

### Background:

Wilson's disease, also called hepatolenticular degeneration, is a hereditary disorder that affects the body's ability to regulate its copper absorption and storage. Instead of excreting excess copper into the intestines and eventually out of the body, Wilson's disease causes the body to store it in your kidneys, liver, eyes and brain. Wilson's disease is a treatable condition, but caution must be taken as too much copper in the liver can be life-threatening.

Copper is important for the development of health bones, collagen, nerves and melanin in the skin. Excess copper is usually excreted through bile, but for people with Wilson's disease this mechanism does not function effectively.

For patients with Wilson's disease, it is important to avoid copper-rich foods, like organ meats and shellfish. However, dietary restrictions are usually not enough to control Wilson's disease on their own. Drinking alcohol should also be avoided as it can further harm the liver, which may already be damaged from cirrhosis as a result of excessive copper storage. If necessary, your physician can prescribe medicines to help the body excrete excess copper. Treatment may also be needed for any existing liver or central nervous system damage.

### Dietary Copper Tips:

The copper content in food can vary depending on a number of factors:

- The copper content and location of the soil in which the food was grown, or the method used to process the food.
- Drinking water may contain elevated levels of copper. The copper content of your water should not be more than 0.1 ppm. If you have copper plumbing, the copper content of your water can be reduced by running the water for awhile before using it.
- Always check food labels to see if they contain copper. Consult your pharmacist for help finding a multivitamin that does not contain copper. Most prenatal vitamins are high in copper and should be avoided. If you are pregnant or intend to become pregnant, please have your obstetrician consult with your hepatologist before prescribing your prenatal vitamin.
- Copper cooking utensils can leave trace amounts in food and shouldn't be used when trying to decrease copper intake.

### High Copper Foods:

Once copper levels have stabilized to normal, these foods are allowed occasionally. If you are a vegetarian, please consult with our dietitian as many of the foods used for protein in a vegetarian diet are high in copper.

- Lamb
- Pork
- Pheasant
- Quail
- Duck
- Goose
- Squid
- Salmon
- Organ meats including liver, heart, kidney, and brain
- Shellfish including oysters, scallops, shrimp, lobster, clams, and crab
- Soy protein meat substitutes
- Tofu
- Nuts and seeds
- Vegetable juice cocktail
- Mushrooms
- Nectarines
- Commercially dried fruits including raisins, dates, prunes
- Avocado
- Dried beans including soy beans, lima beans, baked beans, garbanzo beans, pinto beans
- Dried peas
- Lentils
- Millet
- Barley
- Wheat germ
- Bran breads
- Cereals with >0.2 mg of copper per serving (check label)
- Soy flour
- Soy grits
- Fresh sweet potatoes
- Chocolate milk
- Soy milk
- Cocoa
- Instant breakfast beverages
- Mineral water
- Soy-based beverages
- Copper-fortified formulas
- Brewer's yeast
- Multi-vitamins with copper or minerals

### Low Copper Foods:

- Beef
- Eggs
- White meat turkey and chicken
- Cold cuts and frankfurters that do not contain pork, dark turkey, dark chicken, or organ meats
- Most vegetables including fresh tomatoes
- Breads and pasta from refined flour
- Rice
- Regular oatmeal
- Cereals with <0.1 mg of copper per serving (check label)
- Butter
- Cream
- Margarine
- Mayonnaise
- Non-dairy creamer
- Sour cream
- Oils
- Salad dressings (made from allowed ingredients)
- Most milk products
- Milk flavored with carob
- Cheeses
- Cottage cheese
- Jams, jellies, and candies made with allowed ingredients
- Carob
- Flavoring extracts
- Coffee
- Tea
- Fruit juices
- Fruit-flavored beverages
- Lemonade
- Soups made with allowed ingredients

Altering the body's copper intake can have serious health consequences. Therefore, attempting a low copper diet without physician supervision is not recommended. Your healthcare provider is the best source of information for questions and concerns related to your health. To find a physician near you, please see our [locations page](#). To learn more, or for help following a low copper diet, schedule an appointment with our Registered Dietitian Nutritionist by calling **(602) 422-9800** or visiting [www.arizonadigestivehealth.com/help-desk-forms/request-an-appointment](http://www.arizonadigestivehealth.com/help-desk-forms/request-an-appointment).