CONTROL OF LISTERIA MONOCYTOGENES IN DAIRY FARMS

S. Di Tanna, C. Belleflamme, C. Anceau, M.

Sindic*



Unité de Technologie des IAA - FUSAGx Passage des déportés, 2 – 5030 Gembloux - 081/62.24.95

INTRODUCTION

- > Performed in Walloon farms in contact with the PDR project
- L. monocytogenes characterised by its ubiquity
- Numerous sources of contaminations : environment, cross-contaminations, post-contaminations, mastitis,...

OBJECTIVE

➤ Process of raw milk butter and cheeses improving to control *L*. monocytogenes contaminations using HACCP method

The project

- ➤ PDR context (Walloon Project for Rural Development)
- Consists in helping manufacturing farmers and artisans using HACCP and self-control
- > Co-financed project by the General Direction of Agriculture of the Walloon Region Ministry and Europe (FEOGA)

MATERIEL AND METHODS

- ≥228 butter samples
- ≥66 raw milk cheeses samples
- >Petrifilms 3M total flora for surface taking
- ➤ ALOA method /AFNOR validation (AES 10/3 09/00)
- for L. monocytogenes detection and counting
- ▶NF V 08-050 Norm for coliforms counting

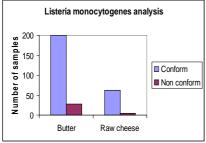
- >Non representative samples of Walloon global situation
- ➤ Shares conformity evaluated in accordance with the Belgian law (A.R. 15/12/94) for L. monocytogenes

Butter: n=1; m=M=c=o in 1 g of product

Raw cheeses: n=5; m=M=c=o in 25 g of product

RESULTS AND DISCUSSION

INITIAL SITUATION



PROBLEM SOLVING METHOD

Hygienogram: review of the cleaning and desinfection programs ⇒most contaminations resolved

Analysis: at each step of production (milk, cream, butter, cheese): L. monocytogenes and coliforms \Rightarrow stage of contamination

HACCP analysis ⇒ critical control points and supervision actions



- A good control of HACCP prerequisites, products HACCP analysis and a good knowledge of product characteristics allow to control L. monocytogenes contaminations in dairy farms raw milk products.
- > Stabilisation of raw milk cheeses production is guarantee by a correct and sufficiently rapid acidification coupled with a decrease of the water activity. These parameters are critical control points and request supervision during production.
- >It is recommended to use warm milk and to cool it quickly (transformation must always begins within two hours after milking) to the fermenting temperature (to 20-22°C for cheese making and to 10-16°C for butter making).



