

The Benefits of Fermented Foods

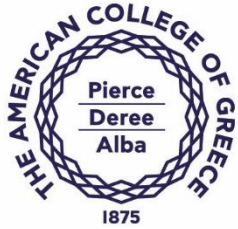
Our digestive system is composed of a network of beneficial bacteria that are responsible for assisting our digestive system to digest food, absorb nutrients, battle harmful bacteria, and eliminate toxins. When these bacteria are killed off due to food additives, antibiotic drugs, processed foods, our gut health is affected. Eating the right kind of fermented foods and avoiding foods that feed unhealthy bacteria can help nourish our healthy gut bacteria and balance the ratio of beneficial-to-bad bacteria, which will eventually reflect on our overall health and well being.

To achieve the proper ratio of beneficial-to-bad bacteria you need to increase the raw fruits and vegetables, cultured and properly fermented foods, limit sugary foods and anything that your body converts to sugar quickly like refined grains and processed foods. So eat more organic foods, especially greens and all vegetables, fiber-rich foods which cleanse the body like flax, chia and psyllium, and eat a variety of anti-fungal foods like coconut, turmeric, ginger, garlic, onion, oregano, cruciferous vegetables, cloves, cinnamon, coriander and olive oil.

WHAT ARE FERMENTED FOODS

Fermented foods contain healthy live bacteria known as probiotics and are foods that have gone through a process during which this bacteria converts the starches and sugars in that food into lactic acid and acetic acid. Fermented foods have high nutritional values (vitamin-K2, trace minerals, B-vitamins and probiotics), are easy to prepare and are economical. Fermentation is an old food preservation method and was used by the Romans who consumed sauerkraut, Ancient Indians who enjoyed " Lassi" a pre-dinner yogurt drink, Bulgarians who are known for their high consumption of fermented milk and Kefir, Turks who are famous for their Ariana drink alongside their meals, Asians who pickle cabbage, turnips, eggplant, cucumbers, onions, squash, and carrots and Middle Easterners who use yoghurt to accompany almost every meal.

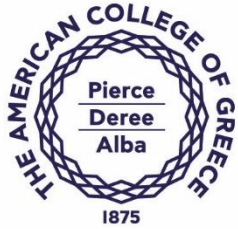




BENEFITS OF FERMENTED FOODS

- 1. Optimize your immune and defense system against disease.** The skin and the lining of our intestinal system is the first line of defense against the outside world. Housed in the lining of our gut are intraepithelial lymphocytes, key players in our immune system that are activated by compounds in cruciferous vegetables such as broccoli and cabbage. Maintaining the optimal conditions in our gut is crucial for our health. Prebiotics, such as fiber rich fruits and vegetables not only are covered in lactic acid bacteria (the good bacteria) but also provide the fiber on which the good bacteria thrive. Live good bacteria also known as probiotics also play a crucial role in the development and operation of the immune system in our digestive tract, aiding in the production of antibodies to pathogens. The key is to balance our ratio of beneficial-to-bad bacteria in the microflora or inner ecosystem of the gut. So if we take an **antibiotic**, we need to replenish the good bacteria in our gut as quickly as possible as antibiotics are indiscriminate killers that kill not only the pathogens but also 300-1000 different species of essential bacteria which is the foundation of your immune system.
- 2. Improve your mood and behavior.** Our gut is now known as our second brain due to the size, complexity and similarity in terms of neurotransmitters with our brain. In fact, "good bacteria" can stimulate cells in the lining of our intestine to produce the feel good neurotransmitter serotonin.
- 3. Help control diabetes.** There is evidence that certain intestinal bacteria may actually produce compounds that increase estrogen, which in turn has been linked to increased risk for diabetes. Eating a diet high in fiber, low in sugar, allows our beneficial gut bacteria to flourish and flushes out the "unhelpful" bacteria.
- 4. Fight obesity.** Studies have found that certain bacteria may help our bodies retain calories and others may help us shed calories. Restoring our gut flora is crucial when you're struggling to lose weight.
- 5. Detoxification.** The beneficial bacteria in fermented foods are detoxifiers, capable of drawing out a wide range of toxins and heavy metals from the body.





Know the Facts

Nutrition & Fitness



MOST POPULAR FERMENTED FOODS

1. Sauerkraut

Made from fermented cabbage rich in B vitamins and probiotics.

2. Kimchi

Similar to sauerkraut but spicier and known as Korean kraut. It may contain peppers and other vegetables. Rich in antioxidants.

3. Pickles

Made with cucumbers and spices. The best brands will just include organic cucumbers, salt (preferably sea salt) and water. Several brands also include herbs and spices like dill or even garlic and onion Rich in probiotics and minerals like silica.

4. Milk Yogurt, Ariana, Kefir

These cultured foods that are made with milk can regulate your digestive tract. Unlike fermented foods milk is mixed with certain types of **live cultures** like acidophilus and are kept in a stabilized environment to ensure the right cultures develop. Different types of milk can be used with the best being goat or sheep milk.

5. Coconut Yoghurt, Coconut Kefir

Is a great option if you're a dairy-free eater. Choose homemade raw coconut yogurt that contains antiviral nutrients like lauric acid and caprylic acid known to fight and kill yeasts and other forms of bad bacteria in the body.

6. And: green bananas, fermented dark chocolate, tempeh, kombucha, seed cheese, tofu, sour cream, wine, beer, brewed ginger ale, cottage cheese, whey, soy sauce, yeasted breads (sourdough), Tabasco Sauce, Worcestershire Sauce, vinegar, "aged" cheeses like parmesan, blue cheese, and feta cheese.

REALITY:

Kefir has a larger range of bacteria than yogurt and bacteria that can colonize our gut and fight off harmful pathogens. But keep in mind that it is made from yeasts that produce good bacteria and not just probiotic bacteria so if you're sensitive or allergic to yeast, you'll need to opt for yogurt instead since it does not derive from yeast. However do consume it whenever possible as it is one of the most ancient healing beverages and is available as both milk and coconut Kefir.



"Humans have been fermenting longer than they've been writing words or cultivating soil." Sandor Katz



Know the Facts

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How to ferment milk and make yogurt/Ariana

Ingredients

- 1 liter milk - whole or 2%, best is goat milk
- 1/2 cup commercial yogurt containing active cultures

Equipment

- saucepan with a lid
- spatula
- instant-read or candy thermometer
- small measuring cup or small bowl
- whisk

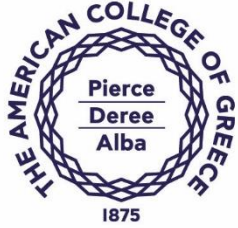
Instructions

- Heat the milk in a saucepan over medium to medium-high heat just below boiling. Stir gently as it heats to make sure the bottom doesn't scorch.
- Let the milk cool until it is just warm to the touch. Stir in the crust occasionally. You can speed up this process by placing your pot in an ice water bath. Continue stirring the milk.
- Add the yogurt. Whisk until the yogurt is dissolved in the milk and smooth.
- Cover with a lid and transfer the pot to warm spot in your kitchen such as a warm oven. Turn on the oven light or wrap the pot in towels to keep the milk warm as it sets (ideally around 110°F).
- Wait for the yogurt to set for least 4 hours or overnight — the exact time will depend on the cultures used, and the temperature at which your yogurt is kept. The longer it sits, the thicker and more tart it becomes.
- Once set remove from the oven. If you see any watery whey on the surface of the yogurt, you can either drain this off or whisk it back into the yogurt before transferring to the containers where it will be refrigerated. Use within 7-10 days.
- Save 1/2 cup of this yogurt for your next batch, which you can use as long as it still tastes good, otherwise use store-bought commercial yogurt in your next batch.
- Ariana is made by diluting the yogurt with water



CHEAT SHEET

- Fermentation time - 6-12 hours
 - Colder temp. - longer time to ferment
- Warmer temp. - shorter time to ferment
- Keep 1/2 cup of yogurt to be used as starter culture for the next batch
- Dip your finger in the mixture and count to 20 in order to check for the correct temperature when adding the yogurt to the cooling milk



Know the Facts

Nutrition & Fitness



How to ferment vegetables and make sauerkraut, kimchi, pickles

Ingredients

- 1 small head of green cabbage (organic)
- 3-4 tablespoons sea salt flakes
- Other vegetables and spices can be added for extra flavor such as purple cabbage, carrots, chili peppers, beetroot, radish, ginger, dill
- water to make a brine solution if needed

Equipment a big pot, a wooden spoon, food processor (optional)

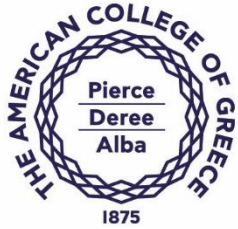
Instructions

- Core and chop cabbage into strips
- Place in a big pot and break with a wooden spoon or process with a food processor until finely chopped, moist and its juices are secreted
- Add other chopped vegetables as desired
- Pour juices into a measuring cup, add salt flakes and spices
- Pack vegetables tightly into a jar. Pour juice into jar until just covered. Place a weight or cabbage leaf over the vegetables to keep the vegetables submerged. You don't want any air in the jar.
- Twist the lid on the jar and place in a tray to collect possible water and foam as it begins to ferment.

CHEAT SHEET

- Always use organic vegetables and quality sea salt flakes
- Cabbage has naturally occurring beneficial microbes present on its leaves helping it ferment in its own juice. It does not need a probiotic culture starter. If you ferment without cabbage you will need to add a starter culture.
- Fermentation time between 4 and 10 days depending on taste preferences and room temperature:
 - Cold temp = longer ferment time
 - Warm temp = shorter ferment time
- Keep container lid closed and resist the urge to open and check out your product as bacteria during fermentation works anaerobically!
- When ready the vegetables become slightly pickled, zesty and incredibly tasty.
- Best stored in the refrigerator consume within 6-8 months





HEALTHY FERMENTED vs PICKLED AND COMMERCIALLY FERMENTED.

As we have mentioned earlier fermented foods have high nutritional values and contain healthy live bacteria known as probiotics.

So what's the difference between healthy fermented foods and their commercially processed and pickled counterparts?

The methods used in the commercially fermented foods like refrigeration, high-heat pasteurization, the use of vinegar and other preservatives unfortunately either slow or completely stop the fermentation and enzymatic processes leading to diminished nutritional value. We have traded many of the benefits of these healthy foods for the convenience of mass-production and prolonged shelf life.

Here is an example: the commercially pickled sauerkraut and cucumber pickles are preserved with vinegar. While the vinegar is fermented, the vegetables have not been. So, the probiotics contained in the jar will primarily be from the vinegar, a considerably limited variety of bacteria, compared to the wide variety of beneficial bacteria that the vegetables would have been able to create if they were fermented the traditional way using water and salt. Vinegar will also kill a lot of other bacteria, both good and bad. So if you enjoy the flavor of vinegar it is best to add it a few minutes prior to consumption.

CHEAT SHEET

- Most commercial pickles are simply packed in salt, vinegar, and pasteurized.
- Many yogurts are so full of sugar that they are little more than puddings.
- Modern techniques effectively kill off all the lactic acid producing bacteria and short-circuit their important and traditional contribution to intestinal and overall health.
- How can you be sure if you are getting the benefits of these active, fermentation cultures? Make your own!