

Poster 7**PATHWAY-27: pivotal assessment of the effects of bioactives on health and wellbeing, from human genoma to food industry****Alice Arianna, Achim Bub, Bernhard Watzl**

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Every year European countries spend millions of euros on the treatment of conditions such as metabolic syndrome, heart disease, diet-related diseases and diabetes. Notably, diet can help greatly to reduce risk factors for these conditions, including elevated blood pressure, blood lipids and blood sugar. The PATHWAY-27 network (www.pathway27.eu), which includes 25 partners broadly distributed in the EU, including one Candidate Country (Turkey), has been established to address the potential of selected bioactive compounds in the prevention of the Metabolic Syndrome.

The general objective of the project is the exploitation of bioactive compounds as ingredients of foods that, within the common diet, could significantly benefit human health and wellbeing. Therefor three model compounds (docosahexaenoic acid - DHA, beta-glucan -BG, and anthocyanins -AC) and three model food matrices (bakery, dairy and egg products) will be used.

In four European study centres, one being the Max Rubner-Institut in Karlsruhe, several intervention studies will be conducted with the following aims: a) increased knowledge on bioavailability, activity, synergism and mechanisms of action of bioactive compounds when administered as integral parts of foods, b) establishing guidelines and best practice for intervention studies c) development and validation of innovative biomarkers.

Furthermore the development of new bioactive-enriched food with scientifically proofed positive effects on human health and improved formulation to guarantee acceptance of consumers shall increase the innovative potential and competitiveness of small and medium-sized enterprises.