

Stainless Steel: Potential Problems

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Stainless Steel: Potential Problems

(As Found in Stents, Cookware, Silverware)

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Contrary to common beliefs, contact with stainless steel may not be inert and benign. A new study has found that stainless steel coronary stents may trigger allergic reactions to substances such as nickel, molybdenum, or chromium, which are released. These allergic reactions may be a major factor in causing in-stent restenosis.

The researchers looked at 131 patients (avg. age 62 years) with coronary stainless-steel stents who underwent angiography for suspected restenosis. The average time since the stents were inserted was about 6 months. All patients underwent allergy skin tests for nickel, chromate, molybdenum, manganese, and small stainless-steel plates. In-stent restenosis (50% diameter stenosis) occurred in 89 patients. All 10 patients with positive patch-test results had restenosis (4 had positive reactions to molybdenum and 7 patients had positive reactions to nickel).

The authors conclude that "Allergic reactions to nickel and molybdenum released from stents may be one of the triggering mechanisms for in-stent restenosis."

COMMENT:

This study shows that the use of stainless steel in contact with humans is not always inert. Although this study was not done on cooking with stainless steel, it does show that sensitive individuals can have adverse reactions to stainless steel devices placed into their body. Studies show that some of the ions which are released from stainless steel devices are able to destroy or damage enzymes and proteins, in addition to causing allergic reactions.

Stainless steel

Stainless steel alloys can contain nickel, chromium, molybdenum, iron, carbon and various other metals. Most doctors do not realize is that nickel can be just as toxic as mercury. Some doctors believe that nickel is actually more toxic than mercury. Nickel is very likely more toxic than mercury and is the main reason for concern in using stainless steel cookware. It is unknown how many nickel ions are liberated during the cooking process with stainless steel cookware. Using stainless steel cookware in which the food touches the metal is best avoided.

Aluminum

Avoid aluminum cookware. Consuming small amounts of aluminum (gradually scraped off the pan over time) can bio-accumulate and create internal toxicity and is linked to Alzheimer's and other diseases.

Teflon

Avoid using Teflon-coated cookware. Research shows that fluoride can be released from Teflon into food. As scratches develop on the pan's surface, bits of the Teflon end up in your food. Under the Teflon is the typical metal, aluminum. As scratches develop, the food begins to come into contact with aluminum and you may end up eating small amounts of aluminum mixed into food. Higher temperatures increase the rate of leaching.

Ceramic Cookware

Some types of ceramic-coated metal for cookware are radioactive, so, buyer beware.

Recommended Cookware & Silverware:

Our top choice for cookware is surgical-grade stainless steel cookware.

There are two types of stainless steel — one type that is attracted to magnets, the other type is not. The best type is the magnetically-attractive type of stainless steel, which usually has a very low or no nickel content and does not leach nickel into food.

Avoid using “silverware” which is often made of high-nickel stainless steel (which can leach into food). Instead, we recommend eating utensils made of **Lexan** (a nontoxic, very durable polycarbonate).



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