

Starter Cultures

The cultures of bacteria used in the manufacture of cheese and other fermented milk products are known as starters. Starters play a vital part in the manufacture of these products; they produce the lactic acid that influences important quality characteristics such as texture, moisture content, freedom from pathogenic microorganisms and their toxins, and taste. The rate of acid production is critical in the manufacture of certain products, e.g. Cheddar cheese. Depending on the product, especially in mechanised cheese production units, starters may also be required to produce acid at a consistently fast rate through the manufacturing period each day and every day. The negative redox potential created by starter growth in cheese also aids in preservation and the development of flavour in the cheese. Additionally antibiotic substances, now referred to as bacteriocins, produced by starters, e.g. nisin may also have a role in preservation.

Cheese	Microorganisms
Soft, Unripened	<i>Lactococcus lactis</i> <i>Leuconostoc citrovorum</i>
Cottage	
Cream	<i>Streptococcus cremoris</i>
Soft, Ripened, 1-5 Months	<i>Lactococcus lactis</i> <i>Streptococcus cremoris</i> <i>Brevibacterium linens</i> <i>Penicillium candidum</i> <i>Penicillium camemberti</i>
Brie	
Camembert	<i>Lactococcus lactis</i> <i>Streptococcus cremoris</i> <i>Penicillium candidum</i> <i>Penicillium camemberti</i>
Limburger	<i>Lactococcus lactis</i> <i>Brevibacterium linens</i> <i>Streptococcus cremoris</i>
Semisoft, Ripened, 1-12 Months	<i>Lactococcus lactis</i> <i>Streptococcus cremoris</i>



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mariovska volna

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Blue	<i>Penicillium glaucum</i> <i>Penicillium roqueforti</i>
Gorgonzola	<i>Lactococcus lactis</i> <i>Streptococcus cremoris</i> <i>Penicillium glaucum</i> <i>Penicillium roqueforti</i>
Monterey	<i>Lactococcus lactis</i> <i>Streptococcus cremoris</i>
Muenster	<i>Lactococcus lactis</i> <i>Brevibacterium linens</i> <i>Streptococcus cremoris</i>
Roquefort	<i>Lactococcus lactis</i> <i>Streptococcus cremoris</i> <i>Penicillium glaucum</i> <i>Penicillium roqueforti</i>
Hard , Ripened, 3-12 Months	<i>Lactococcus lactis</i> <i>Lactobacillus casei</i> <i>Streptococcus cremoris</i> <i>Streptococcus durans</i>
Cheddar	<i>Lactococcus lactis</i> <i>Lactobacillus cased</i> <i>Streptococcus cremoris</i> <i>Streptococcus durans</i>
Colby	<i>Lactococcus lactis</i> <i>Lactobacillus cased</i> <i>Streptococcus cremoris</i> <i>Streptococcus durans</i>
Edam&Gouda	<i>Lactococcus lactis</i> , <i>Streptococcus cremoris</i>
Swiss&Gruyere	<i>Lactococcus lactis</i> <i>Lactobacillus helveticus</i> <i>Streptococcus thermophilus</i> <i>Propionibacterium shermanii</i> or <i>Lactobacillus bulgaricus</i> and <i>Propionibacterium freudenreichii</i>
Very Hard , Ripened, 12-16 Months	<i>Lactococcus lactis</i> <i>Lactobacillus bulgaricus</i> <i>Streptococcus cremoris</i> <i>Streptococcus thermophilus</i>
Parmesan	
Romano	<i>Lactobacillus bulgaricus</i>



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MARIOVO EKO SREDINA ZA EKOLOSKI PRODUKTI

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Streptococcus thermophilus



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