

Gabriele Riccardi, PhD

Gabriele Riccardi is Full Professor of Endocrinology and Metabolic Diseases at the "Federico II" University in Naples, Italy, where he is Director of the Master Course in Human Nutrition and Head of the Diabetes, Nutrition and Metabolism Unit of the University Hospital. He was President of the Società Italiana di Diabetologia (SID) from 2010 to 2012.

Prof. Riccardi is member of the Joint Committee of the European Society of Cardiology and the European Atherosclerosis Society for the Guidelines on Management of Dyslipidaemias and is International Fellow of the American Heart Association. He is in the scientific committee of the Barilla Center for food and nutrition and of the Nutrition Foundation of

Italy; he is member of the International advisory Board of the Antidiabetic Food Center, Lund University, Sweden. Author of over 300 in extenso publications in international scientific journals listed in Pub Med (total impact factor > 600). Gabriele Riccardi has held invited lectures at major national and international conferences and in many universities all over the world.

Whole grains as a marker of carbohydrate quality

Cereal foods are the most relevant source of carbohydrates in the human diet; they give a substantial contribution to the energy intake and play an important role in substrate metabolism. Relationships between cereal food consumption and health outcomes indicate that habitual wholegrain intake is associated with a lower risk of cardiovascular diseases, type 2 diabetes and some types of cancer. Mechanisms underlying these associations are linked to carbohydrate digestibility in the small intestine (lowering the postprandial glucose, insulin and lipid rises) and to fermentation of undigested carbohydrates in the colon. Food features able to influence these mechanisms are not yet completely elucidated; however, the role of the amount of fibre, nutrient composition, food structure, glycaemic index and polyphenol content has been clearly established. Cereal species vary for these features and this explains why their impact on disease risk factors may differ according to the cereal types.

Learning objectives:

- 1. Evaluation of the evidence on the protective role of habitual wholegrain consumption in relation to cardiovascular disease and diabetes
- 2. Identification of mechanisms potentially responsible for the health benefits of wholegrain
- 3. What to recommend to the general population and to people with a high cardiometabolic risk in relation to wholegrain consumption.