



Kefir is a fermented milk drink. The word kefir is said to have originated from the Turkish word "Keif" which means "good feeling". Kefir dates back many centuries to the shepherds of the Caucasus Mountains who carried milk stored in leather pouches where it would ferment into fizzy sour yoghurt.

Elie Metchnikoff, a Nobel-prize winning biologist at the Pasteur Institute, first suggested that lactobacilli might counteract the putrefactive effects of gastrointestinal metabolism in 1908. He attributed the long and healthy life of the people of the Caucasus Mountains to their consumption of soured milk. In modern times there's a great deal of interest and research into probiotics and the health giving properties of fermented milks like kefir.

### *The Kefir Culture*

There are two types of kefir: water kefir - small transparent grains that ferment sweetened water; and milk kefir - white or cream coloured grains that look rather like cauliflower florets that ferment milk.

Kefir is a living culture, a complex symbiosis of more than 30 microflora that form grains or cauliflower-like structures (sometimes called plants) in the milk. As the culture ferments the milk these structures grow, creating new grains in the process. Real kefir from live culture is an endlessly self-propagating process.

Microorganisms present in the grains include lactic acid bacteria, *Lactococcus lactis* subsp. *lactis*, *Streptococcus thermophilus*, *Lb delbrueckii* subsp. *bulgaricus*, *Lb helveticus*, *Lb casei* subsp. *pseudopantarum* and *Lb brevis*, a variety of yeasts, such as *Kluyveromyces*, *Torulopsis*, and *Saccharomyces*, acetic acid bacteria among others. They give kefir excellent keeping qualities by keeping putrifying bacteria that might otherwise colonise the milk at bay. They've been shown to inhibit both salmonella and *E. Coli* in laboratory tests.

### *Kefir and Health*

Kefir has many reputed health benefits. It has antibiotic and antifungal properties. It's been used in the treatment of a variety of conditions, including metabolic disorders, atherosclerosis, and allergies, tuberculosis, cancer, poor digestion, candidiasis, osteoporosis, hypertension, HIV and heart disease. You might find it odd that that a drink containing yeasts would be good for treating candidiasis but it has been helpful to many people, both by restoring a better balance to the gut flora and because some elements of the microflora will kill off *Candida Albicans*. Not all yeasts are harmful.

In addition to beneficial bacteria and yeast, kefir contains many vitamins, minerals, amino acids and enzymes. Particularly calcium, phosphorus, magnesium, B2 and B12, vitamin K, vitamin A and vitamin D. Tryptophan, one of the essential amino acids abundant in kefir, is well known for its relaxing effect on the nervous system. Because kefir also has an abundance of calcium and magnesium, also important minerals for a healthy nervous system, kefir in the diet can have a particularly calming effect on the nerves.

The abundance of enzymes brings more health benefits, especially to lactose intolerant people, many of whom can tolerate kefir without difficulty, as long as the kefir is raw and not cooked (cooking destroys the enzymes).

### References

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Inhibitory power of kefir: the role of organic acids. J Food Prot 2000 Mar;63(3): 364-9

Antibacterial activity of milk-fermenting bacteria. Vet Med (Praha) 1990 Mar;35(3): 187-92

The Caucasus Kefir. Dr. Lee Lorenzen, Biochemist

Kefir is a cultured, enzyme-rich food filled with friendly micro-organisms that help balance your "inner ecosystem." More nutritious and therapeutic than yogurt, it supplies complete protein, essential minerals, and valuable B vitamins.

- Kefir is simple and inexpensive to make at home.
- Kefir is used to restore the inner eco-system after antibiotic therapy.
- Kefir can be made into a delicious smoothie that kids love.
- Kefir is excellent nourishment for pregnant and nursing women, the elderly, and those with compromised immunity.

### What if I'm lactose intolerant, and don't do dairy? Or don't digest milk products well? Is kefir right for me?

The beneficial yeast and friendly bacteria in the kefir culture consume most of the lactose (or milk sugar). Eat kefir on an empty stomach first thing in the morning before (or for) breakfast and you'll be delighted to find it can be easily digested — as numerous people who have been lactose intolerant for years have discovered.

...but they contain different types of beneficial bacteria. Yogurt contains transient beneficial bacteria that keep the digestive system clean and provide food for the friendly bacteria that reside there. But kefir can actually colonize the intestinal tract, a feat that yogurt cannot match.

Kefir contains several major strains of friendly bacteria not commonly found in yogurt, Lactobacillus Caucasus, Leuconostoc, Acetobacter species, and Streptococcus species.

It also contains beneficial yeasts, such as Saccharomyces kefir and Torula kefir, which dominate, control and eliminate destructive pathogenic yeasts in the body. They do so by penetrating the mucosal lining where unhealthy yeast and bacteria reside, forming a virtual SWAT team that housecleans and strengthens the intestines. Hence, the body becomes more efficient in resisting such pathogens as E. coli and intestinal parasites.

Kefir's active yeast and bacteria provide more nutritive value than yogurt by helping digest the foods that you eat and by keeping the colon environment clean and healthy. Because the curd size of kefir is smaller than yogurt, it is also easier to digest, which makes it a particularly excellent, nutritious food for babies, the elderly and people experiencing chronic fatigue and digestive disorders.

### WHAT IS KEFIR?

By Egon Skovmose

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In November 1881 the German naturalist Eduard Kern reported to Botanic Society in St. Petersburg about a mysterious beverage, which was exclusive common to the higher regions of the Caucasus and said to assure the inhabitants of this area good health and a very long life expectancy.

This beverage is kefir, a fermented milk product whose particular features is that in addition to lactic fermentation it also undergoes alcoholic fermentation caused by the presence of yeast, which yields this sourish, yeasty, sparkling, refreshing end product.

Kefir is not only a very valuable tasty, physiologically nutritional milk product it is said to be a "miracle" product.

Research conducted by East European institutes has proven that there is something to the reputation of kefir. In Rumania where research has been carried out by Professor Dr. Asian on the causes of old age, the effect of kefir on prolonging life is being studied. According to gerontologist at the Genatric Centre of Suchumi (former USSR) the importance of kefir has not yet been completely recognized. The general opinion is that the life-prolonging effect is to be attributed to certain components of the kefir grains.

Moreover, kefir seems to have a stabilizing and, to some extent a youth-preserving effect on the human organism, but only if one's entire diet is completely altered and the kefir is not only consumed as a side-dish, a snack or a dessert. When following

the kefir diet recommendations developed in Rumania, one's organism re-adjust within six months.

The functioning of liver, gallbladder, circulation, heart activity, metabolism, oxygen supply to the cells, blood circulation to the brain improves and stabilizes. Also so-called senility does not occur or is even reversed and the elasticity of the blood vessels and joints is restored. Rheumatism and coronary thrombosis do not stand a chance if a special kefir diet is followed: between the ages of 25 and 30 at the latest 1-1/2 Tblsp. of kefir should be consumed twice a day. Numerous scientific tests are being performed to determine the effect of kefir especially in Eastern Europe.

Originally Kefir beverage was obtained by adding the so-called grains to fresh milk and then incubating them at 64 – 75° F for approx. 24 hours. The origin of Kefir grains themselves is unknown. To date it has not been possible to simulate the spontaneous formation of kefir grains using single isolates of kefir flora. New kefir grains can only be obtained from propagating and dividing of existing kefir grains. [Click here to view a picture of actual Kefir Grains.](#)

### **CHARACTERISTIC COMPOSITION OF KEFIR FLORA**

Kefir is a natural probiotic. It contains live active cultures of normal flora that will actually **repopulate your digestive tract and aid in digestion**. Kefir is superior to yogurt because yogurt is made with transient, less potent bacteria.

The bacteria in yogurt will last a few days in the digestive tract, and you need to keep reintroducing them. Kefir contains more organisms than yogurt, and the "normal flora" in kefir is made of very strong strains of micro organisms (unlike yogurt) which will help to over take pathogenic organisms that have taken over. Kefir will repopulate the digestive tract with good organisms. We consider this the more natural way to add good bacteria to the digestive tract and feel these strains are superior to any capsules which might contain organisms that have been dried.

The cultures on Kefir are active and growing when they enter your body. They thrive in dairy and use up the lactose and partially digest the proteins, making it a product that most people can ingest and will benefit from. **Even people with milk sensitivities can usually drink kefir.**

In addition to repopulating the digestive tract, enzyme stores are added to in the body. Many people in the US currently take digestive enzymes. They have been told they are not digesting their food properly, that their enzyme stores have run out, and they will have to take enzymes the rest of their life. Unfortunately, their health care providers have missed something that Sally Fallon and the Weston A. Price people along with people like Donna Gates of Body Ecology have come to realize: that cultured foods will actually add back enzyme stores into the enzyme banks of the body and aid the body in digesting other foods.

Kefir, cultured cream, buttermilk, cultured vegetables, etc all add predigested food full of vitamins and minerals, normal flora, and enzymes to the body. We believe these are valuable foods, part of all good traditional diets, that have become lost in

the society of today. And we believe bringing them back is essential for optimal health.

### **IS IT DIFFERENT THAN YOGURT?**

Yes. There is research showing that Yogurt contains left turning bacteria and kefir contains right turning bacteria. This researcher even states that **young children and nursing mothers should stay away from the left turning bacteria found in Yogurt**. He shows from his research that kefir and its right turning bacteria are far superior and much more beneficial to the digestive tract than the cultures found in yogurt.

Yogurt contains transient bacteria and will not repopulate the digestive tract, but the active, growing, living cultures in kefir will.

**The lactose in kefir is all digested by the time it is ingested**, and some of the proteins have been broken down. Therefore, kefir can be used by many people who have **sensitivities to milk**. The same is not true with yogurt. Kefir can be made from any milk: goat, cow, ox, sheep, etc. A dairy free kefir can also be made from young coconuts. This is very exciting.

### **IS TAKING PROBIOTICS JUST AS GOOD?**

Probiotics are capsules or tablets that contain some of the same healthy bacteria found in kefir. The differences between kefir and probiotics are significant, however. While probiotics contain good organisms that can repopulate the digestive tract, they need to be kept dormant (refrigerated) and are not actively replicating and growing when they arrive in your intestines. In addition, they are not in any medium that will coat the digestive tract and help them to become established, but rather they are in the process of being dormant and are actually slowly decreasing in population as they die off over time.

Kefir, on the other hand has massive quantities of healthy normal flora that are in the process of growing, increasing in number, and thriving. They are eaten in the medium they are thriving in, such the cultured milk or coconut water, which will coat the digestive tract and help them to establish residence there. This is a tremendous boost to your system and will repopulate your digestive tract more quickly, more efficiently, and more thoroughly than probiotics.