

Vacuum packaging

How to vacuum pack your chilled food products safely as a business, manufacturer or retailer.

Vacuum packaging (VP) and modified atmosphere packaging (MAP) can increase the shelf-life of chilled foods by limiting the growth of microorganisms. However, under certain circumstances, a bacterium called non-proteolytic *Clostridium botulinum* (*C. botulinum*) may grow in the absence of oxygen. This bacterium is able to grow and produce a harmful toxin at temperatures of 3°C and above.

It is important that VP/MAP chilled foods have appropriate controls in place to minimise the risk of this organism growing and producing harmful levels of toxin.

Vacuum packing guidance

This guidance helps you vacuum pack and modified atmosphere pack chilled raw and ready-to-eat products. It shows you how to practically develop and implement a [Hazard Analysis Critical Control Point \(HACCP\)](#) based approach for these foods, to control the risk of non-proteolytic *C. botulinum*.

IMPORTANT

This guidance was revised on 14 December 2020, following an [open consultation process](#).

[View The safety and shelf-life of vacuum and modified atmosphere packed chilled foods regarding non-proteolytic *Clostridium botulinum* as PDF \(431.54 KB\)](#)

The 10-day shelf-life for *C. botulinum*

If the shelf-life of the product is more than 10 days, the guidance explains the rules that apply and the requirement for additional controlling factors. It provides a useful 'Decision Tree' to help you understand if the risk of *C. botulinum* is controlled.

The guidance does not apply to vacuum and modified atmosphere packed chilled fresh beef, lamb and pork. Information on chilled fresh beef, lamb and pork and the scope of the guidance is provided in paragraphs 22 to 25 of the guidance.

Frequently asked questions and answers can be found towards the [end of the guidance document](#) or below.

[View The safety and shelf-life of vacuum and modified atmosphere packed chilled foods - Additional Q&A as PDF \(310.89 KB\)](#)

Listeria and other hazards

You must take into account other hazards that can be associated with the products you use. Listeria monocytogenes, in particular, is capable of growing at temperatures below 0°C.

Controls for other hazards need to be included in HACCP based procedures, as well as taken into consideration when setting shelf-life.

Vacuum packing training

We provide free online [Vacuum packing training](#) where you can learn about:

- the hazards associated with vacuum packing and modified atmosphere packing
- the causes and growth of C. botulinum
- the control factors that can be used to prevent its growth and toxin production