

NICKEL ALLERGY AND JEWELRY

Rajani Katta MD www.KattaMD.com

Many people develop rashes after wearing costume or other types of jewelry. In one of the most common scenarios, the use of certain earrings will trigger a red itchy rash on the earlobes.

The most common trigger for this type of allergic reaction is a metal called nickel. Nickel is one of the most common allergy-producing substances in America. It's also widely used, in all sorts of objects. Nickel is cheap and it's strong, so it's used in many types of jewelry, and all sorts of personal and household items, such as watchbands, snaps and buttons on jeans, eyelash curlers, cell phones, and scissors. It's even used in some implantable medical devices.

You can't tell if an object contains nickel just by looking at it, and you can't rely on price either.

How can you tell if you have an allergy to nickel?

When people are allergic to nickel, they often develop a rash right at the site of contact. With time, that rash may spread. A common scenario is when women wear earrings and start to develop a red, itchy, and sometimes oozing, rash on their earlobes. With this type of allergic reaction, the rash is delayed – it usually takes 2 to 3 days before the rash shows up, although it may take as few as hours or as long as one week. Once the rash is there, it can take up to 8 weeks for it to go away.

While you may suspect an allergy to nickel, patch testing is required to confirm this allergy.

If you think you may be allergic to nickel, what kinds of jewelry can you wear?

1. Many sterling silver items will be fine, although not all. Some sterling silver items contain nickel mixed with the silver. It's best to look for makers of sterling silver who certify that their items contain no nickel. James Avery, for example, certifies their silver as nickel free.
2. What about German silver or alpaca or nickel silver? These terms refer to the silver color of the item, not to actual silver. These items actually contain nickel. Do not choose these items.
3. 18 karat gold and above is usually fine. The exception is white gold. In order to make white gold, yellow gold is usually mixed with either palladium or nickel. Unless you know for sure that your white gold item is free of nickel, don't choose it.
4. Can you rely on titanium objects? Not necessarily. Titanium is often mixed with nickel. Some jewelry manufacturers will specify that their titanium items do not contain nickel, so make sure you

look for that information before purchasing. One example is Titanium Era (1-800-656-6564), which sells jewelry made of "aircraft grade titanium," which consists of an alloy made of 90% titanium, 6% aluminum, and 4% vanadium.

5. You may be able to use "medical plastic" earrings, as some are certified to contain "0% nickel". One example are "medical plastic" earrings manufactured by Blomdahl (<http://www.allergymatters.com>).

6. You can also look for costume jewelry that is labeled as "nickel-free". One company that sells nickel-free costume jewelry is www.SimplyWhispers.com. They sell a wide variety of costume jewelry, including accessories such as earring posts.

You do have to be careful, though, in general, with costume jewelry that's marketed as "nickel-free." At this time, there's no US standard to define this term. In the US, some manufacturers define the term "nickel-free" as being free of nickel in the plating or top layer. When this plating wears thin, which happens over time, nickel may be released. As a general rule, be careful with plated jewelry, and pay attention to any rashes that develop at the site of so-called "nickel-free" jewelry.

7. If you're purchasing jewelry, and aren't sure if it contains nickel, you can purchase a **nickel test kit**. This kit contains a chemical (in solution) called dimethylglyoxime. The use of this chemical does not harm the object being tested. When applied to a metal object with a cotton swab, the solution will turn pink in the presence of nickel. This test may not pick up minute amounts of nickel, but it's usually a good screen for jewelry. One company that sells the test kit is www.nickelsolution.com.

8. You can also **use a protective lacquer to help prevent the release of nickel from an object**. Eventually, the lacquer will wear off, so you'll have to reapply it periodically. You could use clear nail polish, although you have to make sure the nail polish itself doesn't trigger an allergic reaction. You can also buy a commercially available solution, such as Nickel Guard (available at www.nickelsolution.com), to provide a protective lacquer that's similar to nail polish but without potential allergens.

9. For an expensive jewelry item, like a wedding ring, you can take it to your jeweler and have them apply a coating (NOT a plating) on the inner surface of the ring. Platinum or rhodium are hard metals, and would provide a strong layer of protection.