

Cheese and Tofu Making Presentation by Fran Wade

Because Fran provided a detailed instruction handout (available on ESP Website: See References), this summary only includes additional information provided during discussion.

Fran brought goat cheese samples from Gayle Prunhuber (See sources)



Cheese Making

About Cheesecloth:

The instructions indicate 10 yards of cheesecloth, but you will only need this much if you use the cheap, flimsy stuff you buy at the grocery store. If you use one of these better alternatives, you will only need enough to line your colander; buy enough for two, so one can be in the laundry:

- Fran uses Game Bags, which have much more substance; plus they can be reused (wash well between uses).
- Purchase real cheesecloth from a cheesemaking source such as cheesemaking.com
- Purchase 100% cotton scrim (usually available at JoAnns in Evergreen); wash well before using, to remove sizing and other chemicals.

About Milk:

You will get the best results if you use raw milk; this can be cow, goat, sheep, mare, water-buffalo, etc.. However, simply pasteurized milk that has not been homogenized (cream at the top) will also work. The best local brand is Lifeline, from Victor MT; it is available at Withey's (Kalispell) and the 3rd St. Market (Whitefish).

Do not use ultra-pasteurized milk, as the high-heat and pressure process used for this process renders the natural calcium in the milk ineffective for curding, an essential process for cheesemaking. Homogenization also interferes with the curding process. If all you can find is ultra-pasteurized and/or homogenized milk, you **MUST** add calcium chloride; refer to [cheesemaking.com \(www.cheesemaking.com/cheesemakingmilkinformation.html\)](http://www.cheesemaking.com/cheesemakingmilkinformation.html) for more.

About Buttermilk (Activating culture):

You can use buttermilk from your grocery store; just be sure it says "contains live cultures." It will not work to add vinegar to regular milk; while this thickens the milk, it does not contain the culturing bacteria needed for the curding process. Alternately, you can make your own using Yogourmet cultured powder available at most natural food stores (Witheys, Mountain Valley Foods, 3rd St. Market), or available from [cheesemaking.com \(www.cheesemaking.com/cheeseculturesandmoldpowders.html\)](http://cheesemaking.com).

Besides the semi-hard cheese that Fran described in her demonstration, there are many other cheeses you can make using specific mesophilic (room temperature) or thermophilic (warmer temperature) cultures. You can purchase these at cheesemaking.com (see Sources). Examples are cheddar, jack, brie, blue, feta, etc..

About Rennet (makes the curd):

Rennet is an animal-based enzyme product, typically made from the mucosal lining of the 4th stomach of a calf (veal). Vegetable rennets have been developed for vegan use.

About Salt:

Do not use iodized salt; the iodine will kill or weaken the good bacteria in the buttermilk or other culture added to thicken the milk.

Cheese Press:

Unless you already have a cheese press, this could be your biggest challenge to making semi-hard and hard cheeses. Fran suggests using a tofu press for small batches. For larger batches, you will need to buy, or make your own, cheese press. Refer to The Essentialist: How to Make a Cheese Press for ideas.

However, there are many soft cheeses you can make, that don't require a press. Fran provided two recipes in this category: ricotta, and cream cheese. Refer to Fran's Cheese and Tofu Making handout for these recipes (See References). And you can find many more recipes at [Cheesemaking.com \(http://www.cheesemaking.com/store/pg/6-Recipes.html\)](http://www.cheesemaking.com/store/pg/6-Recipes.html)

Cooking Pot:

The use of an aluminum pot is not recommended, because the milk and activator are acidic, which could leach aluminum into the mix. Stainless steel or enameled steel are best. It's OK if the pot has an aluminum layer in the bottom, as long as the inside of the pot is not aluminum.

Cream Cheese:

You can use buttermilk as the activator for cream cheese, per Fran's recipe. You can use all cream for extra-rich cream cheese, or a mixture of milk and cream, or just milk.

You can also make delicious cream cheese using plain, unsweetened yogurt or kefir as the activator (homemade or commercial; just be sure it says "Contains Live Cultures." This is especially useful if the whey wants to separate from the yogurt or kefir. Simply follow Fran's recipe, substituting yogurt or kefir.

[NOTE: if making your own yogurt, it must be cultured at a warmer temperature than buttermilk or kefir; refer to ESP's Yogurt & Kefir handout for instructions (see References)].

Tofu

You can simply soak your soybeans overnight, or sprout them over 2 - 3 days. Sprouting predigests the soy protein, making it easier to digest (unsprouted soy protein is very hard on the digestive system).

Refer to the Gathering Summary for Sprouting and Juicing, for instructions on sprouting soy beans (essentialstuff.org/index.php/2009/02/21/Cat/sprouting-and-juicing-062508/)

See also Steve Eisenberg's instructions for making your own soy milk using an electric SoyaJoy machine; this also includes his recipe for tofu and soy burgers. (See References)

Miscellaneous

Sources:

- JoAnn's in Evergreen for cotton scrim (good cheesecloth substitute); Snappy's in Evergreen or Sportsman Ski Haus in Kalispell for game bags
- Cheesemaking.com: powdered cultures, supplies and Help site.
- SoyaJoy (<http://www.soymilkmaker.com/order.html>): Electric tofu makers, cedar tofu press and more
- Loon Lake Gardens & Pottery (goat cheese source): Gayle Prunhuber, 837-4734

References:

- Cheesemaking.com
- ESP Fermentation and Culturing Files: essentialstuff.org/index.php/categories/files/fermentation-files/
 - ▶ Cheese and Tofu Making, by Fran Wade
 - ▶ Soya Milk & Tofu (Using SoyaJoy machine), by Steve Eisenberg:
 - ▶ Yogurt and Kefir, by Catherine Haug



Discussion:

Other uses for whey:

- lacto-fermentation of fruits and veggies; add to homemade mayo to extend shelf life (refrigerated)
 - Sickroom
 - Ricotta cheese
- WheyLow: a whey-sugar recommended for diabetics or weight loss. Made by mixing liquid whey with table sugar, brown sugar, or dried sugar cane juice. Learn more at <http://www.wheylow.com/>. ESP has not confirmed whether the claims are substantiated.