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CC304 Family Nutrition Guide

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Family Nutrition Guide

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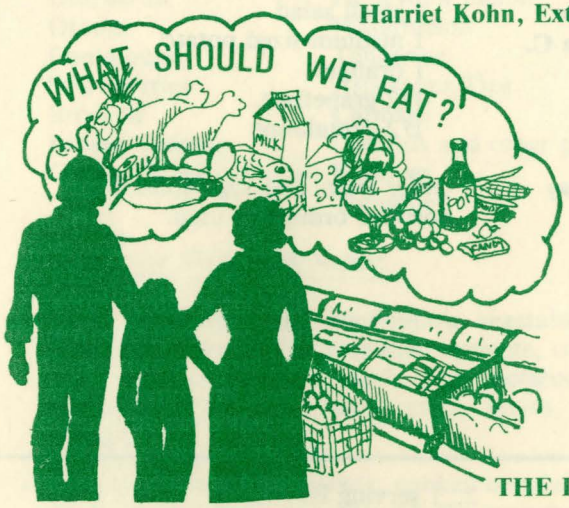

Is your diet healthful? Write out what you and/or your family ate for one full day. Use the Dietary Guidelines (below) and the Daily Food Guide (center-fold) to help you evaluate what was eaten. Then plan ways of meeting your nutritional needs.

THE DIETARY GUIDELINES

The following guidelines and examples of related behaviors are designed to help Americans make more healthful food choices.

1. Eat a Variety of Foods

No single food supplies all the nutrients in the amounts you need.

—Eat a variety of basic foods at each meal, each day and each week. (Basic foods include: vegetables, fruits, whole grain and enriched breads, cereals and grain products, milk, cheese, yogurt, meats, poultry, fish, eggs, dry peas and beans.)

2. Maintain Ideal Weight

If you need to lose weight:

—Increase physical activity.
—Eat less fat and fatty foods.
—Eat less sugar and sweets.
—Limit or omit alcohol.

If you are within normal weight range:
—Eat and exercise defensively to maintain your weight.

If you are 20 percent or more underweight:
—Increase caloric intake and revise exercise habits to reach normal weight.

3. Avoid Too Much Fat, Saturated Fat and Cholesterol

There is controversy about making these recommendations to healthy people, but many nutrition authorities feel that moderation in their use can reduce the chance of having a heart attack.

—Choose lean meat, fish, poultry, dry beans and peas as your protein sources.
—Moderate your use of eggs and organ meats.
—Limit your intake of butter, cream, hydrogenated margarines, shortenings and coconut oil, and foods made from such products.
—Trim excess fat from meats; skim fat from gravies and stews.
—Broil, bake, or boil rather than fry.

4. Eat Foods With Adequate Starch and Fiber

If you cut down on fats you should increase your calories from complex carbohydrates (starches) to supply calories.

—Select foods that are good sources of fiber and starch such as whole grain breads and cereals, fruits and vegetables, beans, peas, and nuts.

5. Avoid Too Much Sugar

Frequent exposures to sugary foods promote dental decay. Sugar is also a low nutrient food.

—Limit the use of all sugars and foods containing sugar.
—Select fresh fruits or fruits canned without sugar.

6. Avoid Too Much Sodium

Sodium is one of the factors that promotes high blood pressure, especially for the 20 percent or so of Americans who react unfavorably to sodium. The trouble is there is no test to tell who is sensitive and who is not sensitive to sodium.

Table salt contains about 40 percent sodium.

—Don't add salt at the table.
—Use very little salt in cooking.
—Limit the intake of salty foods (potato chips, pretzels, salted nuts) and condiments (soy sauce, steak sauce, garlic salt), cheese, pickled foods and cured meat.

7. If You Drink Alcohol, Do So In Moderation

Alcohol is relatively high in calories and low in nutrients.

—If you are pregnant don't drink at all. Alcohol has been linked with birth defects in the infant.
—If you drink, do not take more than two drinks in a day. Heavy drinking causes serious problems.

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DAILY FOOD GUIDE

Serving Size

1. Vegetable-Fruit Group

4 or more servings including
1 serving of a good source or
2 of a fair source of vitamin C.

1 serving high in vitamin A at least 3 times a week, every day for the pregnant or nursing mothers.

1. 1 serving is:

1/2 cup vegetable or fruit
1 small salad
1 medium-sized potato
1 orange
1/2 grapefruit
1/2 cantaloupe

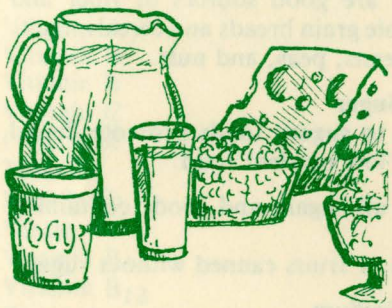
Other fruits and vegetables in portions ordinarily used.

2. Bread-Cereal Group

4 servings including whole grain and enriched breads and cereals

2. 1 serving is:

1 slice bread
1/2 to 3/4 cup cooked cereal, rice, noodles or macaroni
1 ounce ready-to-eat cereal



3. Milk-Cheese Group

Servings

Adults	**2**
Children under 9 years	**2-3**
Children 9 to 12 years and pregnant women	**3**
Teens and nursing mothers	**4**
Pregnant Teens	**5**

3. 1 serving is:

1 cup milk or yogurt
1 1/3 ounces cheddar or Swiss cheese or other natural cheeses
2 ounces processed cheese food

1/2 serving is:

3/4 cup ice cream or ice milk
1 cup cottage cheese

4. Meat, Poultry, Fish and Beans Group

2 servings

4. 1 serving is:

2 to 3 ounces lean, boneless cooked meat, poultry or fish.

1/2 serving is:

1 egg
1/2 to 3/4 cup cooked dry beans, peas, lentils, or soybeans
2 tablespoons peanut butter
1/4 to 1/2 cup nuts, sesame or sunflower seeds

5. Caution: Fats, Sweets and Alcohol Group. Limit amount because of relatively high calories and low nutrient content.

5. Fats. Do include at least one or two servings of vegetable oils and fats to supply essential fatty acids and vitamin E such as: corn oil; safflower oil; soybean oil; cotton seed oil; sunflower oil; and margarine that states liquid vegetable oil first on the label. One serving equals 1 teaspoon.

Foods	Reasons
1. Good Sources of Vitamin C: Grapefruit, Orange, Cantaloupe, Strawberries, Broccoli, Brussel Sprouts, Green and Red Peppers Fair Sources of Vitamin C: Honeydew melon, Watermelon, Tangerine, Asparagus Tips, Cabbage, Collards and other greens, Potatoes, Tomatoes Sources of Vitamin A Value: Dark green leafy and deep-yellow vegetables and deep yellow fruits. For example: apricots, collards, cress, kale, pumpkin, spinach, sweet-potatoes, turnip greens and other dark green leaves, winter squash.	1. Fruits and vegetables contribute vitamins, minerals and fiber. Eat the skins on many fruits and vegetables to increase fiber. Dark-green leafy vegetables provide vitamins A and C as well as riboflavin, folacin, iron and magnesium. Certain greens, collards, kale, mustard, turnip, dandelion and broccoli provide calcium. Nearly all vegetables and fruits are low in fat and none contain cholesterol. The body makes better use of the iron from all of the food groups when a source of vitamin C is eaten at each meal.
2. This group includes: breads; cooked cereals; ready-to eat cereals; bulgur; cornmeal; flours; grits; buckwheat; macaroni and spaghetti; noodles; rice, rolled oats; quick breads; crackers; and other baked goods if made with whole grain or enriched flour.	2. Whole grain and enriched breads and cereals are important sources of B vitamins, iron and protein. They are a major source of protein in vegetarian diets. Whole-grain products also contribute magnesium, folacin, and fiber.
3. Whole skim, lowfat, evaporated, and nonfat dry milk, buttermilk, yogurt, ice cream, ice milk, cheese, cottage cheese, process cheese food and process cheese spreads.	3. Milk and most milk products are calcium rich foods. They contribute riboflavin, protein and vitamins A, B_6, and B_{12}. Some of the products are fortified with vitamin D. Choose low-fat or skim milk to reduce calories and fat except for infants and young children.
4. Beef, veal, lamb, pork, poultry, fish, shellfish (shrimp, oysters, crabs, etc.), dry beans, dry peas, soybeans, lentils, eggs, seeds, peanuts and peanut butter.	4. This group is rich in proteins, phosphorus, vitamins B_6, and B_{12}, as well as other vitamins and minerals. B_{12} is found only in food of animal origins. Some of the foods are richer in certain nutrients: red meats and oysters are good sources of zinc; liver and eggs contain vitamin A; and dry beans, dry peas, soybeans and nuts are sources of magnesium. Meats, poultry and fish are good sources of heme iron, a type of iron well utilized by the body.
5. Sugars. Use cautiously. Frequent exposures promote tooth decay and add calories.	5. Alcohol. If you drink, limit alcoholic beverages from 0 to 2 per day. During pregnancy it's best to omit alcohol since it has been linked with birth defects in the baby.

U.S. RDA (UNITED STATES RECOMMENDED DAILY ALLOWANCES)

The U.S. RDA are generous estimates of amounts of vitamins, minerals and protein needed by most healthy people. They contain a margin of safety above the minimal required amounts of the nutrients.

They were established by the Food and Drug Administration as standards for nutrient labeling. The labels show the percentages of the U.S. RDA for certain nutrients. There are four sets of U.S. RDA (below). The set for infants "Up to 1 year" is used for baby foods and the one for "Children 1 to 4 Years" is used for junior foods. The set for "Adults and Children 4 or More Years of Age" is used for the general variety of food products. All four sets, including the one for the "Pregnant and Lactating Women," are useful in understanding the nutrient labels on foods as well as vitamin and mineral supplements.

If vitamins and mineral supplements are used, it's wise to select levels no higher than the U.S. RDA, for the appropriate age group, unless prescribed by a doctor. Most people don't need nutrient supplements when they eat a variety of nutritious foods.

Food labels can help the consumer choose foods according to nutrient content. The nutrition information on a food label is given for one serving. The number of calories and the amounts of protein, carbohydrate, and fat are given.

The label gives the percentages of seven vitamins and minerals in one serving. An example follows:

Percentage of U.S. Recommended Daily Allowances (U.S. RDA)

Protein	6	Riboflavin	4
Vitamin A	40	Niacin	6
Vitamin C	4	Calcium	2
Thiamin	6	Iron	4

The table below can be used to calculate the amount of a nutrient from the percentages of the U.S. RDA on labels. For example, if the label on a baby food said "Vitamin A 40%," one serving would contain about 600 I.U. (40% of 1500 I.U.). If the label on a general food product said "Vitamin A 40%," one serving would contain about 2000 I.U. (40% of 5000 I.U.).

U.S. Recommended Daily Allowances (U.S. RDA)

Vitamins, minerals and protein	Unit of measurement	*Adults and children 4 or more years of age	#Up to 1 year infants	#Children 1 - 4 years of age	Pregnant or lactating women
Vitamin A	International Unit (I.U.)	5,000	1,500	2,500	8,000
Vitamin D	"	400[a]	400	400	400
Vitamin E	"	30	5.0	10	30
Vitamin C	Milligrams (mg)	60	35	40	60
Folic Acid	"	0.4	0.1	0.2	0.8
Thiamin	"	1.5	0.5	0.7	1.7
Riboflavin	"	1.7	0.6	0.8	2.0
Niacin	"	20	8.0	9.0	20
Vitamin B_6	"	2.0	0.4	0.7	2.5
Vitamin B_{12}	Micrograms (μg)	6.0	2.0	3.0	8.0
Biotin	Milligrams (mg)	0.3	0.5	0.15	0.3
Pantothenic Acid	"	10	3.0	5.0	10
Calcium	Grams (g)	1.0	0.6	0.8	1.3
Phosphorus	"	1.0	0.5	0.8	1.3
Iodine	Micrograms (μg)	150	45	70	150
Iron	Milligrams (mg)	18	15	10	18
Magnesium	"	400	70	200	450
Copper	"	2.0	0.6	1.0	2.0
Zinc	"	15	5.0	8.0	15
Protein	Grams (g)	45[b]	18[b]	20[b]	

*Most often used on general food labels. #Used in labeling infant and junior foods.

[a]Presence optional for adults and children 4 or more years of age in vitamin and mineral supplements.

[b]If protein efficiency ratio of protein is equal to or better than that of casein, U.S. RDA is 45 g for adults, 18 g for infants, and 20 g for children under 4.

If protein efficiency ratio of protein is less than that of casein, U.S. RDA is 65 g for adult, 25 g for infants, and 28 g for children under 4.

Note: No U.S. RDA for protein is given for pregnant or lactating women.

References

"Nutrition and Your Health, Dietary Guidelines for Americans." Home and Garden Bulletin No. 232. U.S. Department of Agriculture and U.S. Department of Health and Human Services, 1980.

"The Hassle-Free Guide to a Better Diet." Leaflet No. 567, U.S.D.A., Science and Education Administration, 1980.

"Nutrition Labels and the U.S. RDA." FDA Consumer Memo, March 1981.