







Food processing is any deliberate change in a food that happens before it is available for us to eat.

Food processing is not new. It dates back to pre-historic times when food was sun-dried, preserved with salt and/or cooked.

Modern processing was developed over the centuries with canning and pasteurisation advancing the micro-biological safety of food.





Food processing can be very simple, e.g. preparing, freezing or drying food to preserve nutrients and freshness.

It can also be complex, e.g. formulating a frozen meal with the right balance of nutrients and ingredients.







Minimally processed foods are:

- washed;
- peeled;
- sliced;
- juiced;
- frozen;
- shredded;
- dried.









Food that requires little processing or production includes:

- washed and packaged fruit and vegetables;
- shelled and ground nuts;
- coffee beans.







#### More highly processed foods are:

- baked;
- fried;
- smoked;
- toasted;
- puffed;
- fermented;
- pasteurised;
- artificially flavoured;
- artificially coloured.











Food is processed to help preserve and enhance nutrients and freshness of ingredients at their peak, for example:

- canned tuna;
- beans and tomatoes;
- frozen fruit and vegetables;
- pureed fruit.







Ingredients such as sweeteners, spices, oils, flavours, colours, and preservatives are also added to food to improve safety and taste and/or add visual appeal, for example:

- instant noodles or rice;
- jars of tomato sauce;
- salad dressings and sauces.







Food can also be processed so that it is "ready-to-eat" and requires little or no preparation. For example:

- breakfast cereal;
- jam;
- peanut butter;
- ice cream;
- yogurt;
- biscuits;
- ham;
- cheese spreads.









Food processing enables food to be packaged, staying fresher for longer and saving time. For example:

- prepared deli foods;
- frozen meals;
- ready meals;
- pizza.







Food is processed for a number of reasons:

- to extend the shelf life;
- to add variety;
- convenience;
- · consumer's health.





#### To extend the shelf life

Processing foods often makes them safer by killing existing bacteria and slowing bacterial growth. For example, heating foods helps remove harmful bacteria.

Examples of preserving food through food processing include:

- fermenting;
- salting;
- canning;
- pasteurising;
- freezing;
- drying.



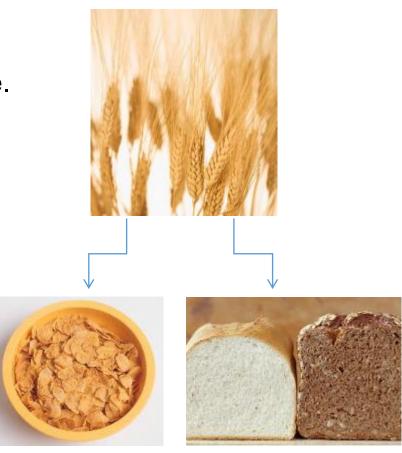




## To add variety

Processing foods provides the consumer with a wider choice. Processing food can modify the:

- flavour;
- texture;
- smell;
- colour;
- shape.





#### Convenience

Consumer demand and lifestyle choices has led to the development of a wide variety of convenience and fast food.









#### **Consumer health**

Health concerns within the population has led to an increased demand for healthier food choices, e.g. lower salt, fat and/or sugar.

Food products are also sometimes fortified to improve the nutritional profile. Nutrients may be added to products to:

- replace nutrients lost during food processing;
- add extra nutrients that would not normally be present, e.g. added fibre in yogurt;
- produce a substitute product with similar nutritive value.







#### **Functional food**

Innovation in food processing has also led to the development of functional food.

A functional food provides benefits over and above their basic nutritional value. Examples include:

- dairy products containing probiotic bacteria;
- cholesterol lowering spreads, drinks and cereal bars;
- Omega 3 eggs;
- other functional foods or drinks fortified with a nutrient that would not usually be present to any great extent, e.g. folic acid fortified bread or breakfast cereals.





For further information, go to: www.foodafactoflife.org.uk