Acrylamide

Information on the risks of acrylamide and how you can reduce the chances of being harmed by it.

Acrylamide is a chemical substance formed when starchy foods, such as potatoes and bread, are cooked at high temperatures (above 120°C). It can be formed when foods are:

- baked
- fried
- grilled
- toasted
- roasted

Acrylamide is not deliberately added to foods – it is a natural by-product of the cooking process and has always been present in our food.

It is found in a wide range of foods including:

- roasted potatoes and root vegetables
- chips
- crisps
- toast
- cakes
- biscuits
- cereals
- coffee

Potential health effects of acrylamide

Laboratory tests show that acrylamide in the diet causes cancer in animals. Scientists agree that acrylamide in food has the potential to cause cancer in humans as well. We recommend that the amount of acrylamide we all consume is reduced, as a precaution.

What the food industry is doing to reduce acrylamide

The food industry has undertaken a lot of work to identify and implement measures to reduce acrylamide levels in food. This includes developing guidance on ways to limit acrylamide formation in a variety of foods and processes. New legislation will require food business operators to put in place simple, practical steps to manage acrylamide within their food safety management systems.

How to reduce acrylamide at home

To reduce your consumption of acrylamide when preparing food at home, we advise you should:

- aim for a golden yellow colour or lighter when frying, baking, toasting or roasting starchy foods
- follow the cooking instructions on the pack when cooking packaged foods like chips and roast potatoes
• eat a healthy, balanced diet and get your 5 A Day to help reduce your risk of cancer

You also need to make sure that you don’t store raw potatoes in the fridge if you intend to cook them at high temperatures, such as by roasting or frying. This is because keeping raw potatoes in the fridge can lead to the formation of more free sugars in the potatoes. This process is sometimes called ‘cold sweetening’.

Cold sweetening can increase overall acrylamide levels, especially if the potatoes are then fried, roasted or baked. Raw potatoes should be stored in a dark, cool place at temperatures above 6°C.

Our work on acrylamide

To understand more about acrylamide and how to reduce the risk it presents we are:

• supporting food manufacturers’ initiatives to reduce acrylamide in foods
• conducting and publishing annual monitoring data for acrylamide in a range of foods
• working with industry to help manufacturers comply with the new legislation
• advising people what they can do to reduce acrylamide in food they cook at home