

HEALTH CARE PROFESSIONAL * TECHNICAL BULLETIN

ULTRA WHEY-PRO™PROTEIN

WITH BLUEBERRY • CRANBERRY • RASPBERRY

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Ultra Whey-Pro™ A Complex Protein Source With Protein Microfractions. The human body needs a constant supply of protein to repair and build cellular tissue. Protein plays an essential role in the production of hormones, blood hemoglobin, anti-bodies, and the creation of new muscle tissue. To build new tissue, you must consume more protein than what is lost through metabolic processes. Protein is composed of elements arranged into amino acids that are divided into two categories: Essential and Non-Essential. Both Essential and Non-Essential amino acids must be present before protein synthesis can occur.

PROTEIN ISOLATE PROCESS

Ultra Whey-Pro Protein (protein isolate) is prepared through a proprietary gentle ultrafiltration technology which chops the naturally occurring long chains of protein into short chains. This process maintains important protein microfractions and provides a protein source with an extraordinarily high biological value. In addition, we add ColostruMunel™ (colostrum powder) which contains Glycoproteins, Growth Factors, Immunoglobulins, Lactoferrin, Lysozyme, and specific components that include, Transfer Factor, Proline Rich Polypeptide (PRP), IGF-1, N-Acetylneuraminic Acid, Nucleotides, Nucleic Acid, and Defensins. This blend is completed with NSN's dark fruit blend which contains blueberry, cranberry, and raspberry.

Ultra Whey-Pro™ Protein can be used by the body as a source of energy.† Generally, when carbohydrates are not readily available, the body can convert protein into glucose, the body's fuel. This conversion of protein to energy begins with the breakdown of branch-chain amino acids (BCAAs), which are easily converted to glucose because of their side chain configuration. Muscle tissue is composed of one-third BCAAs making them very important source of energy. During intense exercise, up to 10% of the energy required comes from the conversion of BCAAs to glucose.† Great taste and dissolvability make Ultra Whey-Pro™ a favorite protein source for body builders, those who require extra protein, and health conscious individuals who are concerned about limiting their carbohydrate consumption.

THE ELEMENTS OF PROTEIN

- Protein compounds are composed of four or five elements: carbon, hydrogen, oxygen, nitrogen, and sometimes sulfur.
- These elements are arranged by the body into amino acids, the building blocks of protein.
- There are 22 amino acids. 8 are essential and 14 are nonessential.

To make up for a deficiency in essential amino acids, the body will break apart incomplete dietary protein and release it back into the blood stream until the missing essential amino acid becomes available. If the essential amino acid is not delivered soon enough, the incomplete protein is transported to the liver where it is separated from its nitrogen base. The amino acids remaining are then converted to glucose (blood sugar) and used as energy or stored as glycogen in the liver and muscle tissue. These leftover amino acids can also be stored as fat. If all essential amino acids are present, the body can manufacture nonessential amino acids.

Nonessential does not mean, however, that these amino acids are not important. As medical science has discovered, the unavailabili-

ty of certain nonessential amino acids can trigger serious disease

processes.

During times of stress such as surgery, illness, training or an extreme emotional burden, the body needs more L-arginine, L-glutamine, and L-histidine.

Consequently, these three amino acids are considered conditionally essential. More and more studies are identifying the benefits and the biological properties of whey protein as a high quality source of these essential, nonessential, and conditionally essential amino acids.

BENEFITS OF ULTRA WHEY PRO

The daily consumption of New Spirit's Ultra Whey Pro™ Protein isolate has an impressive list of benefits:

- It is antibacterial
- •It contains less than 1% of carbs
- It is anti viral
- •It is low in calories
- It helps blood pressure
- It helps athletic performance
- It has been shown to reduce liver damage
- It helps improves immune system function
- It helps improves digestive function
- It helps reduce gastric mucosal injury
- It helps assists in weight maintenance
- It tastes great and dissolves easily
- It helps reduce symptoms of Chronic Fatigue

NSN'S DARK FRUIT BLEND

Blueberries-Recently researchers at Tufts University analyzed 60 fruits and vegetables for their anti-oxidant capacity. Blueberries rate the highest in their capacity to destroy free radicals. Blueberries are packed with antioxidant phyto-nutrients including anthocyandins, ellagic acid, phenolic compounds (phenolic acids, tannins, flavonoids).

<u>Cranberries</u>-The main active ingredient in cranberries is proanthocyanidins which are potent antioxidants that appear to be able to decrease bacteria adherence to the bladder epithelium cells. Their main benefit of this action is that bacteria have less likelihood of grouping together to cause bladder infections, urinary tract infections, and other related conditions. Additional research shows that cranberries are beneficial in the reduction of dental plaque, heart disease, and kidney stones.

Raspberry-Raspberries are rich in vitamin C, folate, and potassium. In addition, raspberries provide high amounts of insoluble fiber, as well as respectable amounts of the soluble fiber pectin. Pectin helps control cholesterol levels and helps prevent bile acid from being transformed into a potentially cancer-causing form. Raspberries are also a good source of ellagic acid and other antioxidants which are not destroyed by cooking.

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A CLOSER LOOK INTO COLOSTRUMUNEL™

ColostruMunel™ is an original, scientifically derived fraction of colostrum that concentrates important immune modulators that have been studied extensively. These components include <u>Transfer Factor</u>, <u>PRP</u>, <u>IGF-1</u>, <u>N-Acetylneuraminic Acid</u>, <u>GMP</u>, <u>Nucleic Acid</u> and <u>Defensins</u>. Studies of the immune components of colostrums have shown that, when certain components are concentrated and separated, they are more directly effective as an immediate immune enhancer. Functions of ColostruMunel™ make it a valuable nutraceutical for anti-aging, immune support, immune modulation, reduction of inflammation, antioxidant protection, and skin health.

Studies have shown ColostruMunel™ to:

- •Promote more active immune response
- •Cause faster phagocytosis
- •Support NK cell activation
- •Protect cells from apoptosis
- •Have antioxidant properties that protect live cells from oxidative damage

In vivo testing suggests that ColostruMunelTM prompts the innate immune system into action and provides immune information for a "smarter" immune response. ColostruMunelTM has also been shown to enhance the secondary response of educating acquired immune antibody response.

Phagocytosis plays an important role as the first line of defense of the innate immune system. Phagocytes chew up foreign invaders and educate the specific immune system. ColostruMunel™ supports phagocytosis by making cells more susceptible to the action of phagocytes, thus allowing for a quicker immune response.

Cytokines are then secreted to form other cells to migrate to the foreign organism. Preliminary data indicates that ColostruMunelTM is able to directly induce a number of cytokines that are known to support Th2 responses which are involved in the humoral immune response.

T-Cell, B-Cell, and NK Cell activation is the next important step in the immune response. T Cells help coordinate the response and kill identified invaders; B Cells seek out targets and send out defensins as well as produce antibodies for future attacks.

ColostruMunel[™] has been shown to activate both B and T lymphocytes, but what is most impressive is ColostruMunel[™] support of NK Cell activation. NK Cells modulate immune cell responses, but they are also powerful killers of infected cells and are a key to keeping invaders at bay until other immune cells can react.

ColostruMunel™ Protein Microfractions

Beta-lactoglobulin Bovine serum albumin

Alpha-lactalbumin Lactoferrin
Immunoglobulins Lactoperoxidase
Glycomacropeptide Lysozyme

Growth Factors (IGF-1, IFG-2, TGF-b)

TYPICAL AMINO ACID PROFILE OF PROTEIN PER 100 GRAMS

Essential Amino Acids		Non-Essential Amino Acids	
Isoleucine	5.10	Alanine	4.30
Leucine	8.78	Arginine	1.86
Lysine	7.01	Aspartic Acid	9.29
Methionine	2.23	Cystine	1.87
Phenylalanine	2.47	Glutamic Acid	14.77
Threonine	5.46	Glycine	1.97
Tryptophan	1.00	Histidine	1.54
Valine	4.44	Proline	5.27
		Serine	4.28
		Tyrosine	2.61
		Proline	4.24
		Serine	4.25
		Tyrosine	3.28

SUGGESTED USE

Consume one or more serving daily to boost protein consumption. Mix 1 scoop Ultra Whey-ProTM (vanilla or chocolate flavor) with 8-10 ounces of cold water, non-fat milk, or other beverage. Stir vigorously. Ultra Whey ProTM can be added to recipes to enhance the protein content.

INGREDIENTS

Ultrafiltered whey protein isolates, de-oiled lecithin, fructooligosaccharide, natural vanilla flavor, l-gluatmine, vitamin B6, ColostruMunel™ (colostrum powder), NSN's Dark Fruit Blend containing cranberry fruit powder (vaccinium macrocarpon), blueberry fruit powder (vaccinium angustifolium), raspberry fruit powder (rubus idaeus).

Whey Pro Chocolate flavor contains: Cocoa powder & Natural Chocolate

SUPPLEMENT FACTS

Serving Size: 28.35	g (1 rounded	scoop)	
Servings per bottle: 2	20 Amt. Per	%DV*	
Item #4013	Serving	70D V	
Calories	100		
Calories from Fat	10		
Total Fat	1g	1.5%	
Saturated Fat	0.5g	2.5%	
Cholesterol	10mg	3%	
Total Carbohydrate	1g	<1%	
Dietary Fiber	0.5g	2%	
Sugars	0.5g		
Sodium	57mg	3%	
Protein	24g	48%	
Vitamin B6	1.0mg	50%	
Calcium	50mg	5%	
*Percent of daily value are based on a 2000 calorie diet			