

## Introduction



In a former advice (SciCom advice 09-2016) the Scientific Committee was not able to make a general statement about the growth potential of *L. monocytogenes* in all types of butter in Belgium. It was **recommended to conduct research** on the limits of growth of *Listeria monocytogenes* in raw milk homestead butter under various combinations of pH and aw (or salt content).

**New data:** Scientific study carried out on raw milk homestead butter in Wallonia

## Question and method

To re-evaluate the growth potential of *L. monocytogenes* in Belgian raw milk homestead butter based on:



- New scientific knowledge and data (including the results of the study entitled "Etude du potentiel de croissance de *Listeria monocytogenes* dans le beurre au lait cru en Wallonie")
- Expert opinion

## Results



- Large variation in production processes of Belgian raw milk homestead butters
- Large variation in the characteristics of Belgian raw milk homestead butters
- The « **worst case** » conditions (e. g. pH) were not covered in the performed durability studies.

## Conclusions

### Risk assessment of growth potential of *L. monocytogenes*

**No general statement about the growth potential** of *L. monocytogenes* in all types of raw milk butter in Belgium is possible.

The **risk** of *L. monocytogenes* growth in raw milk homestead butter is assessed as **low** if the **pH drops** below 5,2 within the first 10 hours of the production process. If the pH value drops even considerably lower within the first 10 hours of the production process (for example to 4,7), the risk will be further reduced.



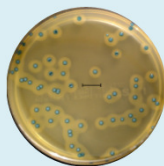
### Production processes of mild butters

With regard to "mild" butters, i.e. butter without or with limited acidification produced from mild cream that has not undergone a biological maturation, the Scientific Committee concludes that the production processes present **potential risks** because they allow the growth of *L. monocytogenes* due to the slow and sometimes rather limited acidification that occurs in the beginning of the production process.

## Recommendations



To include **pH controls** during the production process of raw milk homestead butter in the HACCP procedures



To perform **exact counts** or determine the estimated numbers of *L. monocytogenes* whenever possible in future durability studies



To make producers aware of the **potential risks** associated with certain processes



Proper **communication** with the consumer, in particular with the risk groups, about the potential risks of raw milk products is a point of attention



To add a definition for the term "mild butter" to the **sector guide** + update sector guide based on this advice

## Acknowledgements

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