

Natural Toxins in Edible Plants

Fruit seeds and pits



Apple and pear seeds, as well as the inner stony pit (kernel) of apricots and peaches, contain amygdalin, a cyanogenic glycoside. Amygdalin can cause hydrogen cyanide to be released in the stomach, causing discomfort or illness. It is sometimes fatal.

Accidental swallowing of an occasional seed or pit is not a concern. However, do not make a habit of eating the seeds from these fruits. For a young child, swallowing only a few seeds or pits may cause illness and, in rare cases, can be fatal.

Parsnip



Parsnips commonly contain a group of natural toxins known as furocoumarins. The toxins are probably produced to protect the plant under stressful conditions in the peel or surface layer of the plant or around any damaged areas.

One of the furocoumarin toxins can cause stomach cramps and may also cause a painful skin reaction when contact with the parsnip plant is combined with the person being exposed UV rays from sunlight.

It is important to peel the parsnip before cooking and remove any damaged parts. The toxin levels drop when the parsnip is cooked by baking, microwaving or boiling. Discard any cooking water.

Potatoes



All potatoes contain natural toxins called Solanines, glycoalkaloids in potato sprouts and the peel of potatoes that taste bitter. The plant produces toxins in response to stressors such as micro-organisms and UV light and damage such as bruising.

Severe stomach cramps have been reported from glycoalkaloid poisoning but are very unusual. Cooking does not destroy glycoalkaloids, so it is essential to avoid eating the sprouts and remove any green or damaged parts before cooking. Do not eat cooked potatoes that still taste bitter. If you come across a green potato crisp, it's probably best not to eat it. Remember to store potatoes in a dark, cool and dry place.

Kidney beans



Many types of beans contain toxins called lectins. The highest concentrations are found in kidney beans, especially red kidney beans. Just four or five raw beans can cause severe stomach cramps, vomiting and diarrhea.

To destroy the toxins, soak the beans for at least five hours and then boil them briskly in fresh water for at least 10 minutes. Do not cook beans at a low temperature, for example, in a slow cooker, as it may not destroy the toxin. Improperly cooked beans can be more toxic than raw ones. Canned beans are thoroughly cooked and can be used safely without further cooking.

Rhubarb



Rhubarb contains naturally occurring oxalic acid. The amount depends on the age of the plant, the season, the climate and the type of soil. The highest concentrations are in the leaves, and these should not be eaten.

Oxalic acid poisoning can cause muscle twitching, cramps, decreased breathing and heart action, vomiting, pain, headache, convulsions and coma.

Zucchini



Zucchini may occasionally contain a group of natural toxins known as cucurbitacins. These toxins give zucchini a bitter taste. Bitterness in wild zucchinis is common though rarely seen in commercially grown zucchinis.

Eating bitter zucchinis is known to cause vomiting, stomach cramps, diarrhea and collapse. Do not eat zucchini that have a strong unpleasant smell or taste bitter.