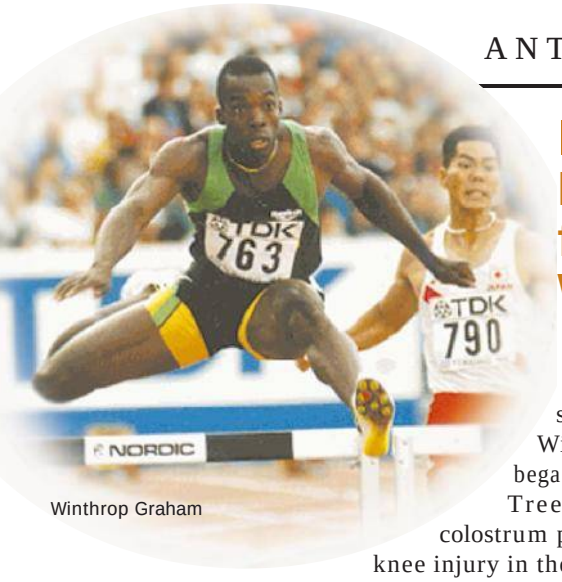


Winthrop Graham

IMMUNE TREE COLOSTRUM: Rich Source of Growth Factors for Athletes and Anyone Who Wants to Stay in Shape

The 1988 and 1992 Olympic silver medallist Winthrop Graham began using Immune Tree a proprietary colostrum product, after a knee injury in the 1996 Olympics.

"It was a rather serious injury and doctors wanted to perform surgery, but I opted for a rehabilitation program," says Graham.

Two years passed. But he was still having trouble recovering after running the hurdles. His knee would become stiff and prevent him from training consistently.

"However, within two months after I began taking 12 colostrum a day, I could run the hurdles with no stiffness at all," he says. "That was amazing to me and I became a believer."

Meanwhile, for Jeff Spreng, Immune Tree Colostrum helped him to realize his body building dreams. "I always wanted to be a body builder, so I tried everything natural to gain weight and build muscle but nothing had any significant effect until I found colostrum," Spreng told a reporter. He began taking a half teaspoon twice a day and, "Right away I noticed how good I felt." He increased his workouts to six hours per day. Thanks to his enhanced recovery from his training sessions, he was able to train seven days a week. He became ripped. He lost twenty-five pounds but added lead muscle. Nowadays, he says, "People stop me on the street and say, 'I don't mean to embarrass you but you have the most incredible body.' No one ever said that kind of thing to me before. Now it happens all the time. My friends who knew me can't believe I've lost weight because they can see I'm bigger. It's so amazing!" These days, Jeff uses two to three heaping teaspoons of colostrum powder, four times per day and is devoted fulltime to body building.

Colostrum is nature's super food. A growing body of evidence suggests that colostrum—particularly Immune Tree colostrum which is so rich in growth factors—is great for weight training, running, power sports and for anyone interested in getting in shape, maintaining exercise intensity and a regular training schedule, and promoting healthy muscle gain.

But, hold on, what is colostrum?

Colostrum for Tissue Repair and Recovery

Colostrum is the specific first diet of mammalian newborns. It is secreted before breast milk. It is rich in immunoglobulins, antimicrobial peptides, and growth factors.

Its high content of bioactive growth factors is generating interest among sports doctors. Growth factors are broad-spectrum small proteins (polypeptides) that play key regulatory roles in cell growth, replication, and differ-

Better Sports Performance with Colostrum

Exercise and training results in muscle damage which, in turn, limits continued physical exertion and will reduce performance during subsequent exercise. Colostrum's growth factors seem to counteract this negative effect. Immune Tree Colostrum is one of the richest sources of essential growth factors that enhance lean muscle development. Let's look at some of the research into the link between supplementing with colostrum and physical fitness.

Study #1
INCREASES IN IGF-I

In a study from the Department of Biology of Physical Activity, University of Jyväskylä, Finland, researchers examined the effects of bovine colostrum supplementation on serum insulin-like growth factor I (IGF-I), immunoglobulin G, hormone, and amino acid and saliva immunoglobulin A concentrations during a strength and speed training period.

Nine male sprinters and jumpers underwent three randomized experimental training treatments of eight days separated by thirteen days. The only difference in the treatments was one group consumed 125 milliliters of colostrum. Post-training increases were noticed for serum IGF-I in the colostrum compared with the placebo group (given normal milkwhey) "It appears that a bovine colostrum supplement... may increase serum IGF-I concentration in athletes during strength and speed training," note the researchers.

Study #2
IMPROVED PERFORMANCE AMONG WOMEN ELITE ATHLETES

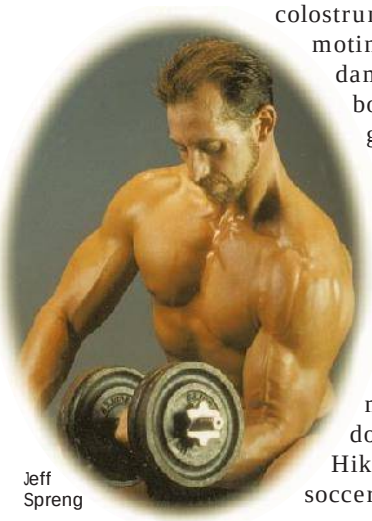
In a double-blind placebo controlled study, the effect of colostrum on rowing performance was studied in a group of elite female rowers. Eight female rowers from the South Australian Sports Institute completed a nine-week training program while consuming 60 grams per day of bovine colostrum powder or whey protein powder. All subjects consumed their normal diets and kept food diaries throughout the study period. There were significantly greater increases in the distance covered and work done by week nine. Endurance was also higher in the colostrum group. These results indicate that oral supplementation with bovine colostrum improves rowing performance in elite female rowers, said the researchers.

entiation. Growth factors support complex feedback loops between the immune, nervous and hormonal systems.

Immune Tree colostrum is a rich source of a particularly important growth factor, **insulinlike growth factor-I** (**IGF-I**), which acts as a second messenger for growth hormone. Human Growth Hormone (hGH) is responsible for many effects on growth, physical development, immunity, and metabolism. Produced and secreted by the anterior pituitary gland in the brain, hGH is normally released in pulses in response from signals from the hypothalamus, usually during sleep. It exerts anabolic effects throughout the body favoring the tissues, bones and muscles. IGF-I helps to carry out the effects of hGH within the cell nucleus.

How Colostrum Helps

The type of growth factors contained in Immune Tree colostrum are instrumental in promoting rapid healing and repair of damaged tissues in the newborn. In the adult, these same growth factors are involved in healing and repair of tissues and organs. Although researchers don't know for sure how colostrum helps athletes, one key study suggests colostrum helps to improve training capacity, performance, and improve muscle development. And we don't mean just elite athletes. Hikers, bicyclists, joggers, and soccer players—anyone who wants an edge—should try colostrum and gauge whether they improve in their performance.



Jeff Spreng

We recommend Immune Tree colostrum, since the company has long produced a true "first-milking" colostrum. Some so-called colostrum products come from the first four to six milkings after the birth of the calf and are as old as 72 hours. True colostrum is produced before the actual birth of the calf and can only be collected for a short period of time following birthing, without being diluted by the subsequent production of milk. At the time of birth, potency is at its peak The active elements such as immune factors, growth factors, antioxidants and anti-inflammatory agents are at their highest concentrations. What this means is that the sooner the colostrum is collected, the less diluted it is with milk, and the greater the concentration of beneficial factors.

Immune Tree colostrum comes in capsules, powder and tasty chewables. The usual dosage is six capsules or chewables daily. If using powder, take 1/2 teaspoon, two to four times daily with water. ❖

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RESOURCES

Immune Tree is available at www.bulkcolostrum.com.
Have questions? Call Donna or Kathi at 541.485.7199
10:00 - 6:00 PM Pacific or E-mail us at excellentthings@pcez.com

Study #3
IMPROVED SPORTS PERFORMANCE AMONG POWER ATHLETES

In another double blind, placebo controlled trial from the University of South Australia study, 51 male power sport participants completed an eight-week standardized training program while consuming 60 grams daily of either colostrum or whey protein.

The athletes were tested for power performance in a battery of tests before beginning supplementation and at weeks four and eight.

The colostrum group significantly improved their maximal vertical jump heights compared to the whey protein group. The colostrum group also improved their post-recovery vertical jump performance significantly more than the control group. There were strong trends for the colostrum group towards greater improvements than the control group in absolute and relative peak power outputs in cycling and peak force generated by knee flexion exercises.

Study #4
BETTER PERFORMANCE & LOWER SERUM CREATINE KINASE

At the Center for Research in Education and Sports Science, at the University of South Australia, a double-blind, placebo controlled study was carried out to determine the effect of supplementation with a commercial bovine colostrum product on plasma IGF-I concentrations and endurance running performance. Although no differences in plasma IGF-1 concentrations were found between the groups at the start or end of the study, the colostrum group continued to improve its performance capacity after four weeks, while the performance of the placebo group reached a plateau. By the eighth week, the colostrum group was running further and doing more work than the placebo group.

Also of note, athletes receiving colostrum displayed a strong trend over eight weeks to reduce the increase in serum creatine kinase concentrations per unit of work done, while there was no such trend in the whey group. Total creatine kinase measurement in serum has remained the best overall marker for detection and monitoring of skeletal and muscle stress. Injury or diseases to striated muscle most commonly cause increases in total serum creatine kinase.