

Systemic Contact Dermatitis Tracked to Food Allergens

BY BETSY BATES Los Angeles Bureau

PORTLAND, ORE. — A broad and diverse group of foods contains nickel, and consumption of these foods has the potential to exacerbate allergic contact dermatitis in patients, particularly those receiving more than one exposure per day, Dr. David E. Cohen said at the annual



meeting of the Pacific Northwest Dermatological Society.

It's no surprise that items such as jewelry or jeans snaps might be a problem in patients with allergic contact dermatitis, since these are well-known sources of nickel that come into contact with the skin.

But edamame?

It's true. The green soybean snacks contain enough naturally occurring nickel nearly 0.9 mg in a single serving—to have the potential of leading to systemic contact dermitis in up to 10% of nickel-sensitive patients, said Dr. Cohen, director of aller-



Soybeans, cashews, and lentils are high in nickel and could cause a patient with nickel allergy to have a flare.

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gic, occupational, and contact dermatitis at New York University.

The normal daily dietary intake of nickel ranges between 0.02 mg/day and 0.48 mg/day.

The Food and Drug Administration has set 50 mcg as the tolerable upper intake level recommended in adults who are allergic to nickel.

Still, certain foods, including soybeans, cashews, lentils, figs, and raspberries, have high nickel content and could cause a patient with nickel allergy to have a flare. (See chart.)

Sometimes the allergen source in foods is even more subtle, noted Dr. Cohen, who conducted a study of three types of tomatoes to identify natural fragrances that might explain their proclivity to produce systemic contact allergy reactions in certain patients (Dermatitis 2005;16: 91-100).

"I see these reactions in adult eczema patients, particularly those who are allergic to fragrance and flavor chemical on patch testing.

"These reactions can look quite banal and don't have any particular distribution to clue in the evaluating dermatologist," Dr. Cohen said during an interview following the meeting.

Several potent constituents of the wellknown allergen balsam of Peru, including cinnamic acid, were detected in various quantities in beefsteak, cherry, and plum tomatoes, he said.

In addition, the allergen coniferyl alcohol was detected in the three varieties of tomatoes.

When the source of a patient's flares is uncertain and seems to point to foods, Dr. Cohen recommends that the patient change to a diet lacking in all foods containing the suspected allergen for a period of 3 weeks.

"Then [tell them to] eat a ton of whatever they miss most," he said.

If a flare ensues, the culprit food may be unmasked.