

GUIDE TO MODERN MEALS

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MICHIGAN STATE COLLEGE :: EXTENSION SERVICE

EAST LANSING

DAILY PROTECTIVE DIET

3 to 6 cups milk (children) ; 2 or 3 cups milk or milk and cheese (adults)

5 servings fruits and vegetables including:

(a) A green or yellow vegetable

(b) Tomatoes, citrus or other fresh fruit or raw cabbage

2 servings protein foods (lean meat, fish, eggs, cheese, beans, nuts)

2 servings whole grain (oatmeal, whole wheat cereal, whole grain bread, wheat germ)

Use enriched flour in place of plain white flour

2 or more pats butter

1 teaspoon fish-liver oil (children)

6 to 8 glasses water

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DO NOT REMOVE

FOOD VALUE CHART

*GROWTH-PROMOTING AND PROTECTIVE FOODS

Class of Food	Use in the Body	Good Sources	To Insure Supply, Serve Daily:	Preparation and Serving Suggestions
Vitamin A (Carotene of plants is changed into Vitamin A by the body).	Helps the eye to adapt to dim light. Makes mucous surfaces of nose, throat, and lungs more resistant to infection. Keeps skin moist. Promotes growth. Strengthens tooth enamel.	Fish-liver oils Butter Vitamin A margarine Liver Egg yolk Cheese Cream Green vegetables Yellow vegetables Yellow fruits Tomatoes	Adults: 1 pint milk 1 egg 2 pats butter 1 serving green or yellow vegetables Children: 3 to 6 cups milk 1 egg or egg yolk 1 serving green or yellow vegetables 1 teaspoon standard fish-liver oil	Only slightly affected by ordinary cooking, drying, or freezing. Do not take mineral oil within several hours of meal-time.
Thiamin (Vitamin B₁)	Aids digestion. Promotes good elimination. Necessary for good appetite. Encourages optimistic outlook. Helps prevent fatigue and nervous irritability. Important in diet of nursing mother.	Wheat germ Whole wheat Oatmeal Whole rye Brown rice Beans Pork Liver Nuts Yeast	2 or 3 servings of whole grain or restored cereal or whole grain bread. 2 or 3 servings of vegetables. 1 serving of liver, pork, beans, peas, wheat germ, nuts or peanut butter. Use enriched or whole grain flour instead of plain white flour.	Cook vegetables quickly. Do not use too much soda in baked products. Serve cooking liquid. Cook cereals over water. Sprinkle wheat germ over refined, toasted cereals. Cook meat a short time when grade permits.
Riboflavin (Vitamin B₂)	Necessary for growth. Helps keep skin in healthy condition. Lengthens active years of life. Preserves youthful appearance. Helps prevent burning, itching and extreme sensitivity of eyes to light. Helps prevent sore lips with cracks at corners.	Liver Cheese Milk Skim milk Eggs Whole grains Lean meat Salmon Greens Beans	2 or 3 cups milk. 2 servings of lean meat, egg, fish, cheese or beans. Use enriched or whole grain flour, bread, and cereals.	Do not use soda in cooking vegetables. Use cooking water. Keep milk out of light.
Niacin (Nicotinic acid)	Helps prevent pellagra (sore mouth and tongue, digestive troubles, rough skin, sleeplessness).	Liver Salmon Lean meat Buttermilk Milk Skim milk Wheat germ Cabbage Greens Peas	A varied diet generous in protein foods should provide sufficient niacin. Use enriched or whole grain flour instead of plain white flour.	
Ascorbic acid (Vitamin C)	Helps prevent fatigue. Keeps gums healthy. Prevents scurvy (sore joints, muscular pain, loss of appetite, loosening of teeth, weakened blood vessels). Increases resistance to infection. Helps wounds heal.	Oranges Grapefruit Lemons Tomatoes Cabbage Strawberries Most fresh fruits and vegetables	1 serving of tomatoes or citrus fruit. 4 servings of fruits and vegetables, one raw if possible.	Peel fruit just before serving. Keep fruit juice covered in refrigerator. Cook vegetables quickly. Use cooking water. Reheat canned tomatoes quickly. Store root vegetables at low temperature.
Vitamin K	Shortens blood-clotting time.	Green, leafy vegetables		
Vitamin D	Aids body in making use of calcium and phosphorus. Helps prevent rickets (poorly developed bones and teeth).	Direct sunshine Viosterol Fish-liver oils Egg yolk hens on a diet high in Vitamin D Vitamin D milk Salmon Sardines Butter (from cows on a diet high in Vitamin D)	Children: Sufficient fish-liver oil to furnish 400 units of vitamin D. Adults: Normal adult probably receives enough through a mixed diet and direct sunshine. Pregnant and nursing mothers: 400 units or more as directed by physician.	Not destroyed by ordinary cooking. Fish-liver oils should be kept cold. Bottle should be tightly covered.
Vitamin E	Necessary for reproduction.	Wheat germ Green lettuce Vegetables	Sufficient vitamin E is thought to be provided by varied diet.	

*There are several other vitamins not listed here. So far as is now known they are probably all included in the "Daily Protective Diet" (as above) if a variety of different foods from each group is eaten from day to day and if the suggestions for preparation are followed.

BODY-BUILDING AND REGULATING FOODS

Class of Food	Use in the Body	Good Sources	To Insure Supply, Serve Daily:	Preparation and Serving Suggestions
Proteins	Build tissue. Repair tissue. May supply energy. May help increase resistance to disease.	Lean meat Poultry Eggs Fish Cheese Milk Beans Peas Nuts Cereals Gelatin	2 servings besides milk. One egg and one other serving recommended. (Animal proteins should be served each day.)	Cook at low temperature. Pork should always be well-done.
Calcium	Builds bones and teeth. Repairs bones and teeth. Aids in clotting of the blood. Helps regulate muscular action. Helps regulate nerve action.	Cheese Skim milk Evaporated milk Ice cream Beans—navy lima soy kidney Mustard greens Broccoli Cauliflower Dandelion greens Kale	It is very difficult to obtain enough calcium without the use of milk or cheese. For Adults: 2 cups milk or 1 cup milk and 1¼ oz. cheese. For Children: 3 to 6 cups milk. For Both: Serve green, leafy vegetables three or four times a week.	Vitamin D is necessary to insure the use of calcium by the body. Serve milk in soups, puddings, and creamed dishes. Skim milk and skim milk powder are excellent sources of calcium. Evaporated milk diluted with an equal quantity of water contains the same amount of calcium as ordinary milk. Make use of water in which vegetables are cooked.
Phosphorus	Builds bones and teeth. Repairs bones and teeth. Is a part of every living cell. Helps regulate muscular action. Helps regulate nerve action.	Cheese Skim milk Evaporated milk Ice cream Eggs Meat Fish Beans Whole grains	2 cups milk (adults) 3 or 4 cups milk (children) 2 servings of egg, meat, fish, cheese or beans.	Vitamin D is necessary to insure the use of phosphorus by the body.
Iron	Builds hemoglobin which is the oxygen carrier of the blood. Prevents nutritional anemia. Helps prevent weakness and fatigue.	Liver Lean meat Egg yolk Green, leafy vegetables Whole grains Beans Dried fruits	2 servings of egg, meat, fish, or beans. Liver (once a week). One or more servings of whole grain. Green, leafy vegetables three or four times a week. Dried fruit once or twice a week. Use enriched or whole grain flour instead of plain white flour.	Use cooking water in soups and gravies. Serve potatoes cooked without peeling often. Use water in which beans or dried fruits are soaked to cook them in
Iodine	Regulates action of the thyroid gland. Prevents simple goiter.	Sea Foods: Shell-fish Salmon Tuna fish Cod Mackerel Halibut Iodized salt	One or two servings of seafood each week. Use iodized salt for cooking and for table.	
Water	Aids in digestion and absorption of food. Necessary for elimination of waste. Regulates temperature of body.		Varies with individual, the diet, and the climate. 6 to 8 glasses daily are average for an adult.	Take regularly between meals. Include with meal but do not use as substitute for thorough mastication.
Bulk	Aids in elimination of waste.	Fruits Vegetables Whole grains	Varies with the person. An average amount includes four or five servings of a variety of fruits and vegetables with one or two servings of whole grain.	Better taken as a part of natural foods than separately.

ENERGY FOODS

Class of Food	Use in the Body	Good Sources	To Insure Supply, Serve Daily:	Preparation and Serving Suggestions
Fats	Help give feeling of satisfaction after a meal. Too much slows up digestion.	Butter Cream Lard Oleomargarine Fat meat Oils	Depends upon person and upon degree of activity.	Should never be heated to smoking point.
Starches	Provide energy.	Bread Cereals Tapioca Crackers Macaroni Potatoes Bananas	Depends upon person and upon degree of activity.	
Sugars	Provide quick energy.	Beet sugar Cane sugar Maple sugar Honey Molasses Corn sirup	Depends upon person and upon degree of activity. Too much encourages tooth decay.	

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