, stuffed with beef and crumbs. ³	Beef, round, cooked, ground.	, 2 c.	28	Breadcrumbs, dry, grated.	2 c, 15	16	Peppers, green. Onion	6 medium 1 small	37	Milk	1/4 c.	9	Table fat. Selt	2 tbsp. 1/2 tsp.	2.6
1789	Potatoes: Cooked: French-fried ¹⁶	!	1	1	1	:	ŀ	Potstoes	5 medium	100	;	;	;	Cooking fat.	1	:
1790	Fried from raw ¹⁷	:	:	-	1	1	:	Potatoes	5-6 medium	100	:	1	t	Salt Cooking fat.	1/3 tsp.	. 29
1621	Hash-browned ¹⁸	:	;	1	ł	:	1	Potatoes, pared, bciled.	5-6 medium	100	1	:	t	Salt Cooking fat.	1/2 tsp.	i
1792	Mashed: Milk added	1	:	;	;	:	;	Potatoes, pared, boiled.	4 medium	26	між	6 tbsp.	15	Selt	3/4 tsp.	\$7.
1793	Milk, table fat added.	:		1	:	ŧ	:	Potstoes, pared, boiled.	4 medium	80	мік	6 tbsp.	14	Table fat. Salt	2 tbsp. 3/4 tsp.	4.5
17% 2	Scalloped and au gratin: ** With cheese	Cheese, Cheddar, chopped.	1 c. or 1/4 lb.	6	Flour	3 tbsp.	1.7	Pote toes	5-6 medium	55	маж	1 1/2 c.	8	Table fat.	3 tbsp. 11/2 tsp.	3.4

See footnotes at end of table.

Table 22, -- MAIN COURSE DISHES: Formulas based on home recipes1 -- Continued

[Percentage losses from evaporation in cocking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

1.00								9	TIR LEGITETI CS							
No. in	Description	Meat or	Meat or meat alternate?	ate2		Cereal			Vegetable			Liguid			Other	
rev.		Kind	Measure	Proportion3	Kind	Measure	Proportion ³	Kind	Measure	Proportion ³	Kind	Measure	Proportion ³	Kind	Weasure	Proportion3
				Percent			Percent			Percent			Percent			Percent
2165 (Con.)	Spagnetti with meatballs in tomato sauce Continued															
	Meatballs in tomato sauce (ingredient in	Beef, lean	3/4 1b.	12	Breadcrumbs,	1 c.	7	Parsley,	7 tbsp.	٦	мік	1/2 c.	5	Cooking	1/4 c.	2
	item 2165)19	(item 355),			grated.	2 tbsp.	9	Garlie	2 cloves	6				Salt	4 tsp.	.97
		ground. Pork,	1/4 1b.	7			}	chopped.		67				Sugar	1 tbsp.	300
		cooked (item						canned. Tomato	٦ د.	ננ				tershire sauce.		
		1750), ground.						paste (25%								
		Eggs	2 large	1				solids). Peppers,	l tsp.	۲:						
								sweet, diced.								
2168	Spanish rice7	1	;	;	Rice, white,	13/4 0.	31	Onion,	3 1/3 tbsp.	7	:	:	:	Cooking	1 3/4	6.
					unen-			Peppers,	4 tbsp.	7				Salt.	tsp. 1/2 tsp.	35.
					riched.			green,						Sugar	3/4 tsp.	4.0
								Tomatoes,	2 0.	55				tershire	·des 6/1	?
								Celery, diced.	1/3 c.	3.5				sauce.		
2251	Sweetpotatoes, candied 8	:	:	;	:	:	:	Sweet-	9	75	Water	1/2 c.	7.4	Sugar,		2
								pourtoes, boiled, pared.	7 oz.).					Drown. Table fat. Salt	1 c. 4 tbsp. 1/2 tsp.	3.5
2428	Welsh rerebit ⁵	Cheese, Cheddar, grated.	1/2 c.	71	Flour	l tbsp.	2	1	•	:	Milk	٦ .	76	Table fat. Selt	1 tbsp. 1/8 tsp. 1/8 tsp.	4.4 .25 .1
1 525							927.									

- zee p. b. Notes on specific ingredients.

Meat alternate includes cheese, eggs, ro poultry.

Hereariage of total weight of ingredients.

Loss of 13 percent applied for evaporation in cooking. The sodium content shown in Handbook 8 for this item represents a product without sait. If sait were included in the formula, the sodium content would be approximately 119 mg. per 100 g. of stew.

Loss of 10 percent applied for evaporation in cooking.

Contributes sufficient sait for seasoning.

Loss of 20 percent applied for evaporation in cooking.

Loss of 20 percent applied for evaporation in cooking.

Loss of 12 percent applied for evaporation in cooking.

Finely shredded or grated.

* Loss of 35 percent applied for evaporation in cooking; fat absorbed during frying, 14 percent. Loss of 15 percent applied for evaporation in cooking; fat absorbed during frying, 4 percent. 13 Used for topping.
* Loss of 6 percent applied for evaporation in cooking.
* Loss of 6 percent applied for evaporation in cooking.
* Loss of 57 percent applied for evaporation in cooking; fat absorbed during frying, 6 percent.
* Loss of 55 percent applied for evaporation in cooking; fat absorbed during frying, 7 percent.
* Loss of 47 percent applied for evaporation in cooking; fat absorbed during frying, 7 percent.
* Loss of 47 percent applied for evaporation in cooking; fat absorbed during frying, 7 percent.

Table 23, -- POTPIES AND PIZZAS: Formulas for crusts based on home recipes1

Quantities listed represent amounts required to prepare a 9-inch-diameter potnie and a 13 1/2-inch-diameter pizza

						I	ngredient	B				
Item No. in	Description	F14	DUF.	Cooki	ng fat	₩a	ter	Yeast	, dry		Other	
AH B, rev.		Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²	Measure	Propor- tion ²	Kind	Measure	Propor- tion ²
382	Crust' for: Beef potpie	7/8 c.	Percent 52	1/4 c.	Percent 28	2 1/3 tbsp.	Percent 19		Percent	Salt	1/3 tap.	Percent 1.10
750	Chicken potpie4	7/8 c.	58	3 tbsp.	23	2 tbsp.	18			Salt	1/3 tsp.	1.27
1628	Pizza, with cheese topping.	1 5/8 c.	55	2 3/4 tsp.	3	1/2 c.	38	1/8 02.	1.2		1/2 tsp. 2/3 tsp.	.6 1.22

1 See p. 6, Notes on Specific Ingredients.
2 Percentage of total weight of ingredients.
3 Losses applied for evaporation in cooking, representing loss from both filling and crust, are given in table 25, footnotes 1 and 2.
4 Used also for the crust portion of turkey potpie: Itam 2350.
5 Used also for the crust portion of pizza with sausage topping: Item 1629.

Table 24. -- POTPIES AND PIZZAS: Formulas for fillings based on home recipes 1

[Quantities listed represent amounts required to prepare a 9-inch-diameter potpie and a 13 1/2-inch-diameter pizza]

Item						1	Ingredient	s					
No. in	Description	Meat or	meat altern	ate ²	Ve	getable			Liquid			Other	
rev.		Kind	Measure	Propor- tion3	Kind	Measure	Propor- tion	Kind	Measure	Propor- tion ³	Kind	Measure	Propor-
	Fillings for:			Percent			Percent			Percent			Percen
382	Beef potpie	Beef, cooked,	5 02.	23	Carrot, diced.	1/3 c.	9	Broth	1 c.	40	Flour Cooking	3 tbsp. 2 1/4	4 5
		diced.			Onion, chopped. Potato,	1 tbsp.	9				fat. Salt	tbap. 1/6 tap.	.13
					cubed. Peas,	1/3 c.	8						
750	Chicken otpie	Chicken,	5 1/2 oz.	23	green. Carrots,	5/8 c.	13	Chicken	3/4 c.	28	Flour	3 1/3 tbsp.	4
750	Cancaga Capita	cooked.	7 1/2 02.	25	diced. Peas,	5/8 c.	נו	broth.	6 2/3	15	Table fat Chicken	1/2 tbap. 1 o2.	2.1
					Onion, chopped.	l tap.	.6		tbap.		fat. Salt	1/8 tsp.	.01
2350	Turkey potpie	Turkey, cooked.	5 1/2 02.	23	Carrots, diced.	5/8 c.	נו	Turkey broth.	3/4 c.	28	flour	3 1/3 tbsp.	4
					Peas, green.	5/8 c.	ນ	Cream	6 2/3 tbsp.	15	Table fat	1 1/2 tbsp.	3.1
					Onion, chopped.	1 tsp.	.6				Salt	1/8 tap.	.01
1628	Fillings for pizza: With cheese topping	Cheese, Parmesan,	3 1/4 02.	25	Tomatoes,	1/2 c.	33				Olive oil	1 1/3	1.7
		grated.			Tomato	1/2 c.	23]			Salt	tap. 1/2 tap.	.83
					Garlic Onion, chopped.	1/3 clove 2 tbsp.	6.3				Oregano Pepper	Dash Dash	-:-
1629	With sausage topping6	Pork sausaga,	4 oz.	30	Tomatoes,	1/2 c.	31				Olive oil ⁵	1 1/3 tsp. 1/2 tsp.	1.6
		canned.			Tomato puree.	1/2 c.	31						
					Garlic Onion, chopped.	1/3 clove 2 thmp.	5.2						

1 See p. 6, Notes on Specific Ingredients.
2 Meat alternate includes cheese, eggs, or poultry.
3 Percentage of total weight of ingredients.
4 Losses applied for evaporation in cooking, representing loss from both filling and crust, are given in table 25, footnotes 1 and 2.
4 Losses applied for evaporation in cooking, representing loss from both filling and crust, are given in table 25, footnotes 1 and 2.
5 Spread over crust.
6 The formula for the filling in pixsa with sausage topping, item 1629 in Handbook 8, did not contain cheese. If 3 1/4 oz. of grated Parmesan cheese were added to this formula, the proportions of ingredients would be modified as follows: Cheese, 19 percent; sausage, 24 percent; tomatoes, 25 percent; tomato purse, 25 percent; gariic, 0.2 percent; onion, 4.2 percent; salt, 0.63 percent; olive oil, 1.3 percent.

Table 25. -- POTPIES AND PIZZAS: Proportions of crust and of filling in uncooked product

[Percentage losses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in culculating the nutritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

Item. No, in	Description	Proportion of uncool		Item No. in	Description	Proportion of uncool	
AH 8, rev.	Description	Crust	Filling	AH 8,		Crust	Filling
382 750,2350	Beef potpie ¹	Percent 23 20	Percent 77 80	1628 1629	Pizza: With cheese topping 2 With sausage topping 2	Percent 46 46	<u>Percent</u> 54 4 54

1 for evaporation in baking, 18 percent loss was applied to the combined weight of unbaked crust and filling.
2 for evaporation in baking, 25 percent loss was applied to the combined weight of unbaked crust and filling.
3 This product did not contain cheese in the filling. If 3 1/4 oz. of grated Parmesan cheese were added to the formula (see footnote 6, table 24) and if unenriched flour were used, 100 g. of the ready-to-serve pizza would have the following composition: Water, 43.0 percent; food energy, 282 Cal.; protein, 12.9 g;; fat, 13.3 g;; total carbodymata, 27.4 g;; fiber, 0.3 g;; ssh, 3.4 g;; calcium, 188 mg;; phosphorus, 205 mg;; fron, 1.4 mg;; sodium, 668 mg; potassium, 196 mg; vitamin A value, 550 I.U.; thiamine, 0.08 mg; riboflavin, 0.18 mg;; inscin, 1.4 mg;; and ascorbic acid, 9 mg.
4 The proportions of crust and filling in this product with cheese added to the filling would be 41 percent and 59 percent, respectively.

Table 26. -- MISCELLANEOUS FOOD MIXTURES: Formulas based on home recipes ¹

[Percentage losses from evaporation in cooking are given as footnotes to specific items in this table. These losses were applied to the formulas in calculating the matritive values of the cooked foods listed in Handbook 8. The losses were derived as explained in the section, Weight Change During Cooking, p. 2, and applied as illustrated in table 1, p. 2]

[tem	}							Ingredien	ts					
No. in	Description	Flo	ur		Liquid			Fat		Sug	gar		Other	
rev.		Messure	Propor- tion ²	Kind	Measure	Propor- tlon ²	Kind	Measure	Propor- tion ²	Messure	Propor- tion ²	Kind	Measure	Propor- tion ²
			Percent			Percent			Percent		Percent			Percent
424	Cranberry sauce, sweetened, home-prepared, un- strained.			Water	1 c.	22				2 c.	37	Cranberries.	1 lb. (approx. 4 c.).	42
925	Cranberry-orange relish, uncooked.									2 c.	38	Cranberries Orange, in- cluding peel.	4 c. 1 (3-inch dia- meter)	43 19
1330	Milk, malted, beverage			Milk	1 c.	90						Malted milk powdar.	3 heaping tsp.	10
1333	Chocolate beveragea: Hot chocolate ⁴			Water Milk	1/2 c. 3 1/2 c.	11 81				4 tbsp.	5	Chocolate, bitter. Salt	l oz. Few grains	2.7
1334	Hot cocoa 4			Milk	4 c.	93				4 tbsp.	5	Cocoa, high- fat, plain.	4 tbsp.	2.7
1944	Selsd dressings: French			Vinegar.	1/4 c.	25	Cooking oil.	3/4 c.	70	l tsp.	2	Salt Paprika Mustard, dry Papper	1 tsp. 1/2 tap. 1/4 tsp. Dash	1.70 .8 .3
1945	Cooked ³	3 tbsp.	4.4	Milk Vinegar.	1 c. 6 tbsp.	53 19	Table fat	2 tbsp.	6.1	2 tbsp.	5.4	Egg Mustard, brown, prepared. Salt	l large	10.4
2469	White sauce: 3	1 100	3	Milk	1 c.	92	Table fat	l thep.	5			Selt	1/4 tsp.	.56
2470	Thin	1 tbsp.	5	Milk	1 c.	85	Table fat	2 tbsp.	10			Salt	1/4 tsp.	.52
- 1														.48
2471	Thick	3 1/2 tbsp.	8	Milk	1 c.	78	Table fat	3 tbsp.	13.5			Salt	1/4 tsp.	.48

1 See p. 6, Notes on Specific Ingredients.
2 Percentage of total weight of ingredients.
3 Lose of 10 percent applied for evaporation in cooking.
4 Loss of 8 percent applied for evaporation in cooking.
5 Loss of 18 percent applied for evaporation in cooking.

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