

# NICKEL

\_\_\_\_\_Name

\_\_\_\_\_Date

## ***What is it?***

Nickel is a durable inexpensive metal that is a very common cause of allergic contact dermatitis. It is widely present in shiny silvery objects, and sometimes in water or products stored or cooked in metal. Allergy to nickel may develop in childhood and can persist for life.

## ***Where might it be found?***

jewelry, rings, necklace clasp  
buttons, snaps, zipper, hooks  
rivets, studs, suspender clips  
belt buckle, watch band buckle  
purse clasp, strap buckle  
hairpins, clips, barrettes  
eyelash curler, tweezers  
nail clippers, nail file  
razor blades, shaver screen  
lipstick holder, compact  
bra underwire, bra hook, clasp  
eyeglass frames  
dental implants, fillings, braces  
cigarette lighter  
keys, key-chain, key ring  
coins, Euro, money clip  
pocket knife  
cell phone, i-Pod  
badge chain or clip  
scissors, letter opener  
paper clips, staples  
metal pens, metal pencils  
stethoscope neckpiece  
acupuncture needles  
knitting needles  
sewing needle, pins, thimble  
kitchen utensils, cutlery  
tea ball, egg beater  
vacuum cleaner, toaster  
metal instruments, parts, file  
work tools, hobby tools  
chain saw or lathe fragments  
electrical wiring, water pipes  
plastics reagents  
enamel dyes  
duplicating fluids

musical instruments, surgical instruments  
orthopedic metal implants, esp. static and large  
brushed chrome fixtures, cabinet handles, knobs  
pigments in fabric, ceramics, wallpaper, paint  
alkaline batteries, magnet cores, electroplate  
electronic chips  
cutting fluids, coolants, fuel additives  
smoke from cigarettes, foundries, incinerators  
insecticides

## ***How to avoid it:***

Many plated metals and alloys release nickel when in contact with sweat on the skin. Objects can be checked for nickel by swabbing with dimethylglyoxime and ammonium hydroxide. A bright pink shows nickel is present. You may buy a test kit (order from Allerderm, 800-365-6868, [www.allerderm.com](http://www.allerderm.com) or Delasco, [www.delasco.com](http://www.delasco.com)).

Avoid nickel by carrying coins in plastic pouches. Cover keys with a plastic key guard or use copper keys. Use an emery board rather than nail file. Use silicone cases for cell phones and i-Pods. Cover nickel items with several coats of Nickel Guard ([www.nickelsolution.com](http://www.nickelsolution.com)), clear nail polish, or acrylic paint, and reapply when it chips. A heavy cloth backing or iron-on patch on jeans behind a rivet or snap may help protect.

Select scissors and tools with plastic, rubber, or wood handles. Use vinyl gloves to handle metal objects or industrial solutions containing nickel. Reduce friction, pressure, and perspiration if exposure is required. Adults, but not children, may try protective creams (like Tetric or 3% clioquinol, [www.delrayderm.com](http://www.delrayderm.com)). For prostheses and implants, consider materials like porcelain, titanium, or zirconium.

*(continued)*

Jewelry made from at least 12 carat gold, sterling silver, platinum, and titanium is usually safe. An item that causes a reaction can be plated with rhodium, but ask about expected cost and frequency of re-plating. Hypoallergenic nickel-free jewelry can be purchased from many sources (such as [www.simplywhispers.com](http://www.simplywhispers.com) 800-451-5700, and Ear-eze 781-767-7770). It is wise to test prospective metal purchases for nickel first with the dimethylglyoxime kit before buying. Here are some guidelines you may find useful:

**SAFE**

rose gold  
pewter  
bronze  
stainless steel\*  
platinum  
yellow gold (≥12 carat)  
sterling silver  
pure copper  
brass  
medical plastic  
most titanium alloys^

**AVOID**

white gold (unless 14kt palladium white gold)  
nickel silver (an alloy of copper, nickel, and zinc)  
nickel bronze  
chrome  
plated jewelry whose surface can wear off to reveal nickel  
German silver (an alloy of copper, nickel, and zinc)  
alpaca (an alloy of copper, nickel, and zinc)  
sea water bronze  
high-strength yellow brass  
palladium (closely related to nickel and may cross-react)  
some titanium alloys

\*may produce a reaction if used in a surgical implant, if a high sulfur type stainless steel, or if in prolonged exposure with sweating

^Blomdahl-gold plated titanium, Boccia-titanium earrings, TeNo-nickel-free stainless steel (see [www.allergymatters.com](http://www.allergymatters.com))

*(continued)*

Some studies support the use of a nickel avoidance diet, especially in cases of chronic hand or widespread dermatitis. Your doctor may recommend you try for one month eliminating foods that are high in nickel:

**AVOID THE FOLLOWING:**

Shellfish, such as shrimp, mussels, crawfish, herring, oysters, canned tuna and mackerel

Asparagus  
Beans (green, brown, white, kidney, soya, baked)  
Kale  
Leeks  
Lentils  
Lettuce (also commercial salad dressings)  
Peas (green and split)  
Soy protein powder (found in sausages, sandwich meat, products from minced meat, bread, and soup concentrates, bouillon), tofu, soy sauce  
Spinach  
Sprouts (bean and alfalfa)

Bran, buckwheat  
Wheat bran and other bran and fiber products  
Millet  
Muesli and similar breakfast cereal  
Multigrain breads  
Oatmeal, oats  
Rice (unpolished)  
Rye bran  
Sesame seeds  
Sunflower seeds

Dates, figs, pineapple, plums, prunes, raspberries  
Gelatin, rhubarb  
Chocolate, esp. dark and cocoa products  
Tea from dispensers, black tea  
Almonds, hazel nuts, peanuts, walnuts, cashews  
Strong licorice, excess baking powder  
Vitamins and nutritional supplements

**YOU MAY EAT:**

Eggs, fish, meat, poultry, including turkey  
Milk (except chocolate)  
Yogurt, cheese, butter, margarine

Beets, red  
Broccoli  
Brussels sprouts  
Cabbage, white and Chinese  
Cauliflower  
Corn  
Cucumber  
Dill  
Eggplant  
Garlic  
Mushrooms  
Onions  
Parsley  
Peppers, green and red  
Potatoes, parsnips  
Rice products (from polished rice)  
Cornflakes, cornmeal, cornstarch  
Macaroni  
Popcorn  
Spaghetti  
Wheat flour  
Whole grain rye and wheat (in moderation)

Bananas, berries (except raspberries), peaches, pears  
Raisins  
Carbonated and alcoholic beverages  
Coffee and tea (in moderation)  
Yeast

CAUTION against nickel leached from cans or cooking pans of fruits and vegetables.

If your dermatitis improves during the nickel restriction diet, begin to re-introduce one removed food each week. Watch carefully for any flare of your dermatitis. Wait a full week before adding back another item.

In some areas of the country, the first quart of water flushed through the tap in the morning may contain significant levels of nickel. Avoid drinking this water.