

# **Innovation price for the development of an eco-innovative, bioactive yogurt dessert which offers a solution of complete valorization of cheese whey and reduces blood cholesterol**

For the fifth year in a row, the Hellenic Association of Food Industries (SEVT) organized in Greece the European Food Eco-Innovation contest Ecotrophelia 2015, part of the European program Food for Life and Eco-Innovation, for the production of novel, innovative, environmentally friendly food products. The contest was organized in Zappeion, in Athens, 23-24th June 2015, where 14 teams of university students took part in final stage of the competition. The Technological Institute of Thessaly took part with two teams and received the 1<sup>st</sup> and 3<sup>rd</sup> Price of Ecotrophelia 2015, while the Metsoveio Technical Institute of Athens received the second place. More information regarding this competition can be found at <http://www.sevt.gr/en/news-details/FM-O/diagnwismos-ecotrophelia-2015-o-sebt-brabeyei-kainotoma-proi>.

The 3<sup>rd</sup> Innovation Price was awarded to the product **TYROYO-Raisin Delight**, developed by a team of two students of the Department of Food Technology, TEI of Thessaly (Chrysanthi Mitsagga and Sergios Toukhikyan) and one MSc student of the School of Medicine, University of Thessaly (Fani Karkanta), under the supervision of Dr. Ioannis Giavasis, Assistant Professor at the TEI of Thessaly (Dept. of Food Science).

TYROYO-Raisin Delight is a bioactive yogurt dessert made of non-thermally condensed cheese whey and cow's milk, Greek P.D.O. black raisins, oat  $\beta$ -glucans which reduce blood cholesterol and antioxidant olive polyphenols, via a green process of "zero discharge" where cheese whey is fully utilized and transformed into a nutritious and healthy delicacy, with a very low carbon footprint. It is a biofunctional and eco-friendly product containing 3g of  $\beta$ -glucan per 200g serving, which has a solid health claim approved by EFSA (European Food Safety Authority), as concerns the reduction of blood cholesterol and the risk of coronary heart disease. Its main component is cheese whey which has high nutritional value, however it is often treated as a food waste and becomes a significant environmental pollutant if disposed of the environment without biological treatment.

This product has been designed and produced in close co-operation with Dr. Konstantinos Petrotos (Associate Professor of Food Engineering, TEI of Thessaly) and the companies Polyhealth S.A. (an innovative polyphenol-producing company based in Larisa, Greece) and Dodoni S.A. (a well-established and exporting dairy company in Ioannina, Greece), which contributed by technical and financial means. The dairy company Amarantos (Kalampaka, Greece) also helped in the initial steps of product development. The graphic designer Sotiris Gerokostas (Larisa, Greece) was responsible for the design of the package of this unique yogurt dessert.

The Department of Food Technology of the Technological Institute (TEI) of Thessaly, Greece has been awarded an innovation price for three years in a row in this competition (as many as the years that it had participated from 2013 to 2015), proving that it is a highly active and productive Department, which emphasizes in research and innovation and actively supports the local food industry in new product development.



From left to right: The representatives of Polyhealth S.A., Mrs Stavroula Lada and Efi Lada, Dr. Konstantinos Petrotos, the students Sergios Toukhikyan, Chrysanthi Mitsagga and Fani Karkanta, the supervisor Dr. Ioannis Giavasis, and the Head of Marketing Dept. of Dodoni S.A., Mrs Vicky Papoutsaki.



The Innovation price-awarded product TYROYO-Raisin Delight, and its main components: Cow's milk, cow's cheese whey, P.D.O black raisins from Korinthos district, oat  $\beta$ -glucans and olive polyphenols .



The 3<sup>rd</sup> Innovation Price for TYROYO-Raisin Delight



The external packaging of TYROYO-Raisin Delight



The price-awarded teams of the TEI of Thessaly



The award of the 3<sup>rd</sup> Innovation Price to the team that developed TYROYO-Raisin Delight