



# Fresubin® 2 kcal HP

The low volume solution: effectively combines high energy and high protein

2 kcal/mL, high protein tube feed for the dietary management of patients with or at risk of malnutrition, in particular with increased energy and protein needs and/or fluid restrictions and low volume tolerance





Quick to meet nutrition targets in the lowest volume

For periods of high energy and protein needs (>1.2g protein/kg BW)

Highest protein content (10g/100 mL) among standard tube feeds to maintain muscle mass<sup>1-3</sup>

With eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) from fish oil in the recommended daily intake for adults for cardiovascular protection<sup>4-6</sup>

## **Fresubin**

## 2 kcal HP

### Ready to use in 500 mL EasyBag



### **Nutritional Information**

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Energy value	kJ	(20
F-1 /450/ 5	(= kcal)	(20
Fat (45% Energy)	g	2
of which saturated fatty acids	g	3.
of which medium chain triglycerides	g	
of which monounsaturated fatty acids	g	5.7
of which polyunsaturated fatty acids	g	1.0
of which EPA* + DHA**	g	0.0
Carbohydrate (35% Energy)	g	2.
of which sugars of which lactose	g	
	g	≤ 0.2
Fibre	g	
Protein (20% Energy)	g	
<b>Salt</b> (Na x 2.5)	g	0.:
Water	ml	-
Lactose Content	g	≤ 0.2
Gluten Content	ppm	≤
Osmolarity	mosmol/l	39
Osmolality	mosmol/kg H <sub>2</sub> O	56
Minerals and trace elements		
Sodium	mg/mmol	60/2.
Potassium	mg/mmol	170/4.
Chloride	mg/mmol	90/2.
Calcium	mg/mmol	205/5.
Magnesium	mg/mmol	20/0.8
Phosphorus	mg/mmol	120/3.8
Iron	mg	2.6
Zinc	mg	2
Copper	μg	26
Manganese	mg	0.5
lodine	μg	26
Fluoride	mg	0.2
Chromium	μg	13
Molybdenum	μg	2
Selenium	μg	13
Vitamins		
Vitamin A	μg RE°	18
of which β-Carotene	μg RE°	4
Vitamin D <sub>3</sub>	μg	2
Vitamin E	mg α-TE°°	2.6
Vitamin K <sub>1</sub>	μg	13
Thiamine (Vitamin B <sub>1)</sub>	mg	0.2
Riboflavin (Vitamin B <sub>2)</sub>	mg	0.3
Niacin	mg/mg NE°°°	3.2/5
Vitamin B <sub>6</sub>	mg	0.:
Vitamin B <sub>12</sub>	μg	0.
Pantothenic acid	mg	0.9
Biotin	μg	
Folic acid	μg	53
Vitamin C	mg	13

\*eicosapentaenoic acid (EPA), \*\*docosahexaenic acid (DHA) °retinol equivalents (RE), °° alpha-tocopherol equivalents (α-TE), °°° niacin equivalents (NE)

## Prescribing information

Food for special medical purposes: Nutritionally complete high-caloric (2.0 kcal/mL), high protein (20% energy) tube feed. Fresubin 2kcal HP is without fibre, high in mono-unsaturated fatty acids and with MCT.

Low in sodium, low in lactose and gluten. For the dietary management of patients with or at risk of disease related malnutrition, in particular with high protein and energy needs and/or fluid restrictions.

#### Dosage:

To be determined by a health care professional according to patients' needs. Recommendation for complete nutrition ≥ 1000 mL/day (2000 kcal).

To be used under medical supervision. Coagulation in the digestive tract, e.g. due to drug interaction, may occur. Monitor feeding rate. Suitable as sole source of nutrition. Not suitable for infants < 1 year. Use with caution in children < 6 years. Not suitable for patients with galactosaemia. Ensure adequate fluid and electrolyte intake. Not for parenteral (I.V.) use!

Recommended tube size: ≥ CH 5 for pump assisted feeding, ≥ CH 12 for gravity feeding. Store at room temperature. Once opened, use within 24 hours. Shake well before use! Do not use if bag is damaged or swollen or content is coagulated. Do not mix with drugs.

#### Contraindications:

Not suitable whenever enteral nutrition is not permitted such as in acute gastrointestinal bleeding, ileus and shock. Use with caution in severe organ failure with impaired metabolism and severe forms of malassimilation. Not suitable for patients with congenital inability to metabolise nutrients contained in Fresubin 2kcal HP.

#### Ingredients

Water, glucose syrup, <u>milk protein</u>, vegetable oils (rapeseed oil, sunflower oil), medium chain triglycerides (MCT), maltodextrin, potassium citrate, <u>fish oil</u>, emulsifiers (<u>soya lecithin</u>, E 471), acidity regulator (E 507), potassium carbonate, sodium chloride, vit. C, sodium carbonate, magnesium oxide, iron sulphate, zinc sulphate, niacin, manganese chloride, pantothenic acid, copper sulphate, sodium fluoride, vit. B2, vit. B6, vit. B1, vit. A, β-carotene, folic acid, chromium chloride, sodium molybdate, sodium selenite, potassium iodide, vit. K1 hiotin vit D3 vit B12

Allergen Information: This product contains milk, soy and fish oil.

#### References

- 1) Arends J, Bachmann P, Baracos V, Barthelemy N, Bertz H, Bozzetti F et al. ESPEN guidelines on nutrition in cancer patients. Clin Nutr. 2017;36(1):11-48.
- 2) Weimann A, Braga M, Carli F, Higashiguchi T, Hübner M, Klek S et al. ESPEN guideline: Clinical nutrition in surgery. Clin Nutr. 2017;36(3):623-650.
- 3) Deutz NEP, Bauer JM, Barazzoni R, Biolo G, Boirie Y, Bosy-Westphal A, et al. Protein intake and exercise for optimal muscle function with aging: Recommendations from the ESPEN Expert Group. Clin Nutr. 2014;33(6):929-936.
- 4) Kris-Etherton, PM, Grieger JA and Etherton TD. Dietary reference intakes for DHA and EPA. Prostaglandins Leukot Essent Fatty Acids 2009; 81(2-3): 99-104.
- 5) International Society for the Study of Fatty Acids and Lipids (ISSFAL): Recommendations for Dietary Intake of Polyunsaturated Fatty Acids in Healthy Adults, Report June 2004.
- 6) Lee JH et al. Omega-3 fatty acids for cardioprotection. Mayo Clin Proc. 2008;83(3):324.
- 7) Lochs H, Allison SP, Meier R, Pirlich M, Kondrup J, Schneider S, et al. Introductory to the ESPEN Guidelines on Enteral Nutrition: terminology, definitions and general topics. Clin Nutr 2006;25:180-6.

