



## **Pre-Press kit**

### **Symposium preview**

**This coming 6 and 7 October, Granville will host the 3<sup>rd</sup> Health Sea International Symposium.**

Once strictly known for their gastronomic qualities, marine resources have been recently spurring growing interest amongst researchers, doctors and manufacturers who have recognised their tremendous reservoir of innovative potential in terms of nutrition, cosmetics or “health products”.

The Symposium's partnership with the vast European SEAFOODplus project attests to the numerous development possibilities of marine resources, regardless of their animal or vegetal origin.

Lower-Normandy is one of the highly active French regions in research, production and development of ocean-based products. Hence, the Sea International Symposium couldn't have chosen a better homeport than Granville!

The Nordic countries, trailblazers in applied research for the development of marine resources, will be the special guests at this year's event. Representatives from Denmark, Norway and Iceland will present their research and swap their experiences with their European, Nordic and American counterparts.

Organised within the framework of the 3<sup>rd</sup> Health Sea International Symposium, the conferences and the business convention will enable researchers, practitioners and manufacturers to review the current state of scientific advancement and application in this field.

Together they will answer questions raised by key issues in the sector:

- Along with what quality criteria are raw materials to be selected?
- What image do European consumers have of ocean-based products?
- What developments have undergone fishing by-products?
- What impact do the processes and preservation have on the nutritional qualities of ocean-based products?

**Organised by Manche Expansion, in partnership with the Centre CCI, Sud Manche, Cébanor and University of Caen Lower-Normandy, the Health Sea International**

**Symposium 2005 is the event of the year devoted to the latest scientific and industrial developments in ocean-based health products.**

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# 1. Guests of Honour: The Nordic countries

From production to the end-product, Denmark, Norway and Iceland have a proven traditional *savoir-faire* and a wealth of experience in the enhancement of marine resources. Therefore, it is only natural that these countries have been chosen to be the guests of honour for the 3<sup>rd</sup> Health Sea International Symposium.

## Norway

After oil, ocean-based products are Norway's second largest source of income. Thanks to its 21,000 km of coastline and protected fjords, Norway has developed a powerful aquaculture industry mainly built upon salmon and trout farming. Each year, Norway sells almost 500,000 tonnes of these fish abroad, making it the n°1 exporter worldwide.

Moreover, this country has been able to combine quality with sustainable development—i.e. rigorous management of natural resources, excellent waste management systems and sanitary conditions as closely in line with natural ones as possible.

As early as the 90s, Norway spearheaded a programme that drastically reduced the antibiotics used in fish farming slashing them by 96%, whilst fish production simultaneously rocketed by 359%.

Nowadays, Norway has been diversifying its fish farming industries and is bringing other species of sea life to market—e.g. cod, halibut, char fish, prawns, mussels and oysters.

Norway has also undertaken a vast national programme of development of marine by-products, which churns out 600,000 tonnes of them per year.

Currently, merely 10% is used in animal feed, or as ingredients in the agro business, but the Norwegian authorities believe that this figure could easily be quintupled.

Since 1992, RUBIN, a national research organisation financed by various ministries, has been working towards this goal. The main focus of this organisation's work concerns protein hydrolysates, peptides, fish oils, phospholipids and nucleolipids.

**Presentation by Sigrun Bekkevold / RUBIN, 6 October at 9:15 a.m. – by Einar Mustaparta / Advanced Biopolymers, 6 October at 14:30 p.m. – by Amund / NIFES, 6 October 14:45 p.m.**

## Denmark

Essentially based on herring, the Danish fish processing industry has been expanding since the 50s, and it has progressively diversified into other species such as the sand eel, the sprat, the mackerel and the Norway pout.

These days, in Denmark, 90% of these industrially processed fish are enhanced for uses other than direct human consumption: animal feed, oil used in nutritional supplements, medications and paint. In 2000, more than 100 tonnes of fish oil were produced in Danish factories.

The DIFRES (Danish Institute for Fisheries Research) is coordinating the European SEAFOODplus programme. A public organisation reporting the Danish Ministry of Food, Agriculture and Fisheries, the DIFRES supports research in order to develop the enhancement of fishing and aquaculture resources with a view to preserve resources, quality and a high level of added value.

**Presentation by Prof. Torger Borrensen / DIFRES, 6 October at 9:45 a.m.**

## Iceland

Representing 60% of Iceland's exports in 2004, marine resources are the economic backbone of the country.

With two million tonnes of fish netted per year, Iceland holds 12<sup>th</sup> place amongst the world's top fishing countries.

Atlantic cod is Iceland's strongest fish export: in 2004 it represented 40% of all Icelandic fish sales abroad.

Even though national law clearly stipulates that exploitable fish stocks are the common property of the country, Iceland has implemented a rigorous resource management policy since 1976.

In Iceland, the importance of fishing still predominates over aquaculture, and this has prompted Icelandic authorities to undertake a vast programme to develop cod farming.

The IFL (Icelandic Fisheries Laboratories) conducts research into the development of more commonplace fish varieties such as the blue whiting, or enrichment fish filets with fish proteins or even bioactive ocean-based ingredients.

The enhancement of fish by-products has also become a strategic priority, and Iceland is developing the necessary technologies for the creation of a new range of products targeting the food, pharmaceutical and cosmetic industries—e.g. fish hydrolysate proteins and chitosan (used in the treatment of waste water, the reduction of inflammation and the acceleration of the cicatrisation of wounds!).

**Presentation by Gudjon Thorkelsson / Icelandic Fisheries Laboratories, 6 October 12:00 p.m. – by Jon Bragi Bjarnason / University Science Institute 6 October at 3:00 p.m.**

## 2. The two Symposium Roundtables

Each day the Symposium will close with a large roundtable discussion led by international experts.

### **The 6 October Roundtable: “The enhancement of marine resources and their by-products”**

**will shed light on issues of quality, safety and toxicology.**

**It will bring together highly diverse and complementary speakers :**

- Jean François Collobert from the DDSV 14 (Direction Départementale des Services Vétérinaires du Calvados [i.e. the Department directorate of veterinary services in Calvados]) will talk about the regulatory aspects and their possible future developments in France.
- François Narbonne, from the University of Bordeaux’s food toxicology laboratory, will speak on the toxicological risks linked to the enhancement ocean-based by-products.
- Jean Paul Vernoux, from Caen University in Lower-Normandy, specialist in toxic microalga, will talk about the risks for aquaculture linked to the presences of these strains of alga and the future prospects that research will bring.
- Bill Doré, from the Galway Marine Institute (Ireland) will present the risks of contamination of bivalves by pathogenic viruses and the research led on this front within the framework of the SEAFOODplus programme to avoid human contamination.
- Mme Anne Jansen, of the Section régionale Conchylicole (i.e. the regional Oyster-farm section) in northern Normandy, will present the quality procedures that have been carried out.
- Richard Brouzes, from Copéport Marée, will talk about the regulatory constraints and the way fishermen ensure the sanitary quality of their catch.

### **The 7 October Roundtable: “From the fisherman’s trawl to the consumer’s plate”**

**whose objective is to clarify the nutritional value and the functional effects of ocean-based products and to determine the influence of the process and the preservation on its organoleptic qualities.**

**This roundtable will pool the expertise of:**

- Laetizia Kolypczuk, from the Pôle Filière Halieutique de Boulogne sur Mer (the Boulogne sur Mer Halieutic Centre, a.k.a the Aquatic Products Competitive Cluster), whose research concentrates on giving manufacturers and consumers a better understanding of the nutritional make-up of products and to optimise the preservation and processing procedures to maintain these qualities.
- Marine Ozeredczuk, from the AFFSA CIQUAL (Agence Française de Sécurité des Aliments or the French Agency for Food Security) will talk about the methods used in the development of composition tables of ocean-based products, necessary for regulatory authorities and manufacturers alike, as well as a study carried out on the effects of processing on macro-nutrients, the minerals and vitamins of fish.
- Bénédicte Borgiaès, from the Pasteur Institute in Lille, will deal with the question of the influence of the preservation process on the nutritional quality of components of ocean-based products, in particular the Omega-3s.
- Finally, Sophie Evon Narac, from Nutrimer company, Jean François Feillet, from Meralliance and Nick Hedges, from Unilever R&D (UK) will talk about their experience as industrial food processors, their way of meeting consumer expectations, both in terms of the nutritional value of the products and their “sustainable” quality.

### 3.

## The attitude of European consumers towards ocean-based products

**Although European consumers are now aware of the “health” benefits of ocean-based products, oddly they still consume little of them.**

#### **Why?**

It seems that particularly amongst youth, the health benefit is not a factor sufficiently assimilated to change eating habits.

Research has been carried out to identify the conscious and unconscious obstacles hindering the consumption of ocean-based products, especially fish.

7 October, Domingo Calvo Dopico, from the University of Corogne (Spain) will present the results of a study that he conducted on this question and will suggest several different paths that health, educational authorities as well as manufacturers in various European countries might take.

To reverse this trend, it seems necessary that a greater educational and informational programme be set up to target specific groups (kids, adults and the elderly) and in parallel this, well suited professional marketing and communication tools must accompany this drive.

## 4. Normandy: A region developing marine resources

The Lower-Normandy region is inspiring a new dynamic for its territory's natural marine resource exploitation.

Thanks to its 470 km of coastline, and the measures it took to preserve the water quality of its littoral, Lower-Normandy has seen the expansion of a highly dynamic aquaculture initially built upon mussel and oyster farming, alongside its more traditional fishing and food processing industries. Consequently, the Manche has become the n°1 French producer of these shellfish.

Leaders in ocean-based products, the Region and the Departments of the Manche and Calvados have conducted an active research support policy for the development of local resources (seaweed, shellfish, fish, etc) since the 80s.

These efforts have culminated in the constitution of a strong network of scientific partnerships that supports the development and health applications of ocean-based products in the regions. Some of the leading lights from this area include:

- **LLBM** – Laboratoire de Biologie et de Biotechnologies Marines from the University of Caen in Lower-Normandy.
- **INTECHMER** – Institut National des Sciences et TECHniques de la MER – dedicated to Training, Research and technology Transfers, it is a start-up incubator located in Cherbourg, France.
- **SMEL** – Syndicat Mixte de l'Equipe ment du Littoral, is an international specialist in the farming of marine invertebrates using a land-based re-circulated water system, located in the Manche department.

With the creation of **LOGIMER**, and home to Europe's only salt wastewater post-process treatment plant, **Granville** too has been most active via its enterprise zone dedicated to the enhancement of ocean-based products.

Besides innovative food manufacturers, such as **Nutrimer** (which produces a highly nutritional range of products for the family), **Cuisiner** (French pioneer and leader in ocean sticks), or **Satmar** (the largest oyster hatchery in Europe, which produces a sterile and thus ready-to-eat more resistant breed of triploid that is consumable year-round) numerous ocean-based health product companies have been developing in Lower-Normandy. Some of them include:

- **Dielen laboratories** (fish-based hydrolyses nutritional supplements).
- **Activ'Alg**, (innovative microalgae-based ingredients for cosmetics), **Algothem** (algae-based thalassotherapy products).
- **Saumon de France** (the only high nutritional quality salmon farm in France)

... not to mention the companies that will be created in the years to come!

## 5.

# 5 October, as a preamble to the Symposium, the 2<sup>nd</sup> Open Conference SEAFOODplus

**SEAFOODplus is the largest integrated research project financed by the European Union in the field of ocean-based products.**

### **Its goal**

To meet consumer needs and expectations in terms of healthy products.

### **The main focus of its research**

Improved development of by-products, upgraded ocean-based product safety, responsible and sustainable aquaculture, and traceability in the processing chain.

### **A few stats**

The programme began 1 January **2004**; it ends 30 June **2008**.

It has a **26 million euro** budget, of which the European Union has a **14.4 million euro** stake. More than **200** researchers from **16** European countries are going to work together on 20 major research themes defined by the programme.

Nearly **70** partners (institutes and manufacturers) are collaborating on this project in order to enhance the benefits of ocean-based products for the health and well being of mankind.

To present the progress of its work, SEAFOODplus has chosen Granville. Its 2<sup>nd</sup> Open Conference will expand upon the following results:

- the extraction of functional components of marine resources;
- consumer behaviour;
- the latest data concerning aquaculture;
- the implementation of manufacturer traceability.