

# SOUS VIDE – FOOD SAFETY REQUIREMENTS

‘Sous vide’ is French for ‘under vacuum’. It refers to cooking food under vacuum, in sealed pouches (oxygen barrier bags) at precise and sometimes low temperatures, and often for a long time.

When using the sous vide method, the first ingredient is food safety. While sous vide has a good safety record, there are potential risks in three areas:

1. Food held in the temperature danger zone (defined as 5°–60°C by the Australia New Zealand Food Standards Code) for an extended time is at risk of bacterial growth, e.g. during ‘low temperature / long time’ cooking, product cooling or product re-heating
2. Food in refrigeration for an extended time is at risk of cold-tolerant bacteria that cause foodborne illness
3. Food cooked at low temperatures for short periods of time will, essentially, remain raw and disease-causing bacteria and parasites may survive.

## Reduce the risks

The risks associated with sous vide may be reduced by:

- preparing thinner portions of food so that heating and cooling are rapid
- using a water bath temperature of at least 55°C so bacterial growth is prevented and the destruction of the cells begins
- holding food below 54.5°C during cooking for no more than six hours
- using commercial equipment with adequate heating capacity and excellent temperature control
- checking water and/or food temperatures using a calibrated tip-sensitive digital thermometer that is accurate to 0.1°C
- not storing prepared food for an extended time unless processes have been proven safe
- not cooking large portions of meat for extended times at low temperatures
- use commercial heating equipment
- set the water bath temperature above 55°C
- cool food quickly in slush ice or specialised equipment
- check temperatures with a good quality, tip-sensitive digital thermometer
- freeze food that needs to be stored for longer than five days.

## DON'T

- cook food for a long time (more than six hours) at low temperature (below 54.5°C)
- prepare large portions of tenderised, re-formed or glued meats
- experiment with recipes until you understand the food safety risks.

## Guidance material

Detailed information on sous vide is available in the Food Authority’s guideline *Sous vide: Food safety precautions for restaurants*.

## More information

- visit the Food Authority website at [www.foodauthority.nsw.gov.au](http://www.foodauthority.nsw.gov.au)
- phone the helpline on 1300 552 406

New practitioners of sous vide should be aware of the food safety risks and avoid experimental applications of the technology.

## Tips for new practitioners

### DO

- learn from the experts – take a course, read books etc
- prepare thin portions so food cooks/cooling quickly



Department of  
Primary Industries  
Food Authority



About the NSW Food Authority: The NSW Food Authority is the government organisation that helps ensure NSW food is safe and correctly labelled. It works with consumers, industry and other government organisations to minimise food poisoning by providing information about and regulating the safe production, storage, transport, promotion and preparation of food.

Note: This information is a general summary and cannot cover all situations. Food businesses are required to comply with all of the provisions of the Food Standards Code and the *Food Act 2003* (NSW).



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More resources at [foodauthority.nsw.gov.au](http://foodauthority.nsw.gov.au)



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