




	
	Frebini® ENERGY Drink	Frebini® ENERGY FIBRE Drink	Frebini® ORIGINAL FIBRE	Frebini® ORIGINAL	Frebini® ENERGY FIBRE	Frebini® ENERGY
	1,5 kcal/ml	1,5 kcal/ml	1,0 kcal/ml	1,0 kcal/ml	1,5 kcal/ml	1,5 kcal/ml
Indications	<ul style="list-style-type: none"><li>In case or at risk of malnutrition</li><li>Increased energy needs, e.g.<ul style="list-style-type: none"><li>Failure to thrive</li><li>Neurological impairment</li><li>Crohn's disease</li><li>Chronic catabolic diseases</li><li>Trauma, surgery, physical disablement</li></ul></li></ul>	<ul style="list-style-type: none"><li>In case or at risk of malnutrition</li><li>Increased energy needs, e.g.<ul style="list-style-type: none"><li>Failure to thrive</li><li>Neurological impairment</li><li>Crohn's disease</li><li>Chronic catabolic diseases</li><li>Trauma, surgery, physical disablement</li></ul></li></ul>	<ul style="list-style-type: none"><li>In case or at risk of malnutrition</li><li>Failure to thrive</li><li>Neurological impairment</li><li>Trauma / Surgery</li><li>Crohn's disease</li><li>Chronic catabolic diseases</li></ul>	<ul style="list-style-type: none"><li>In case or at risk of malnutrition</li><li>Failure to thrive</li><li>Neurological impairment</li><li>Trauma / Surgery</li><li>Crohn's disease</li><li>Chronic catabolic diseases</li></ul>	<ul style="list-style-type: none"><li>In case or at risk of malnutrition</li><li>With increased energy needs and/or fluid restriction, e.g.<ul style="list-style-type: none"><li>Failure to thrive</li><li>Neurological impairment</li><li>Physical disablement</li><li>Trauma / Surgery</li><li>Crohn's disease</li><li>Chronic catabolic diseases</li></ul></li></ul>	<ul style="list-style-type: none"><li>In case or at risk of malnutrition</li><li>With increased energy needs and/or fluid restriction, e.g.<ul style="list-style-type: none"><li>Failure to thrive</li><li>Neurological impairment</li><li>Physical disablement</li><li>Trauma / Surgery</li><li>Crohn's disease</li><li>Chronic catabolic diseases</li></ul></li></ul>
Content per Bottle						
Flavours	<ul style="list-style-type: none"><li>Banana</li><li>Strawberry</li></ul>	<ul style="list-style-type: none"><li>Chocolate</li><li>Vanilla</li></ul>				

Detailed product information can be found on [fresubin.com/frebini-home](https://fresubin.com/frebini-home)



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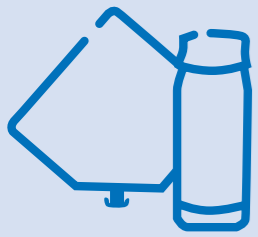
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# Frebini®

## Enteral Nutrition in Paediatrics



For Healthcare Professionals only.



# Frebini - our **dedicated** enteral nutrition **for children**

Malnutrition in children has far-reaching consequences and needs to be avoided or treated.

**Indications for additional nutrition support:**

- Failure to thrive
- Eating disorders
- Insufficient food intake
- Loss of appetite

**Enhanced energy and nutrient needs due to:**

- Cystic fibrosis
- Crohn's disease
- Chronic catabolic disease, e.g. cancer, HIV/AIDS
- Trauma
- Post-surgery
- Neurological impairment
- Physical disablement
- Congenital heart disease

**The Frebini range - our solution for children from 1 to 12 years**

- **Balanced protein composition** with high quality complete milk protein (80% casein, 20% whey)
- Complete in **all essential nutrients** according to legal requirements
- Balanced fat composition with rapeseed oil, **MCT for easy absorption and fish oil\***
- With fibre to maintain gut physiology<sup>1</sup> or fibre-free for children who cannot tolerate fibre



\*Frebini tube feeds contain fish oil



## Frebini Tube Feeds

- **Range** of normo- and high caloric tube feeds **with and without fibre**
- For effective nutrition according to the specific needs of children
- In our **eco-friendly** 500 ml EasyBag

Caloric density	Without fibre	With fibre
1.0 kcal/ml	<b>Frebini ORIGINAL</b>	<b>Frebini ORIGINAL FIBRE</b>
1.5 kcal/ml	<b>Frebini ENERGY</b>	<b>Frebini ENERGY FIBRE</b>



## Frebini Sip Feeds

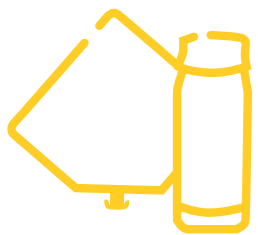


- 4 delicious flavours: Strawberry, Banana, Vanilla and Chocolate
- Frebini Energy Drink: reworked recipe with **improved taste**, confirmed by independent market research institute tested by children
- In **child-friendly** 200 ml EasyBottle, very **well accepted by children**

Caloric density	Without fibre	With fibre
1.5 kcal/ml	<b>Frebini ENERGY Drink Strawberry, Banana</b>	<b>Frebini ENERGY FIBRE Drink Vanilla, Chocolate</b>



Frebini products are food for special medical purposes, that have to be used under medical supervision.

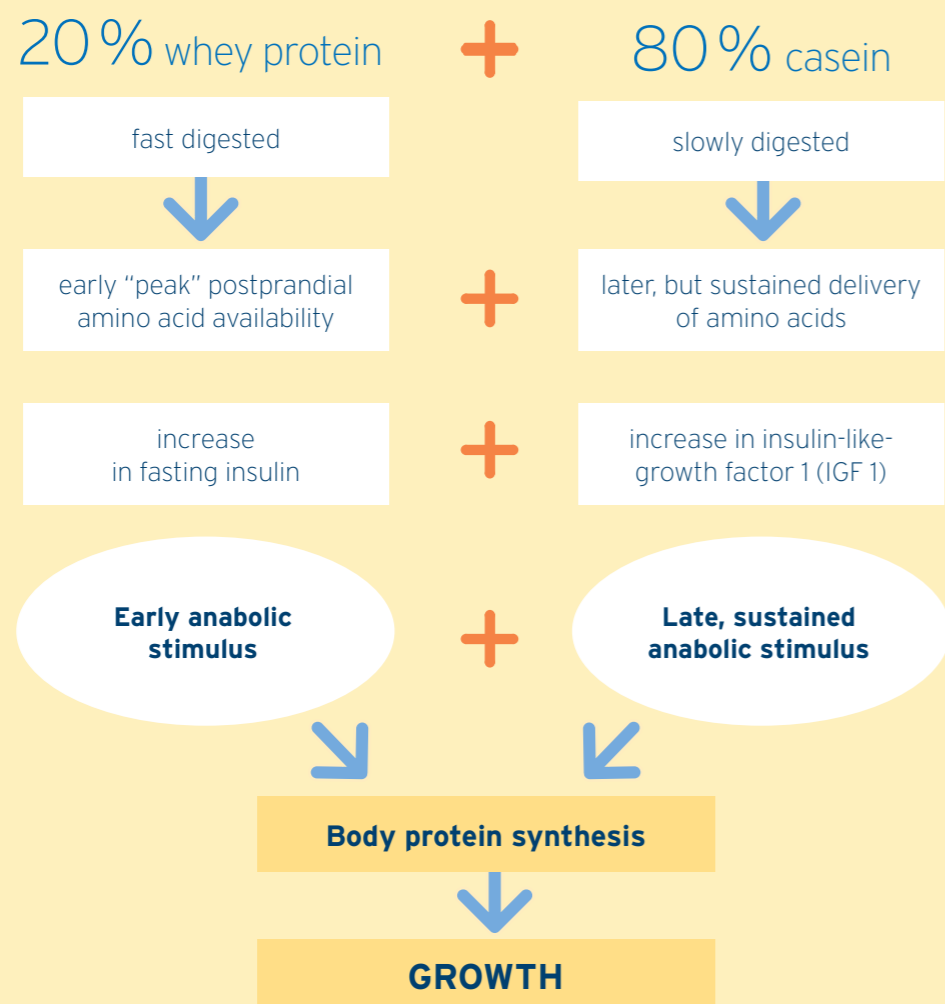


# Protein – vital for **growth and development**

The ESPGHAN Committee on Nutrition stated<sup>2</sup>: “Paediatric patients represent a particularly vulnerable population that has specific nutritional requirements...”



## The special nutritional quality of complete milk protein



The natural composition of milk protein is kept in **Frebini tube and sip feeds**



so that **children can benefit optimally** from both protein fractions – whey and casein.



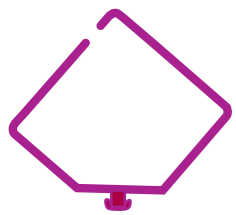
## Higher protein needs of paediatric patients



**Frebini tube and sip feeds** contain protein to meet the increased protein requirements of chronically or acutely ill children. For **catch up growth and/or disease specific higher demands** such as:

- For the critically ill child<sup>6,7</sup> and the injured child<sup>8,9</sup> an increased protein uptake is recommended: 0–2 years, 2–3 g/kg BW<sup>0</sup>/day; 2–13 years, 1.5–2 g/kg/day.
- Children with acute kidney injury on dialysis and with chronic kidney disease on dialysis have an increased SDI<sup>00</sup> 0.9–1.5 g/kg BW/day.<sup>10</sup>
- Protein requirements of paediatric patients with cancer such as multiple myeloma or leucemia undergoing hematopoietic stem cell transplantation are higher: 2–3 g/kg BW/day are recommended.<sup>11</sup>
- For children with cystic fibrosis protein needs are probably higher compared to the healthy population i.e., 20% or more of macronutrient intake.<sup>12</sup>

<sup>0</sup> BW – Body weight, <sup>00</sup> SDI – Suggested dietary intake



# Frebini tube feeds – **the pioneer of LCPUFA<sup>▲</sup>** from fish oil in paediatric enteral nutrition



first on the market with fish oil in paediatric tube feeds<sup>#</sup> in 2001



highest in EPA\* and DHA\*\* n-3 LCPUFA from fish oil in standard tube feeds for children  $\geq 1$  year<sup>#</sup>



balanced composition of DHA and EPA

per 1000 ml	kcal	DHA	EPA
Frebini ORIGINAL/ORIGINAL FIBRE	<b>1.000</b>	<b>300 mg</b>	<b>600 mg</b>
Frebini ENERGY/ENERGY FIBRE	<b>1.500</b>	<b>400 mg</b>	<b>800 mg</b>



balanced fat composition with rapeseed oil, fish oil<sup>13,14</sup> and medium chain triglycerides<sup>15</sup>

MCT for a more rapid absorption by the intestinal mucosa and a faster oxidation of medium chain fatty acids compared to long chain fatty acids.

DHA



EPA

essential for the retina and brain development – which continues during childhood<sup>16-18</sup>

essential for cardiovascular and immunological health<sup>19,20</sup> and may be particularly beneficial for chronically or acutely ill patients with inflammatory conditions<sup>121-23</sup>

In Europe, recommendations for LCPUFA in **healthy children** were defined by different associations.<sup>20, 24-26</sup>

**Many chronic and acute diseases involve excessive inflammation and/or immunosuppression.<sup>27</sup> Therefore, the requirements of LCPUFA in sick children may be significantly increased.**

<sup>▲</sup> long-chain polyunsaturated fatty acids, \* EPA – eicosapentaenoic acid, \*\* DHA – docosahexaenoic acid, # for children  $\geq 1$  year



## Saving plastics in Enteral Nutrition: **Our responsibility**

Saving plastic is the most important step to prevent plastic waste<sup>28</sup>

How big is a little less?



### Frebini 200 ml EasyBottle

since 2011, in addition to removing the straw<sup>29</sup>

- 30%  
plastic  
reduction



EasyBottle

### Frebini EasyBag

is the lightest tube feed container on the market\*

- 60%  
plastic in  
weight



- 85%  
plastic in  
waste  
volume<sup>30</sup>

### Reducing plastic for a better planet

Because every little change we make matters for the environment – for us, for our children and for our future generations!

**Our goal as Fresenius: to become climate neutral in our own operations by 2040.**

\* Compared to the median weight of representative 500 ml HDPE tube feed bottles in the market.