

# alternavita

natural science for a healthy lifestyle

## the living immune system

Why is mammal milk a biologically active life giving force for immunity?

### Recipe/How To

Optimize the natural state of bovine colostrum by utilizing safe and natural prebiotics favored by probiotics

6



### Product Review

Top brand of bovine colostrum for price, effectiveness, consistency of product and ease of use.

8



### Sources/tips

Sources and extra tips for using bovine colostrum, mammal milk and other prebiotics

9



from the editor:

in this issue:

# Colostrum and mammal milk are vital for lifelong health

What can you do if you missed out on this living immune system for optimal health?

Welcome to the debut issue of Alternavita Monthly© magazine!



In this issue learn to get off the trendy track by choosing nature's superior bio foods that offer nutrition that no synthetic drug can match. Learn why top medical research universities and the food industry are taking a second look at these amazing functional foods for health. Can you believe a few short decades ago they were considered waste products?

You will also find the tried and true from Alternavita blog and some easy new twists. Learn more about *trusted* functional food products of yesterday and how to use them today. Cut to the chase functional food market trends and see how you can be ahead of the curve by making them at home as I learned to do. Get superior life long health benefits and enjoy the tremendous cost saving benefit of being savvy, not trendy!

Thanks for reading this debut issue!

*M. Ferrari*

in this issue

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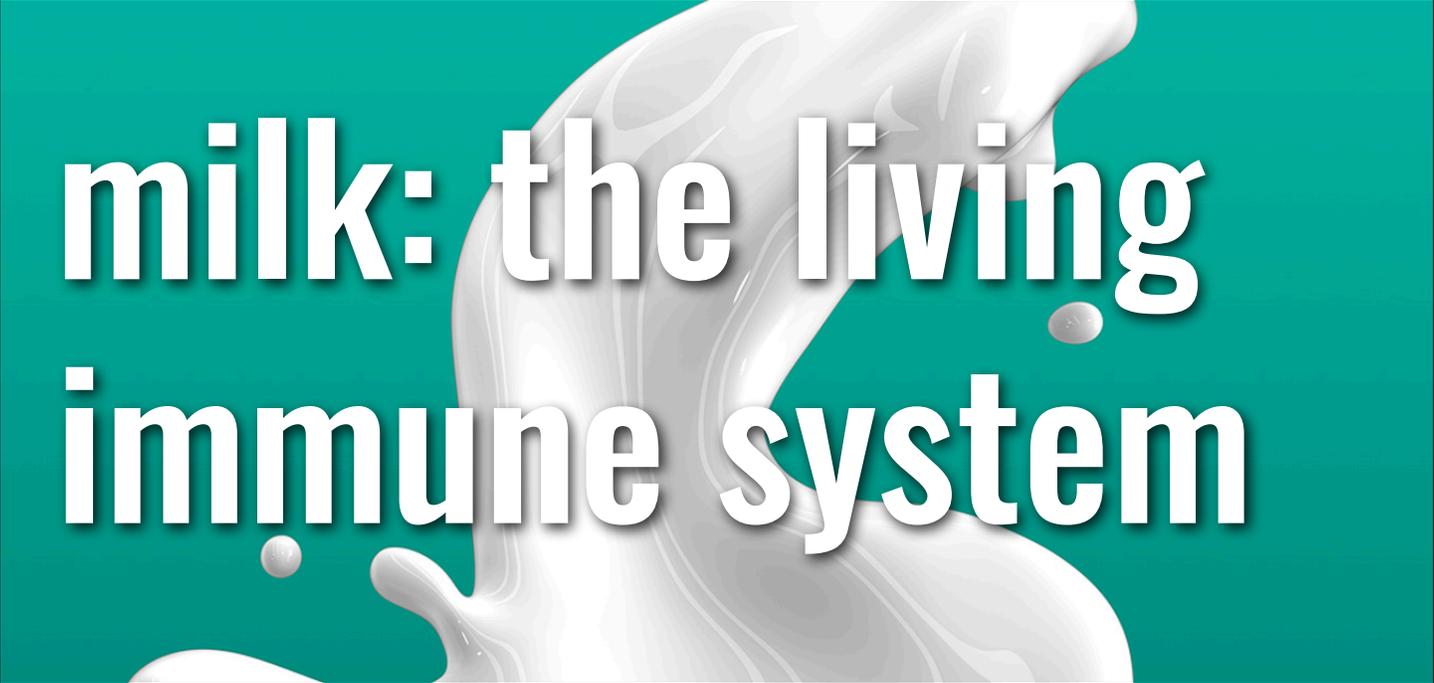
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in the next issue:  
beating fatigue and malnutrition syndromes with functional foods



# milk: the living immune system

## The Living Immune System

### Why is mammal milk a biologically active life giving force for immunity?

**Colostrum is such an important part of mammalian evolution that most mammals literally cannot survive without it and today's research is indicating that the human mammal may be no different**

The foundation for the optimal health of each new born mammal begins with colostrum and ends with an optimal period that differs across species of later lactation milk before proper weaning for the lifelong benefit of the mammal. Why is colostrum and later lactation milk so important?

### **The placenta is not effective at transferring antibodies**

Among most mammals, the placenta is not effective at transferring antibodies to the fetus:

antibodies are transferred immediately after birth via the colostrum.

The immune system consists of cells and organs that have the ability in recognizing foreign substances and infectious microorganisms. An infant has a different immune system as compared to an adult and the proper development of the immune system is vital for the prevention of immune disorders.

### **The infant has an immature immune system throughout childhood**

The infant's immune system remains immature and functionally naïve at birth. This lack of prior exposure to pathogens causes a lack of immune memory and this condition continues throughout childhood. B. Breve, found in breast milk balances the immune TH1/TH2 response in infants according to researchers. B. Breve, the major bacteria in intestinal flora during infancy can promote differentiation of naïve T cells to TH1 and hence establish the balance of TH1/TH2 that is naturally skewed post birth.

### **Colostrum develops the immune system**

Colostrum is most important to an individual at birth. Before a baby is born, he or she is

[continued on page 4](#)



provided with immune regulating factors such as auto antibodies through the placenta. Numerous types of antibodies are associated with reducing the threat of type-1 diabetes, systemic lupus and rheumatoid arthritis. Before and during birth, a baby then receives other types of antibodies from the mother's blood serum to stimulate an effective immune response.

A mother's final gift to her newborn is the gift of her breast milk which contains a different variety of antibodies designed to help the infant grow and develop, including the proliferation of stem cells and regulation of gene function. A mother's milk can be seen as the weaning stage of her newborn's immune system as an initiating factor for its own development of a defense system.

### Healthy microbiome required for host homeostasis

The WHO refers to human milk as the nutritional gold standard for infants. Human milk contains many immunomodulatory compounds, including oligosaccharides.

## 8 thing you should know about bovine colostrum, the living immune system

1. Bovine colostrum survives transit through the gut and may replace the need for secretory IgA.
2. Bovine colostrum is widely considered safe and efficacious in treating diarrheal infection in humans, e.g., rotavirus, ETEC and enterohemorrhagic E. coli, including children. Antibodies in colostrum remain active in the intestinal tract.
3. Oral bovine colostrum decreases the severity of viral upper respiratory tract infections in humans.
4. Bovine colostrum contains immunomodulatory capabilities independent of antibody response.
5. Bovine colostrum promotes normal cell growth and DNA synthesis.
6. Researchers reported that colostrum stimulates maturation of B Lymphocytes (type of white blood cell) and primes them for production of antibodies, enhances growth and differentiation of white blood cells. Similar activity in both cow and human colostrum can also activate macrophages.
7. Bovine colostrum contains Immunoglobulins (A, D, E, G and M) IgG neutralizes toxins and microbes in the lymph and circulatory system IgM destroys bacteria IgE and IgD are highly antiviral.
8. Colostrum contains living white blood cells [Leukocytes] Bovine colostrum contains viable cells, such as neutrophils and macrophages, that secrete special proteins to support the immune system including cytokines, lactoferrin, and proline-rich polypeptides (PRP).

### Non digestible sugars, oligosaccharides show a direct bifidogenic effect on the gut

Mammal-milk oligosaccharides serve as prebiotics because the nondigestible

continued on page 5

# A Healthy Microbiome Is Necessary For Growth And Nutrition

## Kwashiorkor

- Kwashiorkor is a form of acute malnutrition, and it seems to be caused by environmental factors and a lack of protein in the diet. Recently, the team of Prof. Gordon at WUSTL established that the microbiome is one of the causal factors in this disease.
- Microbiota assembly is perturbed in children with under nutrition, resulting in persistent microbiota immaturity that is not rescued by current nutritional interventions.
- Scientists have long known that premature infants fed artificial baby milk are more likely to develop necrotizing enterocolitis than those fed breast milk. According to a 2012 study, free fatty acids created during the 'digestion' of artificial baby milk to mimic what happens in the stomach of an infant cause cell death that may contribute to necrotizing enterocolitis.
- ...the thymus – a central organ of the immune system – is twice as big in breast fed infants compared with formula-fed infants at four months. The size difference was also seen at ten months.

oligosaccharides present in human milk show a bifidogenic effect on the gut.

The gastrointestinal tract is the largest immune organ in the body. It contains 65% of the overall immunologic tissues and over 80% of the immunoglobulin-producing tissues of the body. These immunologic areas in the gastrointestinal tract are involved in managing pathogenic threats and in preventing the induction of inflammation.

## Oligosaccharides act independently of microbiota; however probiotics exert profound influence as well

Recently, it has become clear that many gut-related disorders are correlated with an imbalance in the microbiota and the immune system. Well-known examples include inflammatory bowel diseases like colitis. Oligosaccharides act systemically and modulate the immune response in a microbiota-independent manner.

However, probiotics are also metabolically active and interact continuously with their environment including other bacteria, the gut epithelium, mucosal immune system, the

central nervous system, and the endocrine system, they are able to exert a significant influence on the postnatal development and host physiology; the metabolic activity of microflora is considered to be equal to that of liver.

## Conclusion

From homeostasis and immune development as well as nutrition, growth and future protection it is increasingly clear that colostrum is the post birth life giving force of all mammals.

## Did you know?

**Milk: a postnatal imprinting system stabilizing FoxP3 expression and regulatory T cell differentiation.**

Accumulating evidence underlines that milk is a complex signalling and epigenetic imprinting network that promotes stable FoxP3 expression and long-lasting Treg differentiation, crucial postnatal events preventing atopic and autoimmune diseases.

[Clin Transl Allergy. 2016 May 12;6:18. doi: 10.1186/s13601-016-0108-9. eCollection 2016](#)

**What can you do if you missed out on this living immune system for optimal health?**

end feature



## bovine colostrum super milk

- 1 tsp. powdered bovine colostrum
- 4-8 oz. whole fat mammal milk (must be mammal milk)
- 2-4 tbsp. kefir (any)
- 2-4 tbsp. yogurt (any)

Dissolve bovine colostrum in yogurt and kefir. Add other ingredients and stir well until blended.  
May flavor as desired. Drink once daily.

\* A few favorite well known brands, Lifeway™ Kefir, Activia™, Simply Nature™ Whole Fat Yogurt (Aldi's), Stonyfield Farms™, Friendly Farms™

### Why mammal milk and what is phagocytosis?

Mammal milk is required for enhanced phagocytosis as shown by research, especially in the elderly. Phagocytosis, by which immune cells 'eat' bacteria or infected cells, is one of the mechanisms that help to resist infections. Lactic acid bacteria strains like acidophilus also greatly enhances phagocytosis. A dysfunctional autophagic mechanism leads to chronic intestinal inflammation in IBD.

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## How To Use Bovine Colostrum

### 3 Favorite Recipes And How To Optimize Benefit

Powdered Bovine Colostrum that is unadulterated is preferred for oral immune therapy as its prebiotic ability is enhanced by not being pre-digested. Dose according to label of your preferred brand or upon tolerance. Lactase (b galactosidase) created upon digestion of lactose by specific probiotics as their preferred energy source ensures activation of macrophages in the intestinal pool from the creation of one of the two enzymes capable of activating gc globulin, the most potent macrophage activating factor ever discovered, bovine colostrum is used to produce gcmf (a popular immune therapy). The other necessary enzyme is naturally occurring.

- \* There have been **extremely rare** reports of adverse reactions to bovine colostrum, those with severe milk or protein allergies may want to avoid. Bovine colostrum is considered a universal donor for most mammals.
- \* Severe immune compromised individuals should stay within the confines of the known safety of GRAS probiotics and kefir (store bought brands) that are well tolerated for the majority and should not use raw milk products. You can obtain all the benefits while avoiding risk by adding strains to pasteurized milk or using liquid whey obtained from safe, clinically studied and well tolerated products in the majority as severe immune intolerance or split immune tolerance can not well regulate until homeostasis is achieved. When in doubt stick with store bought and do not add unknown organisms.
- \* Some also can not tolerate soil based organisms as found in home made fermented juices. D lactate should be avoided and only L lactate strains should be sought.

## How To Use Bovine Colostrum

### Colostrum dissolves best in fat

Colostrum is the ultimate functional food, here are some tips to get you started on how to use it.

- Always dissolve in yogurt, kefir or oil first before adding to milk for easier mixing.
- Any supplement may be added as well.

- Colostrum is powerful, dose according to comfort level.
- Add oil to slow over active response.
- Add lactic acid bacteria such as acidophilus, friendly yeasts, milk or liquid whey to clear cellular debris faster while taking a break from colostrum.
- Sodium ascorbate may be added to milk for rapid detox as used in drug rehab clinics, works on all drugs and is often used in immune therapy to detox drugs and toxins.

### super immune colostrum liver and kidney tonic: liquid whey is a bio superfood

Dissolve 1 tsp. bovine colostrum in 2-4 tbsp. of liquid whey (may increase amount of whey upon tolerance); collected from kefir, yogurt or milk. Add 4-8 oz. room temperature pure filtered water. Add ½ tsp. molasses. Stir until dissolved. Drink daily.

#### liquid whey benefits include:

- ionic vitamins and minerals
- equal to milk for kwashiorkor
- superior protein, very easily digested, full complement of amino acids
- naturally occurring probiotics as contained in initial milk product used to collect liquid whey
- equal to vitamin c or lactic acid bacteria for detox
- similar to milk = superior electrolyte

\*Colostrum does not dissolve easily in liquid whey, it takes a lot of stirring.

### kefir colostrum

- 1 tsp. bovine colostrum
- 3 tbsp. kefir (any)
- 3 tbsp. yogurt (any)
- 1/2 tsp. molasses
- 8 oz. whole fat mammal milk (must be mammal milk)

Heat mammal milk to 180° F.

Let cool to 110° F

Add kefir, yogurt and molasses to cooled mammal milk. Stir. Pour in to any clean, sterile jar and place a clean paper towel over the top, secured with a rubber band. Let ferment at room temperature (70° F but not over 80°F) for 8 hours. May ferment up to 24 hours if a thicker consistency is desired. Will curdle if over 80° F for over 8 hours. Find a slightly cooler ideal place if desiring to ferment longer than 8 hours.\* As directed for popular maf products. Add 1 tbsp. of finished fermented product to 2-8 oz. whole fat mammal milk with 1 tsp. of olive oil and consume. May add additional minerals to this finished product by the drop, 2-4 drops if desired.

end recipe/how to



# Product Review

## Body Boost Powdered Bovine Colostrum

**“Colostrum is the most powerful healing substance in the world. If it were not for colostrum the human race wouldn’t even exist,”**

**states Dr. Robert Heinerman, Ph.D.**

**Colostrum does not have to be absorbed.**

**A lack of systemic absorption supports the high safety profile of this method; that is altering systemic immune response via the gut (GALT).**

Clinical & Translational Immunology (2016) Gastroenterology and Liver Units, Department of Medicine, Hebrew University-Hadassah Medical Center, Jerusalem, Israel

Works systemically and independently of microbiome via the gut (GALT). Chondroitin sulfate and oleic acid are just two of the essential components found in colostrum exerting substantial effect. Chondroitin sulfate restores oral tolerance in RA (Rheumatoid Arthritis).

Body Boost is loaded with good fat (oleic acid). The right fat content is a sign of good quality colostrum in all mammals. Cod liver oil is superior with milk and colostrum. Olive oil contains high amounts of oleic acid. Colostrum repairs your body’s essential DNA and RNA. Helps regulate the brain’s “feel-good” chemicals to brighten our moods.

Your immune defense system gets depleted as you age. Colostrum with peptides and lactoferrin add back antibodies and immune factors for dual action in the bloodstream and also in the GI tract.

Anti-aging: more energy and youthful appearing skin. Some of the other many benefits are, it helps maintain a robust intestinal lining and promote healthy intestinal flora. Its growth factors enhance stamina and support normal re-growth of tissue and lean muscle.

## history

### Founder – John Epert

John Epert turns 78 September 2018 and has been active in business and the outdoors thru out his life.

He programmed computers for General Electric from 1965-1970. From 1971 to 1990 John bought a small fresh juice business doing \$65,000 per year and grew it into a major distributor of Health Foods carrying 10,000 items while growing the business to \$45,000,000 a year before selling the business.

John and Lynne ( his wife), walk 6 miles a day as well as work out at the gym three days a week for 75 minutes. They have been using BodyBoost Colostrum since 1996 and have never gotten sick, sometimes a sore muscle or two but that is it.

**• Collected and processed in the USA.**

**• Clinically reported research has shown near complete reversal of symptoms in a 75 year old man with Sjogren's Syndrome, a serious immune condition after approximately 800 days of natural oral immune treatment (utilizing a \*bovine colostrum immune™ product).**

### buy here

[Colostrum Bovine 16oz Powder #1 Best Value on Amazon](#)  
[50% DISCOUNT TODAY! 100% Whole Nothing Added,](#)  
[Collected 1st Milking Only, Maximum Biological Activity,](#)  
[Contains Natural Occurring Probiotics, High Ig, Ld, Plus](#)  
[Lactoferrin, Nutritional Immune Support Supplement for Pets,](#)  
[Dogs, Kids, Adults, Athletes, GUARANTEED](#)

end product review

# Tips

Other prebiotics that may be added to yogurt, kefir and colostrum to enhance the benefits are citrus peels, stir colostrum in to yogurt or kefir and sprinkle some citrus zest on top. Bio flavanoid anti oxidants from citrus peel are the most bio active substances on earth and contain more vitamin C than the pulp. Pectin from citrus fruit is a beneficial prebiotic; not a synthetic FOS (fructo-oligosaccharide) as found in probiotic capsules. Other unnatural synthetic sugars like high fructose corn syrup can lead to diabetes and obesity as well as liver inflammation and fatty liver.

Maf (macrophage activating factor) recipes may also be made with colostrum and fermented juice for a non dairy maf but look for friendly yeasts to ensure the creation of lactase also known as beta galactosidase. Candida Kefyr is one such naturally occurring friendly yeast. **Store bought juice may not be used. Juice or milk that contains synthetic preservatives will not ferment properly. Liquid whey can be used to ferment some juices, see non dairy Bravo™ for direction on how to safely ferment juice.**



# sources

## feature

## The Living Immune System

1. [Beneficial Microorganisms in Medical and Health Applications](#)
2. [Copyright \(C\) 2013 by the American Society for Nutrition autism, allergy, and HIV, the microbiota and general gut integrity play a role.](#)
3. [Digested artificial baby milk, but not breast milk, kills normal cells](#)
4. [2015 cultivating healthy growth and nutrition through the gut microbiota](#)
5. [kwashiorkor microbiome causal factor](#)
6. [The Science of Mother's Milk-1](#)
7. [A molecular basis for bifidobacterial enrichment in the infant gastrointestinal tract....Exp resion studies indicate that many of these key functions are only induced during growth on milk oligosaccharides and not expressed during growth on other prebiotics. \(Garrido D., 2012\)](#)

end sources/tips

Liquid whey is a super food called 'the breast milk for adults', it can restore protein deficiency, is a great liver and kidney tonic, is full of ionic minerals like magnesium, is easily digestible, full of lactose for the perfect energy 'food' for lactic acid bacteria. Lactose does not cause necrotizing enterocolitis in premature infants, unlike formula with *novel* prebiotics like inulin. Liquid whey proteins are easily digested, have a full complement of amino acids. Liquid whey is equal to milk for kwashiorkor. It is often combined with probiotics in functional food drinks being marketed today by Activia™ and Danone.

### did you know?

Pectin from citrus fruit is a natural prebiotic; not a synthetic like FOS as found in probiotic capsules and that cannot be synthesized.

### did you know?

Regular consumption of bovine colostrum has been reported to have a protective role for infantile gastro immunity due to its direct effect on the development of infantile gut-associated lymphoid tissues which is responsible for the majority of the immune system.

### did you know?

Infants who are not breast fed are at an early stage with SRB (and with methane-forming bacteria) settled (Baquero et al, 1988; Hudson, Roberts, 1993). Today this dangerous condition is known as SIBO.



## Natural science for a healthy lifestyle

Alternavita Monthly Magazine-© is a web and print publication featuring popular posts from the blog Alternavita as well as new recipes, how to's, products, tips and resources designed for the *average reader* who desires a healthy lifestyle with relative ease and effort, no extremes and most importantly, one that shows clear evidence as produced by current leading edge clinical science.

## Mission Statement:

### 80% Rule

**80% safety**, GRAS (Generally Regarded As Safe) and well tolerated in the majority when used as directed

**80% efficacy** (the medical threshold for certainty and gold standard of care)

**80% ease of use and compliance** (can the majority reasonably achieve this)

**80% accessibility/cost** (can the majority reasonably access this)

*"Beauty is truth, truth beauty, that is all ye know on earth, and all ye need to know"*

John Keats

*"Let food be thy medicine and medicine be thy food."*

Hippocrates

## about alternavita monthly magazine and ezine©

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## Bio:

I am a wife, mother and graphic designer from the US. After losing my health and career in graphic design I began an intense journey back to my own beginnings seeking resolution and understanding of my own health conditions, the most notable MS (multiple sclerosis). I eventually recovered thanks to natural immune therapy gcmf and the pioneering work of Dr. Nobuto Yamamoto, Dr. Marco Ruggiero, Bravo Yogurt™, the work of Cedars Sinai, Dr. Mark Pimentel, Dr. Henry Lin and many others. Since my recovery I have sought to make their work known to the general public. I have written several books and have published many websites. Over this period of many years, while embarking on this teaching mission I have met thousands of patients, many health professionals and professors throughout the world, many of whom follow my writing. I am currently healthy and enjoy my life, family and profession to the fullest, forever grateful to these pioneers in gut and immune research.



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"This statement or product recommendations have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease"  
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# alternavita

natural science for a healthy lifestyle

## why to go for protein power

What is Protein  
Energy  
Malnutrition?

### Recipe/How To

The fastest way to obtain liquid whey and how to utilize both the whey and the cream cheese derived from making liquid whey

6



### Product Review

Top brand of bovine colostrum for price, effectiveness, consistency of product and ease of use.

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### Sources/tips

Extra tips on the extreme benefits of liquid whey for energy, mental health, detox and more

9



from the editor:

*in this issue:*

## Combatting Protein Energy Malnutrition With Liquid Whey

What can you do to alleviate the worldwide problem of protein energy malnutrition (PEM)?

In this July 2018 issue of Alternavita Monthly Magazine© learn about liquid whey, another waste by product that can help alleviate worldwide malnutrition as well as help you combat serious health problems caused by poor diet malnutrition, namely protein energy malnutrition, including the detrimental effects that this particular form of malnutrition can have on gut, immune, mental and reproductive health, especially for non milk drinkers who are not able to derive the important benefits as can be found in milk due to **severe casein intolerance**. Forget the coffee and see real energy benefits from this form of pure, fast absorbed protein!



You will also learn the easiest method of obtaining liquid whey that retains all the probiotics of the pre-strained product and then concentrates others in their 100% bio available forms. Finally, what to do with the cream cheese leftover and how to use all that whey to make healthier fermented fruit juices with less sugar.

Thanks for reading this July 2018 issue!

*M. Ferrari*

*in this issue*

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*in the next issue:*  
*more beating stress and malnutrition syndromes with functional foods*



# why to go for protein power

## Combatting Protein Energy Malnutrition With Liquid Whey

### What is Protein Energy Malnutrition/ Protein Calorie Malnutrition?

Protein energy malnutrition (PEM) is defined as a form of malnutrition due to lack of protein and can be moderate to severe

Types of protein malnutrition are:

**Kwashiorkor: Protein malnutrition dominant**

**Marasmus: Deficiency in calorie intake**

**Marasmic Kwashiorkor: Marked protein deficiency and marked calorie insufficiency, the most severe form (PCM)**

Kwashiorkor is a nutritional deficiency disease caused when infants are weaned from their mother's milk and placed on a diet consisting of low-protein cereals. The most striking symptom of kwashiorkor is edema. Other symptoms may include loss of hair and skin pigmentation, scaliness of the skin, and diarrhea. As the disease progresses, a person may develop anemia, digestive disorders, brain damage, a loss of appetite, irritability, and apathy.

Protein energy malnutrition is more common in low-income countries although higher income countries are also affected. This may also occur in patients with chronic diseases and who are institutionalized or hospitalized.

Protein energy malnutrition affects children and elderly the most. The main causes in the developed world are ignorance of the nutritional needs of children, particularly in cases of milk allergy and inadequate nutrient dense food. 6 million deaths are attributed to Kwashiorkor annually.

### Protein energy malnutrition can have significant lifelong effects

Protein malnutrition is detrimental at any point in life, but prenatally it can have significant lifelong effects. Diets that consist of less than 10% protein in utero have been linked with many deficits, including decreased brain weight and impaired communication within the brain. **Even mild protein malnutrition has been shown to have lasting significant effects, including:**

- Decreased brain size with impaired neocortical plasticity
- Decreased sperm quality
- Low Birth Weight
- Decreased cardiac energy
- T cell depletion
- Oxidative stress
- Increased passive stiffness in skeletal muscles

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The most common co-morbid conditions are diarrhea and malaria but a variety have been noted, including sepsis, severe anemia, pneumonia, tuberculosis, scabies, chronic ear infections, rickets, and keratomalacia.

### Associated malnutrition deficiencies

Other severe malnutrition deficiencies associated with kwashiorkor include scurvy, beri beri, pellagra, rickets, vitamin A, E and K deficiency and mineral deficiencies.

### What is liquid whey?

Whey is the transparent, yellowish-green liquid separated from the curdled milk during cheese production. It is also called lactoserum and is also found in yogurt. Liquid whey has a slightly tart but pleasant flavor. It is not the same as the powdered, unhealthy, and denatured whey, which is often sold in health food stores.

Acid whey is also a waste by product generated by the creation of Greek Yogurt. Greek yogurt production generates tons of acid whey yearly. For years, companies have paid farmers to spread the waste as fertilizer or feed it to livestock but when the popularity of Greek yogurt skyrocketed yogurt makers began working together with scientists to develop more economical ways to get rid of their acid whey. About two-thirds of the milk used to make Greek yogurt ends up as this by-product. Acid whey can't be poured down the drain because it is high in nutrients that would fertilize nearby waters.

### How does liquid whey benefit protein calorie malnutrition?

### How does liquid whey benefit protein calorie malnutrition?

### Milk and whey proteins have different biological and functional properties

The typical composition of milk comprises about 3.6% protein, out of which casein predominates at approximately 80% and remaining 20% are whey proteins. Whey proteins are unique, superior proteins with many health benefits.

### Whey proteins are rapidly absorbed

Whey proteins are absorbed faster in body than casein. Plasma amino acids are more rapidly elevated following

## 10 things you should know about whey

1. The uniqueness of whey proteins is due to their ability to boost the level of glutathione (GSH) in various tissues and to optimize the immune system.
2. Beta-lactoglobulin comprises approximately half of the total protein content in bovine whey. This protein, has an ability to modulate lymphatic responses and to bind fatty acids.
3. Alpha-lactalbumin is the second most important protein in whey. Alpha-lactalbumin plays a vital role in reducing the risk of some cancers as it constrains cell division.
4. Bovine serum albumin (BSA), the most important property of bovine serum albumin is its ability to bind to various ligands reversibly.
5. Immunoglobulin-G (IgGs), Lp and Lf concentrated from whey participates in host immunity. IgGs binds with bacterial toxins and lowers the bacterial load in the large bowel.
6. The major application of lactoperoxidase is a protective factor against infectious microbes.
7. Lysozyme exhibits antibacterial activity against gram-positive bacteria only. It is also used in the treatment of bacterial and viral infections, skin and eye diseases, periodontitis, leukemia and cancer.
8. The proteose peptone 3 component is found only in whey excluding from the human source. It is produced during the fermentation of fat-free bovine milk and enhances the production of monoclonal antibodies .
9. Glycomacropptides are also known as Casein Macro-Peptide (CMP) contains large numbers of branched chain amino acids.
10. Whey compounds are able to survive passage throughout the entire intestinal tract. Whey components that provide antimicrobial action are IgG, IgM and IgA. IgG binds to toxin produced by *Clostridium difficile*, thereby reducing diarrhea, dehydration and muscle aches. GMP inhibits binding of cholera toxin to receptors in the intestinal tract.

whey protein consumption. *Whey proteins are superior to gelatin proteins.*

continued on page 5

# Whey Benefits The Gastro System And Promotes Healing

- Whey proteins exert a therapeutic effect on the gastric mucosa. This effect is due to the presence of sulphhydryl group in amino acid cysteine and its linkage with glutamic acid in the production of glutathione.
- Wound healing involves the growth of new skin through the use of proteins and their amino acids. The healing process is delayed when there are inadequate amounts of protein or diets high in poor-quality proteins, such as gelatin are present. Whey proteins provide good quality proteins and are therefore often recommended by physicians after any surgery or burn therapy.
- In a study, *Lactobacillus acidophilus* subsp. *johnsonii* (La1) has been shown to effectively suppress the growth of *Helicobacter pylori*. The results were confirmed by conducting a hydrogen breath test. The whey-drink based on *L. acidophilus* (*johnsonii*) culture was given to some volunteers and a marked decrease in test values was observed.

The lipid fraction of whey free fatty acids specifically inhibit the germination of *Candida albicans*, a morphologic change associated with pathogenicity.

## Whey proteins decrease inflammation as compared to casein

It was found that the consumption of whey proteins depleted the plasma levels of pro-inflammatory cytokines as compared to casein.

## Whey protein benefits the microbiota in several ways

The predominant nutrient in milk whey liquid is carbohydrates in the form of lactose. Cells in the body are rapidly able to derive energy from whey.

Apart from being a good source of energy, lactose that is converted to lactic acid in the intestine helps in the regulation of intestinal flora by promoting growth of good bacteria and inhibiting development of putrefactive bacteria that produce toxins causing bloating and gas. The lactic acid found in fresh whey is L+ lactic acid rather than D- lactic acid and is easily metabolized. Lactose support LAB (such as *Bifidobacteria* & *Lactobacilli*).

Stallic acids are a type of oligosaccharides found in whey that possess prebiotic properties. These organic acids possess antimicrobial properties, particularly against *E. coli*. They help to lower the pH of the intestine and increase the secretion of bile juices and absorption of nutrients.

## Vitamins And Minerals

The vitamin content of whey provides nearly all B vitamins. Liquid whey contributes several

minerals to the diet. One cup of acid whey provides 250 mg of calcium and 200 mg of phosphorus. Whey supplies potassium, magnesium and zinc.

Liquid whey contains more calcium than milk in the form of calcium phosphate that selectively stimulates the growth of intestinal lactobacilli and decreases *Salmonella* infections.

## Conclusion

Protein energy malnutrition is a mild to severe form of malnutrition caused by lack of food, substandard nutrition or ignorance of nutrition during pregnancy and post weaning. Various other causes are chronic medical conditions and institutional care. PEM contributes to millions of annual deaths.

Liquid whey proteins are unique proteins that contain all essential amino acids. Whey is one of the most studied compounds in dairy products and is; anti-hypertensive, anti-oxidative, immuno-modulant, anti-mutagenic, anti-microbial, opioid, anti-thrombotic, anti-obesity. Fermented liquid whey products are gaining popularity worldwide and are considered an excellent source of dairy peptides.

Whey proteins can be used for optimizing immune function in elderly, critically ill or immuno-compromised individuals to treat disorders such as arthritis, inflammatory bowel disease, diabetes and Alzheimer's disease.

## How can you easily reduce the risk of protein energy malnutrition?

end feature



## How To Strain And Use Liquid Whey

### Plus A Favorite Recipe To Optimize Nutritional Benefit With Vitamin C

Liquid whey can be made by clabbering raw milk but the easiest way to collect whey is by straining any whole fat, all natural, no fillers yogurt through a strainer *and* filter to collect the liquid whey at the bottom of a bowl. Be sure to use a bowl that allows space below the strainer for the liquid whey to collect without reaching the bottom of the strainer. Kefir can also be used to make whey if it has been prepared first by culturing as a yogurt starter to achieve the thickness of a yogurt as kefir is too thin to strain. Place yogurt in a strainer with a filter; cheese cloth, doubled or a coffee filter and place on the counter for a few hours or cover with a plate and refrigerate overnight. If room temp. is over 70° it is best to refrigerate. A 32 oz. (2 lb.) 907g container of store bought yogurt will produce about 2 cups of liquid whey containing all probiotic strains as found in the original yogurt or kefir. You now have a protein superfood to utilize for many health benefits.

**Most people can tolerate liquid whey immediately, however, some cannot.** Introduce liquid whey by starting with 1 tsp. of whey. After 3-5 days on 1 teaspoon of whey per day, increase to 2 teaspoons a day and so on, until you can *safely* tolerate up to ½ a cup of whey per day with meals. (GAPS recommendation). **Whey has a long shelf life and can last up to 6 months in the refrigerator.**

## best yogurt cream cheese

A perfect thicker cream cheese texture

### How to Make Yogurt Cheese

1 5.3 oz cup Greek yogurt (ingredients should be just milk + bacteria—no milk solids, pectin nor gelatin)  
a piece of cheesecloth or coffee filter to suspend yogurt overnight

\* A few favorite well known brands, "Simply Nature" (Aldi's), Stonyfield Farms Oikos™, Friendly Farms™

\* You may also use *any* leftover yogurt from your strained whey as a delicious cream cheese and recipes can be found on the internet to make cheesecake with this type of home made cream cheese

### Traditional Labneh (top restaurant trendy)

Spread some of the yogurt cheese on a plate, drizzle some olive oil atop, serve with any combination of the following: pita, olives, tomatoes, bruised mint, sprinkles of other herbs or spices.

### Jalapeno Yogurt Cream Cheese

1/3 c yogurt cheese  
a drop or two of olive oil and a pinch of minced garlic  
1/4 jalapeno, seeded, diced fine

continued page 7

## More Ways To Use Liquid Whey



Liquid whey can be used to lacto ferment all natural juices or fresh herbs like mint for a natural fizzy drink

1/8- 1/4 cup per day of liquid whey is ideal for most: protein overload causes pain and stiffness, acidosis can be serious

- Use in place of water or milk for baking
- Excellent liquid replacement bread making
- Soak any grains in liquid whey for digestive ease
- Also great for pets, add a tbsp. to pet food

Do not use liquid whey to ferment vegetables (better to stick with vegetable cultures)  
As whey is an acid, always dilute to prevent tooth decay and metabolic acidosis.

Mix in colostrum or milk to boost the power of either but colostrum does not mix well alone with liquid whey as whey is very low fat, takes a lot of stirring.

### lacto fermented lemonade whey

*refreshing thirst quencher with vitamin C*

1/2 cup Lemon juice, fresh squeezed \* (do not use any juice with preservatives for fermentation, fresh only)

1/2 cup sugar

1/2 cup liquid whey

1/2 tsp. molasses

6 1/2 cups pure filtered water

#### Instructions

Place all of the ingredients in a large glass jar or pitcher with a tight-fitting lid. Shake well to dissolve the sugar. Let stand at room temperature for two days, then refrigerate. May add more sugar to taste.

### whey to go lemon energy water

1/8 - 1/4 cup liquid whey

1/2 tsp. molasses

8 oz. room temp. or cold green tea

8 oz. pure filtered water

juice from one fresh squeezed lemon

Mix all ingredients in a tall glass and enjoy. May add sugar or honey to taste.

#### Yogurt Cream Cheese Cheesecake Bites

1/3 c yogurt cheese

2-3 graham crackers (snapped to smallest size)

1 tbsp. confectioner's sugar

1/8 tsp. vanilla extract

fresh strawberries or any desired fruit

Mix the yogurt cheese, sugar and vanilla. Snap the graham crackers at the perforation. Spread a little cheesecake mixture onto each square, then top with a fruit and a sprinkle of sugar. Enjoy immediately, does not keep.

end recipe/how to



# Product Review

## Body Boost Powdered Bovine Colostrum

**“Colostrum is the most powerful healing substance in the world. If it were not for colostrum the human race wouldn’t even exist,”**

**states Dr. Robert Heinerman, Ph.D.**

**Colostrum does not have to be absorbed.**

**A lack of systemic absorption supports the high safety profile of this method; that is altering systemic immune response via the gut (GALT).**

Clinical & Translational Immunology (2016) Gastroenterology and Liver Units, Department of Medicine, Hebrew University-Hadassah Medical Center, Jerusalem, Israel

Works systemically and independently of microbiome via the gut (GALT). Chondroitin sulfate and oleic acid are just two of the essential components found in colostrum exerting substantial effect. Chondroitin sulfate restores oral tolerance in RA (Rheumatoid Arthritis).

Body Boost is loaded with good fat (oleic acid). The right fat content is a sign of good quality colostrum in all mammals. Cod liver oil is superior with milk and colostrum. Olive oil contains high amounts of oleic acid. Colostrum repairs your body’s essential DNA and RNA. Helps regulate the brain’s “feel-good” chemicals to brighten our moods.

Your immune defense system gets depleted as you age. Colostrum with peptides and lactoferrin add back antibodies and immune factors for dual action in the bloodstream and also in the GI tract.

Anti-aging: more energy and youthful appearing skin. Some of the other many benefits are, it helps maintain a robust intestinal lining and promote healthy intestinal flora. Its growth factors enhance stamina and support normal re-growth of tissue and lean muscle.

## history

### Founder – John Epert

John Epert turns 78 September 2018 and has been active in business and the outdoors thru out his life.

He programmed computers for General Electric from 1965-1970. From 1971 to 1990 John bought a small fresh juice business doing \$65,000 per year and grew it into a major distributor of Health Foods carrying 10,000 items while growing the business to \$45,000,000 a year before selling the business.

John and Lynne ( his wife), walk 6 miles a day as well as work out at the gym three days a week for 75 minutes. They have been using BodyBoost Colostrum since 1996 and have never gotten sick, sometimes a sore muscle or two but that is it.

**• Collected and processed in the USA.**

**• Clinically reported research has shown near complete reversal of symptoms in a 75 year old man with Sjogren's Syndrome, a serious immune condition after approximately 800 days of natural oral immune treatment (utilizing a \*bovine colostrum immune™ product).**

### buy here

[Colostrum Bovine 16oz Powder #1 Best Value on Amazon 50% DISCOUNT TODAY! 100% Whole Nothing Added, Collected 1st Milking Only, Maximum Biological Activity, Contains Natural Occurring Probiotics, High Ig, Ld, Plus Lactoferrin, Nutritional Immune Support Supplement for Pets, Dogs, Kids, Adults, Athletes, GUARANTEED](#)

end product review

# Tips

The uniqueness of whey proteins is due to their ability to boost the level of glutathione (GSH) in various tissues and also to optimize various processes of the immune system. The role of GSH is very critical as it protects the cells against free radical damage, infections, toxins, pollution and UV exposure. GSH is the centerpiece of the body's antioxidant defense system. It has been widely observed that individuals suffering from cancer, chronic fatigue syndrome and many other immune-compromising conditions have very poor levels of glutathione. The sulphur-containing amino-acids (cysteine and methionine) are also found in high levels in whey protein. Liquid whey can eliminate the need for a lot of supplements.



**The therapeutic potential of milk whey is: antibiotic, anti viral, anti-cancer, anti-toxin and is an immune-enhancer that offers unique prebiotic properties, it has been proven to be of equal value to milk in the treatment of PEM (protein energy malnutrition) kwashiorkor.**

Liquid whey is a super food called 'the breast milk for adults', it can restore protein deficiency, is a great liver and kidney tonic, is full of ionic minerals, is easily digestible, full of lactose for the perfect energy 'food' for lactic acid bacteria. Lactose does not cause necrotizing enterocolitis in premature infants, unlike formula with *novel* prebiotics like inulin. Liquid whey proteins are easily digested for most casein intolerant and have a full complement of essential amino acids. **Liquid whey is equal to milk for kwashiorkor.** It is often combined with probiotics in functional food drinks being marketed today as energy drinks.

**did you know?**  
whey has many enzymes that provide protection against the invasion of microorganisms. It has antiviral effects and defends the digestive system of neonatal babies

**did you know?**  
whey has benefits for mental health. The brain uses amino acids to make dopamine, norepinephrine and serotonin, chemicals that elevate your mood and play key roles in learning, concentration and memory

**did you know?**  
liquid whey can reconstitute the entire digestive tract and can restore function from the stomach to the lower bowel and even lessen severity of respiratory disorders like pneumonia

# sources

## feature

## Whey To Go For Protein Power

### 1. [Review](#)

[Therapeutic Potential of Milk Whey](#)

2. [Acid whey: Is the waste product an untapped goldmine?](#)

3. [Initiation of a cure for kwashiorkor patients using a whey milk product. A comparison with cows milk](#)

4. [Growth and Nutritional Biomarkers of Preterm Infants Fed a New Powdered Human Milk Fortifier: A Randomized Trial](#)

5. [Whey protein hydrolysate and branched-chain amino acids downregulate inflammation-related genes in vascular endothelial cells](#)

6. [Goat whey ameliorates intestinal inflammation on acetic acid-induced colitis in rats](#)

end sources/tips



## Natural science for a healthy lifestyle

Alternavita Monthly Magazine© is a web and print publication featuring popular posts from the blog Alternavita as well as new recipes, how to's, products, tips and resources designed for the *average reader* who desires a healthy lifestyle with relative ease and effort, no extremes and most importantly, one that shows clear evidence as produced by *valid scientific method* leading edge clinical science.

## Mission Statement:

### 80% Rule

- 80% safety, GRAS (Generally Regarded As Safe) and well tolerated in the majority when used as directed
- 80% efficacy (the medical threshold for certainty and gold standard of care)
- 80% ease of use and compliance (can the majority reasonably achieve this)
- 80% accessibility/cost (can the majority reasonably access this)

*"Beauty is truth, truth beauty, that is all ye know on earth, and all ye need to know"*

John Keats

*"Let food be thy medicine and medicine be thy food."*

## about alternavita monthly magazine and ezine©

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## *Bio:*

I am a wife, mother and graphic designer from the US. After losing my health and career in graphic design I began an intense journey back to my own beginnings seeking resolution and understanding of my own health conditions, the most notable MS (multiple sclerosis). I eventually recovered thanks to natural immune therapy gcmf and the pioneering work of Dr. Nobuto Yamamoto, Dr. Marco Ruggiero, Bravo Yogurt™, the work of Cedars Sinai, Dr. Mark Pimentel, Dr. Henry Lin and many others. Since my recovery I have sought to make their work known to the general public. I have written several books and have published many websites. Over this period of many years, while embarking on this teaching mission I have met thousands of patients, many health professionals and professors throughout the world, many of whom follow my writing. I am currently healthy and enjoy my life, family and profession to the fullest, forever grateful to these pioneers in gut and immune research.



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# alternavita

natural science for a healthy lifestyle

## the champagne of milk

Why kefir is gaining clinical popularity, the metabolic miracles of kefir

### Recipe/How To

Super healthy kefir chocolate mousse and how to use kefir to reduce sugar and help reverse metabolic syndrome

6



### Product Review

Natural Probiotic Selection kefir starter sachets for price, consistency of product and ease of use

8



### Sources/tips

Sources and extra tips for using kefir and other probiotics to gain nutrition benefits that go beyond adding vitamins and minerals

9



from the editor:

*in this issue:*

# Kefir is the champagne of probiotics

Why you should take advantage of the amazing benefits of kefir daily for prevention and reversal of common syndromes

Welcome to the August issue of Alternavita Monthly© magazine!



Kefir is an amazing functional food that has benefits that extend far beyond the basic organisms as can be found in yogurt and that are important for metabolic health, including brain metabolism, immune function and intestinal homeostasis and is being researched today for its anti cancer properties against difficult to treat cancers like lung and liver cancer. It is also a nutritional powerhouse that creates crucial vitamins and bio active minerals that are nearly impossible to assimilate from food or a pill. Kefir is an easily tolerated milk alternative.

You will also find a super easy, tasty, sugar free (*or not*) chocolate mousse recipe made from kefir cream and some easy tips to make the most of kefir as a tool for reducing sugar content in food, especially fructose. The product review features a very good commercial kefir starter that is easy to use and packed with lactic acid bacteria and friendly yeast. Thanks for reading the August issue!

*M. Ferrari*

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*in the next issue:*  
*the newly discovered amazing anti obesity and immune benefits of kefir*

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# the champagne of milk

## The metabolic miracles of kefir

Why is kefir gaining  
clinical popularity as an  
emerging nutra-ceutical?

The interest in developing functional foods is increasing because people want to improve their health and prevent diseases.

Kefir is a mildly acidic fermented beverage with high probiotic activity, produced by the addition of lactic acid bacteria and yeasts to milk. The composition of kefir varies according to factors such as milk type and the microbiological composition of culture types; kefir grain or commercial starter culture.

The microorganisms in kefir produce vitamins, degrade protein and hydrolyse lactose, resulting in a highly nutritious and digestible functional food.

Kefir has well demonstrated antimicrobial, immunological, anti-tumour and hypocholesterolaemic, anti-hypertensive, and anti-diabetic effects, as well as microbiome modulation and  $\beta$ -galactosidase activity.

Kefir grains show  $\beta$ -galactosidase enzyme activity, which stays active when consumed.  $\beta$ -galactosidase enzymes found in kefir and yogurt are able to convert gc globulin protein to macrophage activating factors during the fermentation process.  $\beta$ -Galactosidase treatment is a common first-stage modification of the three major subtypes of Gc protein to GcMAF (a popular and effective immune therapy treatment).

**Kefir room temp. cultured is preferred to create  $\beta$ -galactosidase.**

$\beta$ -galactosidase, also called lactase is important for organisms as a key provider in the production of energy and a source of carbons through the break down of lactose to galactose and glucose. It is also important for the lactose intolerant as many adult humans lack the lactase enzyme, which has the same function of beta-gal, so they are not able to properly digest dairy products. Kefir is a good option for lactose-intolerant individuals, who cannot digest significant amounts of lactose, which is the predominant sugar in milk. As in yogurt, lactose content is reduced in kefir while that of  $\beta$ -galactosidase is increased. Lactose as a pre-biotic does not cause necrosis in premature infants and reduces H<sub>2</sub>S (hydrogen sulfide). Lactase enzyme deficiency correlates with immune deficiency.

continued on page 4

**Kefir and yogurt contain trillions, not billions of healthy organisms**



**Blend plain, home made whole fat milk kefir, yogurt and fruit together with milk and bovine colostrum and let it refrigerate overnight to maximize benefit of each component while easing digestion**

### **Why is kefir different than yogurt?**

Kefir grains have a complex composition of microbial species with the predominance of lactic acid bacteria and including acetic bacteria, yeasts, and fungi.

Kefir grain fermentations have been evaluated and a wide variety of bioactive compounds have been observed, such as organic acids, CO<sub>2</sub>, H<sub>2</sub>O<sub>2</sub>, bioactive peptides, exopolysaccharides (kefiran), and bacteriocins. These compounds act independently and together to produce various health benefits. The microbiological and chemical composition of kefir indicates that it is a very complex probiotic, with *Lactobacillus* species, generally the predominant microorganisms. Kefiran as found in kefir favors the activity of peritoneal macrophages and it also increases peritoneal IgA along with many other benefits including significant anti-inflammatory benefits. IgA deficiency is an increasingly common immune deficiency syndrome and is associated with high risk for SIBO and IBD.

### **What are some of the health benefits associated with kefir as compared to yogurt?**

The microorganisms in the kefir grains produce lactic acid, antibiotics and bactericides, which

## **Lactic Acid Bacteria & Bifidobacteria Natural Health-Promoting Dairy Foods**

1. LAB and bifidobacteria provide an effective way to increase vitamin levels in milk. Some bacterial strains in the genera *Lactobacillus* and *Bifidobacterium* provide an additional source of B vitamins (thiamine, riboflavin, cobalamin, folate, and biotin) during dairy fermentation. Deficiencies in vitamin B2 or vitamin B1 can lead to both liver and skin disorders and alterations in brain glucose metabolism
2. Folate (vitamin B9) deficiency is linked to neural tube defects, some cancers, poor cognitive performance and heart disease. Instead of synthetic folate, foods can be naturally fortified with folate synthesized by LAB and bifidobacteria. *Streptococcus thermophilus* and *L. bulgaricus* are suitable for yogurt naturally enriched in this vitamin. High folate concentration can be reached in yogurt as a result of the ability of *S. thermophilus* to produce this vitamin.
3. Vitamin B12 deficiency is common, particularly in vegetarians. Animals, plants and fungi cannot produce B12, it is exclusively produced by microorganisms. Cobalamin can be synthesized by bacteria such as *L. reuteri*, *Propionibacterium freudenreichii* and *B. animalis* Bb12.
4. Biotin (vitamin B7) deficiency can be caused by poor diet or genetic disorders that affect its metabolism. Biotin can be made by some LAB in dairy products. *L. helveticus* increased biotin content in fermented milks.

**You can add specific probiotic strains from capsules to kefir and milk to increase vitamin content and offer other benefits like anti-inflammatory and anti-obesity. Current research provided evidence that probiotic therapy with *L. plantarum* and *B. animalis* can effectively attenuate MS progression as well as reinforce the polarization of regulatory T-cells.**

*Bifidobacterium animalis* in combination with human origin of *Lactobacillus plantarum* ameliorate neuroinflammation in experimental model of multiple sclerosis by altering CD4+ T cell subset balance. *Biomed Pharmacother.* 2017 Nov;95:1535-1548. doi: 10.1016/j.biopha.2017.08.117. Epub 2017 Sep 22.

inhibit the development of pathogens. Kefir acts against the pathogenic bacteria salmonella, helicobacter, shigella, staph, e coli, enterobacter, listeria, streptococcus p. , streptococcus f., the fungus *Candida albicans* and many others. A mixture of kefir isolated bacteria and yeast is able to prevent diarrhea and colitis triggered by C.

continued on page 5

## A Healthy Microbiome Is Necessary For Mental Health

- Gamma-aminobutyric acid (GABA) is the main inhibitory neurotransmitter of the central nervous system. Important functions of GABA are neurotransmission, induction of hypotension, diuretic effects, antidiabetic, relaxing and tranquilizer effects.
- Most GABA-producing strains are lactobacilli; *L. brevis*, *L. paracasei*, *L. delbrueckii*, *L. buchneri*, *L. plantarum*, *L. helveticus*, *Streptococcus thermophilus*, and *Lactococcus lactis*. Some, *Bifidobacterium* spp. were also reported to produce GABA, although with lower capacity than LAB. Yogurt enriched with GABA was produced using the strain *S. thermophilus*. Cheese *Lactococcus lactis* as source of GABA have been produced.
- Particular species from the gut microbiome stimulate gut endocrine cells to produce serotonin, serotonin acts as a neurotransmitter. As a result of stimulating gut serotonin, research results observed more serotonin in the colon, and also more serotonin that is picked up by blood platelets and circulated systemically.

difficile. A combination of *Lb. plantarum*, *K. marxianus*, isolated from kefir grains and *S. thermophilus* isolated from yogurt starters, was able to inhibit the cytopathic action of Shiga toxins. Kefir (lactic acid bacteria) inhibits spore formation and aflatoxin produced by *Aspergillus*, a toxic compound formed in the field or during food storage. Kefir is a promising, safe alternative natural food preservative. The cell-free fraction of kefir or lactic acid bacteria isolated from kefir has been demonstrated to be anti tumoral against gastric, colon, breast, lymphatic and lung cancer. Kefir's anti cancer effects are generating intense research today as a safe and effective cancer treatment. Lactic acid bacteria are critical for detox and energy creation as well as having well demonstrated anti inflammatory properties. Probiotic mediated modulation of host glutathione system is helpful in disease conditions like acute pancreatitis, lead induced oxidative stress and treatment of radiation induced enteritis and colitis. Probiotic intervention is useful for treatments and conditions that are known to rapidly decrease mucosal glutathione levels like radiation therapy and *H. pylori* infection.

### More bio active nutritional benefits of kefir

Kefir microorganisms produce many vitamins. Yeasts in kefir provide essential growth nutrients such as amino acids, vitamins and favorably alters pH. The essential amino acid contents in kefir are valine, isoleucine, methionine, lysine, threonine, phenylalanine, and tryptophan. Tryptophan, one of

the most important amino acids in kefir is of key importance in the nervous system. Kefir contains complete proteins that are partially digested, facilitating digestion by the body. Phosphorus, which is the second most abundant mineral in the human body, aids in the utilization of carbohydrates, fats and proteins for cell growth, maintenance and energy, is abundant in kefir. Fermented milk products lead to a significant increase of butyrate, propionate and total SCFA, in the ascending, transverse and descending colon. Butyrate was the SCFA with the largest increase.

### Conclusion

Many vitamins and important elements can be found in kefir. They include group B vitamins, vitamin A, C, D, E, K2, folic acid, biotin, macro elements such as magnesium, calcium, phosphorus, potassium, sodium, and chloride; micro elements such as copper, iron, zinc, iodine, selenium, manganese, phosphorus, cobalt and molybdenum. One cup of low fat kefir provides 7-14 grams of protein with about 140 calories. Kefir is beneficial to people who are trying to lose weight. The benefits of consuming kefir are numerous, including nutritional, antibacterial, immunological, anti-tumoural, anti-carcinogenic, anti diabetic, hypocholesterolaemic effects and  $\beta$ -galactosidase activity.

### How can you use kefir and yogurt to optimize nutritional benefits?

end feature



## Easy, Healthy, Sugar Free Chocolate Mousse

Makes a super healthy weight loss/diabetic friendly dessert!

4 oz. of cream cheese end product obtained from strained plain whole fat kefir made yogurt, plain yogurt or plain greek yogurt (see how to strain yogurt for whey on the web for more info if needed)

4 oz. of heavy cream

4 tbsp. of unsweetened powdered baking cocoa or unsweetened powdered dark baking cocoa whichever you prefer

4 tbsp. of stevia, xylitol or confectioner's sugar may be used

Combine cream cheese, cocoa and sugar in a small bowl until well blended and sugar is completely dissolved. Whip the heavy cream until stiff peaks are formed. Slowly fold the heavy cream in to the bowl mixture until fully combined. Spoon in to small dessert bowls or glasses. Chill in refrigerator for at least two hours. Makes 4 servings.

\*No filler Plain yogurt and Greek yogurt create a much more desirable cream cheese end product texture after being strained to collect the liquid whey. Fillers in some store bought products create a less desirable texture.

## How To Use Kefir To Enhance Nutrition

### A Few Favorite Ways To Use Kefir In The Kitchen

Always make kefir a daily part of your diet for the super nutrition it provides as it is one of the most easily obtained fermented food products worldwide. If you can't find kefir look for buttermilk. You can easily make kefir at home from grains or commercial kefir powder starters. Kefir is a super food in and of itself but there are many ways to optimize kefir benefits as well as making store bought kefir an even healthier version by increasing phagocytic activity. Drink at least one glass of kefir per day.

- Always buy plain yogurt or kefir and add flavor like vanilla or whole fruit at home, plain yogurt or kefir has much less chances of having additives and preservatives you don't want. Store bought juice may not be used for flavor. Juice that contains synthetic preservatives will destroy beneficial organisms in kefir
- Add kefir and yogurt to milk to increase phagocytosis, this works especially well in the elderly. Phagocytosis is the process in which infected cells and cellular debris are 'digested' by intestinal macrophages to inhibit oxidative stress and inflammation. Probiotics in kefir and yogurt greatly help digestion of proteins as well as keeping opportunistic pathogens in check.

### Use Plain Kefir And Yogurt As Starter And Then Collect Whey And Cream Cheese

Use plain kefir and yogurt together as a yogurt starter, 2-3 tbsp. per 8 oz. of whole fat mammal milk is best. ***Kefir is too thin as a beverage to be strained to produce a cream cheese, it must be fermented longer to produce a thick yogurt like texture.*** Once a thick yogurt is obtained, usually within about 24 hours, strain this super healthy yogurt to collect liquid whey after which kefir has a thicker texture to use in many recipes. Add a tbsp. or two of the liquid whey to other drinks or use it as a starter ferment on its own for fruit juices and herbs to create other healthy drinks. Amino acid, vitamin and mineral content become greatly concentrated in liquid whey making liquid whey, a bio super food equal to milk. Don't throw away the thickened health powerhouse creamy cheese like end product but use it to create even more recipes like the one above and go beyond a simple kefir smoothie.

\* Store bought and commercial kefir starter work best for this ferment process for beginners so as not to introduce too many organisms that may ruin the final product. Use sanitary utensils.

continued page 7

## More tips for optimizing kefir

**Kefir can be used as a beneficial pre-digester before meals or in the fridge.**

- Add whole fruit to kefir and let it ferment for just a few hours in the fridge to increase beneficial yeasts like *Kluyveromyces lactis* and *Kluyveromyces Marxianus*
- Add a slice of lemon, orange or lime with peel included to kefir and let it ferment for a few hours to increase Vitamin C content in kefir from the

**citrus peel, citrus peel has much higher vitamin C content than the pulp.**

- Sprinkle a tsp. of ground, dried powdered citrus peel or citrus zest to kefir drinks to increase citrus fiber as a safe prebiotic
- Add chondroitin sulfate, let the sulfate ferment in kefir for a while to help digest this large, hard to absorb protein. Afterward add a tsp. of olive oil or cod liver oil to increase absorption. Chondroitin sulfate is clinically proven to restore immune tolerance in RA. Cod liver oil if used daily for at least 4 months greatly reduces inflammation in arthritis, fermented cod liver oil is best.

## Healthy Kefir Ranch Dressing

**A healthy, probiotic rich twist on a classic dressing!**

Servings: 24

Ingredients

1 1/2 cup Plain Whole Milk Kefir  
1 clove fresh garlic, minced  
1 Tbsp fresh dill, finely chopped  
1 Tbsp fresh parsley, finely chopped  
1 Tbsp fresh chives, finely chopped  
2 tsp lemon juice  
1/2 tsp salt  
1/8 tsp black pepper

**Process or blend all ingredients in food processor or blender (may also be whisked instead), cover and chill in the refrigerator for at least 30 minutes before serving.**

Lifeway® Recipe

## How to decrease the fructose/sugar content in fruit

Plain store bought kefir like LifeWay® lasts a long time refrigerated and the organisms remain active. You can use any kefir to reduce the sugar content in whole fruits by blending them together first in the blender or food processor and then letting them slow ferment for up to 24 hours in the fridge in a glass jar. The increase in friendly yeasts helps reduce sugar content in fruit by fermenting them. It also helps pre-digest fibers. Sugar laden fruits work better than citrus fruits as they naturally contain higher amounts of sugar. Friendly yeasts are able to utilize many different sugars and consume them for energy.

Lactic acid bacteria (LAB) fermentation is common among the various fermentation processes used. It produces changes in both profile and types of bioactive compounds. Molecules such as bioactive peptides, short chain fatty acids or polysaccharides are generated while sugar content or anti-nutritional compounds are decreased and phenolic compounds are converted to molecules with added biological value. These transformations, associated with prebiotic and/or probiotic potential supply as well as improvement of food components bioaccessibility and bioavailability, result in modifications of health-related properties.

**Water kefir is NOT a substitute for dairy kefir. Dairy kefir from grains has trillions and trillions more probiotics than water kefir.**

end recipe/how to



## Product Review

### Natural Probiotic Selection Kefir Starter

**No babysitting grains, easy to use sachets!**

**Every single portion of kefir can be re-cultivated. One sachet is**

**enough to make 1 liter of thick creamy milk kefir. Can be set at room temperature. No need of specific appliances**

Contains a blend of the following Lacto-bacteria and yeast: *Lactococcus lactis* ssp. *cremoris*, *Lactococcus lactis* ssp. *lactis*, *Lactococcus lactis* ssp. *lactis* biovar *diacetylactis*, *S. Thermophilus*, *Lactobacillus Bulgaricus*, *Lactobacillus kefir*, *Lactobacillus parakefir*, *Saccharomyces cerevisiae*, *Kluyveromyces lactis*  
Mild in taste, suitable for healthy smoothies

One of the top benefits of using Natural Probiotic Selection Kefir Starter is no babysitting grains as that can get tiresome and a key benefit is always ensuring a consistent batch free of unwanted contaminants or spoilage organisms which can happen when grains are used for extended periods. While grains do offer more microbes and greater diversity, commercial cultures offer the benefit of clinically studied and well tolerated in the majority cultures that are easily cultured batch after batch, even at home, even for beginners.

Another great benefit is how fail proof this process is. From the first batch and with each re-culture it is nearly impossible not to produce a thick, creamy and delicious kefir with no expensive and unnecessary equipment. You can easily produce kefir at home that ensures health and immune benefits and this product does offer both with trillions of beneficial organisms and friendly yeasts, especially the important LABS.

Finally one of the greatest benefits is cost. Store bought kefir can get expensive, while adding to consumer waste with unwanted plastic containers. You can make a year's worth of kefir for pennies as compared to store bought brands and store it in glass containers that offer greater sanitation and are easily reused.

Natural Probiotic Selection offers fine products with tremendous health benefits that can be experienced in a very short time and it is worthwhile to experiment with different kefir cultures with virtually no intolerance issues to create necessary microbial diversity that eventually occurs in the healthy, adult microbiota.

#### buy here

[Kefir Starter Culture – Pack of 5 Freeze Dried Sachets](#)

[Kefir Starter Culture – Pack of 10 Freeze Dried Sachets \(10\)](#)

## history

Natural Probiotic Selection Ltd is a company that gives you the possibility to make your own fresh yogurt and kefir in the comfort of your home. Founded in London, England in 2016, Natural Probiotic selection is a privately held company with a global reach through sellers like Amazon and Ebay. Natural Probiotic Selection goes beyond just selling yogurt and kefir starter cultures; they want to keep your daily diet running healthy and strong! As your nutrition partner, they are intensely focused and experienced on how to grow lactobacteria. They make the process easy, guiding you step by step to make your own home crafted authentic yogurt and kefir in a cost - effective way. They offer a pure bacterial blend of cultures made in a laboratory environment with no preservatives and away from additives, maltodextrin, gluten and GMOs. They also cover the full spectrum of home crafting yogurt and kefir experience through an App, website, videos, tips and easy to follow instruction pdf's that they immediately email upon purchase. They are passionate yogurt and kefir lovers with specialties in Yogurt making, Bio Yogurt, Home Crafted Yogurt and Kefir, Kefir Starter Cultures, Freeze-dried Yogurt and Kefir Starters, Yogurt Starter Cultures, and Authentic Yogurt and Kefir

end product review

# Tips

During milk fermentation, LAB, making use of their proteolytic system can transform milk proteins into biologically active peptides. These peptides can exert a wide range of effects, such as antimicrobial, anti-hypertensive, anti-thrombotic, immunomodulatory, and anti-oxidative. The most studied mechanism of bioactive peptides is the anti-hypertensive action displayed by the inhibition of the angiotensin-I-converting enzyme (ACE), which regulates blood pressure. ACE inhibitory peptides have been isolated from a variety of fermented dairy products including cheese, fermented milks and yogurt. The best known ACE-inhibitory biopeptides, have been identified in milk fermented by *L. helveticus*. Dairy starter cultures used in the manufacture of fermented dairy products (e.g., *L. helveticus*, *L. delbrueckii* ssp. *bulgaricus*, *L. plantarum*, *L. rhamnosus*, *L. acidophilus*, *Lactococcus Lactis*, or *S. thermophilus*) can generate bioactive peptides.

Conjugated linoleic acid (CLA) is a polyunsaturated fatty acid (PUFA) that can be biosynthesized by LAB and bifidobacteria through bioconversion of linoleic acid. The health-promoting properties of CLA include anti-carcinogenic, anti-atherogenic, anti-inflammatory, and anti-diabetic activity, as well as the ability to reduce body fat. An effective way to increase CLA uptake in humans is to increase CLA levels in dairy products by using strains with high production potential. A number of food-grade LAB and bifidobacteria were reported to produce CLA in milk products, as is the case of *Lactococcus lactis*, *L. rhamnosus*, *L. casei*, *L. acidophilus*, *L. plantarum*-2, *B. bifidum* and *B. animalis* Bb12. Exopolysaccharides (EPS) are complex extracellular carbohydrate polymers that can be produced by some LAB during dairy fermentations. Some of them promote selective growth of bifidobacteria, thus playing a role on the microbiota and host immune system.

**\* It is oleic acid and not linoleic acid that exerts beneficial anti-cancer effect.**



# sources

## feature

## The Champagne Of Milk

1. [A review: chemical, microbiological and nutritional characteristics of kefir: CyTA - Journal of Food: Vol 13, No 3](#)

2. [Lactic Acid Bacteria and Bifidobacteria with Potential to Design Natural Biofunctional Health-Promoting Dairy Foods](#)

3. [Milk kefir: composition, microbial cultures, biological activities, and related products](#)

4. [Fruits and vegetables, as a source of nutritional compounds and phytochemicals: Changes in bioactive compounds during lactic fermentation](#)

5. [Kefir peptides prevent high-fructose corn syrup-induced non-alcoholic fatty liver disease in a murine model by modulation of inflammation and the JAK2 signaling pathway.](#)

end sources/tips

**Bifidobacterium longum subspecies infantis (*B. infantis*) is unique among gut bacteria in its prodigious capacity to digest and consume any human milk oligosaccharide structure, the result of a large repertoire of bacterial genes encoding an array of glycosidases and oligosaccharide transporters not found in other bacterial species. In vitro, *B. infantis* grows better than other bacterial strains in the presence of human milk oligosaccharides, displays anti-inflammatory activity in premature intestinal cells, and decreases intestinal permeability.**

### did you know?

Some probiotics like *Lactobacillus gasseri* within the genus of *Lactobacillus acidophilus* is a major species of the human flora and widely utilized as a probiotic, can consume glucose to minimize excess sugar

### did you know?

Alkalosis is a greater negative factor in some conditions than acidosis

### did you know?

The major products formed during kefir fermentation are lactic acid, CO<sub>2</sub> and alcohol in the form of ethanol at 0.48%. Despite being called the 'champagne of milk' short fermentation periods and moderate to low sugar content will not produce 'intoxicating' kefir. Lactic acid reduces muscle pain

### did you know?

Some friendly yeasts as found in kefir are capable of utilizing a variety of sugars and are one of the reasons kefir is so effective at helping to correct metabolic syndrome

### did you know?

Historically, those who had greater access to natural cream, butter and cheese escaped disease plagues



## Natural science for a healthy lifestyle

Alternavita Monthly Magazine-© is a web and print publication featuring popular posts from the blog Alternavita as well as new recipes, how to's, products, tips and resources designed for the *average reader* who desires a healthy lifestyle with relative ease and effort, no extremes and most importantly, one that shows clear evidence as produced by current leading edge clinical science.

## Mission Statement:

### 80% Rule

**80% safety**, GRAS (Generally Regarded As Safe) and well tolerated in the majority when used as directed

**80% efficacy** (the medical threshold for certainty and gold standard of care)

**80% ease of use and compliance** (can the majority reasonably achieve this)

**80% accessibility/cost** (can the majority reasonably access this)

*"Beauty is truth, truth beauty, that is all ye know on earth, and all ye need to know"*

John Keats

*"Let food be thy medicine and medicine be thy food."*

Hippocrates

## about alternavita monthly magazine and ezine©

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## *Bio:*

I am a wife, mother and graphic designer from the US. After losing my health and career in graphic design I began an intense journey back to my own beginnings seeking resolution and understanding of my own health conditions, the most notable MS (multiple sclerosis). I eventually recovered thanks to natural immune therapy gcmf and the pioneering work of Dr. Nobuto Yamamoto, Dr. Marco Ruggiero, Bravo Yogurt™, the work of Cedars Sinai, Dr. Mark Pimentel, Dr. Henry Lin and many others. Since my recovery I have sought to make their work known to the general public. I have written several books and have published many websites. Over this period of many years, while embarking on this teaching mission I have met thousands of patients, many health professionals and professors throughout the world, many of whom follow my writing. I am currently healthy and enjoy my life, family and profession to the fullest, forever grateful to these pioneers in gut and immune research.



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