



# The High Road to Health™

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*Trusted Nutrition  
the Natural 'Whey'™*

Discover the link  
between Probiotics  
and Colostrum!

See inside  
for details

## NEW FINDINGS SUGGEST “WHOLE PROTEIN” SUPERIOR TO “ISOLATE.”

Protein supplements are often offered as whey protein isolates because it has long been thought that isolated whey protein is the best supplement for protein accretion (gain) due to its fast digestion rate. Recently however, there have been various studies that show evidence that casein (milk) protein may have more efficient total body protein accretion capabilities due to its *slower* digestion rate.

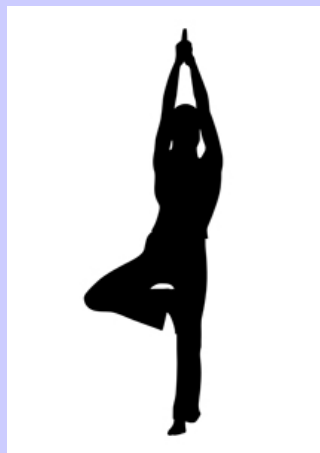
There are two aspects essential to gaining total body protein. One aspect is the concept of **protein synthesis**. One must *enhance* protein synthesis in order to build new pro-

teins. The other aspect of protein gain is **proteolysis**. One must *suppress* proteolysis which is the destruction of proteins that are already a part of the body. Whey protein does an excellent job of stimulating protein synthesis and casein protein does an excellent job of inhibiting proteolysis. However, whey protein, by itself, *does not* inhibit proteolysis whereas casein protein does stimulate protein synthesis.

When a person ingests whey protein, the mixture, or bolus, stays soluble in the stomach and is quickly released into the duodenum where it is ab-

sorbed into the blood. This can cause a condition known as *aminoacidemia* which means high levels of amino acids in the blood. The body naturally desires to stay in an

See “Whole protein” pg 3



## RESEARCH SHOWS POSSIBLE SYNERGY BETWEEN PROBIOTICS AND COLOSTRUM.

Probiotics and colostrum have long been known to provide a myriad of health benefits. Probiotics (living helpful microorganisms) have been shown to enhance immune function, restore natural healthy intestinal microflora, relieve and repair gastrointestinal disorders, and even re-

duce lactose intolerance. Colostrum (the “first milk” of mammalian mothers) has also been shown to augment immune function as well as provide growth factors. Volumes of research have been done on both of these substances and emerging studies from the *Journal of Applied Microbiol-*

*ogy and Biotechnology* has found a natural synergy or coalition between these two substances. Immune enhancers such as **lymphocyte** (white blood cells) growth and **macrophage phagocytosis** (destruction of dangerous bacteria) were shown to

See “Natural synergy” pg 3

### Summer Health Tip!

Getting out into the sunshine is good for your health and may help prevent disease! When the ultraviolet rays of the sun come into contact with your skin, they are converted into previtamin D<sub>3</sub> and will be converted into the active form **cholecalciferol** over the next 36 hours. Vitamin D has many roles in body systems such as bone growth and development, immune, brain, and nervous system function, as well as pancreas, skin, muscle, cartilage and reproductive organ health.

Recently, research has even linked Vitamin D with protection against the development of multiple sclerosis.

A good thing to remember is that sunscreens with a “Sun Protection Factor” (SPF) higher than 8 will prohibit vitamin D synthesis so you will be better off if you put the sunscreen on after a few minutes in the sun. Most people will receive adequate vitamin D from the sun if they expose their face, hands, and arms on a clear, sunny day 3-4 days a week for around 20 minutes. Be careful not too get to much sun as the benefits of vitamin D can be outweighed by the risk of developing of skin cancer.

# WHOLE PROTEIN

*“Caprotein is a natural full spectrum protein containing both casein and whey protein.”*

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equilibrium or homeostasis, so a large influx of amino acids into the blood is not desirable as it causes the body to immediately adjust and usually overcompensate. However, when casein protein is ingested, the protein coagulates in the stomach and is slowly released in the duodenum for a slower influx of amino acids into the blood stream. This causes a lower aminoacidemia which means amino acid levels in the blood plasma are not overcompensated by the body. This results in a steady and ultimately superior

*postprandial* (following a meal) amino acid balance.

Testing on various age groups has shown that most people experience the best protein accretion (gain) when both casein protein and whey protein are present in the supplement. As you may know, Caprotein™ is a natural full spectrum protein containing both casein and whey protein. Caprotein™ has been formulated to target several population groups ranging from the elderly to the young and

growing. The natural amino acid profile that is present in Caprotein™ provides a high biological value which makes for an excellent choice for those with protein needs. More and more studies are coming to the conclusion that to achieve the best total body protein accretion, a mixture of casein protein and whey protein is desirable. The functional food Caprotein™ provides for this need. ■

Influence of the protein digestion rate on protein turnover in young and elderly subjects. *Journal of Nutrition* October 2002

Slow and fast dietary proteins differently modulate postprandial protein accretion. *Proceedings of the National Academy of Sciences of the U.S.A.* December 1997

# NATURAL SYNERGY

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increase by up to twice their normal capacity when probiotics and colostrum were paired together. Probiotic strains as well as **immunoglobulins** (immune enhancers) must be viable and active to achieve the highest health benefit when ingested. Recent studies show that overall viability of probiotic strain **Lactobacillus rhamnosus** as well as **IgG**



Probiotics occur naturally in freshly cultured yogurt but only supplemental probiotics deliver several billion microorganisms per dose.

**immunoglobulins** were strengthened to a greater degree when utilized as a pair than when utilized independently. These emerging scientific studies are giving credence to a new understanding of certain natural biochemical coalitions existing in nature.

It is the goal of Mt. Capra Products to offer wholefood nutritionals just as one would find them in the natural world. Mt. Capra is pleased to offer CapraColostrum™ which is harvested from healthy, antibiotic and growth hormone free goats. Mt

Capra also offers Caprobiotics Plus™ and shelf stable Caprobiotics Advanced™, two probiotics cultured in all natural skim goats' milk. These supplements deliver 24 billion bacteria and 10 billion bacteria per serving respectively. Both the colostrum and the probiotics are gently processed ensuring the highest nutritional bioavailability. To conclude, when it comes to supplying all natural probiotics and colostrum supplements, Mt. Capra offers superior products second to none in the marketplace. ■

Synergistic effects of *Lactobacillus rhamnosus* ZDY114 and bovine colostrums on the immunological function of mouse in vivo and in vitro. *Applied Microbiology and Biotechnology*. 2007 Jan 16

Synergistic antidigestion effect of *Lactobacillus rhamnosus* and bovine colostrums in simulated gastrointestinal tract (in vitro) *Applied Microbial and Biotechnology* 21 February 2007



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