



BOOK OF ABSTRACTS

International Summer School FOOD SAFETY AND HEALTHY LIVING FSHL – 2023

ON SITE and ONLINE

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C30 KETOGENIC DIET AS A THERAPEUTIC TOOL

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The ketogenic diet is based on a particular selection of foods, in which the intake of carbohydrates is drastically reduced as an energy source in favor of proteins and fats. The ketogenic diet has received alternate support and criticism from the scientific world in relation to its use and the expected results.

When the intake of carbohydrates is reduced, the body mainly uses fats for energy purposes, hence the use of this diet in the treatment of overweight and obesity. In this dietary approach molecules called ketone bodies (ketogenic diet) are formed; these molecules can also be used by the brain which generally bases its energy metabolism on sugars.

The ketogenic diet has an important impact on the body and must be carried out under medical supervision because it is not without side effects.

The ketogenic diet is also used in the therapy of some pathologies, and in particular of epilepsy; interesting results have been obtained in the treatment of epileptic seizures in patients, especially children, who did not obtain satisfactory results with conventional drugs. In this lesson we will describe the main applications of the ketogenic diet, the current therapeutic approaches, and the possible side effects.

Keywords: ketone bodies, overweight, obesity, epilepsy

Patrizia RESTANI

Patrizia Restani is graduated in Pharmaceutical Chemistry and Technology and obtained a PhD in Toxicology at the Università degli Studi di Milano. Retired from 11.2022, she was Full Professor in Food Chemistry, at the School of Pharmacy, Università degli Studi di Milano, where was responsible for the teachings: 1) Food Chemistry; 2) Dietetic Products; 3) Analytical methods for detection of xenobiotics in foods. She is still adjunct professor at the Università degli Studi di Milano for the teaching “Dietetic Products”.



She was the Coordinator of the school in Scienze e Sicurezza Chimico-Tossicologica dell'Ambiente (Chemical Safety and Toxicological Environmental Sciences), Università degli Studi di Milano from 2011 to 2017 and from 2019 to 2022.

Patrizia Restani has been involved in numerous national and international research programs in the field of Food Safety, Dietetic products, Risk and Benefit Assessment, and has managed several scientific projects both as the project coordinator and as the responsible of research units. She coordinated the European Project PlantLIBRA (Plant Food Supplements: Level of Intake, Benefit and Risk Assessment) in the context of the 7th EU Framework Program, involving 25 partners distributed in 4 continents. She

received the title of Honorary Professor at the Transylvanian University of Brasov (Romania).

Patrizia Restani is scientific secretary of the Commission IV "Safety and Health" at the OIV- International Organization of Vine and Wine- and is a member of the Italian Delegation (Ministry of Agriculture) at the same organization. She is a member of the technical committee for Nutrition and Animal health - Section for dietetics and nutrition of the Italian Ministry of Health.

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