It is important not to over-cook certain foods

**WHAT IS ACRYLAMIDE?**

Acrylamide is a chemical that is formed naturally when some foods are cooked at high temperatures (above 120°C) such as by frying, roasting, baking, grilling and toasting. Legislation is in place to reduce acrylamide levels in food, as it has the potential to cause cancer in humans.

**WHAT FOODS?**

If you cook the following types of foods, you should put in place practical steps to reduce acrylamide.

- **Raw potato products** such as chips, French fries, other cut (deep-fried) and sliced potato crisps made from fresh potatoes, including potatoes that are deep fried and finished in the oven.
- **Bread products** such as loaves, bread rolls and baguettes, toast and toasted sandwiches.
- **Sweet bakery products** such as cookies, biscuits, scones, gingerbread, wafers, crumpets.
- **Savoury bakery products** such as crackers, crisp bread, breadsticks.

**SAFETY POINT WHY? TICK IF YOU DO THIS**

**Purchasing, receipt and storage**

- When buying raw potatoes ask your supplier for advice on the best variety to use for the type of cooking you are doing. Certain potato varieties are lower in natural sugars and using these will help to keep acrylamide levels lower.
- Store raw, unpeeled potatoes that are going to be fried, baked or roasted in a cool, dark place, above 6°C. Do not store in the fridge. Potatoes stored in the fridge can form more sugars, which can mean higher levels of acrylamide when the food is cooked.
- When buying cooked products from a supplier tell them you will not accept over-baked or burnt products. Check deliveries and reject products that are over-baked or burnt as these will have higher levels of acrylamide.
- Ask your cooking oil supplier for advice on the best oil to use for the type of cooking you are doing. Cooking foods in the right oil for the type of cooking will help foods to fry quicker and keep acrylamide levels lower.

**Preparation**

- Cut foods, such as potatoes, to similar sizes. This will help all foods to cook more evenly.
- Where possible, when making home-made chips, or cut potatoes that are going to be deep-fried, follow one of these steps:
  - Soak (for 30–120 mins) in cold water after cutting. Rinse with clean water and drain. These steps will remove excess sugars and help to keep acrylamide levels lower.
  - Or - Soak for a few minutes in warm water. Rinse with clean water and drain.
  - Or - blanch potatoes before cooking.
- Where possible, and when the preparation process allows, when making bread or dough products follow this step:
  - Extend the yeast fermentation time. This will help to keep acrylamide levels lower in the finished product.

Food Standards Agency | Further information: www.food.gov.uk/safety-hygiene/acrylamide
### SAFETY POINT

**Cooking**

<table>
<thead>
<tr>
<th>What to Do</th>
<th>Why?</th>
<th>Tick If You Do This</th>
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<tbody>
<tr>
<td>Cook foods to a golden yellow, or lighter colour.</td>
<td>The manufacturer has tried and tested cooking methods specifically for its products.</td>
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<tr>
<td>Where appropriate, follow the manufacturer's cooking instructions for food products.</td>
<td>Deep-fry potato products, such as chips and French fries to a golden yellow, or lighter colour. The oil temperature for cooking should ideally be below 175°C.</td>
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<tr>
<td>Deep-fry potato products, such as chips and French fries to a golden yellow, or lighter colour.</td>
<td>Cooking to a golden yellow, or lighter colour, and deep-frying at lower temperatures will keep acrylamide levels low.</td>
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<td>When deep-frying take care not to over-fill baskets. Fill the basket only half way.</td>
<td>This will help the foods to cook more evenly.</td>
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<td>Keep cooking oil quality at its best by skimming often to remove crumbs and food particles left in the oil.</td>
<td>This will prevent crumbs and food particles left in the oil from burning and will keep the oil quality for longer.</td>
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<td>Filter, change oils and clean cooking equipment as often as needed or as recommended by suppliers.</td>
<td>Reusing old, dirty oil and cooking equipment will increase the levels of acrylamide in deep-fried foods.</td>
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<td>When baking bread and sweet or savoury bakery products cook to a golden yellow, or lighter colour. Use the lowest oven temperature possible for the food.</td>
<td>Baking foods to a golden yellow, or lighter colour, and at lower oven temperatures will reduce acrylamide levels.</td>
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<tr>
<td>When cooking foods such as toast and toasted sandwiches do not over-toast or burn.</td>
<td>Cooking bread to a golden colour, or lighter, will help to keep acrylamide levels lower.</td>
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<td>Where possible, set a timer to mark the cooking time. This could be on the oven or fryer or you can use a separate timer.</td>
<td>This will remind you to remove foods at the right time to prevent foods from becoming over-cooked or burnt.</td>
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### THINK TWICE!

Over-cooking or burning certain foods means that these foods can be higher in acrylamide.

**Colour charts**

Some suppliers have produced colour charts to show what colour is the best for certain foods to keep acrylamide levels low. You can ask if your supplier has these available. You do not have to use colour charts, but they can be useful for training your staff.

**Colour charts for fries can be found at:** [http://goodfries.eu/en/](http://goodfries.eu/en/)

### WHAT TO DO IF THINGS GO WRONG

- Dispose of foods that are over-cooked or burnt.

### HOW TO STOP THIS HAPPENING AGAIN

- Review your cooking method.
- You might need to lower the cooking temperature or use different equipment.
- Train staff again on this safe method.
- Improve staff supervision.
- Repair or replace equipment that is broken or not working.

Write down what went wrong and what you did about it in your diary.