

Fresubin® HP energy

High energy, protein rich *tube feed* with MCT for patients with increased energy and protein requirements and/or fluid restriction such as

former Fresubin®
HP 750 MCT

- Long-term hypermetabolic conditions
- Cardiopulmonary insufficiency
- Cystic Fibrosis
- CAPD (continuous peritoneal dialysis)
- Decubitus

Features and Benefits

- High in energy (1,5 kcal/ml)
- Rich in protein (112,5 g/RDD▲)
- Rich in MCT (57% of fat) for easy absorption
- Addition of EPA⁺ and DHA⁺⁺ from fish oil; Recommended ratio of ω -6/ ω -3 fatty acids of 4:1^{1,2,3} for immune function support
- Recommended ratio of Vit. C:E:β-Carotene⁴ and increased selenium for antioxidative defence support
- Increased zinc for wound healing support
- Fibre free
- 500 ml & 1000 ml EasyBag, 500 ml glass bottle



ENTERAL NUTRITION

 Fresenius
Kabi

Caring for Life

Fresubin® HP energy

Nutritional Information

Average content per 100 ml

Caloric value	630 kJ (= 150 kcal)	
Protein (20 Energy%)	7.5 g	
Carbohydrates (45 Energy%)	17 g	
of which sugars	1.0 g	
of which lactose	≤ 0.06 g	
Fat (35 Energy%)	5.8 g	
of which saturated fatty acids	3.7 g	
of which monounsaturated fatty acids	0.5 g	
of which polyunsaturated fatty acids	1.5 g	
of which MCT	3.3 g	
of which EPA + DHA	0.05 g	
of which cholesterol	≤ 1.7 mg	
Water	79 ml	
Osmolarity	300 mosmol/l	
Osmolality	400 mosmol/kg H ₂ O	

Vitamins and other* nutrients:

Vit. A	70 µg	Vit. B ₆	0.16 mg
β-Carotene	130 µg	Vit. B ₁₂	0.27 µg
Vit. D	1.0 µg	Pantothenic acid	0.47 mg
Vit. E	1.33 mg	Biotin	5 µg
Vit. K ₁	6.67 µg	Folic acid	27 µg
Vit. B ₁	0.13 mg	Vit. C	6.7 mg
Vit. B ₂	0.17 mg	Choline*	26.7 mg
Niacin	1.6 mg		

Minerals and trace elements:

Sodium	120 mg	Copper	130 µg
Potassium	234 mg	Manganese	0.27 mg
Chloride	184 mg	Iodide	13.3 µg
Calcium	80 mg	Fluoride	0.13 mg
Magnesium	27 mg	Chromium	6.7 µg
Phosphorus	63 mg	Molybdenum	10 µg
Iron	1.33 mg	Selenium	6.7 µg
Zinc	1.2 mg		

Carbohydrate Composition g/100 ml

Glucose	0.31
Maltose	0.71
Lactose	0.02
Oligosaccharides and polysaccharides	15.98

Fatty Acid Profile g/100 ml

Caprylic acid	1.92
Capric acid	1.33
Lauric acid	0.05
Myristic acid	0.02
Palmitic acid	0.26
Palmitoleic acid	0.02
Stearic acid	0.09
Oleic acid	0.52
Linoleic acid	1.18
α-Linolenic acid	0.24
Eicosapentaenoic acid	0.03
Docosahexaenoic acid	0.02
Other ω-3 fatty acids from fish	0.01
ω-6/ω-3 fatty acids	4:1

*EPA = Eicosapentaenoic acid, **DHA = Docosahexaenoic acid, *Recommended Daily Dosage to meet Population Reference Intake (1500 ml)

Amino Acid Pattern g/100 ml

Indispensable (essential)		Dispensable (non essential)	
Lysine	0.66	Glycine	0.16
Threonine	0.37	Alanine	0.33
Methionine	0.23	Proline	0.80
Phenylalanine	0.39	Serine	0.46
Tryptophan	0.15	Glutamic acid	0.98
Valine	0.55	Aspartic acid and Asparagine	0.66
Leucine	0.87	Total	3.39
Isoleucine	0.43		
Total	3.65		
Conditionally indispensable			
Tyrosine	0.42		
Cysteine	0.08		
Histidine	0.25		
Arginine	0.28		
Glutamine	0.72		
Total	1.75		

Ingredients

Water, maltodextrin, milk protein, medium chain triglycerides (MCT), vegetable oils, minerals, acid regulators (E 332, E 530, E 170), fish oil, vitamins, choline chloride, emulsifier (E 471), trace elements

Prescribing Information

Food for special medical purposes:

Nutritionally complete high energy protein rich tube feed with MCT, fibre free, clinically free from lactose, gluten free.

Intended use:

For the dietary management of patients with high protein and energy needs.

Dosage:

For complete nutrition ≥ 1.5 l/day. Increase slowly when commencing tube feeding.

Important notes:

To be used under medical supervision. Take care to control delivery rate. For total or supplementary nutrition. Water equilibrium should be monitored. Drug interaction may occur with certain medication.

Careful monitoring is required.

Storage:

Store at room temperature.

Usage guide:

Recommended tube size: ≥ FR 12 for gravity feeding, ≥ FR 5 for pump assisted feeding. Do not use if bag is damaged or swollen or content is coagulated. Shake well before use!

Contra Indications:

- Not suitable where enteral feeding is not permitted such as: gut atonia and others
- Not suitable for impaired renal function and reduced protein tolerance
- Not suitable for congenital inability to metabolise nutrients contained in **Fresubin® HP energy**
- Not suitable for infants < 1 year.

References:

1. Simopoulos AP: Am J Clin Nutr 1990; 70 (Suppl.): 560s-569s
2. Gerster H: Internat J Vit Nutr Res 1998; 68: 159-173
3. Dach: Referenzwerte für die Nährstoffzufuhr, 2000
4. Biesalski et al: Clin. Nutrition 1997; 16: 151-155