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Frequently asked questions - acrylamide in food

:: [Full text in English \[pdf 25kb\]](#)

Acrylamide FAQ's:

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General questions

1. What is acrylamide?

Acrylamide is a chemical that is used to make polyacrylamide materials. Polyacrylamide is used in the treatment of drinking-water and waste water where it is used to remove particles and other impurities (see Question 15). It is also used to make glues, paper and cosmetics. Polyacrylamide materials contain very small amounts of acrylamide.

Acrylamide is also used in the construction of dam foundations and tunnels, and appears to be produced in some foods prepared at high temperatures.

2. What is the problem?

Acrylamide is known to cause cancer in animals. Also, certain doses of acrylamide are toxic to the nervous system of both animals and humans.

In April 2002 the Swedish National Food Authority reported the presence of elevated levels of acrylamide in certain types of food processed at high temperatures. Since then, acrylamide has been found in a range of cooked and heat-processed foods in other countries, including The Netherlands, Norway, Switzerland, the United Kingdom and the United States.

Previous concerns about acrylamide were focused on workers using acrylamide in their jobs, and cigarette smoking.

3. How/why does acrylamide form when food is cooked at high temperatures?

There is currently little information about, and poor understanding of, how acrylamide is formed in foods. It appears to be produced naturally in some foods that have been cooked or processed at high temperature and the levels appear to increase with the duration of heating. The highest levels found so far were in starchy foods (potato and cereal products).

Further research is needed to explain why acrylamide forms in food as well as the conditions that promote or reduce its presence in food.

4. What can be done to avoid acrylamide in food? Should I stop eating starchy foods including potato chips/potato crisps?

We don't know exactly at what temperature acrylamide is formed in food. However acrylamide has so far not been found in food prepared at temperatures below 120 degrees Celsius, including boiled foods.

Food should not be cooked excessively, i.e. for too long or at too high a temperature. However, all food, especially meat and meat products, should be cooked sufficiently to destroy food poisoning bacteria.

The information available on acrylamide so far reinforces general advice on healthy eating, including moderating consumption of fried and fatty foods. There is not enough evidence about the amounts of acrylamide in different types of food to recommend avoiding any particular food product.

5. Are home-cooked foods safer than pre-cooked, packaged or processed foods?

Elevated levels of acrylamide have been found in home cooked foods, as well as pre-cooked, packaged and processed foods.

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