# **Understanding Nickel Allergy**

## What Is Nickel Allergy?

Nickel allergy is a very common form of contact dermatitis, a skin inflammation resulting from exposure to allergens. More accurately described as allergic contact dermatitis to nickel, this condition occurs when perspiration dissolves nickel salts in metal; these nickel particles then penetrate the skin leading to an allergic reaction.



Nickel allergy is considered a Type IV allergy, meaning once sensitized, an allergic reaction may occur up to 48 hours after nickel contact. This delay often results in confusion over the object that actually caused the nickel allergy reaction. For example, the belt buckle worn on the day the outbreak occurs may not be the

belt buckle that caused the irritation, as that buckle could have been worn up to two days past.

Sensitization may be immediate, or it may take months or years to develop. Once sensitized, the individual will be nickel allergic for life. Therefore, it is important to understand this health condition and realize that with basic steps, symptoms can be successfully controlled.

### What Are The Symptoms Of Nickel Allergy?

The most frequent symptom of nickel allergy is a rash that is typically very itchy. Other symptoms may include dry patches on skin resembling a burn, raised bumps on the skin or swelling, hives, welts, blisters or weeping lesions. Symptoms range from mild to quite severe, depending upon the individual and the level of exposure.

## Where Is Nickel Found?

Nickel is commonly used as an inexpensive way to add strength, durability, and luster to metallic products. A clinically proven method to determine if a metal item contains nickel is to use the dmg spot test for nickel, Nickel Alert<sup>®</sup>. Nickel Alert will detect free nickel in extremely low levels down to a limit of 10 parts per million while the vast majority of people will not react unless levels are greater than 11 parts per million Nickel Alert is safe to use for all metal items, including heirlooms; however, if an item has been coated with varnishes or antique finishes, this coating may be dissolved with the use of Nickel Alert. Saturating a cotton swab with several drops of Nickel Alert is sufficient to get an accurate response. Test the metal item by rubbing the moist swab firmly against the item for several seconds. When nickel is found, a pink or reddish color shows on the swab. One bottle of Nickel Alert will generally allow for 200+ positive tests. Nickel Alert should be used in well-ventilated areas.

#### Common alloys that often contain nickel include:

chrome or chromate, palladium, silver plate, white gold, and yellow gold. Because many goods are manufactured in developing countries, it is recommended that you test even "safe" metals occasionally, especially if symptoms arise.



Nickel Solution<sup>®</sup> allows you to easily detect nickel and then protect your skin.

## What Causes Nickel Allergy?

Nickel allergy results when the body mistakes the nickel in metal as a harmful substance and produces an allergic response. Some studies show that genetics may play a part in determining those who will develop nickel allergy.

Piercings are frequently implicated in the introduction of nickel to the body. During the healing process following piercing, nickel-laden jewelry which is worn during that time will expose the individual to nickel for a lengthy period and increase the likelihood of a reaction.

Another risk factor is exposure to metal in the workplace, such as the use of scissors for hair stylists, coins for cashiers, and most metalworking.

# How Is Nickel Allergy Treated?

For immediate relief, physicians may recommend a steroid cream to reduce inflammation and redness. Nickel allergy symptoms usually clear within a few days once contact with nickel is stopped. There is no cure for nickel allergy. For long-term relief, it is necessary to identify the source of nickel and avoid it.

# **Avoiding 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 Nickel Alert, as noted above.

#### Common items that may contain nickel include:

belts, belt buckles, jewelry, hair accessories, metallic buttons, snaps, rivets, jeans studs, zippers, clasps, bra and swimwear hooks, waist cinchers, hand tools, scissors, keys, coins, frames of eyeglasses/sunglasses, watches, kitchen utensils, silverware, handbag clasps and ornamentation, pocket knives, cell phones, electronic tablets, laptops, fitness trackers.

While avoiding nickel is ideal, it is not always possible. In those instances, it is important to place a barrier of protection between nickel and the skin. One form of protection, Nickel Guard® forms an invisible micro-bond which effectively seals the metal item, so that nickel salts cannot penetrate to the skin. Clinically proven and allergist-recommended, Nickel Guard has been formulated specifically for those with sensitive skin. It does not contain toluene, formaldehyde, or dibutyl phthalate, ingredients known to cause secondary allergic reactions. Nickel Guard is ideal for coating small items without movable parts, such as jean studs, eyeglass frames, and most jewelry. Nickel Guard is safe to use for all metal items, but should be used in a wellventilated area.



Nickel Guard is proven safe, easy to use, and effective.

Other effective barriers might include plastic covers for electronic devices or wearing gloves while handling metals.

When possible, search out non-allergenic replacements for those items containing nickel. Titanium, platinum, plastic, carbon fiber, wood, and zinc are good choices.

# **Coping With Multiple Metal Allergies**

In addition to nickel, there are other metals that may elicit allergic reactions. While nickel is by far the most common, other metals to consider are cobalt, copper, gold, and chromium. For those allergic to nickel and other metals, the answer is titanium. Titanium is highly recommended by dermatologists and allergists worldwide due to its low allergenicity. Topical reactions to titanium are extremely rare.

Metal free buckles, such as carbon fiber buckle, are an excellent choice as well.

# Understanding the Difference Between "Certified Nickel Free™", "Nickel Free", and "Hypoallergenic"

The labels on some belt buckles, jewelry, and other metals may be misleading. Even in places where there are government regulations on limiting nickel content, these restrictions are not enforced. Therefore, products may be labeled as "nickel free" or "hypoallergenic" and still contain nickel, without any regulatory penalties. For some manufacturers, the items are labeled "nickel free" or "hypoallergenic" as the plating contains no nickel, but nickel is found in the base metal. In these situations, once the plating wears slightly, a nickel reaction can occur.

You can trust **Certified Nickel Free** products, which have been carefully sourced and tested to assure they contain no nickel in the base metal or in any plating. All Certified Nickel Free products are **guaranteed for life** to never test positive for nickel or cobalt. If you ever have a reaction to one of these products, you most likely have multiple metal allergies.



# How Does Weather Or Exercise **Impact Nickel Allergy?**

People with nickel allergy find that this condition worsens during warm months, or after intense physical labor or exercise. The reason is simple: perspiration aids the transfer of nickel salts to the skin, even through clothing, and will increase the likelihood of a reaction as previously mentioned. For this reason, it is extremely important to assure that all metal contacting the skin during high temperatures is nickel free. Consider testing the metal on such items as swimsuits, work belt buckles, fitness trackers, running watches, and sunglasses. If nickel is found, use Nickel Guard or locate a suitable replacement.

# **Diet And Nickel Allergy**

Studies show that the 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, physicians may recommend the avoidance of certain foods which typically contain higher amounts of nickel. These foods often include, but are not limited to shellfish, mackerel, tuna, processed meats with fillers or coatings, canned meats, canned fish, chocolate, cocoa powder, nuts, seeds, licorice, baking powder, gelatin, canned fruits and vegetables, beans, soy, oatmeal, and granola. A physician who specializes in nickel allergy should be consulted before undertaking a low nickel diet.

# **Medical Considerations:**

Patients should be aware that some dental appliances such as crowns and wires on braces may contain nickel. Surgical implants may also contain nickel. For example, heart stents, peripheral valves, and transcervical sterilization devices contain a combination of nickel and titanium. Medical personnel should be advised of nickel allergy prior to any procedure so that alternatives to nickel will be used.

# **Thank You**

#### We truly appreciate your business.

We are a small husband and wife business and strive to assure our customers receive the very best in nickel free products and the latest nickel allergy information. If you are happy with your purchase, we ask that you consider helping others like yourself who are trying to cope with nickel allergy by leaving a product review.

If you have experienced any problems, please let us know as we are here to help you resolve any concerns. Email anytime at info@theallergyshop.com.au.

Mt Pisgah with **Dress Black Titanium Buckle** 

nickel-free goods you can trust

Roan Mountain Distressed

This information is intended to educate the reader about nickel allergy and is not a substitute for examination and diagnosis by a physician. Nickel Smart®, Nickel Alert®, Nickel Solution®, Nickel Guard®, and Certified Nickel Free™ are protected trademarks used with permission of Athena Allergy, Inc.

©2020 The Allergy Shop Pty Ltd.