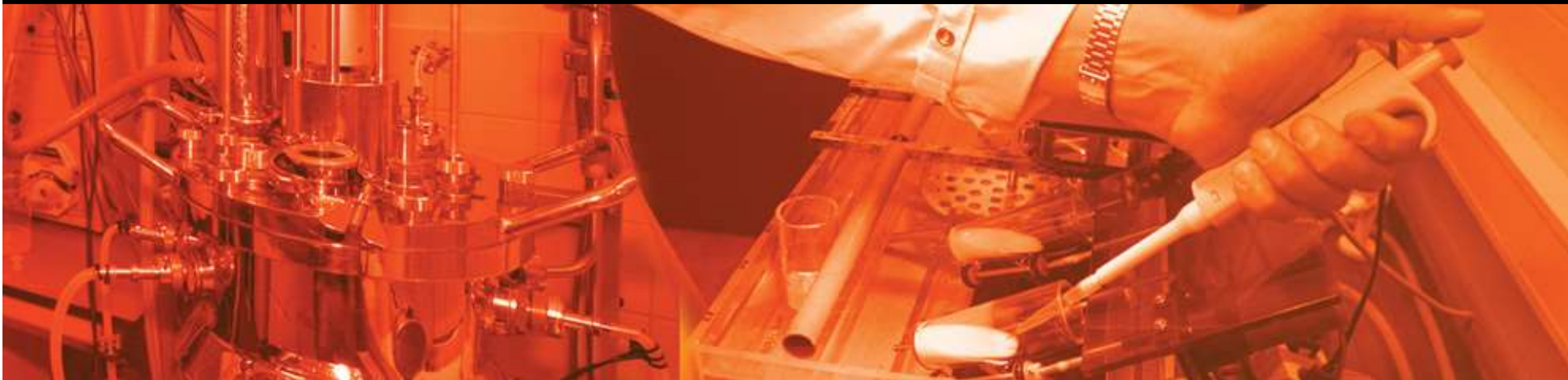


New developments in dairy starter cultures



■ Ingredients ■ Research ■ Concepts ■ Consultancy ■ Production | *for the dairy industry*

Wilco Meijer
CSK food enrichment bv



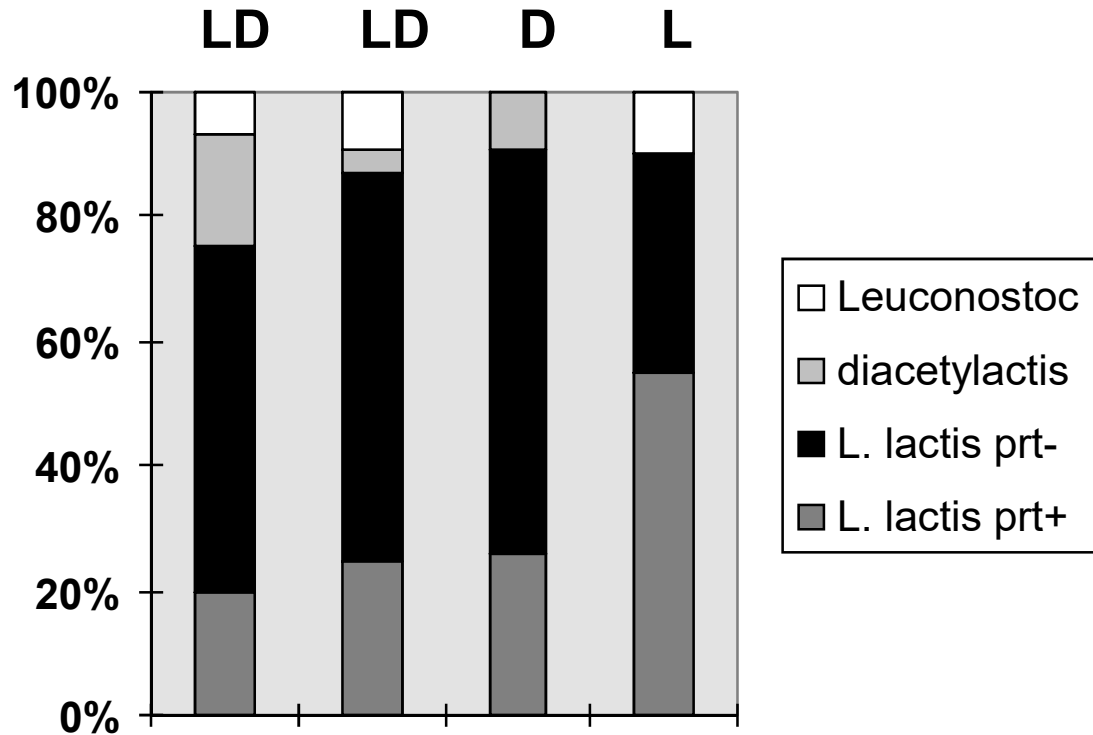
Outlook presentation



1. General introduction
2. History of cheese making
3. Biodiversity
4. Flavour
5. Conclusions

Product authenticity

- Cultures for bulkstarters -



O-cultures

Lactococcus lactis / cremoris

L-cultures

+ *Leuconostoc* sp.

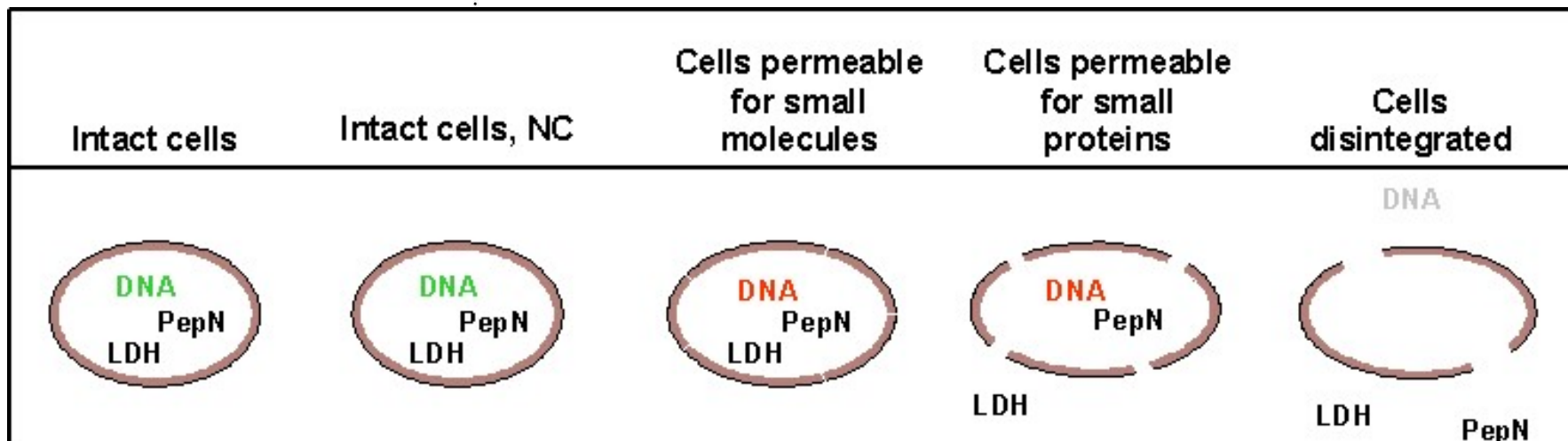
LD-cultures

+ *Leuconostoc* sp. + *Lactococcus lactis* subsp.

lactis biovar. *diacetylactis*

Flavour

- cell integrity / culture dynamics during cheese ripening -



Flavour

- Flavour wheel -



Segment “Thermofilic sweet”
Bouillon, Parmesan and Proosdij
taste profile

Segment “Farmhouse”
Farmhouse taste profile
(sulfuric, sharp and sweet flavour notes)

Segment “Fruity sweet”
Alcoholic, fruity and yeasty
taste profile

Segment “Propionic sweet”
Intensive sweet and nutty taste profile

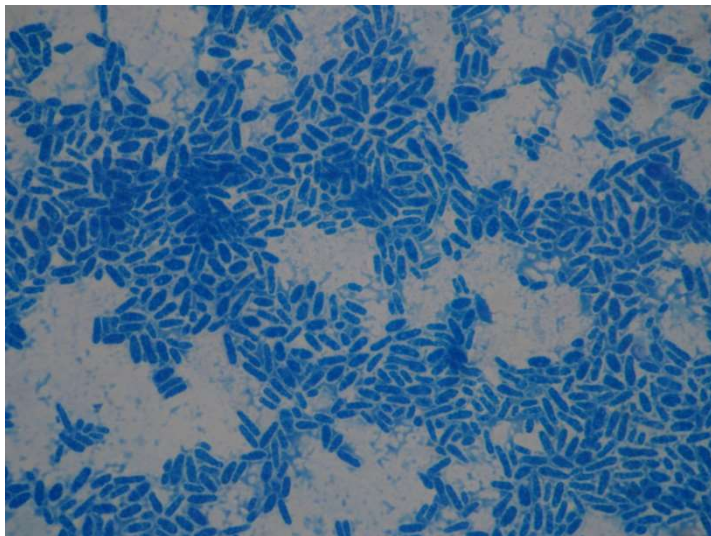


'Mediterranean' flavour

- a combination of *K. lactis* and *Y. lipolytica* -

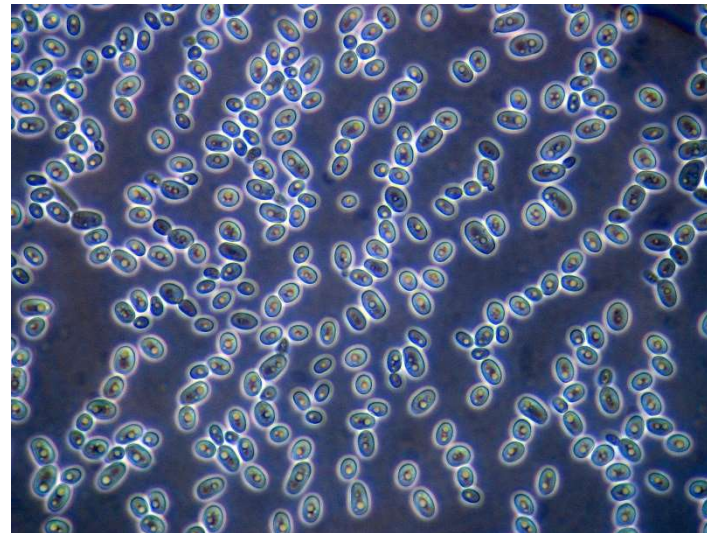
Kluyveromyces lactis

- produces ethanol from lactose
- produces the fruity flavors



Yarrowia lipolytica

- high lipolytic activity



PCT application number | PCT/NL2013/050865



Dairy Suppliers Day DK 2016

