

Pasteurisation

Layout

During pasteurisation, pathogenic microorganisms are destroyed. The food is heated to 72°C for about 15 seconds. The shelf life is extended for a limited amount of time and it is used for milk, some soups, liquid egg, ice cream and fruit juices

In pasteurization, various methods are possible, which require different times and temperatures depending on the property of the pasteurizing food:

- Continuous heating: 62-65°C for at least 30 minutes
- Short heating: between 71-78°C for less than 1 minute to a maximum of 10 minutes
- Short-time high heating: 85-95°C for a few seconds

The microorganisms are largely killed, but not their spores. The foods are made low in germs, but not germ-free.

Examples of applications are:

milk, dairy products, vegetable and fruit juices, sour vegetables, fish marinades, salads and semi-preserved foods.

Pro:

Better protection of vitamins, minerals and flavours

Cons:

Relatively short shelf life

The **high pasteurization** describes the combination of initial heating of the milk to 75 to 85°C with subsequent heating by steam injection or heat exchanger to 125-127°C

Ultra-high heating (UHT heating)

At 135-150°C for 1-4 seconds. There are no more growth-capable microorganisms. Examples are: meat, fish, vegetables, fruit or milk

Pro:

Nutrients are generally preserved, as UHT heating is followed in accordance with the principle of "shorter heating capacity, but higher temperatures". As a result, UHT heating is being used more and more frequently.

Cons:

However, a „cooking taste“ can be developed, which some consumers think that is negative

Recipe:

If you want to pasteurize for example **eggs** yourself:

place a bowl of fresh eggs on the counter for 15 to 20 minutes to reach room temperature.

Put the eggs in a saucepan of water and cover a cooking thermometer on the side of the pot.

Heat the water over a medium heat to 60 °C. Keep this temperature for three to five minutes.

Then remove the eggs from the water with a spoon and rinse them cold until they have room temperature.

Store the eggs in the fridge.