Aging is a process related to various cellular and organic functional alterations. These finally cause multi-organic cell failure. The epigenetic mechanisms related to aging are modifiable with appropriate preventive actions which can be mediated by sirtuins, caloric input, diet components, adipose tissue-related inflammatory reactions, and physical activity. For millennia the Mediterranean lifestyle has been a daily habit for people in Western civilizations living around the Mediterranean sea. A high adherence to this traditional diet is associated with low mortality, hence increased longevity, and also reduced risk of developing chronic diseases such as cancer, the metabolic syndrome, depression and cardiovascular and neurodegenerative diseases. Reports indicate that some of the dietary components of this diet (i.e. olive oil, antioxidants, omega-3 and -6 polyunsaturated acids, polyphenols and flavonoids) can mediate beneficial anti-aging effects. In this same sense, physical activity displays a positive effect, producing caloric consumption and the regulation of adipose and pancreatic function. This lecture will discuss several ways of improving health during mid-life and focus on certain groups of functional foods and healthy habits which may reduce or prevent age-related chronic diseases.