

Probiotics and Food Recipes

Liz Lipski, PhD

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YOGURT

It's simple to make delicious yogurt at home for a fraction of the cost.

Timeframe: 8-24 hours

Special Equipment:

- Quart/liter jar
- Insulated Cooler or Yogurt Maker



Ingredients: (enough to make 1 quart):

- 1 quart or liter of whole milk*
- 1 tbsp/15 ml fresh live-culture plain yogurt. You can buy yogurt or use some from your last batch.

* You can use 2% or skim, goat milk, or canned coconut milk. Fresh or raw milk from a reputable source makes a delicious and even more healthful yogurt.

Process:

1. Preheat the jar and insulated cooler with hot water so that they will not drain heat from the yogurt and it can stay warm to ferment.
2. Heat the milk until bubbles begin to form. If you use a thermometer, heat milk to 180° F (82° C). Use gentle heat, and stir frequently to avoid burning the milk. The heating is not absolutely necessary, but it results in a thicker yogurt.
3. Cool the milk to 110° F (43° C), or the point where it feels hot, but it is not hard to keep your (clean!) finger in it. You can speed the cooling process by setting the pot with the hot milk into a bowl or pot of cold water. Don't let the milk get too cool; the yogurt cultures are most active in the above-body-temperature range.
4. Mix starter yogurt into the milk. Use just 1 Tbsp (15 ml.) per quart. I used to use more starter, assuming that more is better, until I consulted my number one kitchen book, *The Joy of Cooking* (1964 Edition), known affectionately as "Joy" in our kitchen. "you may

wonder why so little starter is used and think that a little more will produce a better result. It won't. The bacillus, if crowded, gives a sour, watery product. But if the culture has sufficient Lebensraum (German for "room to live"), it will be rich, mild, and creamy." Mix the starter thoroughly into the milk, and pour the mixture into the preheated jar.

5. Cap the jar and place it in the pre-heated insulated cooler. If much space remains in the cooler, fill it with bottles of hot water (not too hot to touch) and/or towels. Close the cooler. Place the cooler in a warm spot where it will not be disturbed. "Yogurt has the added idiosyncrasy that it doesn't care to be jostled while growing," note *Joy*.
6. Check the yogurt after 8-12 hours. It should have a tangy flavor and some thickness. If it isn't thick (hasn't "yoged"), warm it up by filling the insulated cooler with hot water around the jar of yogurt, adding more starter, and leaving it 4 to 8 more hours. You can leave it to ferment longer if you wish. It will become more sour as more of the milk's lactose is converted into lactic acid. A longer fermentation period can often make yogurt digestible even for lactose-intolerant individuals.
7. Yogurt can store in the refrigerator for weeks, though its flavor will become more sour over time. Save some of the yogurt to use as a starter for the next batch.

Recipe used with permission from: Sandor Katz's *Wild Fermentation*, Chelsea Green Publishing, 2003, p. 76-77. www.wildfermentation.com

Variations on making yogurt: You can see from the recommendations below that yogurt is pretty forgiving...and that there is a lot of variety in ways that people make it.

- You can also make yogurt in a yogurt maker.
- You can take a quart jar and put it on top of your yogurt maker, then cover the entire thing with a bowl to keep it insulated.
- I've covered a jar with a towel and put it into a gas oven with the pilot light on.
- Wrap a heating pad around it. Set heating pad on low. Cover with a towel.
- I've also left jars near heating vents covered with a towel.
- One of our participants just pours milk into a jar, adds yogurt, and puts it into her hot tub for 12 hours.
- Another participant makes soy yogurt. She Adds guar gum and agar to help give it a thicker consistency.
- And still another just heats half of the milk, then mixes it with the hot milk so she doesn't have to wait for it to cool.
- You can add a touch of your favorite probiotic. Just add a bit so that the probiotics have room to stretch out.

KEFIR

Ingredients

1 tablespoon kefir grains

1 quart milk**

*You can purchase kefir grains at many health food stores or at www.bodyecology.com. As people make kefir, they make large amounts of kefir grains. These can be split so that you can get some from a friend or give some to a friend.

**You can use cow, goat, coconut, yak, or other types of milk. Dairy products can be pasteurized, raw, skim, 2% or whole milk. For someone who is extremely sensitive, you can even make kefir from water. Use 1 quart of water, 1/3 cup of organic brown sugar, and 1 tsp of molasses along with 1/4 cup of kefir grains.

Directions

Put the kefir grains and milk into a glass jar. Cover tightly. Set out at room temperature for 12 to 24 hours. It takes less time in warm weather than in cold weather. Put in a place that is not in direct sunlight.

Shake the kefir gently a couple of times if you remember.

When the kefir is ready, you will see kefir grains coagulate at the top of the jar. Separate these grains and put into a separate container for your next batch. You can strain the grains out by using a strainer or colander.

Kefir will last 3-4 weeks in your fridge.

Kefir is a traditional cultured milk product. Kefir typically has between 9-12 or more bacterial strains of probiotics and is also rich in prebiotics. It also typically has beneficial yeasts such as *Saccharomyces kefir* and *Torula kefir*. I find that kefir is better tolerated by most people who are sensitive to dairy products than yogurt is.

It aids in digestion, helps keep gut microbiota in balance, and has all of the many benefits of probiotic rich foods such as making B-complex vitamins, vitamin K, and acting as an immune modulator.

Liz Lipski, PhD

Cashew Kefir

Cashew Milk

Ingredients:

- 1 cup cashews
- 4 cups water
- Pinch salt
- 1 Tbsp honey, maple syrup, or sweetener of choice

Take all ingredients and put in blender. Blend until smooth.

Heat cashew milk by putting it in a jar and putting the jar into a hot water bath. Or heat on stove to about 92 degrees.

Add kefir starter. I typically use Yogourmet kefir starter because it's easy. (Available at health food stores, Amazon, etc.) Use as directed. Or you can purchase dehydrated kefir grains. Since I don't use enough to keep these "pets" alive, I use the Yogourmet. If you are a connoisseur, you'll probably want to use the dehydrated grains, rehydrate, and keep them alive.

Let sit at room temperature and in about 24 hours you'll have kefir.

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Daikon-Miso Pickles

Ingredients:

- 1/2 pound daikon radish
- 1 cup white miso
- 1 tbsp fresh ginger, peeled and minced

Peel 1/2 pound of daikon radish and slice into 1/4 inch rounds.

Put 1/2 of the miso into a bowl. Put the daikon slices on top. Add more miso to bury the radishes.

Press, cover and let sit for 24 hours. Rinse and eat. These will keep refrigerated for a couple of weeks.

You can save the miso to use in soup or to make more pickles.

HALF SOUR PICKLES

5-8 small pickling cucumbers (Kirby) or 4-6 small regular cucumbers
1 quart filtered, spring, or distilled water (chlorine will have a negative effect on your pickles)
2 TBSP sea salt
1-2 cloves garlic, chopped
1-2 tsp dill seed
¼ cup fresh dill or 1 TBSP dried dill leaf
2-4 fresh horseradish leaves, or grape leaves, or 1 oak leaf. In the winter you can use a pinch of black tea leaves or a couple of dried bay leaves instead. (The tannins in all of these leaves keep the pickles crisp and crunchy.)

Optional spices: coriander, cumin, red pepper flakes, mustard seeds, cinnamon, caraway



1. Soak the cucumbers in ice water for an hour. This will enliven them.
2. Place leaves, garlic, and spices in the bottom of a quart jar.
3. Pack the cucumbers into the jar, packing them in tightly.
4. Dissolve the salt in the water. Pour it over the cucumbers. Make sure that the cucumbers are completely submerged in the water. If not, make a bit of extra brine to cover them.
5. Leave 1" of space between the top of the water and the top of the jar
6. Cover loosely with a kitchen towel or cheesecloth in a cool place. Leave on your counter for 3-7 days. Then begin to check them daily. The brine will begin to get cloudy and slightly bubbly. When the pickles taste "right" to you, cover and refrigerate.

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CASHEW MILK

Cashews are a softer nut, and therefore do not need to be soaked overnight to be able to blend smoothly as almonds or hazelnuts do. Use fresh cashew milk to pour over a cooked whole grain cereal for breakfast or use it to make fruit smoothies. I like to make this milk thicker by adding half of the water. I store it in a glass jar in the refrigerator and add it to spice tea with a little coconut sugar for a late night warming drink.

½ cup raw cashews

2 cups water

2 tablespoons maple syrup

pinch sea salt

Place all ingredients into a high-powered blender. Blend on high until very smooth. Taste and adjust sweetness if necessary. Store in a glass pitcher or glass mason jar in the refrigerator for up to 4 days.

Yield: 2 ½ cups

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CASHEW-COCONUT YOGURT

Add to pot:

2 cups cashew milk (see recipe)
4 cups canned coconut milk (no added sugar)
1 tbsp honey, maple syrup, or coconut sugar
1 tsp vanilla extract or no-alcohol glycerite

Bring to simmer. Watch carefully so it doesn't boil over.
Once it begins to simmer turn off the heat.

Whisk in:

1.5 tbsp Gelatin OR 1.5 tsp agar powder that has been dissolved into 1/2 cup boiling water or 1 tsp pectin

Pour the liquids into a bowl and put that bowl into a larger one of cold (but not iced) tap water to cool down to 92°F. Whisking helps it cool down faster.

(Note: Omit this step if using agar powder, and let it cool down on its own so the agar powder doesn't get lumpy)

When you have reached about 92°F add the contents of about 9 probiotic capsules. *25 to 30 billion of any dairy-free probiotic.* Whisk them in well.

Ladle into jars and keep warm for about 10 hours.*

If there is a clear pool at the bottom after 10 hours, secure the lids tightly and shake the yogurt to mix it in before refrigerating. *(Note: For agar option shaking isn't necessary)*

Refrigerate for 8 hours.

Optional: Put a drop or two of lemon extract on a spoon and stir into your jar of yogurt just before eating it.

*Keep warm with a yogurt maker, by putting in an oven with a gas pilot light, in a cooler with warm water, or even by putting it into your hot tub. (Liz Lipski notes.)

Recipe from: The Spunky Coconut Blog www.thespunkycoconut.com and adapted by Whole Life Nutrition® and Liz Lipski, PhD, CCN.