

Researchers produce Omega 3 using marine plant micro-organisms

May 6 2013



Neiker-Tecnalia, the Basque Institute for Agricultural Research and Development, and the company FARMARABA S.L. are working together on a Project designed to produce Omega 3 using marine plant micro-organisms. The ultimate aim is to develop in-house technologies



to obtain this highly valued fatty acid, and then apply them at a FARMARABA production plant.

Researchers at the R&D centre, which has proven experience in the biotechnology and agri-foodstuff sector, have managed to obtain meal with a high Omega 3 content by means of the fermentation processes of various marine plant micro-organisms. The experts are seeking to identify and isolate the micro-organisms most suited to producing the fatty acid. They are also researching the most suitable fermentation conditions to obtain types of meal with a greater nutritional value and which are suitable for food applications.

The technology to produce Omega 3 by cultivating micro-organisms is the basis of a flourishing biotechnology industry. So Neiker-Tecnalia and Farmaraba have committed themselves to active collaboration in the development of in-house technologies and in the identification of new micro-organisms capable of producing Omega 3, a functional ingredient increasingly being called for in the production of foodstuffs with a high nutritional value.

The project is being funded by FARMARABA S.L., a subsidiary of Grupo Elgorriaga BRANDS set up in Vitoria-Gasteiz (Basque Country) in 2010. The company, which is in the biotechnology sector, is committed to research in a sector where development is booming: the production and marketing of functional ingredients for food use.

The quest for food that is more health-giving

The improvement in eating habits and the consumption of natural products are turning into a collective awareness in the quest for health and wellbeing. This social awareness has driven demand for innovative foodstuffs formulated so that they are more nutritional and more health-giving. For many years the food market has been offering new products



with a high fibre content, low in fat, fat-free or low in sugar, but the demand for health-giving foodstuffs continues to expand and consumers are seeking new, more sophisticated products that include compounds essential for health, like Omega 3 fatty acids.

The year 2000 saw the launching onto the market worldwide of nearly 140 new products that contained Omega 3, while nearly 2,000 appeared in 2009; this accounts for approximately 3% of the total of new products on the food market. The market for products with Omega 3 is set to go on expanding in Europe at a rate of 24% per year until 2014, according to a recent study by the Frost & Sullivan consulting company.

Provided by Neiker-Tecnalia

Citation: Researchers produce Omega 3 using marine plant micro-organisms (2013, May 6) retrieved 25 April 2024 from <u>https://phys.org/news/2013-05-omega-marine-micro-organisms.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.