Copper-Consumer

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Copper  
Fact Sheet for Consumers  
  
This is a general overview. For more in-depth information, see our health professional fact sheet.  
  
What is copper and what does it do?  
Copper is a mineral that you need to stay healthy. Your body uses copper to carry out many important functions, including making energy, connective tissues, and blood vessels. Copper also helps maintain the nervous and immune systems and activates genes. Your body also needs copper for brain development.  
  
How much copper do I need?  
The amount of copper you need each day depends on your age. Average daily recommended amounts are listed below in micrograms (mcg).  
  
Life Stage Recommended Amount  
Birth to 6 months 200 mcg  
Infants 7 12 months 220 mcg  
Children 1 3 years 340 mcg  
Children 4 8 years 440 mcg  
Children 9 13 years 700 mcg  
Teens 14 18 years 890 mcg  
Adults 19 years and older 900 mcg  
Pregnant teens and women 1,000 mcg  
Breastfeeding teens and women 1,300 mcg  
What foods provide copper?  
Many foods contain copper. You can get recommended amounts of copper by eating a variety of foods, including the following:  
  
Beef liver and shellfish such as oysters  
Nuts (such as cashews), seeds (such as sesame and sunflower), and chocolate  
Wheat-bran cereals and whole-grain products  
Potatoes, mushrooms, avocados, chickpeas, and tofu  
What kinds of copper dietary supplements are available?  
Copper is available in many multivitamin/mineral supplements, in supplements that contain only copper, and in other dietary supplements. Copper in dietary supplements is often in the forms of cupric oxide, cupric sulfate, copper amino acid chelates, and copper gluconate. It is not known whether one form of copper is better than another.  
  
Am I getting enough copper?  
Most people get enough copper from the foods they eat. However, certain groups of people are more likely than others to have trouble getting enough copper:  
  
People with celiac disease  
People with Menkes disease, a rare genetic disorder  
People taking high doses of zinc supplements, which can interfere with the ability to absorb copper and could lead to copper deficiency  
What happens if I don t get enough copper?  
Copper deficiency is rare in the United States. Copper deficiency can cause extreme tiredness, lightened patches of skin, high levels of cholesterol in the blood, and connective tissue disorders affecting the ligaments and skin. Other effects of copper deficiency are weak and brittle bones, loss of balance and coordination, and increased risk of infection.  
  
What are some effects of copper on health?  
Scientists are studying copper to understand how it affects health. Here are several examples of what this research has shown.  
  
Cardiovascular disease  
Studies looking at the effect of copper intake on heart disease have had mixed results. More research is needed to understand whether getting more copper from the diet or supplements might raise or lower the risk of cardiovascular disease.  
  
Alzheimer s disease  
Some research shows that people with higher levels of copper in their blood have a lower risk of Alzheimer s disease. Other research, however, shows that high amounts might increase Alzheimer s disease risk. More research is needed to determine whether high or low levels of copper affect the risk of developing Alzheimer s disease. Research is also needed to find out whether dietary supplements that contain copper could affect the risk of Alzheimer s disease or its symptoms.  
  
Can copper be harmful?  
Yes, copper can be harmful if you get too much. Getting too much copper on a regular basis can cause liver damage, abdominal pain, cramps, nausea, diarrhea, and vomiting. Copper toxicity is rare in healthy individuals. However, it can occur in people with Wilson s disease, a rare genetic disorder. It can also occur if copper-containing water pipes leach copper into drinking water in your home or workplace.  
  
The daily upper limits for copper include intakes from all sources food, beverages, and supplements and are listed below in micrograms (mcg).  
  
Ages Upper Limit  
Birth to 12 months Not established  
Children 1 3 years 1,000 mcg  
Children 4 8 years 3,000 mcg  
Children 9 13 years 5,000 mcg  
Teens 14 18 years 8,000 mcg  
Adults 10,000 mcg  
Does copper interact with medications or other dietary supplements?  
Copper is not known to interact with any medications. However, it s always important to tell your doctor, pharmacist, and other health care providers about any dietary supplements and prescription or over-the-counter medicines you take. They can tell you if the dietary supplements might interact with your medicines or if the medicines might interfere with how your body absorbs, uses, or breaks down nutrients such as copper.  
  
Copper and healthful eating  
People should get most of their nutrients from food and beverages, according to the federal government s Dietary Guidelines for Americans. Foods contain vitamins, minerals, dietary fiber, and other components that benefit health. In some cases, fortified foods and dietary supplements are useful when it is not possible to meet needs for one or more nutrients (for example, during specific life stages such as pregnancy). For more information about building a healthy dietary pattern, see the Dietary Guidelines for Americansexternal link disclaimer and the U.S. Department of Agriculture s (USDA s) MyPlate.external link disclaimer  
  
Where can I find out more about copper?  
For more information on copper  
Office of Dietary Supplements (ODS) Health Professional Fact Sheet on Copper  
MedlinePlus, Copper in dietexternal link disclaimer  
For more information on food sources of copper  
ODS Health Professional Fact Sheet on Copper  
USDA s FoodData Centralexternal link disclaimer  
USDA, Copper contentexternal link disclaimer of selected foods  
For more advice on choosing dietary supplements  
ODS Frequently Asked Questions: Which brand(s) of dietary supplements should I purchase?  
For information about building a healthy dietary pattern  
Dietary Guidelines for Americansexternal link disclaimer  
MyPlateexternal link disclaimer  
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