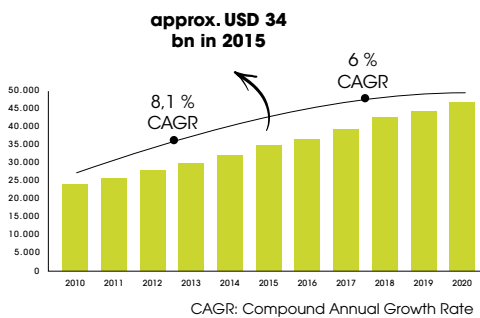


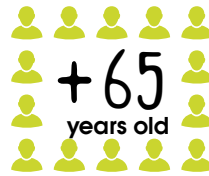


In the midst of disease, specific nutrition needs are a vital role in disease management and recovery. Clinical nutrition products offer effective help in preserving the quality of life and support of vital functions in the body.

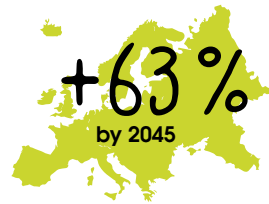
A HIGH POTENTIAL MARKET



Global market for **clinical nutrition**
(3A Business consulting, Kalorama Information)



In 2012, the size of the global population aged **over 65 reached 577 million**, up by 12% since 2007.
(Euromonitor)



In Europe, up to **20% of seniors** are affected by sarcopenia.
(According to the International Osteoporosis Foundation)



Malnutrition is highly prevalent in hospital settings **35 - 65%**
(European Society for Clinical and Metabolism)

A REAL THERAPEUTIC TOOL FOR MEDICINE

- **Malnutrition can be reversed** if management is early and adapted to patient's needs.
- **Overnight fasting period** combined with **sleeping** are aggravating factors of **decreased muscle mass** (Glover et al. 2008).

NUTRITIONAL NEEDS

- Throughout nutritional management, HAS (*Haute Autorité de Santé*) recommends high calorie (≥ 1.5 kcal/ml or g) and/or high protein products (protein ≥ 7.0 g/100 ml or 100 g) **to increase dietary intake by 400 kcal/day and/or 30 g protein/day** (for malnourished elderly)
- For **sarcopenia**, protein needs are even higher: **1.2 - 1.5 G/KG A DAY.**

PROTEIN BENEFITS

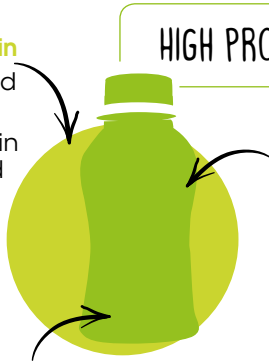
- Consuming protein stimulates protein synthesis (Houston et al. 2008)
- For a **malnourished** person, (C. Bouteloup CF France) protein intake is essential for good **nitrogen balance**



INGREDIA'S PROTEINS

PRODIET® Micellar casein

- For a slow amino acid released overnight.
- For a very high protein beverage with a fluid texture (up to 14 % of protein)



HIGH PROTEIN BEVERAGE

PRODIET® Hydrolysate

To trigger muscle synthesis

PRODIET® Total milk protein

For a product without lactose and low sugar

POWDER SHAKE SOLUTIONS

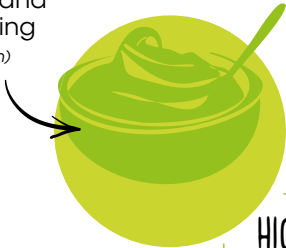


PRODIET® Native whey

Instant protein for a beverage with a pleasant taste

PRODIET® Micellar casein

For a smooth and creamy pudding (up to 12 % of protein)



PRODIET® Micellar casein

Instant protein for good muscle recovery

HIGH PROTEIN PUDDING

WHY INGREDIA?



Expert in milk proteins since 1965
First supplier of micellar casein in the world



Milk proteins specifically developed for the nutrition market



Teams dedicated to innovation and technical customer support



High quality nutritional proteins for a diet compliance



Ingredia SA
51 avenue Lobbedez - CS 60946 - 62033 Arras - FRANCE
Tel: +33 (0)3 21 23 80 00
Mail: ingredia-functional@ingredia.com
Web: www.ingredia-functional.com

