

# VITASTEVE

Project Duration:

**1/10/2012 - 30/9/2015**



Design and Development of Low GI Foods  
based on sweetening compounds isolated from **Stevia rebaudiana**  
cultivated in China and enriched with vitamins A and D

## PROJECT RESULTS

- ▶ **A new bioactive cereal product (cereal bar)** based on sweeteners from the Stevia plant (steviol glycosides) with low glycemic index and enriched with Vitamin A & D was developed by Yiotis S.A.
- ▶ A market research held in Greece and China where the consumers of both countries expressed **a positive motivation to buy the product.**
- ▶ In Greece, except from the classical organoleptic evaluation, **modern techniques from the neurophysiology field were also applied.** The novelty of the analysis lies in the use of data of the consumers' brain function during the tasting of the product, where valuable information can be extracted for the product acceptance. The application of this method set the basis for the application of such tools/techniques to the food quality assessment.
- ▶ **Clinical studies were performed in adults and children.**
  - ▶ Adults: The VITASTEVE product consumption lead to:
    - **significant improvement of insulin secretion** in comparison to the consumption of sugar-based similar products,
    - **better maintenance of metabolic and hormonal profile.**
    - **better maintenance of mitochondrial function and metabolism.**
  - ▶ Overweight/Obese Children: The daily consumption of VITASTEVE product **helped them to improve:**
    - **the metabolic syndrome parameters** (body weight, BMI, systolic blood pressure, waist circumference), and
    - **the laboratory markers** (fasting insulin, fasting glucose).

## SIGNIFICANCE AND BENEFITS

**The results of the clinical studies can be used for the design and development of other low GI food products.**

## IMPACT

Up to now there is a lack in the market of snacks based in Stevia glycosides and fortified with vitamins A and D- although cereal based products have gained an increasing portion of the market. Consequently, **this innovative bio-active snack will help compliance of overweight/obese, pre-diabetic and diabetic people undergoing nutritional programs and will introduce healthy dietary habits in population.**



## PROJECT SCOPE

The overall aim of VITASTEVEV project is to **achieve growth through competitiveness** by innovative solutions, having as final result the **development and production of a new innovative product that responds to consumer needs**, while **providing to Industries profits and existence**.

## PROJECT OBJECTIVES

- ▶ **The creation of a transnational cooperation** between industries, scientific communities and dissemination of results in order to promote innovation and competitiveness.
- ▶ **The development and quality assessment** of an innovative, low cost, low glycaemic index/low glycaemic load, Stevia based product (cereal bar), enriched with Vitamins A and D designed especially to cover nutritional habits and needs in Greece and China.
- ▶ **The evaluation** of this new bio-active product through clinical and laboratory studies, and its connection with health benefits.
- ▶ **The promotion** of knowledge and the exploitation following the dissemination of the final product in Greece and China.

# PROJECT PARTNERS

- ▶ **Yiotis S.A.** (co-ordinator)



- ▶ **National and Kapodistrian University of Athens** -  
Medical School - Evgenidion Institute - Biological Chemistry



- ▶ **Federation of Hellenic Food industries, SEVT**



- ▶ **SMR Consultants**



- ▶ **Jiangsu Provincial Center** for disease control  
and prevention - Institute of Food Safety



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