The olive tree (Olea europaea L.) belongs to the botanical family of the Oleaceae and is the only species of this family with edible fruit. Its fruits and their oil have health-beneficial effects, deriving from the presence of bioactive compounds. Such advantages include reducing oxidative damage in the body and lowering the incidence of cancer and improving cardiovascular health and healthier aging, thus making olive-derived products important functional foods. In addition, non-traditional products derived from olive, such as olive leaves, stones, seeds, sprouts, and others, representing the by-products of both the table olive and the olive oil industries, may represent valuable sources of healthy alternative products.

The aim of this Special Issue is to provide new insights on the potential bioactive properties of olive tree fruits, oils, and other olive-derived products as functional food ingredients for health maintenance and the prevention of chronic, oxidative stress-related diseases, combining metabolism and nutritional mechanistic studies in humans, animals, and relevant cellular models.