## NICKEL ALLERGY

Piercing is a major cause of nickel allergy. When the skin is injured (pierced), the prolonged direct contact with nickel allows your body to recognize nickel as a harmful substance. Nickel allergy symptoms result from the body's response to nickel. Nickel allergy is considered a delayed Type IV allergy meaning once sensitized an allergic reaction may occur up to 48 hours after nickel contact.



Nickel allergy rashes on the abdomen are common and a result of nickel laden belt buckles and jean snaps. Even when not directly touching the skin, buckles and snaps can elicit symptoms. Perspiration dissolves nickel salts which then penetrate the skin leading to an allergic reaction. Once an individual is sensitized to nickel, they will react for their lifetime.

## Allergy relief

For immediate relief, your doctor may recommend a steroid cream to help reduce inflammation and redness. Nickel allergy usually clears within a few days once contact with nickel is stopped. It is important to identify the source of nickel and avoid it.



Nickel Solution™, is an essential building block for nickel allergy control, containing a bottle each of Nickel Alert and Nickel Guard.

### How to avoid nickel

The key to avoiding nickel is to identify it BEFORE your skin does.

All metal items suspected of containing nickel may be tested with a dimethylglyoxime test called Nickel Alert™. Nickel Alert quickly, safely, and easily tests jewelry and other metal items for the presence of nickel.



## Where nickel is found

Nickel is found in metal and metal plated objects, including gold, because it is inexpensive, durable, and lustrous. Often it is difficult to identify the nickel source because a rash might not appear for two days. It is critical to test all metal items since there are often multiple sources of exposure.

#### Common items that may contain nickel

- Belts and buckles
- Earrings and rings
- Necklaces and bracelets
- Buttons/snaps/jean studs
- White and yellow gold
- Zippers and fasteners
- Hand tools and scissors
- Keys and coins
- Eyeglass frames
- Watches and bands
- Kitchen utensils
- Silverware
- Bra hooks
- Hair pins
- Handbag clutches
- Pocket knives
- Lipstick holders
- Powder compacts
- Cell phones
- Brass or chrome fixtures

## "Nickel Free" and "Hypoallergenic" Jewelry

Jewelry labeled "nickel free" or "hypoallergenic" often refers only to the plating. The base metal may contain nickel. Once the plating wears thin, even microscopically, nickel salts will come in contact with your skin and symptoms can occur.

Expensive jewelry may also contain nickel in the base metal. Test your jewelry regularly, even the "safe" items, using the dimethylglyoxime test–Nickel Alert.

### When avoidance of nickel is not possible

Avoiding nickel is ideal, but not always possible. When avoidance of nickel is not possible, coat the metal that contacts your skin (jean studs, eyeglass frames, etc.) with a clear coating. Avoid generic nail polishes. They often contain toluene, formaldehyde, and dibutyl phthalate which can lead to further sensitization for nickel allergic individuals. Use Nickel Guard™ as a safe alternative. For large areas of skin exposed to a nickel source, consider wearing protective clothing.

### Additional considerations

**Diet:** Dietary intake of certain foods may aggravate dermatitis, especially hand dermatitis, in severely allergic individuals. A nickel free diet is extremely difficult to implement, as nickel content in food varies throughout the world. It is important that all other sources of nickel exposure be eliminated as a first step to symptom relief.

In rare instances, your doctor may instruct you to avoid foods which typically contain higher amounts of nickel, including asparagus, chocolate, peanuts, beans, peas, rhubarb, cabbage, oysters, spinach, herring, tea, mushrooms, whole meal flour, pears, sprouts, corn, raisins, onions, tomatoes, and baking powder.

Please consult your physician before undertaking a low nickel diet.



**Weather:** In the summer, perspiration aids the transfer of nickel salts to the skin, increasing symptoms.

Medical: Tell your physician that you are nickel allergic. Verify all dental appliances and surgical implants are nickel free prior to implantation.

# Metals that often contain nickel:

- Chrome (or chromate)
  - Palladium
  - Silverplate
- Gold yellow/white

## Replacements for nickel:

- Titanium Platinum
  - Plastic Wood
    - Zinc

Because many goods are manufactured in developing countries, it is recommended you test even "safe" metals occasionally, especially if symptoms arise.

