

Cross-Reactivity & Food Allergies

A recent LinkedIn post about a new flavour of potato crisps containing pink peppercorns sparked significant public reaction, shedding light on how many people are unaware of the risks associated with cross-reactivity between allergenic foods. Who would expect that eating just a few crisps could lead to a scratchy throat, tingling lips, and the need for an EpiPen? While you may know you have an allergy to tree nuts like cashews, pink peppercorns probably wouldn't be on your radar. Surprisingly, they belong to the same botanical family as cashews and pistachios, which means they can trigger similar allergic reactions. However, since pink peppercorns are not classified as tree nuts, they aren't always listed as allergens on food packaging, posing a hidden risk for those with nut allergies.

What is Cross-Reactivity?

Cross-reactivity occurs when the proteins in one food are similar to those in another, leading the immune system to mistakenly identify them as the same allergen. This can trigger an allergic reaction in sensitive individuals, even if they haven't consumed the food they are allergic to.

Surprisingly, foods that seem completely unrelated can pose a risk due to these biological similarities. For example, pink peppercorns and cashew nuts, or fenugreek and peanuts, share similar proteins that can cause cross-reactive allergic responses.

Pink peppercorns, in particular, come from the same botanical family (Anacardiaceae) as pistachios and cashews. However, because they are not classified as tree nuts, they often go unlabelled as allergens on food packaging, making them an unexpected risk for individuals with nut allergies.

Awareness of Cross-Reactivity

Understanding cross-reactivity is vital for managing allergens and preventing unexpected allergic reactions.

- Even if you avoid known allergens, cross-reactive foods can pose hidden dangers.
- Report any allergic reactions to food businesses and regulatory bodies to improve allergen safety.
- Always check ingredient labels carefully, especially on spice mixes and processed foods.
- When dining out, ask about all ingredients, including seasonings, and inquire about measures taken to prevent cross-contamination.
- Watch out for undeclared garnishes that may contain allergens.
- Carry prescribed medication if you are at risk of a severe reaction and seek medical advice if unsure about potential allergens.

Unexpected allergens

In many foreign foods, especially cheeses and charcuterie, it is quite common to find added ingredients which may cause an allergic reaction. For example: -

- Pistachio nuts in stuffings and continental meats such as Mortadella. Added cheese in salamis in Austria.
- Fennel seeds in Italian salamis, ragout and many pasta sauces.
- Ground hazel nuts and walnuts used to coat some soft cheeses in France.
- Walnut, chestnut, vine and nettle leaves being used to wrap semi-hard cheeses in France and England.
- Breads made with chestnut flour in France and with added fennel and caraway seeds in Germany.

Examples of Cross-Reactive Foods

- **Peanuts** belong to the **legume family**, which includes soybeans, lupin, peas, beans, and fenugreek.
- **Latex allergy** can cross-react with certain fruits like **banana, avocado, kiwi, and chestnut**. Reactions range from contact sensitivity to severe allergic responses.
- **Crustaceans** (prawns, lobster, crab) and **edible insects** (crickets, mealworms) share similar proteins, making them highly cross-reactive and potentially life-threatening.
- **Oral Allergy Syndrome (pollen food syndrome)** can cause mouth and throat irritation after eating raw fruits like apples, pears, and cherries. Cooking these foods usually reduces reactions.