

# OSTEMÆLKENS KVALITET OG DENS BETYDNING FOR VALLEN

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16th of June DMS Seminar

**Arla Foods Ingredients**  
Discovering the wonders of whey 

**WHEY PROTEIN  
MATTERS**



# WHY IS MILK AND WHEY QUALITY IMPORTANT?





# WHEY PRODUCTION

Dairy Farm



Milk



Dairy Site



Whey



Whey process site




Powder

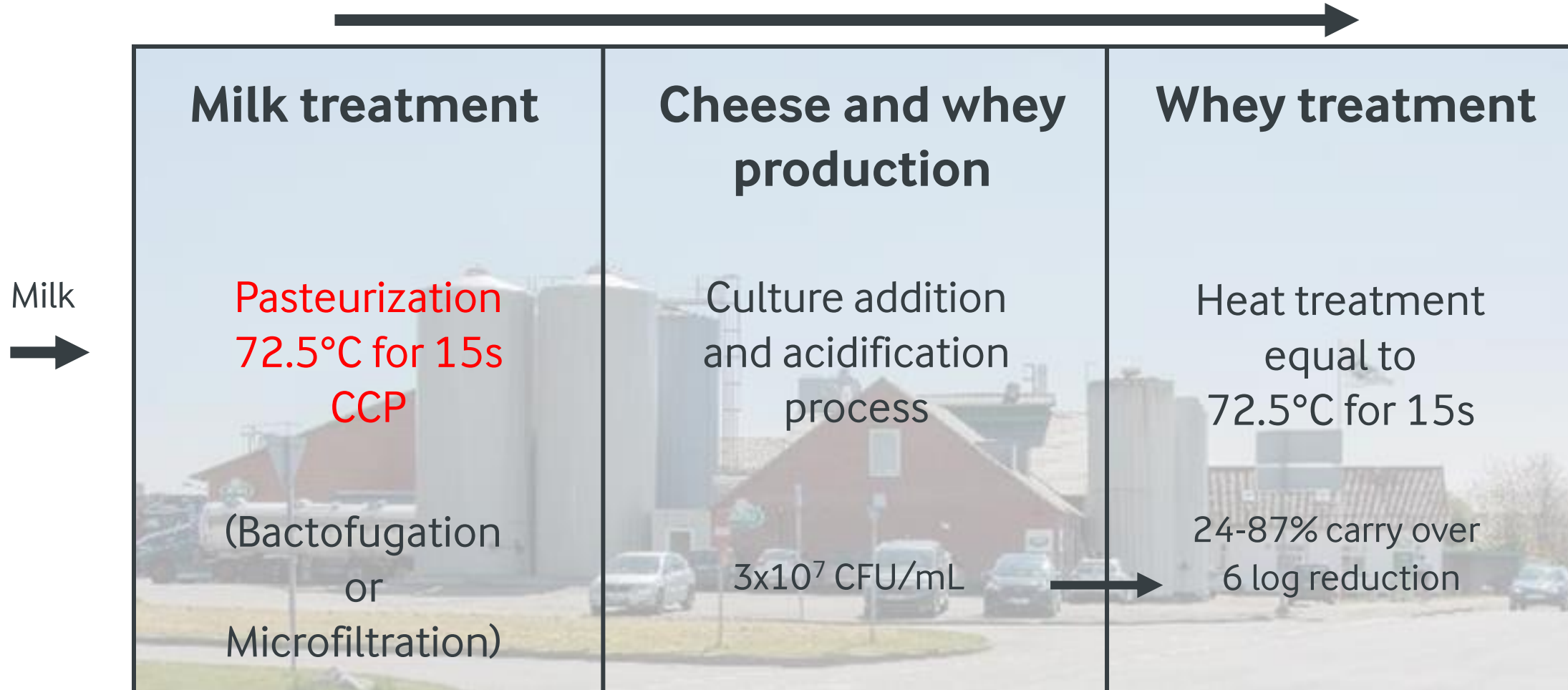
Cheese



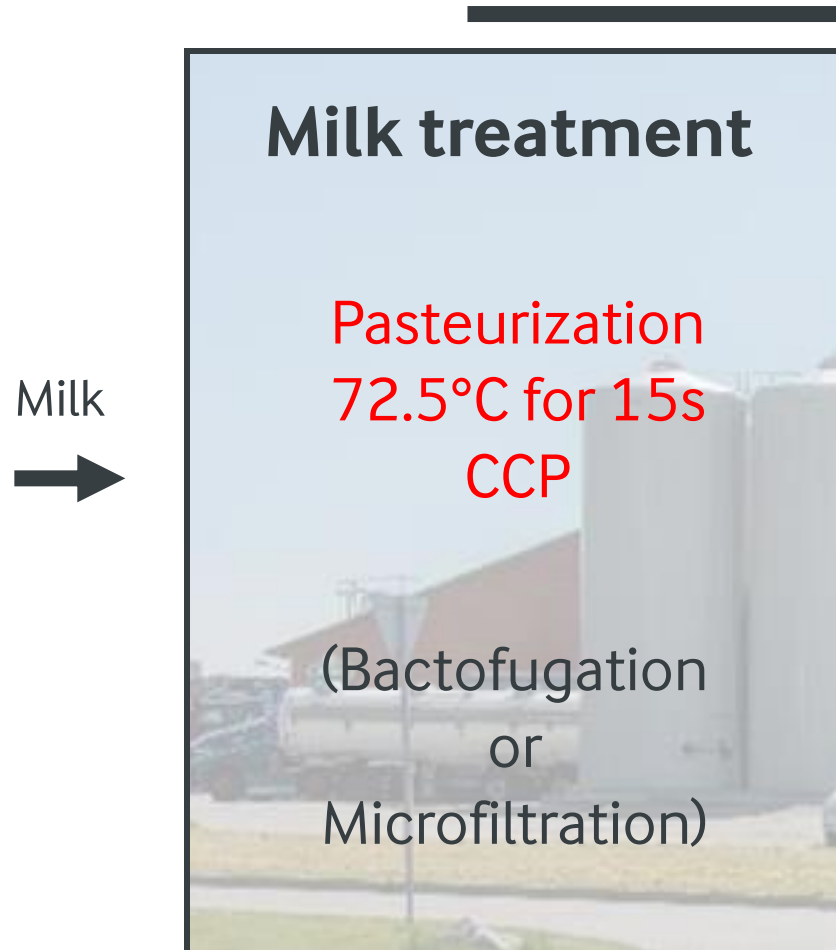
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# CHEESE AND WHEY PRODUCTION



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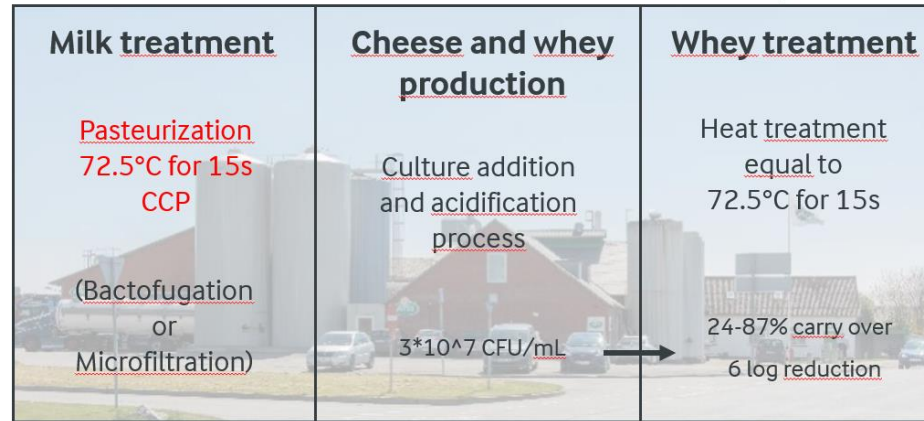
Dairy Farm



Milk



Dairy Site



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Whey process site




Cheese



Powder



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# WHEY PRODUCTION

Whey processing site (DP)



No whey heat treatments at Danmark Protein

Whey is upconcentrated = Bacteria is upconcentrated

Drying is not a kill step

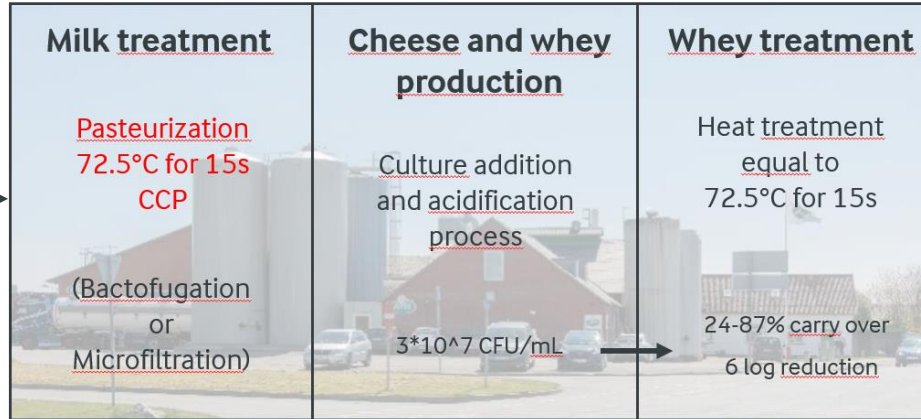


# CHEESE AND WHEY PRODUCTION

Microbiological  
analysis




Milk



Whey



**Whey processing site (DP)**



No heat treatments at Danmark Protein  
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Cheese



Powder



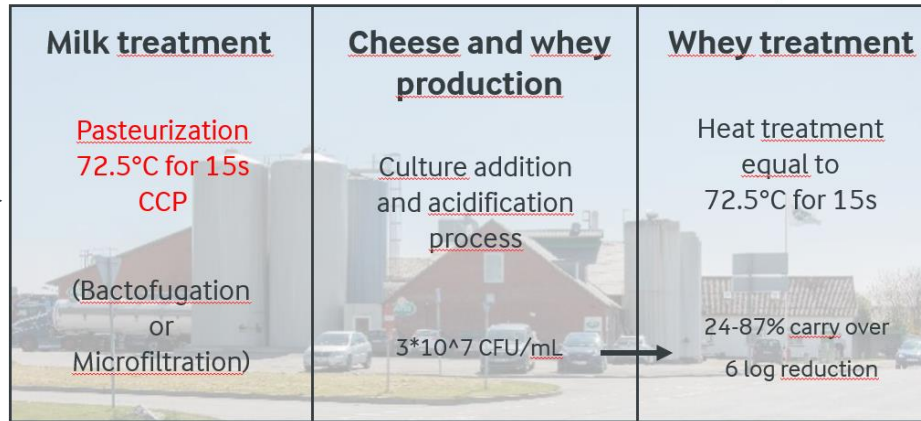
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# CASE STUDY



Milk



Whey



**Whey processing site (DP)**



No heat treatments at Danmark Protein  
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Cheese

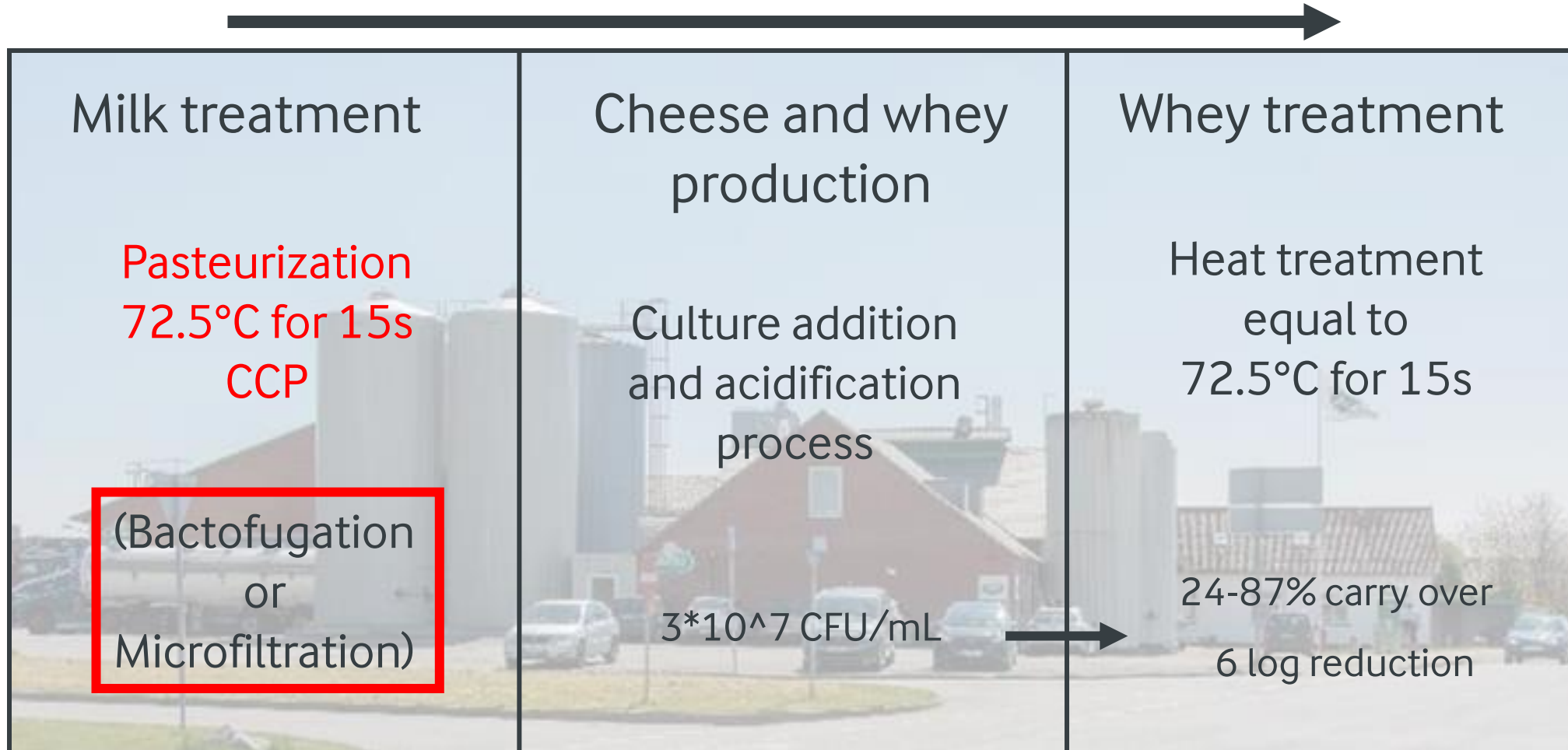


Powder



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# CASE STUDY





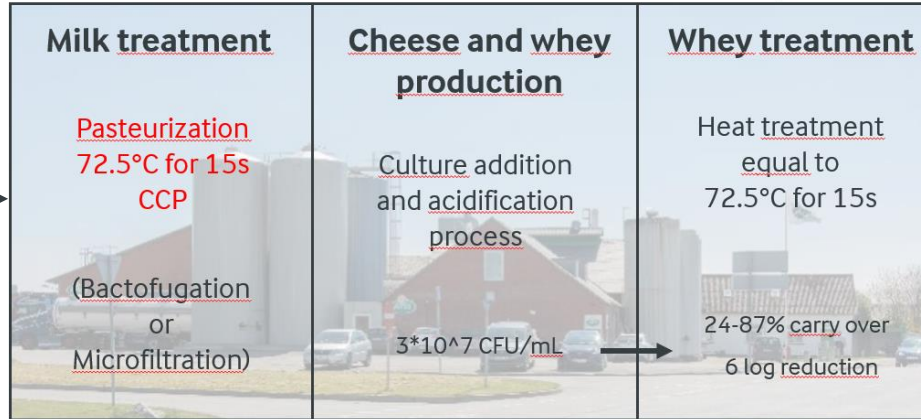
CAS



# CASE STUDY



Milk



Whey



Powder



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Evaporated  
skim milk  
concentrate  
(SMC)

*Streptococcus  
thermophilus wt*



Cheese





# TAKE HOME MESSAGES

- For AFI the whey quality is of paramount importance for our products and end users
- Whey heat treatment must be effective (6 log reduction)
- *S. thermophilus* wt species (thermoresistant species in general) and sporeforming bacteria are bad news
- Producing good quality whey, gives good quality cheese. Whey quality data can be used effectively for cheese production
- New analysis methods are under development



**THANK YOU  
QUESTIONS?**



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