

Specification Sheet 1 of 2 : **PROTEIPAQ 1** Orthomolecular Nutrition and Therapeutic Supplemental

Date : August, 2011

Description

A long-life Ready-to-Use high-energy, complete **protein-based orthomolecular supplement**, which is a composite derived from a blend of enzyme-inactivated soya flour; an Omega 6 vegetable oil; **supplementary amino acids** and sensory additions which provides for a taste profile paralleling that of peanut butter.

The standard product is flavoured with orange oil; however, an unflavoured variant is also available on request.

Packaging

This product is presented as a flowable paste in terms of a Ready-to-Use Food (RUF), and is packed into 74 micron polyethylene/metallocene sachets which incorporate oxygen and light barriers (EEC Directive : Not a hazardous substance – requires no labelling in accordance with any directives or national laws).

The sachet volume is 50 grams, which facilitates accurate dosing over all age groups with reduced wastage. Thus packed, the product requires no refrigeration or any other specialised handling consideration and is ideally suited to any field application; they are also extremely robust and can withstand considerable mishandling without rupture. Shipping packs consist of cardboard cartons measuring ca. 320x165x165 mm containing 100 x 50 g sachets = 5 kgs net.

This product shall shortly also become available in a stabilised composition, which makes it spreadable in much the same way as peanut butter. These packs shall be available in plastic pails in volumes of 1 and 2,5 kgs.

Flavoured variants have a shelf-life of 12 months; unflavoured variants 3 years.

Nutritional Potentials

Proteipaq 1 is formulated to provide orthomolecular nutritional assistance to anyone exposed to protein or essential fatty acid (EFA) deprivation or shortfall; and for anyone whose goal is uninterrupted daily protein and EFA sufficiency, coupled with exceptionally high energy values.

In the medical environment, the product provides the necessary nutritional support to facilitate and enhance a diversity of therapies and procedures.

1. Protein : the protein profile is such that this product delivers **a minimum of 70%** (comparative ; peanut paste 34%) of the eight essential amino acids per 100 grams in accordance with the 1985 FAO/WHO Daily Recommended Guidelines (DRG) in all age groups.
With the exception of folic acid and zinc, Proteipaq 1 is not fortified with any micro-nutrients – in the case of folic acid, this is supplemented, as foliacin is essential to proper protein nutrition; and zinc is supplemented in order to ensure a zinc-to-copper ratio of 1:14 to obviate any possible copper toxicity.
2. Essential Fatty Acids (EFA): the product provides essential linoleic, linolenic and arachidonic EFA nutrition in addition to lecithin, which provides choline and inositol.
3. Sugars: in view of the high Glycemic Index (GI) of sucrose (GI=59), the sugar added to Proteipaq 1 consists of fructose, which has a GI of 20. In addition to the low GI, the high dietary fibre content of the product plays a significant role in the reduced overall GL (Glycemic Load) of all Proteipaq products.



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Technical Information: Proteipaq Supplementals @ www.proteipaq.com

**Specification Sheet 2 of 2 : PROTEIPAQ 1 Orthomolecular Nutritional and
Therapeutic Supplemental**

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Ingredient Profile

Enzyme-inactivated soya flour; sunflower oil; fructose; **L-lysine; L-threonine**; anti-caking agent (E572) and an EU & US FDA approved flavourant.

Nutritional Profile – Typical Values : Test References : A.O.A.C. 18th Edition

(Expressed per 100 grams)

Energy	:	2420 kJ
Complete Protein	:	20,1 g
Carbohydrate	:	24,3 g of which
dietary Fibre	:	6,4 g
Total Fat	:	45,5 g of which
poly-unsaturated	:	29,4 g
mono-unsaturated	:	10,4 g
saturated	:	5,7 g
trans-fatty acid	:	0,0 g
Total Sugar	:	8,3 g
Moisture	:	1,4 g
Sodium	:	18,7 mg

Microbiological Profile

Total Plate Count – Test Ref. SANS 4833:2007	:	20 cfu / 10 g *
Yeasts and Moulds – Test Ref. ISO 7954	:	50 cfu / 10g **
Coliforms - Test Ref. SANS 4832:2007	:	<10 cfu / 10 g
Salmonella – Test Ref. SANS 6579	:	Not detected
Clostridia – Test Ref. ISO 761	:	Not detected
E.coli – Test Ref. ISO 16649-2	:	<10 cfu / 10g
Staphylococcus aureus – Test Ref. SABS 6888-1	:	<10 cfu / 10g

* comparison : BP limit = 10 000 cfu / 1 gram

** comparison : BP limit = 100 cfu / 1 gram

Principal Vitamin and Mineral Presence – Typical Values

(Expressed per 100 grams)

Biotin	:	19 ug	=	63 % of RDA
Folic Acid	:	336 ug	=	84 % of RDA
Inositol (from Lecithin)	:	104 mg	=	100 % of RDA
Cholin (from Lecithin)	:	195 mg	=	41 % of RDA
Magnesium	:	72 mg	=	24 % of RDA
Zinc	:	7,4 mg	=	48 % of RDA



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