This is the Yogurt maker I use. Buy the version with the two larger jars rather than these smaller jars



Order this Yogurt maker with the two larger jars rather than these smaller jars.

Order this inulin to feed the probiotics

Micro Ingredients Organic Chicory Root Inulin
Powder, 2 Pounds | Natural Prebiotic Fiber
Supplement | Intestinal Support for Colon and Gut
Health | Non-GMO and Vegan Friendly

Amazon's Choice in Prebiotic Nutritional Suppl...

1 sustainability feature 

900+ bought in past month



This is the two recommended probiotics that colonize upper small intestine as well as colon.

L Reuteri and L Gasseri are fermented at different temperatures so separate batches of each is best.









These are other recommended probiotics that can be fermented. Use the yogurt E-Book for the correct fermenting temperature. Yogurt Plus is an excellent 5 probiotic combination that I ferment at 102 F. All of them are fermented for 36 hours.

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#### Brand: Cutting Edge Cultures



50+ bought in past month











Here are the basic tools. A mixing bowl, a measuring cup, inulin, milk and the starter. I add three heaping tablespoons of Inulin to the mixing bowl. Chickory root Inulin mixes easier than this artichoke variety. I pre-wash my hands and then rinse in the hottest water everything that will touch the mixture including the final two glass jugs with their lids.

Add three tablespoons of a previous batch or three tablets of Gasseri or 10 tablets of L Reuteri or three tablets of the other pro-biotics if starting a new batch.

I find grass fed milk tends to come out half whey liquid. It might be that it is not ultra pasteurized. Most batches come out great with the organic ultra-pasturized especially if you include half and half for half of the milk. Pasurizing the milk requires heating up the 32 oz to about 190 degrees but no more than 195 degrees. Let it cool for 5 to 10 minutes and then put the pan in a bigger pan and add ice water to the bigger pan to speed up the cooling.

Add a dash of milk. Stir, smash, scrap the mixture to get the Inulin to dissolve in the milk. I like using a metal wisk.



Mix it all as best you can. There are always some lumps of the Inulin. Next pour in 32 ounces of whole organic milk. All the yogurts tend to be a more runny than commercial yogurts.



I used a frother until it broke and now just use a wisk until all the first mixture mixes with 32 ounces of milk and or cream. After it is well mixed, pour it into the two bowls that came with the yogurt maker and put the lids on the bowls.



Rinse the bowls before putting in the yogurt maker. I also like to pour out ant residual water in the yogurt maker from the previous batch and rinse the lid. Dry with a paper towel. I don't want any extra bacteria in the yogurt maker. I also compress the white plastic lids before sealing them to keep the jars from poping open during the 36 hours of fermenting.



Put the two bowls in the yogurt maker. Add enough water in the yogurt maker to be at least an inch or two deep so that the heat is more even. Put the lid on the top.

To start Press "Temp/Time" and 108 is displayed at the start. Use + or – to adjust the temperature to the preferred level as specified in the Yogurt E-Book. 100 degrees for L Reuteri and 109 for L Gasseri. Each probiotic likes different temperatures. Press "Start/Reset" and 08 is displayed which is 8 hours. Press the "+" 28 times to increase the fermenting to 36 hours. Press "Start/Reset" and the process begins. It will then count down the hours until it is ready.

You can leave the yogurt in the bowls if it finishes while you are sleeping. I try and time it so I'm awake when it is done.

After 36 hours take it out and save 16 ounces to use as starter for future batches. I recommend starting either another batch of the same or start another batch of the Gasseri or any of the probiotics recommended in the Yougurt E-Book. Put the rest in the refrigerator. I found it helpful to buy extra glass jars to store the starters with labels on the tops and 32 oz jars to store the different yogurts in the refrigerator

# Lactobacillus Reuteri DSM 17938, ATCC PTA 6475

Available from Bio Gaia

DSM 17938 and ATCC PTA 6475 strains increase oxytocin release from the pituitary gland and thereby yield effects such as smoother skin, reduced skin wrinkles, accelerated healing, increased feelings of empathy, restoration of youthful muscle and other benefits.

Leaky Gut: Helps to strengthen and repair the intestinal barrier, which, when damaged, can allow harmful bacteria to enter the body and cause bloating, gas, cramps, and food sensitivities.<sup>39</sup>

Urinary Tract Infections: Provides female support to combating and easing the effects of Urinary Tract Infections (UTI's).<sup>40</sup>

Dental Health: As one of the few probiotics found in the mouth, studies have shown it helps **deter** the growth of Streptococcus mutans, the bacteria which causes **tooth decay**. 41

H. Pylori Defense: May help reduce the presence of Helicobacter pylori (H. pylori), a harmful bacteria which researchers have linked to peptic ulcers and other digestive diseases.<sup>42</sup>

# . Lactobacillus Gasseri

Healthy Weight Support: A review of over a dozen human randomized controlled trials concluded that L. gasseri supports healthy weight management. Other studies have shown this strain to support the **reduction of fatty tissue** and **improve metabolism**.<sup>24-27</sup>

Bone Density: Shown to have anti-menopausal effects by increasing bone mineral density and lowering pain sensitivity.<sup>28</sup>

Official name of strain is Lacticaseibacillus casei Shirota

Lacticaseibacillus casei : the full strain name may also be referred to as Lacticaseibacillus casei DN-114001

<u>Lactobacillus casei</u> is one of numerous species belonging to the <u>Lactobacillus</u> genus. As of April 2020 *L. casei* has been officially reclassified to *Lacticaseibacillus casei* so the full strain name may also be referred to as *Lacticaseibacillus casei* Shirota (Zheng J et al., 2020). Strains from this particular species are often present in fermented foods such as sauerkraut and

yoghurt, and the *Lactobacillus casei* Shirota strain is typically found in commercially available yoghurt drinks.

# What are the benefits of Lactobacillus casei?

- Production of antimicrobial substances Bacteriocins are antimicrobial and produced by many organisms including lactic acid bacteria. *L. casei* displays antimicrobial ability against gram-positive and gram-negative pathogenic and antibiotic-resistant bacteria, thus supporting the growth of beneficial microbes and maintaining gut homeostasis. (Ullah N. *et al.*, 2017).
- 2. **Enhances gut barrier function** *L. casei* prevents impaired barrier function of intestinal epithelial cells. The exact role probiotics play in epithelial barrier function is not well understood but when gut cells were pre-treated with *L. casei* before undergoing induced cytokine dysfunction, they provided a protective effect (Soo Han D *et al.*, 2010).
- 3. **Reduces the adhesion of pathogens** *L. casei* competes with selective groups of pathogens for adhesion to intestinal surfaces, thus taking up more room on the gut lining and leaving less space for pathogens to inhabit and grow (Y.-K. Lee and K.-Y. Puong, 2007).
- 4. Modulation of the immune system Some strains of *L. casei* have demonstrated their ability to alter the composition of the gut and modulate the human innate immune system. *Lactobacillus casei* DN-114001 has been extensively trialled for immune support and *L. casei* Shirota has been shown to increase the activity of natural killer (NK) cells which target several types of tumours and other infectious cells (Reale M. *et al.*, 2011).

# Key takeaways for Lactobacillus casei

- Lactobacillus casei is officially known as Lacticaseibacillus casei; it contains well-studied strains within the species and is often used in food production to ferment cheese and yoghurt.
- The benefits of *L. casei* include supporting the growth of beneficial microbes, protecting the gut lining and reducing the adhesion of pathogens; other benefits are strain-specific.
- One of the most well researched strains is Lactobacillus casei Shirota which has been widely studied to support digestive and immune health.

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