ACRYLAMIDE IN FOOD
What is it? How can we reduce it?

ACRYLAMIDE IS MOSTLY FOUND IN

- coffee
- potato crisps / French fries
- soft / crispy breads
- biscuits / cakes / rusks

HOW ACRYLAMIDE FORMS IN FOOD

Acrylamide is a chemical compound that typically forms in starchy foods when they are baked, fried or roasted at high-temperatures (120-150°C).

When the sugar and amino acid naturally present in starchy food are heated, they combine to form substances giving new flavours and aromas. This also causes the browning of the food and produces acrylamide.

Maillard reaction (or browning)

amino acid + sugar + water → flavour + colour + acrylamide

HOW TO CUT DOWN ON ACRYLAMIDE (TIPS)

- During frying, follow recommended frying times and temperatures to avoid overcooking, excessive crisping and burning.
- Toast bread to a golden yellow rather than brown colour.
- Cook potato products like French fries and croquettes golden yellow rather than brown.
- Do not store potatoes in the refrigerator as this increases sugar levels (potentially increasing acrylamide production during cooking). Keep them in a dark, cool place.

Consumers like you can help too by following a balanced diet and varying how your food is cooked.

For more detailed information you can contact your national food safety agency.

POTENTIAL HEALTH EFFECTS

Laboratory tests show that acrylamide in the diet causes cancer in animals. Scientists conclude that acrylamide in food potentially increases the cancer risk for consumers of all ages. However, it is virtually impossible to eliminate acrylamide from cooked starchy foods. We can only try to reduce the amounts in food through more careful and varied cooking.

National authorities in the EU offer advice tailored to national eating habits and culinary traditions. Also, a careful selection of raw materials and cooking practices can help limit acrylamide formation. A rule of thumb is: "Don’t burn it, lightly brown it".

Further examples of tips from national authorities:

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EFSA provides independent scientific advice to risk managers on acrylamide. EFSA also compiles data on acrylamide levels in a range of foods across Europe, helping to identify trends. These data are collected by Member States.

www.efsa.europa.eu