

Cookware Safety

POTTERY

Lead from pottery can enter the food placed in it, and although it does not change the look or taste of the food or drink, it can cause lead poisoning in anyone who eats from it. Lead poisoning is especially dangerous for children and pregnant women. It can cause learning difficulties, behavioral problems and serious illness.

Safety Guidelines:

- Pottery made in the United States must meet safety guidelines for lead and should be safe to use.
- Do not prepare food in pottery from Mexico or Latin America because of possible high levels of lead.
- Other imported pottery such as pitchers and mugs may also have large amounts of lead.
- Look for safety labels that state "Safe for food use."
- Follow recommendations that state: "Not for food use;" "Plate may poison food;" or "For decorative purposes only." Warning labels may be erased or painted over.
- Pottery is unsafe to use if it has a gray powder on the glaze after the pottery has been washed.

Keep Your Family Safe: Do not use pottery with lead for cooking, serving or storing foods or beverages. For more information about lead, call your county health department. The public health department can check your family for lead poisoning and may be able to test your pottery for lead.

ALUMINUM COOKWARE

Aluminum is in air, water, soil, plants, animals, foods and household products. More than half of all cookware sold today is made of aluminum, usually

coated with nonstick finishes or treated in some way to harden the structure and make it more scratch-resistant.

There is no evidence that aluminum causes Alzheimer's disease as was once suggested by researchers. However, for those who would like to avoid exposure to aluminum, the best way would be to avoid antacids containing aluminum and to use deodorants (which generally do not contain aluminum) rather than antiperspirants.

Many over-the-counter medicines contain aluminum. One antacid tablet can contain 50 milligrams of aluminum and a buffered aspirin tablet may contain about 10 to 20 milligrams of aluminum.

In contrast, a person using uncoated aluminum pans for all cooking and food storage every day would take in an estimated 3.5 milligrams of aluminum daily. However, storing highly acidic or salty foods such as tomato sauce, rhubarb or sauerkraut in aluminum pots may cause more aluminum than usual to enter the food and is not recommended. (These foods will also cause pitting on the pot's surface.)

ANODIZED ALUMINUM COOKWARE

The anodization process hardens the surface of aluminum cookware making it non-stick, scratch-resistant and easy to clean. Manufacturers claim that a final stage in the anodization process seals the aluminum, preventing any leaching into food. This cookware doesn't react to acidic foods, so these pots and pans are top choices for cooking rhubarb and sauces with tomato, wine and lemon juice.

CAST IRON COOKWARE

This all-time classic is strong, inexpensive, and an even conductor of heat for browning, frying and baking foods. Cooking with cast iron also provides

a source of an important nutrient. Foods cooked in unglazed cast iron may contain twice the amount of iron they would otherwise.

Cast-iron utensils should be handled differently from other utensils. To prevent rust damage, the inside of cast iron cookware should be coated frequently with unsalted cooking oil. It should not be washed with strong detergents or scoured and should be wiped dry immediately after rinsing.

COPPER COOKWARE

Copper is an excellent conductor of heat, especially good for top-of-range cooking. Cooks often prefer copper cookware for delicate sauces and foods that must be cooked at precisely controlled temperatures.

Copper cookware is usually lined with tin or stainless steel. The Food and Drug Administration (FDA) cautions against using unlined copper for general cooking because the metal is relatively easily dissolved by some foods with which it comes in contact, and in sufficient quantities can cause nausea, vomiting and diarrhea.

NONSTICK COATINGS

Although nonstick pans will wear away with hard use and particles may chip off, the Food and Drug Administration has stated that these particles would pass unchanged through your body and pose no health hazard. A coated pan heated for long periods at high temperatures will give off fumes, but these are less toxic than fumes given off by ordinary cooking oils.

STAINLESS STEEL COOKWARE

Stainless steel cookware is durable, will not permanently corrode or tarnish and its hard, nonporous surface is resistant to wear. Stainless steel is a combination of iron and other metals. It contains chromium, and may contain nickel,

molybdenum or titanium, which contribute special hardness, resistance to damage from high temperatures, scratching and corrosion.

As stainless steel does not conduct heat evenly, most stainless steel cookware is made with copper or aluminum bottoms. Manufacturers caution against allowing acidic or salty foods to remain in stainless steel for long periods. Although there are no known health hazards from leaching of the metal, undissolved salt will pit steel surfaces.

CERAMIC AND ENAMELED COOKWARE

Enamel-coated iron and steel is colorful, stain and scratch resistant and does not pick up food odors. It does not contain lead, except in some glazes for slow-cooking pots (crock-pots). However, the amount of lead leached into food from these pots does not exceed FDA standards. In the 1970s excessive levels of potentially toxic cadmium were found in pigments used to color the interior of enamel cookware manufactured overseas. The FDA prohibited the importing of these products at that time. However, manufacturers have discontinued the use of pigments with cadmium, so that the enamelware now marketed is cadmium free.

SOURCES:

1. Blumenthal, Dale (1990). *Is That Newfangled Cookware Safe?* DHHS Publication No. (FDA) 91-2242.
2. University of Wisconsin-Extension (1998). *Is Your Pottery Safe to Use* [WWW document]. URL <http://www.uwex.edu/disted/inforsce/777.htm>

This information has been reviewed and adapted for use in South Carolina by P.H. Schmutz, HGIC Information Specialist; Joyce Christenbury, Extension Resource Management Specialist; and E.H. Hoyle, Extension Food Safety Specialist, Clemson University.

This information is supplied with the understanding that no discrimination is intended and no endorsement by the Clemson University Cooperative Extension Service is implied. All recommendations are for South Carolina conditions and may not apply to other areas. (New 5/99).