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Food for Children

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**Cultivated mind is the guardian  
genius of democracy. . . . It is  
the only dictator that freemen ac-  
knowledge and the only security that  
freemen desire.**

**President Mirabeau B. Lamar.**

## FOOD FOR CHILDREN.

The mother who wishes to do her very best in planning for her family and in helping them to keep well and strong, often finds herself puzzled to know how to provide suitable food for her children, especially for those who have outgrown babyhood and are beginning to share the family diet.

Her problems might be put in these questions :

What kind of food?

How much food?

When shall it be eaten?

What should it cost?

### WHAT KIND OF FOOD.

1. *It should be simple and simply prepared.*

There should be no rich pastry and cakes, no highly spiced food, no fried food, especially for the younger children; there should be no great variety at any one meal.

2. *It should be easily digestible.*

Often the digestibility of a food depends on fineness of division. Children should be taught to chew thoroughly. Such foods as peas, beans, and corn that are often swallowed with little chewing should be rubbed through a strainer for younger children and served as a vegetable or cream soup. Bananas are often indigestible because they slip down in large pieces. Fresh bread that can be pressed into a gummy mass is very bad and cheese had better be grated and mixed with rice or macaroni.

3. *It should furnish the body the materials it needs for growth.*

Milk, cheese, eggs, meat, fish, cereals, bread, macaroni, peas, beans, lentils, all contain a good deal of a substance called protein, which is a muscle-building food. Children need a good deal of food containing protein or they will not grow as rapidly as they ought to or have firm, hard flesh. Lime, iron, phosphorus, sulphur and similar materials in the form of mineral salts, are also needed for growth. These are necessary to make good

bones and firm teeth. They are also needed for the blood and other body fluids. Milk and most fruits and vegetables contain a large amount of mineral salts. It is absolutely necessary that children have these foods in their diet. Many children do not like vegetables, but they will eat them in Scotch broth, cream soup, or a meat stew, and they can gradually be taught to like many kinds. Fruit for the little child should be cooked.

4. *Food should furnish heat and energy which produces activity.*

To make the child able to run and play as well as to keep him warm, it must have foods that can be burned in the body, or fuel foods, and it must breathe in fresh air to burn them. The element in food which is burned in the body by uniting with the oxygen breathed in from the air is carbon. Carbon exists in all foods. Protein will furnish it, but it is expensive, and the body does not flourish well if it has too much protein. The protein must be used chiefly to build the muscles and other parts of the body, and sugar and starch and fat used for fuel. Milk, cream, cheese, butter, butterine, olive oil, fat, meal, oatmeal, chocolate, and nuts contain fats. Rice, wheat, and other cereals, bread, macaroni, potatoes, peas, beans, and many other vegetables contain starch. Milk and most fruits contain sugar. Homemade candy is a beneficial source of sugar if eaten in small quantities and as dessert for luncheon or dinner.

5. *Water is needed by the body.*

Nearly all our foods contain some water, while milk and vegetables contain a great deal. These foods, however, do not furnish enough water. Children require a great deal, several glasses a day. This water may be taken between meals or at mealtime, but the food must not be washed down with it. If one is not sure the water is pure, it should be boiled. Tea or coffee should not be given to children as they stimulate the nerves and take away the appetite. Hot water with a little milk and sugar, or "crust coffee" made from toasted bread or wheat cocoa will give a hot drink for cold weather.

#### HOW MUCH FOOD.

Every mother knows that the well, strong child who is active in play and work demands more food as he grows larger and

older. If he has the right kind of food and takes it at the right time and chews it thoroughly there is little danger that he will eat too much, and if food is at hand he will himself see that he has enough. But the less vigorous child or the child who wakes up in the morning unrefreshed, perhaps because he has not had enough fresh air through the night, or the child who has bought candy, and pickles, and ice cream soda on the way home from school may not get enough food to make him grow as he should and to provide for his activity.

Whether he is gaining enough will be shown by weighing him; but whether he is pale, listless, irritable, because he has not enough food, or for some other reason, is not easy to tell. To help us tell whether the lack of food is the trouble, certain amounts have been determined upon that will be right for the average child, and we may compare the amount we are giving with these standards. Just as dresses are made up in sizes to fit different ages, so a certain amount of food is suggested for a child from 2-5, 6-9 and 10-13. But just as in planning a dress for a certain age the size of the child as well as the age must be considered, so in determining the amount of food needed, the weight as well as the age must be taken into account.

It is useless to measure our food in pounds, because as we have seen, our foods contain different substances of different values. Some foods, too, are nearly all waste; and though water is very necessary, we can get it so easily that we do not think it of importance in food.

A convenient way to measure the amount of nutriment in any food is to measure the heat that may be obtained from the food when it is burned. Protein, starch, sugar, and fat can all be burned.

The unit of heat used in measuring the heat producing power of different foods is called the *calorie*. Just as we say 10 or 12 yards of cloth, so we may say 10 or 12 calories of heat. A calorie is that amount of heat needed to raise the temperature of one pint of water about 4° Fahrenheit.

For convenience many people are now comparing the amount

of various foods that have a fuel value of 100 calories. Each of the following food portions represents about 100 calories:

Name of Food.	Serving.	Ounces.
Bread (corn)	Small square	1.3
Bread (white)	Thick slice	1.3
Bread (brown)	Thick slice	1.5
Corn flakes	Cereal dish (1 cup)	.97
Oats (rolled)		.88
Hominy (cooked)	Large serving	4.2
Hominy (uncooked)	2½ tablespoons	.92
Rice (boiled)	Serving dish	3.1
Rice (uncooked)	2½ tablespoons	.98
Shredded wheat	1 biscuit	.94
Wheat flour	4 teaspoons	.97
Eggs	1	2.1
Chocolate (bitter)	½ square	.56
Puffed rice	1¾ cups	.97
Potatoes	1 medium potato	4.20
Cabbage	3 cups	11.00
Split pea	1 2-3 tablespoonfuls	1.0
Whole milk	Small glass	4.9
Cheese (full cream)	1½ cubic inches	.82
Cottage cheese	4 cubic inches	3.12
Banana	1 large	3.5
Apples	2 apples (small)	7.3
Grape juice	Small glass	4.2
Cream	¼ glass	1.7
Sponge cake	Small piece	.89
Custard (milk)	Ordinary cup	4.29
Olives (green)	7 olives	1.1
Olives (ripe)	7 olives	1.3
Sugar	3 teaspoonfuls or 1½ lumps	.86
Pecan	8	.46
Celery		19.0
Lettuce		17.3

When children are of normal size, development and activity they require per day about as follows:

	Age in Years.	Calories.
Boys	14-17	2700-3000
Girls	14-17	2200-2600
Children	10-13	1800-2200
Children	6-9	1400-2000
Children	2-5	1200-1500
Children	1-2	900-1200
Infants	Under 1 year	45 calories per pound of weight.

Should children be under or over size their requirement can be figured from the following table:

From 1-2 years of age	about 45-40 calories per pound.
From 2-5 years of age	about 40-35 calories per pound.
From 6-9 years of age	about 35-31 calories per pound.
From 10-13 years of age	about 31-27 calories per pound.
From 14-17 years of age	about 27-20 calories per pound.

One must remember in using the calorie that it measures only the amount of food. It is not enough merely to see that the child secures the needed number of calories. A five-year-old could get 1200 calories from sugar alone but that child would not grow. A child must have a "mixed diet," containing protein, fats, sugars, starches, and minerals. Mineral salts can not be burned, so they have no fuel value. They are, however, a most important food constituent. They are absolutely necessary, and must be present in sufficient amounts if the child is to develop normally. Lack of lime salts cause rickets, lack of iron, anemia. Milk is very deficient in iron, and for this reason as a child approaches the end of its first year, the milk diet should be supplemented with other foods, eggs and strained cereals, for example. A mother must select with great care, using each day milk, eggs, cereals, green vegetables, fruits and bread. Where the child has a carefully planned, mixed diet it seldom fails to get enough of each of the needed materials to build the body and furnish the energy for activity.

#### WHEN SHOULD CHILDREN EAT?

1. Three regular meals should be provided for children and the eating should be done at regular times.
2. For little children an additional luncheon at 11 o'clock is beneficial. This should be provided even after the child enters school and continue through the third or fourth year. A glass of milk and a graham cracker, or bread and milk are sufficient.
3. Very little children (under 4) need a mid-morning and mid-afternoon meal.

#### WHAT SHOULD FOOD COST?

This is a difficult question. The price of food varies in different parts of the country, in different parts of the city, and at different times of the year. If the money must go as far as possible, remember there is more nourishment in the cheap cuts of meat; that the broken rice is as good as the whole kernels; that homemade bread is the best and cheapest; that butterine and the cotton seed oils are cheaper than butter and are fairly good substitutes; that beans and peas may be used in place of meat;

that skimmed milk contains much good protein that can be eaten in the form of cottage cheese; that one quart of whole milk gives as much strength as two pounds of potatoes, four pounds of cabbage, 8 eggs. or three-quarters of a pound of round steak. The cost of these articles is as follows:

1 quart of milk = .10	{	8 eggs .....	.24
		2 pounds potatoes.....	.05
		¾ pounds steak .....	.16
		4 pounds cabbage.....	.10

Remember that in buying food at the baker's ready prepared you are paying the baker for doing work that you can do better and cheaper yourself and that in buying canned goods you are usually guilty of the same extravagance.

Buy the non-perishable supplies, where it is possible, in quantities, thus securing the advantage of a lower price and making it possible to purchase articles of food when they are cheapest and best on the market.

#### MEALS.

Below are some suggested meals with the amount for serving given:

##### CHILDREN'S MEALS.

Food for one day for a child 2-5. Price about 15c. Fuel value 1200-1500 calories.

*Breakfast.* 7:30.

Orange Juice, 4 tablespoonfuls.

Cream of Wheat, ¼ cup.

Milk, 1¼ cups.

Toast.

*Lunch.* 11 o'clock.

Milk, 1 glass.

Bread and Butter, 1 thin slice.

*Dinner.* 12:30.

Cream of Split Pea Soup, 1 cup.

Bread and Butter, 2 thin slices of bread, 1 pat of butter.

Rice Pudding and Raisins, 1 generous serving.

*Lunch.* 4 o'clock.

Graham Crackers, 2.

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We are indebted to the Chicago Child Welfare Exhibit for a part of this material on meals.



*Supper.*

Milk Toast, 2 thin slices, 1 glass top milk.

Baked Apple, 1.

Food for one day for a child 6-9. Price, about 15c. Fuel value, 1400 to 2000 calories.

*Breakfast.*

Cream of Wheat and Dates,  $\frac{1}{2}$  cup of Cream of Wheat and 4 Dates.

Milk,  $\frac{1}{3}$  cup top milk.

Toast with Butter, 1 slice.

*Lunch.* 11 o'clock.

Milk, 1 glass.

Bread and Butter, 1 slice.

*Dinner.*

Fish Chowder, 1 cup.

Crackers, 2.

Rhubarb Sauce, 1 cup.

Cookies, 2.

*Supper.*

Creamed Egg and 1 egg— $\frac{1}{2}$  cup cream sauce.

Toast, 2 slices.

Milk, 1 glass.

Gingerbread, 1 piece.

*Breakfast.*

Oatmeal,  $\frac{1}{2}$  cup.

Milk,  $\frac{1}{4}$  cup top.

Toast and Butter, 2 slices.

Stewed Dried Apples, 1 sauce dish.

*Lunch.*

Rice and Cheese,  $\frac{1}{2}$  cup.

Bread and Butter, 2 slices.

Bananas, 1.

*Dinner.*

Lentil Stew with Potatoes.

Corn Bread and Butter, 2 pieces.

Prune Whip.

The following meals are for the three children of a family living on a \$1000 income and they are so planned that, by increas-

ing the amount of food or making simple additions to the menu of the younger children, the older children are provided for.

Child 2-5 years of age: 1200-1500 Calories.

Breakfast	7:30	Orange Juice, 4 tablespoons. Cream of Wheat, $\frac{1}{4}$ cup. Milk, $1\frac{1}{2}$ cups. Bread (stale), 1 slice.
Lunch	11:00	Milk, 1 cup. Bread (stale); 1 slice. Butter, 1 teaspoonful.
Dinner	1:00	Baked Potato, 1. Boiled Onions (mashed), 2. Bread and Butter, 1 slice. Milk to Drink, 1 cup. Baked Apple, 1. Boiled Rice, 1 cup. Milk, $\frac{3}{4}$ cup. Bread and Butter, 1 slice.

*Substitutes or Additions.*

For Cream of Wheat or Rice: Farina, Wheatena, Pettyjohn or other cereal.

For Orange Juice and Baked Apple: prune pulp and sauce.

For Onion: spinach, strained peas, stewed celery.

An egg every day may take the place of a part of the milk ( $\frac{1}{2}$  cup) and should be given 2 or 3 times a week.

Child 6-9 years of age: 1500-1800 Calories.

Breakfast	7:30	Cream of Wheat, $\frac{1}{2}$ cup. Top Milk, $\frac{1}{4}$ cup. Stewed Prunes, 5. Toast, 1 slice. Milk to Drink, 1 glass.
Dinner	1:00	Pea Soup, 1 cup. Croutons, 1 slice bread. Boiled Onions, 2 small. Baked Potato, 1 large. Molasses Cookies, 2.

Supper	5:30	Cream Toast, 2 slices bread. Rice pudding (with milk and sugar), 1 cup. Milk to Drink, 1 glass.
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*Substitutes or Additions.*

Cream of Wheat.

For Peas: strained beans or lentils.

For Onions: spinach, cauliflower, carrots (well cooked), lettuce.

For Prunes: ripe apples, dates, baked bananas, all stewed fruits.

For Pudding: junkets, custards, ice cream, blanc mange, bread pudding, and simple desserts.

For Cookies: sponge cake, gingerbread, plain cakes or cookies.

Child 10-13 years of age:		1800-2200 Calories.
Breakfast	7:30	Cream of Wheat, $\frac{3}{4}$ cup. Top Milk, $\frac{1}{2}$ cup. Stewed Prunes, 7 prunes. Toast, 2 slices. Milk to Drink, 1 cup.
Luncheon	1:00	Pea Soup, 1 cup. Boiled Onions, 2 small. Baked Potato, 1 large. Bread and Butter, 2 slices. Cookies, 3.
Dinner	5:30	Baked Fish, small serving. Creamed Potatoes, $\frac{3}{4}$ cup. Spinach, $\frac{1}{2}$ cup. Bread and Butter, 2 slices. Rice Pudding (milk and sugar), 1 cup.

*Substitutes or Additions.*

For Cream of Wheat: Any well cooked cereal.

For Fish: rare beefsteak, roast beef or mutton chops, boiled mutton, salt fish.

For Prunes: any fruit (uncooked or cooked).

For Vegetables: any well cooked or fresh vegetables.

For Dessert: all simple desserts.

## A FEW RECIPES.

*Cereals.*

In general cereals should be cooked as follows:

Have the water rapidly boiling. Add one teaspoonful of salt for each cup of cereal. Sprinkle the cereal slowly into water, stirring till it is well mixed, and boil for five minutes. Continue the cooking without stirring, either in a double boiler or with a piece of asbestos under the saucepan. A double boiler may be made by fitting together two saucepans, nearly of the same size, putting the larger one on top.

Fine cereals need three and a half to six times as much water as cereal. The coarser cereals require two to three times as much water as cereal.

Cream of Wheat, Wheatena, Quaker oats, wheat germ, malt cereal should be cooked 30 to 40 minutes; coarse oatmeal, cornmeal and cracked wheat from two to six hours.

The fireless cooker is excellent for cereals. Add cereal to boiling salted water. Boil ten minutes. Put in cooker and allow to stand over night.

Dates, cooked prunes, or other fruit, cut in small pieces, may be stirred into the cereal before serving.

*Vegetables.*

Wash or scrub vegetables in cold water. Cook until tender in salted boiling water. Withered vegetables may be freshened by putting in cold water in an hour or two. This is especially true of carrots, potatoes, and turnips. The time for cooking varies very much with the age of the vegetables. This table gives the time for cooking some kinds of vegetables:

Potatoes, 30 minutes.	Beets, 2 hours.
Carrots, 45 minutes.	Cabbage, 20 minutes.
Onions, 60 minutes.	Spinach, 30 to 45 minutes.
Turnips, 45 minutes.	Squash, 30 to 45 minutes.

*Dried Fruits.*

Wash the fruit thoroughly, add four or five times as much water as fruit, and soak from twelve to twenty-four hours. Bring to a boil and put into fireless cooker. Sugar may be added if desired. Prunes need none if the juice is boiled down. Apri-

cots, peaches and apples need little. With 48 hours' soaking apricots and peaches may be cooked with only a few minutes' boiling.

#### *Lentils.*

Pick over and wash the lentils and soak them over night, or even twenty-four hours.

Pour off the water and add about four times as much fresh water as there are lentils. Add a teaspoon of salt for each cup of lentils. A slice of salt pork and an onion may be added if desired. Boil for half an hour and then cook in the fireless cooker for six or eight hours, or simmer slowly on the stove.

#### *Cream Soups.*

Delicious cream soups may be made from the water in which vegetables, such as spinach, celery, asparagus, cauliflower and cabbage have been cooked. For two cups of the vegetable water allow an equal amount of milk. Thicken with three level tablespoons of flour rubbed smooth in a little milk. Stir in two tablespoons of butter or butterine or clarified beef fat, and salt to taste. In the same way cream soups may be made from dried green or split peas, dried lima beans and lentils, as well as from corn, onions, potatoes, and tomatoes. The dried vegetables should be soaked and used with the water in which they were cooked. Unless liked very thick, a little less flour may be used for thickening, since they contain so much starch. (Two tablespoons to the quart is sufficient.)

#### *Cream of Tomato Soup:*

2 cups of milk.	2 tablespoons of fat.
2 cups of tomato.	1 tablespoon of salt.
4 tablespoons of flour.	

Mix four tablespoons of flour with a little cold tomato, add the rest of the tomato and bring to the boiling point. Strain, cool, and then add the milk. Heat just before serving and add the fat and salt. This will serve six people.

#### *Potato Soup.*

3 potatoes.	1 tablespoon of fat.
1 quart mlk.	1 tablespoon of salt.
2 tablespoons of flour.	

Boil potatoes in salted water until soft; mash and beat until light. Add milk gradually. Mix flour with a little cold liquid

and add to the lot potato mixture. Let come to the boiling point and then add the butter and salt. This will serve six people.

*Beef Stew with Vegetables.*

Cut into pieces one or two pounds of stew meat (neck piece, aitch bone or shank may be used). Cover well with boiling water and simmer for two or three hours or until the meat is nearly done. Add potatoes and other vegetables, such as carrots, onions, turnips; cut in small pieces, and cook until tender. Season with salt. Thicken or serve thin as desired. Rice and left-over cereal may be used for thickening.

This also may be cooked in fireless cooker. Cook the meat and vegetables in boiling water ten minutes, put into the fireless cooker for four to five hours. Season with salt and serve hot.

*Fish Chowder.*

One pound cod, haddock or any white fish; six medium sized potatoes cut into small pieces, one sliced onion, one or two slices of salt pork cut into small pieces, two teaspoons salt, two cups milk, four cups water. Wash and cut fish from bones. Put four cups of cold water over bones and cook 20 minutes. Strain out bones and add pork, potatoes and onion to this water; cook 15 minutes, then add fish, cover and simmer 15 minutes. Then add milk, salt and crackers and cook five minutes. Serve hot.

*Scotch Broth.*

Wash and cut into pieces two pounds neck of mutton. Put meat and bones into kettle with two quarts of cold water and bring quickly to the boiling point; add from one-half to three-fourth cup of barley that has been soaked over night in cold water. Simmer one to one and one-half hours or until the meat is tender. Then add two carrots, one turnip, one onion and two potatoes cut into small pieces. Cook until vegetables are soft. Serve hot.

If the fireless cooker is used, add vegetables with the barley. Boil ten minutes and put into the cooker for four or five hours.



