3.1.1

Preparing food to make it edible

PREPARATION TECHNIQUES

We often have to transform food before eating it. Bar only a few exceptions, food needs to be cleaned, cut up, peeled and so forth. The list is long.
Keywords > Clean, cut, peel, core, mince, squeeze, dry, melt...

These techniques allow food to be separated and prepared. There are many techniques. For example, there are mechanical techniques. These simply involve cutting, squeezing, grinding or sieving.
Mechanical techniques: cutting, peeling, churning, squeezing, centrifuging, grinding, sieving...

There are also thermal techniques such as drying, melting and crystallizing.
Thermal techniques: drying, melting, crystallizing, concentrating...

There are biochemical techniques, where the aim is to destabilise the molecular or cellular structure of a foodstuff. This is true of curdling milk, but we will be looking at that later on.
Biochemical techniques: destabilising the molecular or cellular structure

We will take two cereals as an example to illustrate these techniques.

GRAINS OF RICE

Grains of rice need to have their hard husks removed.

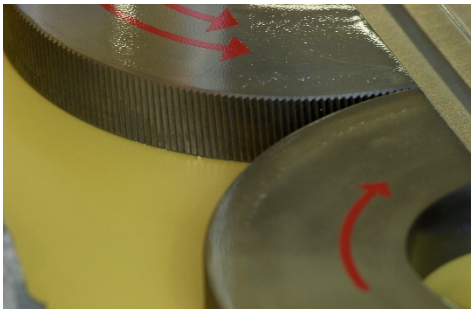
In the olden days, mechanical techniques involved beating every head of rice on a board. The grains were then poured into a mortar to be separated. They were separated from the husks by being hit by the flat side of a pestle, thus getting rid of the outside layers to reveal the white grains below.

Nowadays, the techniques are still mechanical, but rice is husked in industrial rice mills. Rubber rollers separate the grain from its husk without breaking it. The rice is then whitened by polishing the outside layers and removing the dust.

GRAINS OF WHEAT

What about grains of wheat? How are they milled into flour?

In the olden days, they were ground by millstones.



Nowadays, they are ground in industrial mills, which pass them between two corrugated steel cylinders.

Then they are sieved to separate the flour from the coarser, darker bits. So mechanical techniques are still in operation, alternating between grinding and sieving.

RULES FOR PREPARATION

In certain cases, preparation techniques may be subject to particular rules belonging to particular cultures. An example of this would be the technique for cutting up raw fish in Japan.

Photo: Set of Japanese kitchen knives showing a 'Deba bōchō' in the foreground, used to chop fish or meat, a square-bladed 'Nakiri bōchō' for vegetables and a 'Yanagi-ba-bōchō' used to make sashimis.

Or even the slaughtering methods used for preparing halal or kosher products, which require that the animal must have its throat cut and its blood drained out.