

# Whey Cool™ Powder



— Available in Unflavored/Unsweetened, Vanilla and Chocolate Flavors —

By David Brady, ND, DC, CCN, DACBN & Suzanne Copp, MS

THIS INFORMATION IS PROVIDED FOR THE USE OF PHYSICIANS AND OTHER LICENSED HEALTH CARE PRACTITIONERS ONLY. THIS INFORMATION IS INTENDED FOR PHYSICIANS AND OTHER LICENSED HEALTH CARE PROVIDERS TO USE AS A BASIS FOR DETERMINING WHETHER OR NOT TO RECOMMEND THESE PRODUCTS TO THEIR PATIENTS. THIS MEDICAL AND SCIENTIFIC INFORMATION IS NOT FOR USE BY CONSUMERS. THE DIETARY SUPPLEMENT PRODUCTS OFFERED BY DESIGNS FOR HEALTH ARE NOT INTENDED FOR USE BY CONSUMERS AS A MEANS TO CURE, TREAT, PREVENT, DIAGNOSE, OR MITIGATE ANY DISEASE OR OTHER MEDICAL CONDITION.

[Unflavored and Unsweetened]

Supplement Facts		
Serving Size 30 grams (approx. one heaping scoop)		
Servings Per Container 30		
Amount Per Serving	% Daily Value	
Calories	130	
Calories from Fat	15	
Total Fat	2 g	3%*
Saturated Fat	1 g	5%*
Cholesterol	30 mg	10%
Sodium	45 mg	2%
Total Carbohydrate	3 g	1%*
Sugars	3 g	†
Protein (from Proserum® Whey)	24 g	48%*
Calcium	120 mg	12%
Phosphorus	90 mg	9%
Potassium	155 mg	4%
Alpha-Lactalbumin	4.1 g	†
Immunoglobulins	3 g	†
Bovine Serum Albumin	1.3 g	†
Lactoferrin	1.2 g	†

\*Percent Daily Values are based on a 2,000 calorie diet.  
†Daily Value not established.

**Ingredients:** Proprietary whey protein concentrate (Proserum®).

**Contains Milk.**

[Vanilla]

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Amount Per Serving	% Daily Value	
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Total Fat	2 g	3%*
Saturated Fat	1 g	5%*
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Sugars	3 g	†
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Phosphorus	90 mg	9%
Potassium	155 mg	4%
Alpha-Lactalbumin	4.1 g	†
Immunoglobulins	3 g	†
Bovine Serum Albumin	1.3 g	†
Lactoferrin	1.2 g	†

\*Percent Daily Values are based on a 2,000 calorie diet.  
†Daily Value not established.

**Other Ingredients:** Natural vanilla flavor, xylitol, stevia (leaf) extract.

**Contains: Milk.**

Whey Cool™, a proprietary non-denatured whey protein concentrate, is produced to maintain the full range of the fragile immune boosting and regenerative components naturally present in fresh raw milk. Whey Cool™ is produced using proprietary filtration and drying which involves minimal processing. This unique production method ensures that the whey is not subjected to temperatures that would destroy the original components. We do not use cross-flow filtration, microfiltration, ultrafiltration, hydrolyzation or ion exchange methods which denature the original proteins. This full range, biologically active, complete amino acid profile protein naturally contains an exceptional amount of the critical glutathione precursor covalently bonded cysteine. Additionally it contains the full range and exceptional levels of the most important protein components, which are lactoferrin, immunoglobulins, serum albumin, growth factors, and active peptides (bonded amino acids).

The milk harvested for this product comes from cows that graze on pesticide and chemical-free natural grass pastures. Milk from grass-fed cows has many times higher levels of CLA and contains a proper balance of essential fatty acids. The milking cows are never fed grain or subjected to any growth hormone treatment, chemicals, antibiotics, genetically modified organisms, hyperimmunization or injected pathogens.

This whey protein is produced using a unique low temperature drying and filtration method. The vast majority of whey proteins available use high heat pasteurization. High heat does irreversible damage to the majority of the components of milk and may cause intolerance even in individuals who have no history of milk allergies.

Whey Cool™ contains exceptional levels of cysteine, which is the critical precursor for the intracellular production of glutathione. Cysteine is very scarce in our modern diet and therefore glutathione production is limited and deficiency is prevalent. If cysteine undergoes any heating or processing, as all conventional whey products do, it is denatured and converted to cystine which cannot be utilized for efficient glutathione production. Whey Cool™ should raise glutathione levels exceptionally well because the cysteine comes naturally bound to glutamine and glycine. It is great to know that this complete protein also contains considerable amounts of the important amino acid glutamine, known for its muscle building, gut healing and immune boosting properties.

**Therapeutic properties of proteins and peptides from colostrum and milk.** Postepy Hig Med Dosw (Online). 2005 Jun 30;59:309-23. ZIMECKI M, ARTYM J.

Colostrum and milk are rich in proteins and peptides which play a crucial role in innate immunity when transferred to the offspring and may accelerate maturation of the immune system in neonates. The immunotropic properties of these proteins prompted investigators research their potential application in prevention and therapy. Lactoferrin (LF) exhibits antibacterial, antifungal, antiviral, antiparasitic, and antitumoral activities. It is protective with regard to intestinal epithelium, promotes bone growth, and accelerates the recovery of immune system function in immunocompromised animals. LF was tried in the treatment of hepatitis C infection and the intestinal form of graft-versus-host disease (GvHD). A proline-rich polypeptide (PRP) demonstrated a variety of immunotropic functions, including the promotion of T-cell maturation and inhibition of autoimmune disorders. PRP, in the form of chewable tablets (Colostrinin) was recently found to improve or stabilize the health status of Alzheimer's disease patients. Casein and casein-derived peptides showed protective activities in enamel demineralization and as caries-preventing agents. The protein hydrolyzates were also protective in diabetic animals, reduced tumor growth, had antihypertensive activity and diminished colicky symptoms in infants. Glycomacropeptide (GMP), a peptide derived from kappa-casein, exhibited various antibacterial and antithrombotic activities. Alpha-lactalbumin (LA) demonstrated antiviral, antitumoral and anti-stress properties. LA-enriched diets were anxiolytic, lowered blood pressure in rats, prevented diarrhea, and led to a better weight gain in malnourished children. HAMLET, a complex of LA and oleic acid, was effective in patients with cutaneous papillomas. Lysozyme found application in infant formulas, the treatment of periodontitis, and the prevention of tooth decay. Milk enriched in lysozyme was used in feeding premature infants suffering from concomitant diseases. Interesting, antibacterial properties were exhibited by lactoperoxidase. Both lysozyme and lactoperoxidase required cooperative action with LF in combating bacteria. In conclusion, preparations derived from milk and colostrum are effective, easily bioaccessible, and safe, finding wide application in prevention and therapy for newborns and adults.

**High mobility group-like protein in bovine milk stimulates the proliferation of osteoblastic MC3T3-E1 cells.**

Biochem Biophys Res Commun. 1999 Jul 22;261(1):113-7. YAMAMURA J, TAKADA Y, GOTO M, KUMEGAWA M, AOE S.

The active component in bovine milk on the proliferation of osteoblastic MC3T3-E1 cells was purified and identified. Growth-promoting activity was measured by [<sup>3</sup>H]thymidine incorporation on the cell. The molecular weight of the purified protein was 10 kDa. The amino-terminal sequence of this 10-kDa protein was identical to bovine high mobility group protein (HMG). This 10-kDa protein is suggested to be a basic protein and to have an HMG box, a consensus sequence motif among the HMG family. From these results, we named this protein HMG-like protein. HMG is a ubiquitous nonhistone component of chromatin and considered to be implicated in DNA replication. We found this protein in milk, and it showed a growth-promoting activity. We propose the possibility that HMG-like protein existed in milk and plays an important role for neonate in bone formation by activating osteoblasts.

**Use of bovine lactoferrin for Helicobacter pylori eradication.** Dig Liver Dis. 2003 Oct;35(10):706-10.

DI MARIO F, ARAGONA G, DAL BO N, CAVESTRO GM, CAVALLARO L, IORI V, COMPARATO G, LEANDRO G, PILOTTO A, FRANZE A.

BACKGROUND: One-week triple therapy is the most frequently recommended treatment for Helicobacter pylori infection. Eradication rate is satisfactory, nevertheless is advisable to look for more effective therapies. AIM: To test the efficacy of a standard triple therapy plus bovine lactoferrin in the eradication of H. pylori infection. PATIENTS AND METHODS: One hundred and fifty consecutive H. pylori positive patients, suffering from dyspeptic symptoms were recruited in a 7-day triple therapy open randomised single centre study with rabeprazole, clarithromycin, tinidazole, bovine lactoferrin (group A) or rabeprazole, clarithromycin, tinidazole (group B), or a 10-day therapy with rabeprazole, clarithromycin, tinidazole (group C). H. pylori status was assessed 8 weeks after the end of the treatment by means of a <sup>13</sup>C-urea breath test or a H. pylori stool antigen-test. RESULTS: Eradication rates (intention to treat/per protocol) were: group A (92.2/95.9%), group B (71.2/72.5%) and group C (70.2/75%). The efficacy of triple therapy added with lactoferrin was significantly higher than other two regimens (p=0.01, intention to treat analysis; p=0.005, per protocol analysis). CONCLUSION: These results suggest that lactoferrin tested in the present study was effective in curing H. pylori and could be a new agent to assist the antimicrobials in the eradication of the bacterium.

**Dairy proteins protect against dimethylhydrazine-induced intestinal cancers in rats.** Nutr. 1995 Apr;125(4):809-16.

MCINTOSH GH, REGISTER GO, LE LEU RK, ROYLE PJ, SMITHERS GW.

This abstract quotes "the whey-fed animals had the highest concentrations of glutathione (P = 0.8). Whey is a source of precursors (cysteine-rich proteins) for glutathione synthesis and may be important in providing protection to the host by stimulating glutathione synthesis."