

**with calorie free sweetener (aspartame free)  
low in fat + carbohydrate**

**high BV Whey Protein Isolate, and  
slow digest MICELLAR CASEIN,<sup>1</sup>  
quick but prolonged release of amino acids to muscles**

#### DIRECTIONS

Add 4 heaped dessertspoons (50g) to 1 pint of water. For best results use a blender, shaker or shake in a screw topped jar. Otherwise mix with a fork. May be used to replace not more than one meal per day<sup>2</sup>; or as an additional protein source between meals, before sleeping and on waking.

#### INGREDIENTS

Undenatured Cross-Flow Microfiltered Whey Protein Isolate (65%), Isolated Undenatured Micellar Casein (33%), sweetener (cyclamate), natural flavour, colour (carmoisine).

#### NUTRITIONAL INFORMATION (dry basis\*)

		Per 100g	Per 50g Serving
ENERGY	Kilojoules	1608KJ	804KJ
	Kilocalories	376KCal	187KCal
PROTEIN		90g	45g
CARBOHYDRATES		2.8g	1.4g
	(of which sugars)	2.8g	1.4g
FAT		2.8g	1.4g
	(of which saturates)	2.8g	1.4g
Fibre		1.9g	1g
Sodium		0.09g	0.05g

\*the above results are determined in the absence of water, which may comprise up to 6% as the powder absorbs moisture from the atmosphere.

Grams of Amino Acids per 100g of protein			
<b>Glycine</b>	<b>2.7</b>	<b>Phenylalanine<sup>1</sup></b>	<b>4.8</b>
<b>Alanine</b>	<b>3.8</b>	<b>Tryptophan<sup>1</sup></b>	<b>1.4</b>
<b>Valine<sup>1,2</sup></b>	<b>6.9</b>	<b>Proline</b>	<b>7.4</b>
<b>Leucine<sup>1,2</sup></b>	<b>6.8</b>	<b>Methionine<sup>1</sup></b>	<b>2.3</b>
<b>Isoleucine<sup>1,2</sup></b>	<b>5.9</b>	<b>Cysteine</b>	<b>1.5</b>
<b>Serine</b>	<b>4.4</b>	<b>Lysine<sup>1</sup></b>	<b>7.3</b>
<b>Threonine<sup>1</sup></b>	<b>3.9</b>	<b>Histidine</b>	<b>2.2</b>
<b>Tyrosine</b>	<b>2.2</b>	<b>Arginine<sup>1</sup></b>	<b>3.4</b>
<b>Aspartic Acid</b>	<b>10.2</b>	<b>Glutamine/ Glutamate</b>	<b>17.1</b>

1 - Essential amino acids; 2 - Branched chain amino acids.  
PLEASE NOTE:- Tryptophan from natural source

#### For lean muscle growth

The protein requirement of athletes is approximately 1.2 -1.8g / kg body weight, compared with 0.8-0.9g/ kg body weight for less active individuals. For heavy athletes, this extra requirement is especially important<sup>3</sup>.

Muscle mass is increased by the rate of anabolism (growth), and decreased the rate of catabolism (breakdown) during exercise. Whey protein is absorbed quickly<sup>4</sup>, having a very high biological value and an anabolic effect that lasts a couple of hours. Micellar casein is absorbed much more slowly, giving a sustained anti-catabolic action. It has therefore been recommended to take Whey Protein Isolate in the morning, and Micellar Casein (but not any denatured casein) last thing at night. So Nutrisport 90+ provides the best of both for muscle growth at any time of day or night.

#### Your guarantee of quality

Nutrisport manufacture all their own supplements in an EEC registered milk processing factory, shown by the oval HEALTHMARK symbol. We process no hormones, steroid precursors, meat products or stimulants on our plant, nor any substance banned under IOC drugs testing rules.  
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<sup>1</sup> Bioré, Y. Slow and fast dietary proteins differentially modulate postprandial protein accretion.

Proceedings Natl Acad. Sci 94 (1007) 14930-35

<sup>2</sup> JW Anderson, et al., "Health Advantages and Disadvantages of Weight-Reducing Diets: A Computer Analysis and Critical Review," J Am Coll Nutr 19.5 (2000) : 578-590.

<sup>3</sup> Lemon PW et al: Protein requirements and muscle mass/strength changes during intensive training in novice bodybuilders. J Appl Physiol 1992;73(2):767-775

<sup>4</sup> Lands, Grey and Smoutas: Effect of supplementation with a cysteine donor on muscular performance. J Appl Physiol 87: 1381-1385, 1999; (refers to whey protein isolate)

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