COOPERATIVE EXTENSION WORK AGRICULTURE AND HOME ECONOMICS

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Food for Children



MARTHA MCPHEETERS Extension Specialist in Foods and Nutrition

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FOOD FOR CHILDREN

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The more we know of food and its function in the body, the greater is our conviction that food is an important factor in the growth, health, vitality, and happiness of children, and is a fundamental factor in a physically efficient and happy adult.

Therefore, it is the part of wisdom and good judgment for parents to adopt and hold fast to good food standards for children throughout the growing period, and especially during the preschool and school age periods.

Food for children is usually discussed under the following heads: Infant feeding, food for the preschool child, and the child of school age, and the adolescent. However, this leaflet deals chiefly with a discussion of food for the preschool child, and the child of school age.

Ideas about feeding children have undergone changes in recent years. It is now believed that the diet of the very young child differs from that of the older one mainly in the way the food is prepared, and in the amounts served at various ages. This newer idea of good nutrition for children, also, provides for the use of a greater variety of foods than has been used by many mothers in the past. This variety, of course, must be carefully chosen. It does not mean the discarding of former standards, but merely means that our standards are changed, are improved.

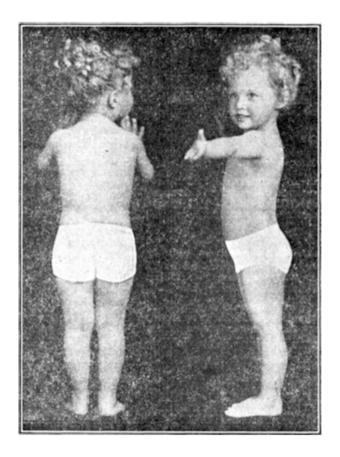
Some Evidences of Good Nutrition and Health

Perhaps you are asking yourself, "How may I know when my child is well nourished?" The following list of outward signs of good nutrition and health in children should give a good mental picture of a healthy and well-nourished child:

- 1. Facial Expression—alert, happy.
- 2. Eves—Clear, bright, steady, free from fatigue rings and puffiness.
- 3. Hair-Smooth, glossy.
- 4. Skin—Smooth, clear, neither too dry nor too moist, and good turgor.
- 5. Color-Good in cheeks, lips, eyelids, and earlobes.
- 6. Teeth-Straight, normal number, closing well, gums firm.
- 7. Bones-Straight and strong, joints normal size.
- 8. Chest—Broad and deep, not pigeon breasted.
- 9. Back—Straight.
- 10. Shoulders—Even shoulder blades, flat against back.
- 11. Muscles—Evenly developed, strong, good turgor, erect posture.
- 12. Abdomen-Not protruding, flat in older children.
- 13. Nervous control-Good.
- Weight—Suitable to height, age, and build. Not 10% underweight, or 20% overweight.
- Body functions—Good appetite, regular elimination, no digestive upsets.

It is possible, at times, for children to appear to be in a good state of health and still be subject to upsets that may be indicative of something wrong. For this reason parents should be watchful for such signs as lack of appetite, poor color, sleeplessness, bad skin condition, failure to gain in weight, irritability, etc.





Food Materials Essential for Proper Growth and Development

- 1. Protein—For muscles and other tissue. The proteins of milk, eggs and meat are the most valuable for growth.
- Minerals—For building body fluids and tissues, and for body regulating purposes.
 - A. Calcium—for bones and teeth and good muscle and nerve tone. The best and surest source for children is in milk.
 - B. Phosphorus—for bones, teeth, and the soft tissues. Best sources for children are milk, milk products, lean meats, egg yolks, and whole grain cereals and vegetables.
 - C. Iron—for red blood corpuscles. Egg yolk, leafy vegetables, whole grain cereals, liver, lean meats, and other fruits and vegetables.
- 3. Vitamins—For growth and regulation of body processes.

Vitamin A—For growth, vigor and resistance to disease, especially respiratory diseases. Found in cream, butter, whole milk, egg yolk, green and yellow vegetables, such as spinach, and carrots, and also codliver oil.

Vitamin B—For growth, good digestion and assimilation, nerve control, and stimulation of appetite. Found in wheat germ, peas and beans, whole grain cereals, fruits and vegetables.

Vitamin C—For good teeth, healing of wounds, preventing skin disorders, and stimulating appetite and growth. The best sources are fruits, especially citrus fruits, tomatoes, leafy vegetables, other vegetables, and milk. These foods should be used raw as far as possible.

Vitamin D—For good bone and teeth, and best utilization of calcium and phosphorus. Found in egg yolk, codliver oil, cream, butter, and leafy vegetables.

- 4. Fats, sugar and starches for energy for work, play, and internal functions. Best sources for children are cereals, breads, cream, butter, and simple sweets.
- 5. Water—For dissolving and carrying food into the blood stream, for elimination of wastes and regulation of body processes. Water is found in every cell of the body and comprises about two-thirds of body weight, so needs to be supplied in a good amount each day.

(Consult Extension Circular No. 304, "Family Nutrition" for further information on this subject.)

Foods a Child Should Have

The period which seems to cause mothers the most concern is the transition period; the period of changing from a milk and semi-fluid diet to a mixed and more solid diet. This period starts when weaning begins, and usually continues to eighteen or twenty months. However, since children differ in their ability to digest coarse food it may be necessary to continue sieving some of the foods during the first months of the preschool period, but solid foods should be introduced gradually, as early as possible.

DAY'S FOOD FOR CHILD FROM TWO TO SIX YEARS OF AGE:

Milk.--A quart a day, and never less than a pint.

Orange or Tomato Juice.—At this age the child should have the juice of one orange or one-half cup of tomato juice.

Vegetables.—Two vegetables, besides potatoes. From two to four level tablespoons at a serving. One should be green in color, or raw, as spinach, lettuce, cabbage, chard, beet tops, carrots, green peas, and beans, and asparagus. One root vegetable may also be served, such

as cooked carrots, beets, turnips, and onions baked, steamed, or cooked in small amount of water, then chopped finely.

Raw vegetables should be finely ground or shredded. They are liked by children when put between thin slices of bread and butter.

Potatoes once a day; baked, boiled, mashed, or creamed.

Fruits.—If possible, two fruits daily. Most of the fruits should be cooked. Only well ripened raw fruits should be given. Berries should be cooked and strained. Raw apples should be scraped for the very young child.

Bananas should be thoroughly ripe and mashed. Fruits containing strong acids, such as rhubarb, sour plums, cherries, and very sour grapefruit should be withheld. Little sugar should be served with fruit.

- Cereals and Breads.—Well cooked cereals should be given once or twice a day. Such cereals as oatmeal, cream of wheat, wheatena, and cracked wheat are very good. Either whole wheat and graham bread should be used daily. Bread in the form of dry, crisp toast should be used at least once a day to help to establish the habit of thorough chewing.
- Eggs.—An egg yolk a day and as many as four whole eggs a week.

 Poached, soft cooked, or used in simple desserts. Do not give fried eggs.
- Meat.—Finely chopped meat (baked, boiled, or broiled) may be used once a day on the days when eggs are not used. Chicken, beef, liver, mutton, lamb, or beef are the most desirable meats. Broiled bacon may be given occasionally. Liver, not exceeding two tablespoons a day, is excellent.
- Sweets and Desserts.—These should be simple custards, ice cream, rice, gelatine, tapioca, cornstarch and fruit puddings. Cakes should consist of graham crackers, sponge or angel cakes, and simple cookies. Plain sugar candy, jelly, marmalade, or molasses on bread may be used as dessert.
- Fats.—Fat is difficult to digest, so should be used sparingly by children. Butter and cream are the best fats to use. Whole milk or very thin cream for cereals, butter for bread, (one-half teaspoon of butter to a slice of bread) and a small amount of butter or bacon fat on vegetables will supply the child's needs for fat.

Water.—Four cups of water daily.

- Codliver Oil.—Three teaspoons daily, if given only through the winter months. One teaspoon daily if used the year around.
- Forbidden Foods.—Pies, pickles, fried foods, gravy, rich cakes, hot breads, (as pancakes) and sweets between meals. Also, green or over-ripe fruits, corn, cucumbers, radishes, cracker jack, coca-cola, pop, tea, coffee, or pork.

DAY'S FOOD FOR THE OLDER CHILD—SIX TO TWELVE

The older child should have the same foods that are suggested for the preschool child, but he will need larger servings of some of them, especially fruits and vegetables. More meat may be used, but not more than once a day. Desserts should still be simple ones, and the same forbidden foods should be withheld.

Regularity of Meals

Definite hours for meals should be followed consistently. Irregularity of eating may lead to digestive disorders and poor digestion in later life. Three meals a day with food requirements divided fairly evenly seems to

work best for most children. However, four eating periods a day is usually recommended for the preschooler.

"Piecing" between meals is a bad practice. It is apt to dull the appetite

for food at regular meals.

There are times, however, when a very active, rapidly growing child may really need extra food. If this is the case food should not be given too near the regular meal hour, and should be of the right kind. Fruit or fruit juice, plain bread and butter, or a glass of milk would meet any need for extra food, and would properly supplement the diet at meal hours

Size of Servings

The capacity of the growing child is about one-third or one-half that of the adult. However, the size of the servings should be determined by the appetite and needs of the child.

Introduce new and unfamiliar foods gradually in small amounts. Perhaps just a teaspoon or even a half-teaspoon at a time is sufficient. As the child learns to like new food the amount may be gradually increased without danger of making him dislike it.

Planning the Meals

The task of feeding children properly will be made easier for the homemaker if the family meals are carefully chosen and simply prepared.

A statement in the opening discussion of this leaflet was to the effect that the diet of the young child differs from that of the older child and adult chiefly in the way the food is prepared and the amounts served. Therefore, if the child's needs are kept clearly in mind, "One menu for all" could be used. Such a plan would greatly simplify the task of meal planning, and preparation for the busy mother who has children of varying ages.

If the plan "One menu for all" is adopted, it is also important that the custom of having the menu right be adopted.

The following menu will meet the body needs of all members of the family, and should be enjoyed by all:

Broiled meat balls, baked potato, buttered carrots, lettuce, bread and butter, milk, and baked apple.

In the set-up of a day's food for the two to six year-old, we said that he might have finely chopped meat occasionally, raw leafy vegetables, and that most fruits should be cooked. There is no better way to serve potatoes than baked, so the two-year old's needs are well taken care of in this menu, as well as those of the older children and adults.

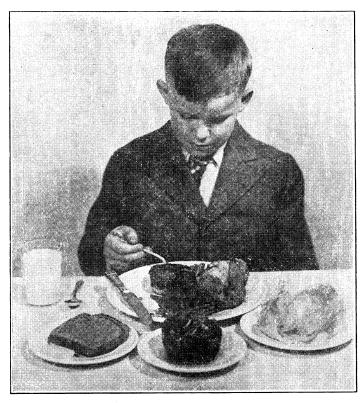
Small servings will meet the demands of the two-year old, moderate servings for the six-year old, and large servings for the ten-year old.



Small Servings of the Family Meal for the Two-year Old



Moderate-sized Servings of the Family Meal for the Six-year Old



Very Generous Servings for the Ten-year Old

(These cuts are reproduced by permission of Bureau of Home Economics, United States Department of Agriculture.)

MENU SUGGESTIONS

Breakfast

Fruit, raw or cooked. Fruit or tomato juice. Cereal, with top milk or thin cream. Eggs and crisp bacon occasionally. Toast with butter.

Milk to drink.

Dinner

Meat and vegetable stew Lettuce Bread and butter Milk Tapioca pudding

Scrambled eggs Sliced tomatoes Baked potato Bread and butter

Milk Fruit cup Beef roast Buttered spinach Bread and butter Milk Rice pudding

Broiled liver Stewed tomatoes and cabbage Buttered rice Bread and butter Apple salad Milk

Supper

Sieved lima beans with bacon Cabbage slaw (finely chopped with cream dressing)

Milk Bread and butter Apple Brown Betty

Cream of tomato soup Toast Baked sweet potato Milk Applesauce and cookies Cream of potato soup Toast Cabbage and apple and carrot salad (finely chopped) Milk Baked custard

Poached eggs on toast Creamed mixed vegetables Toast Milk

Fruit and cup cake

THE PREPARATION OF FOODS

Simply and carefully prepared food is an item of much importance when feeding children. Properly cooked foods will help in saving certain important food elements, such as minerals and vitamins, will render other elements, such as starches, and proteins more easy of digestion, and will also make food more palatable by preserving the natural flavor, color, and texture.

Food for children should not be over-seasoned, and neither should it be too bland and tasteless. The more attractive and tasty it is the better it will be liked.

1. Milk

If there is any question about the cleanliness of milk, bring it quickly to the boiling point for one minute, then cool.

The portion of milk used in cooked foods may best be served in cream soups such as tomato, potato, spinach, and pea soups, and in creamed vegetables, custards, tapioca, rice pudding, etc.

2. Vegetables

Vegetables should be quickly cooked, cooked just until done and no longer, in a small amount of water when cooked in water. Baking and steaming in a small amount of water are excellent methods for children. When cooked in liquid, some of the liquid should be used in soups or sauces. The best methods of serving to children are buttered or creamed.

3. Fruits

Cook with little or no sugar, and not too much water. Prunes and other fruits with skins should be finely chopped for the younger children.

4. Eggs

Cook below boiling point in order to have whites tender. The best methods are poached, soft cooked, creamed, coddled, and in omlets; never fried.

5. Meat

Roast, broil, boil, or make into stews. Bacon crisp but not hard or burned.

6. Cereals

Vary cereals by addition of raisins, and other fruits, such as stewed prunes, figs, etc. Toast much of the bread.

RECIPES

Spinach Soup

2 cups thin white sauce 1 cup cooked spinach ½ teaspoon salt

Cut up spinach, steam until thoroughly wilted, and when done, strain. Combine with hot white sauce, reheat, and serve.

All vegetables may be used in the same way.

Thin White Sauce

1 pint milk

4 tablespoons butter

2 tablespoons flour

Scald milk, melt fat, add flour to fat and blend. Add milk gradually, stirring until sauce is smooth. Cook for 15 minutes.

Creamy Eggs

6 eggs

1 tablespoon butter

6 tablespoons milk ¾ teaspoon salt

Beat eggs slightly, add milk, butter and salt. Put into top of double boiler. Stir constantly and cook until a creamy texture. Serve at once, or they will become hard and dry. (In stirring be careful to keep cooked egg from bottom or sides of dish.)

Stewed Tomatoes and Celery or Cabbage

1 quart canned tomatoes

2 tablespoons butter or other fat.

2 cups cut celery or cabbage

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1½ teaspoons salt

Simmer the tomatoes and celery together for 20 minutes, or until celery is tender. Season with salt and fat and serve. Or, after the tomatoes have cooked alone for 10 minutes, add finely shredded cabbage instead of the celery. Cook for 5 or 10 minutes and season.

Scalloped Cabbage and Apples

2 quarts shredded cabbage

2 to 4 tablespoons butter

1 quart tart sliced apples

or other fat

2 teaspoons salt

1 teaspoon sugar

1 cup buttered bread crumbs

Place alternate layers of the cabbage and apples in a greased baking dish. Season each with salt and fat and sprinkle the sugar over the apples. Spread the buttered crumbs over the last layer. Cover, and bake in a moderate oven for 45 minutes, or until the cabbage and apples are tender. Remove the cover toward the last of the baking so that the crumbs can brown. Serve from the dish.

Creamed Mixed Vegetables

1 cup diced potatoes 2 tablespoons melted butter

1½ cups diced carrots2 tablespoons flour1 cup diced turnips1½ teaspoons salt

2 cups finely chopped cabbage 1 cup milk

Cook the potatoes, carrots, and turnips in three cups of boiling water until almost tender. Add the cabbage, allowing about 5 minutes for cooking. Prepare a sauce of the melted butter, flour, salt, and milk. Cook until thickened and stir this sauce into the vegetables. Cook a few minutes longer, until the desired consistency is reached, and then serve.

Carrot or Turnip Custard

3 eggs 1 teaspoon salt

1½ cups grated raw carrot 3 tablespoons melted butter

or turnip or other fat

3 cups milk

Beat the eggs slightly, add the carrot and other ingredients, pour into a greased baking dish, place on a rack in a pan of hot water, and bake in a moderate oven for about 1 hour, or until the custard is set in the center. Serve at once.

Creamy Rice With Apricots

½ cup rice½ cup sugar1 cup boiling water2 cups chopped fresh fruit1½ cups milkor dried fruit soaked½ teaspoon saltand cooked

Cook the rice over direct heat in the cup of boiling water. When the water has been almost absorbed put the rice in a double boiler, add the milk, salt, and sugar. Cover and cook until the rice is tender. Mix the rice and fruit and when chilled serve with top milk or cream. Canned grated pineapple gives an excellent flavor.

Apple Brown Betty

2 quarts pared and cored diced tart apples 1 teaspoon cinnamon 1 quart bread crumbs (oven toasted until crisp and light brown) 4 teaspoon salt 4 cup melted butter or other fat

Grease a good-sized baking dish and place in it a layer of crumbs, then a layer of apples, and some of the sugar, cinnamon, and a bit of salt, which have been mixed together. Repeat until all the ingredients are used, saving sufficient crumbs for the top. Pour the melted butter or other fat over the top layer of crumbs, cover and bake in a moderately hot oven for 45 minutes, or until the apples are soft. Remove the cover and allow the top to brown. Serve with cream or top milk.

Tapioca Cream

1 quart milk
% cup tapioca
% cup sugar

¼ teaspoon salt

3 eggs

1 teaspoon flavoring

Scald milk in double boiler. Add minute tapioca, sugar and salt and cook 15 minutes, stirring frequently. Pour mixture slowly over beaten egg yolks, stir well. Return to double boiler and cook until mixture thickens like custard. Remove and flavor. Fold in the stiffly beaten egg whites. Chill, and serve with cream or pieces of fruit.