

Your TRUE TEST results indicate that you have a contact allergy to nickel. This contact allergy may cause your skin to react when it is exposed to this substance, although it may take several days for the symptoms to appear. Typical symptoms include redness, swelling, itching and fluid-filled blisters.

Nickel is one of the most common metals in the modern environment, both at work and at home and reportedly causes more dermatitis than all other metals combined. It is used in metal alloys, nickel plating, metal and chemical manufacturing, and the production of batteries and coins. Nickel is often used to coat other metals to give them a shiny metallic finish. Nickel is found on the surface of common metallic and metal-plated items such as metal jewelry, watchbands, keys, tools, equipment, scissors, kitchen utensils, coins, and clothing fasteners such as buttons, zippers and snaps. It is occasionally found in eye cosmetics. While nickel is found in stainless steel, allergic reactions to products made with stainless steel (for example, dental and surgical instruments) are rare because typically only minimal amounts of nickel are released.

WHERE IS NICKEL FOUND?

At work, you may find nickel in or around:

- Metal alloys
- Copper-nickel tubing for salt water
- Machine parts
- Chemical catalysts
- Aluminum electrical joint compounds
- Equipment
- Orthodontic and dental appliances
- Welding and cutting
- Nickel plating
- Metal-working fluids and oils
- Batteries
- Dyes
- Insecticides

At home, you may find nickel in or around:

- Jewelry
- Scissors
- Metal utensils
- Magnets
- Chrome and brass
- Metallic powders
- Some white or 14-kt gold jewelry
- Watchbands
- Pigments
- Hair ornaments
- Eyeglasses
- Keys
- Batteries
- Hand tools
- Buttons and snaps
- Zippers
- Eyeshadow
- Coins
- Some bronze objects
- Some objects with white or 14-kt gold
- Knitting needles

Dietary exposure to nickel can provoke dermatitis in sensitized individuals. Foods reported to be high in nickel include legumes, whole grain flour, oats, soybeans, shellfish, fish, asparagus, beans, mushrooms, onions, corn, spinach, tomatoes, peas, pears, all types of nuts, raisins, rhubarb, tea, cocoa, baking powder, cabbage, sprouts, all canned foods or foods cooked in nickel utensils, licorice, chocolate and potatoes. A recent study reported that nickel was also found in several complementary and alternative remedies (CAR), including preparations advertised to treat asthma, acne, atopic eczema, seborrhea and psoriasis. Herbal remedies, herbal teas and some over-the-counter multivitamins have also been listed as sources of potential nickel exposure. Food containing nickel is seldom a problem, but if you are severely allergic to nickel discuss whether you need to avoid foods rich in nickel with your doctor.

HOW CAN YOU AVOID NICKEL?

- Minimize skin contact with nickel. Aluminum, yellow gold, silver and platinum are usually safe alternative metals.
- Avoid wearing jewelry that may contain nickel.
- Wear clothing with nonmetallic zippers and fasteners.
- Use scissors, kitchen utensils, combs and other metal items with plastic or wood handles.
- Only wear earrings guaranteed to be free of nickel.
- Select a watch with a stainless steel back.
- Coat metallic items that are difficult to avoid contact with such as door keys and doorknobs with several layers polyurethane lacquer.
- Wear protective clothing to perform wet work, because moisture increases the penetration of nickel into the skin.
- Only use products that do not list nickel or related chemicals on the label, ingredient list or Material Safety Data Sheet (MSDS). If no information is available, contact the product manufacturer.
- If you think that you contact nickel at work, ask your employer for MSDS or manufacturer information on the product(s). Talk to your employer about using a different product or about wearing protective gloves and clothing.
- Inform your healthcare providers that you are allergic to nickel.
- Wear protective gloves made of cotton when handling coins, tools or other metal items. Gloves made of disposable rubber or vinyl can also be worn when handling metal objects.
- Jewelry and other metal objects can easily be tested for the presence of nickel using a spot test called Reveal & Conceal Nickel Spot test
- Tell your physician, pharmacist, dentist, beautician and hairdresser that you are allergic to nickel.

WHAT SHOULD YOU LOOK FOR AND AVOID?*

Avoid products with the following names in the list of ingredients, MSDS or package insert.

- Nickel sulphate (NiSO₄) or nickel soluble salts; nickel (Ni); carbonyl nickel powder; nickel alloys; nickel-plating; elemental nickel; nickel catalyst

You also may react to other metal substances that often are present together with nickel:

- Palladium
- Chrome (or chromate)
- Cobalt

*These lists are brief and provide just a few examples. Read product labels carefully and talk to your doctor if you have any questions. Product formulations may change from time to time without notice. Talk to your doctor for specific instructions. For additional information about products that might contain **nickel** or a related substance, go to the Household Products Database online (householdproducts.nlm.nih.gov) at the United States National Library of Medicine.