**Nickel**

You have shown a positive allergic reaction to **nickel**. You should avoid contact with this substance. Here is a partial list of products known to have contained nickel in the past. To be sure, you should check the contents on the package.

**What is it?**
Nickel is a hard, rust, resistant metal found in a wide variety of substances, especially in shiny and silvery objects. Nickel is among the most common causes of allergic contact dermatitis, and having a body part pierced is one of the most common ways people become allergic to it. Metal objects containing nickel are so common that it is difficult to avoid nickel completely. Body fluids (sweat and saliva) can cause some metal to release nickel. Stainless steel contains nickel, but most types of stainless steel release very little of it.

Nickel is also felt to be an occupational allergen, commonly affected workers include hairdresser, retail clerks, food service workers, cleaners and metal workers.

**Uses:**
- Appliances
- Batteries
- Belt buckles
- Blackening zinc and brass
- Bracelets
- Buttons
- Carriages
- Ceramics
- Chalk
- Cigarettes
- Coins and keys
- Costume jewelry (especially earrings, silver, and white gold)
- Curlers
- Dental braces
- Dental instruments
- Dentures
- Door handle
- Duplicating fluids and fluxes (brazing)
- Earrings (esp. silver and white gold)
- Eating utensils
- Electric wiring
- Electroplating
- Enamel (green, nickel oxides)
- Eyeglass frames
- Eyelash curlers
- Eye shadow
- Garter clasps
- Hair dye and bleaches
- Hairpins
- Handbags
- Heart Valve Prosthesis
- Infusion Cannulas
- Insecticides
- Keys and coins
- Machinery parts
- Medallions
- Metal arch supports
- Metal chairs
- Metal cutting fluids and coolants
- Metal furniture
- Metal identification tags
- Metal parts of furniture
- Metallic eyelets of shoes
- Mordant (fixative) in dyes
- Necklaces
- Needles
- Nickel coins
- Nickel plating for alloys such as new
- Silver, Chinese silver, German silver
- Orthopedic plates
- Paint for glass
- Paint pigments
- Pens
- Razors
- Reagents and catalysts (plastics)
- Safety pins
- Scissors
- Silver work
- Telephone wiring
- Thimbles
- Tools, utensils, and instruments
- Umbrellas
- Wall paper pigments
- Watchbands and watch strap buckles
- Wearing apparel (snaps, zippers, and metal buttons)
- White gold crowns
- Wire support of bra cups
- Zippers
Here is a partial list of metal alloys containing nickel:

- Allegheny metal
- Alnico
- Chlormel
- Coil alloys
- Constantan
- Curalium
- Manganium
- Monel
- Nichrome
- Nobilium
- Permalloy
- Platenite
- German silver
- Hatelloy
- Illium
- Invar
- Stainless steel
- Ticonium
- Vitallium

The additives in these alloys rarely cause contact nickel dermatitis, but since nickel is present, the possibility of dermatitis does exist.

Other names for nickel:

- Niccolum sulfuricum
- Nickel sulfate
- Nickel sulfate hexahydrate

Potential cross-reacting/co-reacting substances:

- Cobalt
- Palladium

Spot Test for Nickel

The Nickel Spot Test consists of an ammoniacal solution of Dimethylglyoxime (DMG) for the detection of nickel in various metallic objects. DMG produces a bright, reddish-pink insoluble salt with nickel. The Spot test detects free nickel down to a limit of 10 ppm (parts/million)\(^1\). The sensitivity threshold of most nickel allergic patients is above 11 ppm. Some strongly allergic patients will however still react to objects releasing amounts below the threshold of the test.

We hope that the Nickel Spot Test will be of benefit to you in order to avoid exposure to nickel thereby minimizing contact dermatitis caused by nickel releasing objects.

To order a test kit:

Allerderm
3400 E. McDowell Road
Phoenix, AZ 85008-7899
www.allerderm.com
Email: info@allerderm.com
phone: 800-365-6868
Fax: 800-926-4568
Test kit is called: reveal & conceal, Nickel Spot Test (Part #AL8001)
**Test Procedure**

Test for nickel in metal objects with these easy-to-use swabs and then protect yourself using Nickel Clear Coat.

- Detection solution and applicator all in one
- Revolutionary cotton tip swabs
- Simply “snap” to open
- Convenient-carry them in your purse, wallet or briefcase
- Safe and effective
- Easily disposable
- Use at work, home or while shopping for jewelry, tools, utensils etc.
- Does not harm objects tested or coated
- Detects nickel in seconds

or

Dormer Laboratories Inc  
91 Kelfield Street #5  
Rexdale, Ontario, M9W 5AQ3  
www.dormer.com  
phone: 416-242-6167  
fax: 416-242-948

Test kit is called: Chemo Nickel Spot Test (code: NT)

**Test procedure**

- Put a few drops of the reagent solution onto the cotton tip to moisten it.
- Rub the metal surface of the suspected object intensively for up to 1 minute with the cotton tip.
- Observe the cotton tip for a change in color to reddish-pink.
- A color change of this nature indicates the presence of free nickel.

In general, there is insufficient evidence to support the use of a nickel-restricted diet in patients allergic to nickel.