

**NANOFOODS - Development of foods containing nanoencapsulated ingredient**  
**REFERENTE: prof. Vincenzo Fogliano, Dip. Scienza degli Alimenti**

The preservation of bioactive food ingredients through product processing and storage, and their controlled release in the gastrointestinal tract is yet a major obstacle for the full exploitation of the health potential of many food bioactive components. In addition, conventional microencapsulation solutions often affect the textural sensory properties of the food. The overall objective of the NANOFOOD project is to develop and validate the efficacy of a new generation of healthy foods based on nanocapsules technology. Tailored nanocapsules able to deliver omega-3 fatty acid and silymarin complex into the lower gut will be designed and produced by a specialized Israeli SME in collaboration with Technion, Haifa. These nanocapsules will be incorporated as bioactive ingredients into dry pasta by an Italian SME and into typical bread products by a Turkish SME. The development and characterization of these products will be supported by food scientists operating in leading research centres. Finally, the efficacy of the developed food products will be assessed by a human clinical trials on patients affected by Intestinal Bowel Disease, where the anti-inflammatory properties of the selected ingredients could be highly beneficial. NANOFOODS project will provide SMEs of the consortium with necessary tools and know-how to introduce in the EU markets foods based on nanoencapsulated bioactive ingredients according to the new European legislation regarding novel healthy foods marketing.

**Coordinator**

**UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II**

**Other participants**

LA MORELLA NUTS, S.A. (Spain)

MERK UNLU MAMMULLER GIDA KATKI MADDELERI TURIZM INSAAT VE TICARET LTD SIRKETI (Turkey)

ANTONIO AMATO & C. MOLINI E PASTIFICI IN SALERNO SPA (Italy)

HACETTEPE UNIVERSITESI (Turkey)

KARMAT COATING INDUSTRIES LTD (Israel)

TECHNION - ISRAEL INSTITUTE OF TECHNOLOGY (Israel)

**Start date** 01/10/2008

**End date** 30/09/2010

**Duration** 24 mesi

**Project cost** 1.4 million euro

**Project Funding** 726000.00 euro

**Subprogramme Area** Research for SMEs

**Contract type** Research for SMEs