



# DMRIPredict – a tool to determine shelf life of fresh meat

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## WHY IS SHELF LIFE IMPORTANT?

The increased demand for chill-stored fresh meat with a long shelf life poses a huge challenge to the meat industry. It is the responsibility of the meat producer to determine the use-by date. Therefore, reliable prediction of shelf life is of the utmost importance to ensure both optimal and flexible retail distribution as well as good eating quality at the use-by date.

## DMRIPredict

DMRIPredict is a mathematical tool that is easy to use. It is developed to help meat producers determine shelf life of fresh meat. DMRIPredict is based on a vast amount of data from individual storage experiments conducted under controlled conditions. The shelf life models are robust and reflect real life as natural variation was included, such as pig meat from various cuts collected at different commercial slaughterhouses in four different countries.

## HOW TO USE DMRIPredict

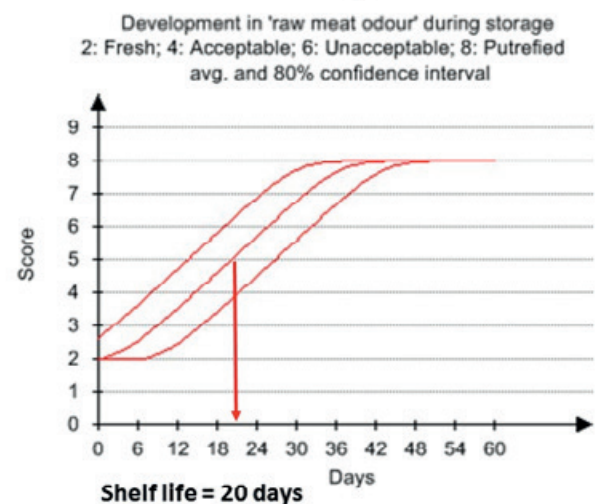
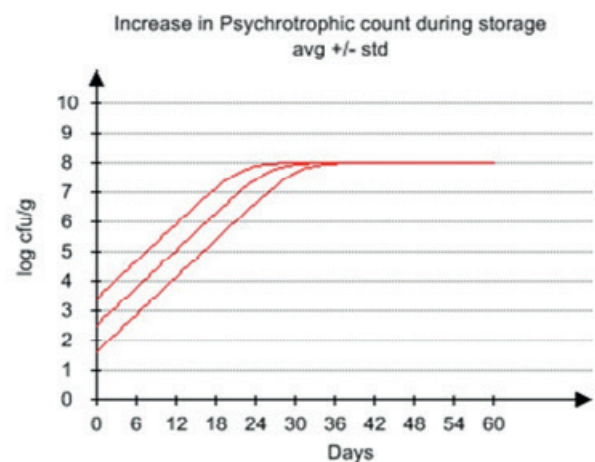
The models can be accessed free of charge at the following website: <http://DMRIPredict.dk>. So first of all, register and log in. DMRIPredict contains several models – both shelf life and safety models (growth of pathogenic bacteria).

Each shelf life model is based on the three factors of significance for shelf life: temperature, packaging method and bacterial count at the time of packaging. Many meat producers do not readily possess a psychrotrophic count. Therefore, when you open the model, the psychrotrophic count is by default set at 2.5, which is the average value from all studies, and this is a good starting point!

The validity of the shelf life models

The models are used by, among others, the major slaughterhouses in Denmark, Sweden and Norway. The Danish Food and Veterinary Control Office has approved the models as documentation for shelf life determination.

## VACCU M PACKED FRESH PORK 20 DAYS AT 4°C



The growth of psychrotrophic bacteria and the development in shelf life (based on odour of the raw meat) for vacuum packed pork stored at 4°C. Shelf life is here defined as the time at which 50% of the packages are unacceptable. The number of psychrotrophic bacteria is set at 2.5 log cfu/cm<sup>2</sup> at the time of packaging, which is the experimental average.



## CONTACT

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