

Product Description Carbelac® 80 Whey Protein Concentrate (WPC) is a food grade powder containing high quality whey protein. It is manufactured from dairy whey using ultrafiltration and spray drying technology.

Ingredient Listing Whey Protein Concentrate (**Milk**)

Chemical	Specification	Typical	Test Method
Protein (N*6.38) (% dry basis)	79.0 Min	80.0	Kjeldahl
Total Nitrogen (TN) (%)	12.4 Min	12.5	Kjeldahl
Moisture (%)	6.00 Max	5.00	Oven
Fat (%)	9.00 Max	8.00	NIR
Ash (%)	4.00 Max	3.50	Furnace 550°C
Lactose (%)	10.0 Max	3.00	Calculated
pH	6.00 Min	6.30	10% Aq Soln

Microbiological

Standard Plate Count (SPC)	<50,000 / g	<10,000 / g	ISO 4833:2003
Coliforms	<10 / g	<10 / g	ISO 4832:2006
E.coli	<10 / g	<10 / g	ISO 16649-2:2001
Staph. aureus	<10 / g	<10 / g	ISO 6888:2003
Salmonella	Not Detected / 25g	Not Detected / 25g	ISO 6579:2002
Yeast & Moulds	<50 / g	<10 / g	ISO 6611:2004

Physical

Scorched particles	Disc B or better	Disc A	ADPI Bulletin 916
Bulk Density	0.40 ± 0.10 g/cc	0.40 g/cc	IDF134:1996
Appearance		Homogenous, free-flowing powder	Visual
Colour		Creamy white	Visual
Organoleptic		Typical, free from off-flavour	Taste

Mineral Profile

Calcium (mg/100g)	500	Atomic Spectroscopy
Sodium (mg/100g)	150	Atomic Spectroscopy
Potassium (mg/100g)	400	Atomic Spectroscopy
Magnesium (mg/100g)	50	Atomic Spectroscopy
Phosphorous (mg/100g)	350	Atomic Spectroscopy
Chloride (mg/100g)	100	Titration

Typical Nutritional Information

Amino Acid Profile	(g per 100g Powder)	(g per 100g Protein)
Leucine	9.35	11.54
Isoleucine	5.03	6.22
Valine	5.09	6.28
<i>Total Branched Chain Amino Acids</i>	<i>19.475</i>	<i>24.04</i>
Aspartic Acid	9.51	11.73
Glutamic Acid	15.22	18.78
Serine	4.72	5.83
Glycine	1.66	2.05
Histidine	1.61	1.99
Arginine	2.39	2.95
Threonine	6.44	7.95
Alanine	4.26	5.26
Proline	5.04	6.22
Tyrosine	2.70	3.33
Methionine	1.61	1.99
Cystine	2.13	2.63
Phenylalanine	2.85	3.53
Lysine	8.10	10.00
Tryptophan	1.24	1.54

Protein Utilisation*

PER	3.5
BV	104
PDCAAS	0.97

* As per scientific literature

Fatty Acid Profile

Saturates (%)	5.87
Mono-unsaturates (%)	2.13
Polyunsaturates (%)	<0.01
Cholesterol (mg/100g)	160

Carbohydrates

Lactose (%)	3.00
Glucose (%)	<0.10
Sucrose (%)	<0.10

Energy	410 KCal / 1730 KJ
Fibre	Nil

Diet Suitability

This product is suitable for individuals with the following dietary requirements: Kosher, Halal, Vegetarian, Ovo-Lacto Vegetarian, Coeliacs, Diabetics, GMO Free, Nut/Seed free.

Storage

Store under clean, cool, dry conditions not exposed to direct sunlight or strong odours and avoiding direct contact with walls and floors. Recommended shelf life is 36 months

Packaging

Packed in 20kg multiwall papersacks with polythene liners. Each sack will be heat sealed. The product will be palletised and shrink wrapped.

Labelling

The following will be printed in large blue writing on white sacks. "Carbelac®", Manufactured by Carbery Food Ingredients and processor EU number.

Coding

Each sack will be individually coded by an automatic ink jet system to ensure traceability

Allergen

Refer to bold print in Ingredient Listing.