SoyLife (Soy Milk Machine)

Presentation by Steve Eisenberg

at the 3/25/09 Cheese & Tofu Gathering

Steve demonstrated how to make soy milk using his Soya Joy machine. Then explained how the soy milk could be used to make tofu, and the hulls used to make soy burgers.

This machine can be used to make other kinds of “milk,” such as almond and other nut milks, rice milk, etc.. Refer to http://www.soymilkmaker.com/recipe.html for recipes.

At this time, the Soya Joy kit costs $99, but a discount is offered for bulk orders. Refer to their distributor’s website (http://www.soymilkmaker.com/) for discount terms.

Soy Milk

Price comparison (does not consider up-front cost for the Soya Joy machine):

<table>
<thead>
<tr>
<th>Store Bought</th>
<th>Soy Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2.39 per quart</td>
<td>$0.26 per quart</td>
</tr>
</tbody>
</table>

The basic process:

• Soak the soybeans in water overnight, or sprout them until they form small tails. Drain.
• Place drained soaked or sprouted beans into the stainless steel grinder compartment, and attach to the machine. Fill outer container with water, insert top part (motor and grinder compartment) into the water container and secure.
• Push the start button; the machine works like a blender/grinder in bursts until the milk is ready (only a few minutes).
• Remove top part; carefully remove grinder compartment, which contains the hulls, and dump hulls into a bowl or storage container. Wash grinder compartment and the blender/grinder apparatus right away, because as the muck from the hulls dry, it becomes difficult to remove. Use soapy water.
• Pour soy milk into storage container. Then wash the water compartment.
• Flavorings can be added to your soy milk, such as vanilla, sugar or stevia; or you can enjoy it plain.
Tofu

The following is from http://www.soymilkmaker.com/.

If you love store-bought tofu, you will be surprised how much better freshly made tofu is. Tofu is made from soy milk. Most of the work involved in making tofu is making the soy milk. Making soy milk at home from scratch is time-consuming and labor intensive without a soy milk maker.

Below are step-by-step instructions on how to make tofu from soy milk. Visit http://www.soymilkmaker.com/ for instructions on how to make soy milk. Many tofu recipes and links to tofu recipes are provided at the end of this page.

1. Make four batches of soy milk per SoyaJoy or SoyaPower soy milk maker User's Manual. Once the soy milk is made, the major part of the work for making tofu is done!
2. Pour all the batches into a pot and simmer soy milk for 5 - 10 minutes. Cool down to between 170º and 180º F.
3. Prepare coagulant – dissolve either one tsp. nigari (natural magnesium chloride) or two tsp. natural calcium sulfate in one cup (8 oz.) warm water. Less coagulant produces softer tofu, more produces firmer tofu. [Refer to "About Tofu Coagulant," below.]
4. Pour the prepared coagulant solution slowly into the soy milk, stirring gently. Stop stirring when 3/4 of coagulant solution has been added. Wait 2-3 minutes. Now, gently stir the forming curds and sprinkle the last 1/4 of the coagulant solution into any milky areas. If there are no milky areas, you do not need to add the rest of the solution. If there are still some milky areas after adding all the solution, mix and add some more. Depending on the water quality, etc., you may need slightly more or less coagulant.
5. Once the soymilk has separated into small white curds of tofu and an amber liquid (whey), transfer curds to a tofu mold (or tofu box) lined with cheesecloth. Any container that has many small holes to allow residual whey to drain can serve as a tofu mold. A lid is then placed on the forming container, after which a small weight of 3 - 5 pounds is placed on the lid of the container and allowed to sit for 20 minutes or so. A pot or jar of water can serve as the weight.
6. Empty the resulting block of tofu into a tub of cold water and allow it to sit for another hour, then store the tofu in the refrigerator and change the soaking water daily.

You can eat the fresh tofu while it is still warm. Freshly made warm tofu tastes so much better than the store-bought stuff! If you use soybeans from a new crop, the tofu tastes even better. It is very satisfying to see tofu taking shape from soy milk. Most everyone who tries it enjoys the process.

About Tofu Coagulant - Natural calcium sulfate and magnesium chloride are the most commonly used tofu coagulants. They have been used for hundreds of years in Japan and China. It is very difficult to find them in retail stores. We offer both for sale on this Web site (http://www.soymilkmaker.com).

Note: see Sources for local source of magnesium chloride.
Soy Burgers

Ingredients for 4 good-sized burgers:

- 1 to 2 cups (250 mL) okara (use whatever residue is available from previously making soymilk)
- 1 cup whole wheat flour
- 1 medium-size potato, peeled, coarsely grated
- 1 medium-size carrot, peeled, coarsely grated
- 1/2 medium-size onion, peeled, chopped finely
- 1/2 teaspoon sea salt, or tamari to taste
- 1 teaspoon garlic granules, or 3 or 4 cloves of fresh garlic, pressed
- 1 tablespoon Italian seasoning
- 1 tablespoon kelp granules
- 1/4 teaspoon cayenne powder (or to taste)
- Optional: to boost protein content, add 125 grams of crumbled medium-firm tofu

Put all above ingredients together in a large bowl and mix thoroughly with a spoon. If consistency is too thin, add a little more flour; if too thick and dry, add a little water.

Roll mixture into medium-size balls and press each into the shape of a burger. Place each separately into a plastic bag and store in freezer until needed.

When ready for use, remove from freezer individually and place in cast-iron fry pan with generous amount of oil heated to a low-to-medium temperature. Allow 5 min. for defrosting, then fry each side for 10 min.

Sources:


Magnesium chloride: Steve purchases this from George at Evergreen Pharmacy (257-2083, Ashley Square, 2141 Hwy 2 East #300, Kalispell MT 59901, at a much better price than ordered from www.soymilkmaker.com/. (No prescription is necessary).