# **Consolidated: Misc Knowledge**

#### Calcium

Calcium acts like a glue. The cheesecake can manipulate the calcium content and type in cheeses to assist the process, and is able to control the final calcium content of the cheese.

#### Lipase

Lipase is an enzyme that breaks down fats into short-chain fatty acids and helps create flavor and aroma. The lipase in stomach lining is much stronger than native milk lipase.

Calf lipase is the mildest, kid is intermediate, lamb is the strongest. You can also buy blends.

Adding extra lipase in the fashion is always optional, but it is the only way to truly duplicate traditional cheeses.

#### **Calcium Chloride**

Every cheesemaker should have a supply of calcium chloride (CaCl2). It helps reduce the

coagulation time and create a firmer curd.

Calcium chloride is added to the milk before rennet, never after.

Some cheesemakers use it when working with goat's milk, but it should definitely be used whenever working with store-bought milk of any kind.

#### **Microbial Rennet**

Most microbial rennet is produced by the microbe Rhizomucor miehei, aka Mucor miehei.

#### Salt

Salt (sodium chloride) slows down, then brings to a halt, the production of acid in cheese. Salt also helps draw whey out of the cheese. Salt also helps protect the outside of the cheese (salted or brined cheeses) by preventing mold and bacterial growth on the surface of the cheese. It also hardens the surface by dehydration, so that the cheese maintains its form.

## How much culture do you need?

A general rule of thumb is that 1 unit cultures 50 pounds (22 L) of milk, but this doesn't apply across the board.

### Raw milk and starter culture

If you are using raw milk, you only need to use about half the amount of starter culture that you'd use with pasteurized milk, because of the adventitious bacteria that already exist in raw milk that product acid.