



SEA SOLUTIONS

BIEN ÊTRE

WELL-BEING

NUTRIPEPTIN™

Glycemic Index reducing
Marine Peptide

Co-developed with  **nutrimarine**
life science



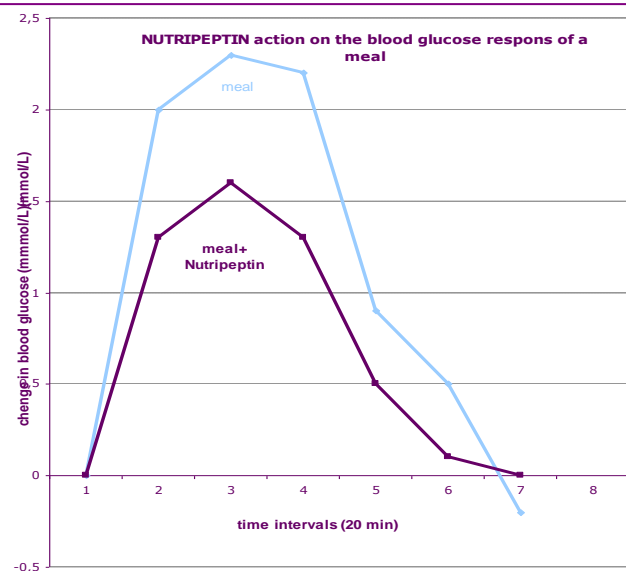
NUTRIPEPTIN™ is a marine protein hydrolysate extracted by enzymatic hydrolysis of fresh lean fish by-products. The nutritional properties of fish protein have been widely researched. Numerous studies have shown its superiority over most other proteins.

As a glycemic index reducing peptide, **NUTRIPEPTIN™** represents a natural mean to fight against the increasing number of overweight people and health disorders that are linked to it.

• NUTRIPEPTIN™ GI-REDUCING PROVEN PROPERTIES

Clinical studies have shown that **NUTRIPEPTIN** has a positive functional effect on post-prandial blood glucose levels.




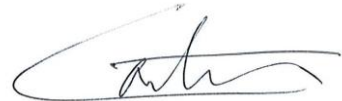
A supplementation of 1 to 2% of **NUTRIPEPTIN™** gives significant GI-lowering functionality (**GI reduction of 30 to 50%**) to ordinary foodstuffs like ice cream, chocolate, white bread, fruit juices, hamburgers, and many other high GI products.



• RECOMMENDED FOR WEIGHT MANAGEMENT AND ENERGY RESTITUTION

Health authorities in most Western countries are seeking for ways to reduce the intake of foods with a high glycemic index, a proven major cause of obesity. The GI-lowering effect of **NUTRIPEPTIN™** makes it an ideal natural mean to help prevent disorders linked to unhealthy life styles that may lead to diabetes and cardiovascular problems.

Its action is also interesting for the fast restitution of the energy towards the muscular cells.

	Xavier Klamka, Quality Manager 	Luce Sergent, Sustainable Development Manager 	Philippe Lambert, Food B.U. Manager 
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- TECHNICAL INFORMATION -

- SPECIFICATIONS** (*guaranteed for each batch*)

Appearance	Specification	Test method
Proteins	fine creamy powder	Internal
Moisture	> 80% <i>on crude product</i>	NF V 04-407 / dir.93/28/CEE
Ashes	< 7% <i>on crude product</i>	NF V 04-401 / dir.71/393/CEE
	< 15% <i>on crude product</i>	NF V 04-404 / dir.71/250/CEE

- Standard amino acid distribution (mg/g)**

Regularly checked according to a periodic control plan

Aspartic acid	96.2	Glutamic acid	157.8
Hydroxyproline	4.8	Serine	42.4
Glycine	48.3	Histidine	24.8
Taurine	10.1	Arginine	56.9
Threonine	37.0	Alanine	63.2
Proline	30.9	Tyrosine	25.4
Valine	40.5	Methionine	27.2
Isoleucine	36.4	Leucine	76.2
Phenylalanine	27.1	Lysine	92.5
Tryptophane	5.5		
Total amino acids	888		
Essential amino acids (EAA)	367		
Non-essential amino acids (NEAA)	521		
EAA/NEAA	0.7		

- SOLUBILITY** soluble in water

- ENERGY VALUE** 320 kcal/100g

- STORAGE**




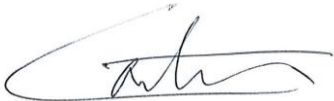
Packaging 20kg bag in box

Shelf life 24 months

Store in a dry area and keep away from light.

Make sure the bag is closed air-tightly once it has been opened.

Don't keep the solubilized product over 65°C or under 4°C more than 24 hours without any stabilizing agent.

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- REGULATION DATA - *the data below have value of certificate*

• **COMPOSITION**

Compound	Source	CAS #	EC #	Added quantity (% on dry matter)
Protein hydrolyzates, fish*	FAO 27 fishing area	91079-91-3	293-481-3	/
Flavour**	Identical to natural and natural	/	/	0.15

*Main fish species: Cod (*Gadus morhua*), Saithe (*Pollachius virens*), Haddock (*Melanogrammus aeglefinus*) and Plaice (*Pleuronectes platessa*)

**Complies with Regulation (EC) No 1334/2008

Flavouring components: flavouring substances, natural flavouring substances

Carrier: maltodextrin

Additives: anti-caking agent E504 (3.5%)

• **LEGAL STATUS**

Food grade product intended to be used in food products and food supplements.

Produced in accordance with Regulation (EC) No 852/2004 and No 853/2004 on the hygiene of foodstuffs, with sanitary approval number FR 62 667 125 CEE.

• **BSE/TSE**

Is based on fish raw material only and cannot be affected by BSE/TSE.

Is not manufactured with any BSE-related risk material from bovine, ovine or caprine species, as defined in decision 2000/418/EEC and regulation 999/2001 and its amendments.

• **GMO According to European Regulations n°1829/2003 and 1830/2003**

Is free from ingredients, additives, processing aids made of or derived from GMO.

• **RESTRICTED SUBSTANCES**

Does not contain any of the CMR substances as defined in Regulation (EC) No 1907/2006 and Regulation (EC) No 1223/2009 (article 15).

Does not contain any other SVHC (PBTs and vPvBs) in accordance with Regulation (EC) No 1907/2006.

Does not fall into the scope of Regulation (EC) No 1272/2008.

• **PESTICIDES**




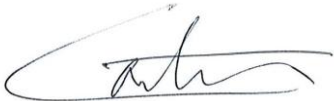
Does not contain pesticides in accordance with Regulation (EC) No 396/2005.

MRIs (maximum residue levels of pesticides) are not applicable to fish products.

• **HAZARDOUS SUBSTANCES Regularly checked according to a periodic control plan**

Complies with Regulation (EC) No 1881/2006 and its amendments

	Specification	Test method
Lead	Max. 3 ppm	mineralization + ICP-MS
Cadmium	Max. 1 ppm	mineralization + ICP-MS
Mercury	Max. 0.1ppm	mineralization + ICP-MS

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	Specification	Test method
Dioxins	Max. 3.5 pg/g (on fresh fish)	High resolution GC/MS
Sum of dioxins and dioxin-like PCBs	Max. 6.5 pg/g (on fresh fish)	High resolution GC/MS Ma
Sum of PCB28, PCB52, PCB101, PCB138, PCB153 and PCB180	Max. 75 ng/g	
Inorganic arsenic	Max. 1ppm	mineralization + ICP-MS
Melamine	Max. 2.5 ppm	

• **MICROBIOLOGICAL DATA** *Guaranteed for each batch*

	Specification	Test method
Total plate count	Max. 10,000 CFU/g	Petrifilm 3 M
Enterobacteriaceae	Max. 10 CFU/g	AFNOR V08-054
Staphylococcus aureus	Absent / 1g	European Pharmacopoeia
E.coli	Absent / 1g	European Pharmacopoeia
Yeasts and moulds	Max. 100 CFU/g	AFNOR XP V08-059
Salmonella	Absent / 25g	Mini VIDAS easy SLM bio

• **IRRADIATION** *complies with Regulations (EC) n° 1999/2 and 1999/3*

Is not irradiated.

Is free from ingredients, additives, processing aids made with the help of irradiation system or exposed to atomic radiation.

• **SOLVENT** *complies with consolidated version of European Directive 2009/32*

Is free from processing made with the help of solvent apart from water.

Is free from VOCs (volatile organic compounds) in accordance with Regulation (EC) No 1999/13 on the limitation of emissions of volatile organic compounds due to the use of organic solvents.

• **ALLERGENS** *Complies with Regulations (EC) n° 1169/2011, Annex II*

Main allergens	Presence in the product	Cross-contamination
<i>Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre in terms of the total SO2</i>	NO	NO
<i>Peanut and products thereof</i>	NO	NO
<i>Nuts, namely: almonds, hazelnuts, walnuts, cashews, pecan nuts, Brazil nuts, pistachio nut, macadamia or Queensland nuts, and products thereof</i>	NO	NO
<i>Eggs and products thereof</i>	NO	NO
<i>Fish and products thereof</i>	FISH 100%	YES
<i>Molluscs and products thereof</i>	NO	YES
<i>Crustaceans and products thereof</i>	NO	YES
<i>Soybeans and products thereof</i>	NO	NO
<i>Cereals containing gluten, namely: wheat, rye, barley, oats, spelt, kamut or their hybridised strains, and products thereof</i>	NO	NO
<i>Milk and products thereof (including lactose)</i>	NO	NO
<i>Sesame seed and derived products</i>	NO	NO
<i>Lupin and products thereof</i>	NO	NO
<i>Celery and products thereof</i>	NO	NO
<i>Mustard and products thereof</i>	NO	NO