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ASSESSMENT OF RAPID'L.MONO® MEDIUM FOR THE DETECTION OF *LISTERIA MONOCYTOGENES* IN NATURALLY CONTAMINATED RAW MEAT AND CHEESE

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Conclusions

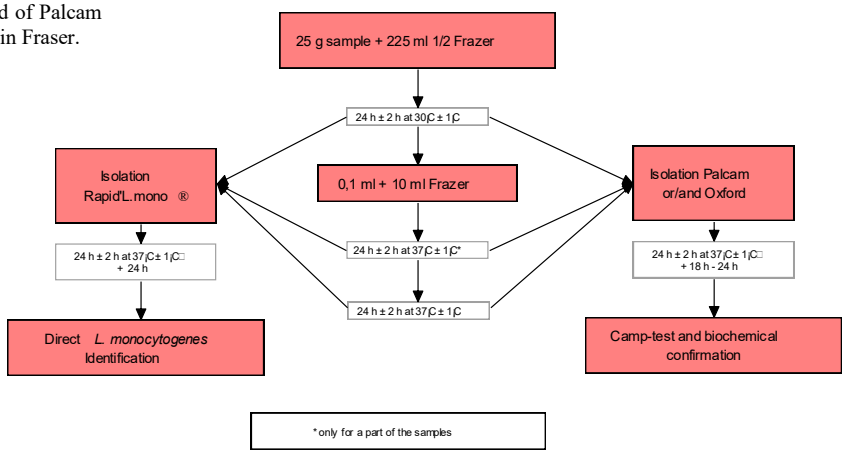
- The use of Rapid'L.mono® medium is time-saving in order to confirm the presence of *Listeria monocytogenes*. However, because of its weak selectivity, it should be used after a selective enrichment in Fraser during minimum 24h.

Material and Methods

- Forty two cheese, 90 raw meat and 27 dried meat samples were assayed for the presence of *Listeria monocytogenes* in 25g. For cheese, the ISO-11290 was used with Palcam, Oxford and Rapid'L.mono® as isolation and confirmation media. For meat, the NF-V-08-055 method was used with Palcam and Rapid'L.mono®. For a part of the meat samples, Oxford was used instead of Palcam and an extra plate was inoculated after a 24h incubation in Fraser.

Introduction

- *Listeria monocytogenes* is an important foodborne pathogen. Cheese and meat are among the most frequently implicated foods. For 10 years, performant detection methods have been developed by the main standardisation organisms. The disadvantage of these methods is that the results based on a few isolates characterisation. The Rapid'L.mono® medium (Sanofi) may be a good alternative for Palcam and Oxford media because it allow to distinguish *Listeria monocytogenes* among the other *Listeria* species by using its chromogenic properties.



Results and Discussion

- All characteristic colonies with Rapid'L.mono® were confirmed as *Listeria monocytogenes*.
- From the 159 analysed samples, 68 (42,8%) were positive with at least 1 medium;
- Among these positive samples, only 55,9% can be detected with the 2 media (reference medium and Rapid'L.mono® medium).
- These 2 media allowed both the detection of 77,9% (53/68) of positive samples.
- A more precise analysis of the results shows that the **Rapid'L.mono® medium is less selective than the reference media**. Thus it is not convenient for direct enumeration or for a detection after 24 h preenrichment in semi-Fraser. However, after 48h enrichment in Fraser, the Rapid'L.mono® **allows a more efficient isolation of *Listeria monocytogenes* isolates** among other *Listeria* species.
- The addition of an extra plate after an enrichment of 24h in Fraser allows the detection of more isolates than the incubation of 48h (results not shown).

Table 1. Recovery of *Listeria monocytogenes* from different food with reference media and RapidÕL. mono¨

	Cheese	Meat	Meat*	Dried meat	Total
Total number of samples	42	63	27	27	**159**
Number of samples positive with one or both media	5	47	9	7	**68**
Number of samples positive with both media	4	26	3	5	**38**
Number of samples positive only with Palcam or Oxford	1	13	1	0	**15**
Number of samples positive only with Rapid'L.mono®	0	8	5	2	**15**
Number of samples negative with both media	37	16	18	19	**90**

*: analysed with the modified NF-V-08-055 method