



Extension FactSheet

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Zinc

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This fact sheet is one in a series containing information to help you select foods that provide adequate daily amounts of vitamins, minerals, and dietary fiber. Following these guidelines will put your diet in accordance with the 2005 Dietary Guidelines for Americans, which are:

- Consume a variety of foods within and among the basic food groups while staying within energy needs.
- Control calorie intake to manage body weight.
- Be physically active every day.
- Increase daily intake of fruits and vegetables, whole grains, and nonfat or low-fat milk and milk products.
- Choose fats wisely for good health.
- Choose carbohydrates wisely for good health.
- Choose and prepare foods with little salt.
- If you drink alcoholic beverages, do so in moderation.
- Keep food safe to eat.

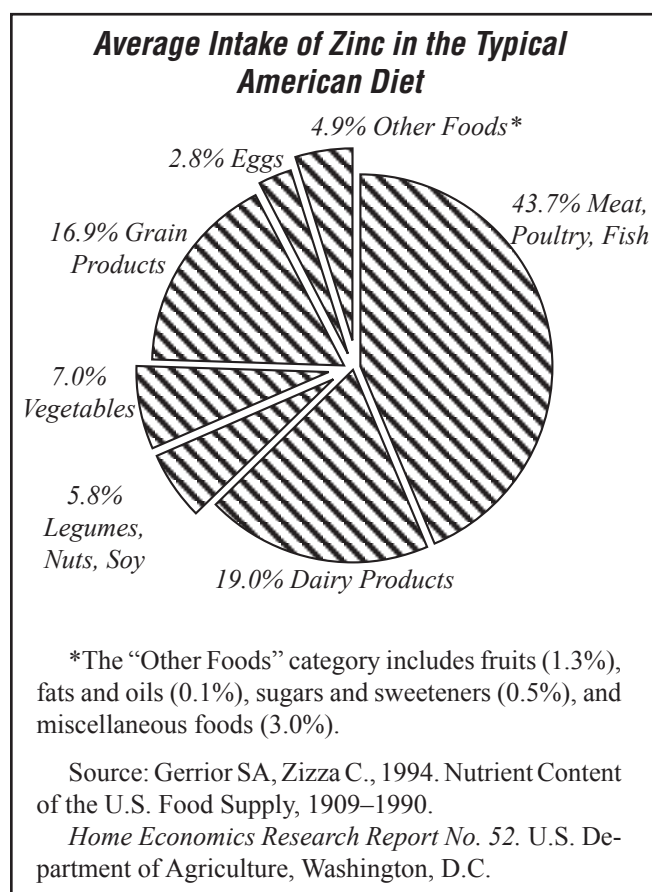
What is “a good food source”?

A good food source of zinc contains a substantial amount of zinc in relation to its calorie content and contributes at least 10 percent of the U.S. Recommended Dietary Allowance (U.S. RDA) for zinc in a selected serving size. The U.S. RDA for zinc is 15 milligrams per day. The U.S. RDA given is for adults (except pregnant or lactating women) and children over 4 years of age.

The U.S. RDA for zinc is the amount of the mineral used as a standard in nutrition labeling of foods. This allowance is based on the 2000 Recommended Dietary Allowances (RDA) for 24 categories for gender and age, set by the Food and Nutrition Board of the National Academy of Sciences. The RDA has been set at 8 milligrams per day for women 19 to 50 years of age and 11 milligrams per day for men 19 to 50 years of age. These recommendations are found in the 2001 Dietary Recommended Intakes (DRI) for 22 categories based on gender and age, set by the Food and Nutrition Board of the National Academy of Sciences.

Where do we get zinc?

Animal products, more specifically red meats and poultry, contain the most readily available form of zinc. Many of the cereals in today’s market are now fortified with zinc. In 2000, meat and dairy products provided approximately 55% of the zinc in the American diet (37.8% and 16.8% respectively). Grain products supplied 25.6% of the zinc recommended. Foods that contain small amounts of zinc, but are not considered good sources, can contribute significant amounts of zinc to an individual’s diet if these foods are eaten often, or in large amounts.



Why do we need zinc?

Zinc, a mineral, plays an important role in the formation of protein in the body and thus, assists in wound healing, blood formation, and general growth and maintenance of all tissues. Zinc also supports immune function and the storage, release, and function of insulin. Zinc is a component of many enzymes, so it is involved in most metabolic processes.

Do we get enough zinc?

The median intake for zinc reported in 2000 by the Food and Nutrition Board and National Institute of Medicine, was 9 milligrams per day for women and 14 milligrams per day for men. The tolerable upper intake level (UL) for safety and health is 40 milligrams per day for adults.

How can we get enough zinc?

Eating a variety of foods that contain zinc is the best way to get an adequate amount. Healthy individuals who eat a balanced diet rarely need supplements. It is important to take special care to ensure an adequate intake, especially if you don't consume animal products. A good rule of thumb is that protein rich foods tend to be rich in zinc as well. Lean meats (beef, other red meats, and shellfish) are some of the best sources. However, nuts, beans, whole grains, and fortified breakfast cereals contain zinc. The list of foods on pages 2 and 3 of this fact sheet will help you select those that are good sources of zinc as you

follow the Dietary Guidelines. The list of good sources was derived from the same nutritive value of foods tables used to analyze information for recent food consumption surveys of the U.S. Department of Agriculture, Human Nutrition Information Service.

How to prepare foods to retain zinc

Zinc is lost in cooking some foods even under the best conditions. To retain zinc:

- Cook foods in a minimal amount of water.
- Cook for the shortest possible time.

What about whole-grain cereals?

Most fortified ready-to-eat cereals usually contain 10 percent of the U.S. RDA for zinc. Since cereals vary, check the label on the package for the percentage of the U.S. RDA for a specific cereal.

What is a serving?

The serving sizes used in this list of good sources are only estimates of the amounts of food you might eat. The amount of nutrient in a serving depends on the weight of the serving. For example, the edible part of a cooked chicken leg (thigh and drumstick) weighs more than the edible part of a cooked chicken breast half. Therefore, the chicken leg appears on the list while the chicken breast half does not. The chicken breast half provides the nutrient—but just not enough to be considered a good source.

Food	Serving Amount	Percentage of U.S. RDA ¹
Breads, cereals, and other grain products		
Ready-to-eat cereals, wheat, puffed, fortified	1 cup	+
Wheat flour, whole grain	1 cup	+
Meat, poultry, fish, and alternates		
Meat and Poultry		
Beef:		
Ground; extra lean, lean, or regular; baked or broiled	3 ounces	++
Pot roast, braised, lean only	3 ounces	+++
Roast, rib, roasted, lean only	3 ounces	++
Short ribs, braised, lean only	3 ounces	+++
Steak, lean only: baked or broiled	3 ounces	++
Braised	3 ounces	+++
Stew meat, simmered, lean only	3 ounces	+++
Chicken, leg (thigh and drumstick), broiled or roasted, without skin	1 leg	+

Ham, fresh, smoked or cured, roasted, lean only	3 ounces	+
Lamb chop, shoulder; braised, broiled, or baked; lean only	1 chop	++
Ground, cooked	1 patty	+
Roast, shoulder, roasted, lean only	3 ounces	++
Liver, braised, beef or pork	3 ounces	++
Calf	3 ounces	+++
Chicken or turkey	1/2 cup diced	+
Pork:		
Chop, baked or broiled, lean only	1 chop	+
Ground, cooked	3 ounces	+
Roast, loin, roasted, lean only	3 ounces	+
Roast, shoulder, roasted, lean only	3 ounces	+
Tongue, braised	3 ounces	++
Turkey:		
Ground, cooked	3 ounces	+
Light or dark meat, roasted, without skin	3 ounces	+
Veal:		
Chop, braised, lean only	1 chop	+
Ground, cooked	1 patty	+
Roast, leg, roasted, lean only	3 ounces	++
Fish and seafood		
Carp, baked or broiled	3 ounces	+
Crabmeat, steamed	3 ounces	+
Lobster, steamed or boiled	3 ounces	+
Mussels, steamed, boiled, or poached	3 ounces	+
Oysters:		
Baked, broiled, or steamed	3 ounces	+++
Canned, undrained	3 ounces	+++
Nuts and seeds		
Pumpkin or squash seeds, hulled, roasted	2 tablespoons	+
Milk, cheese, and yogurt		
Cheese, ricotta	1/2 cup	+
Yogurt:		
Flavored, made with whole or low-fat milk	8 ounces	+
Plain, made with low-fat or nonfat milk	8 ounces	+
¹ A selected serving size contains: + 10–24 percent of the U.S. RDA for adults and children over 4 years of age ++ 25–39 percent of the U.S. RDA for adults and children over 4 years of age +++ 40 percent or more of the U.S. RDA for adults and children over 4 years of age		

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