

Quality and Health-related Aspects of Extra Virgin Olive Oil: State of the Art

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It is well known that lipids are important in nutrition and extra virgin olive oil plays a predominant role in this field, recognised for its high levels of monounsaturated fatty acids. In the case of extra virgin olive oils, it is also recognized its characteristics of functional food, because of the presence of phytochemicals, such as polyphenols (bio-phenols) and phytosterols.

Some of the most representative phenolic compounds in olive oils are the oleosidic forms of hydroxytyrosol and tyrosol, the lignans (1-acetoxypinoresinol and pinoresinol) and the flavonoids (luteolin and apigenin). The phenolic component profile of olive oil depends on many variables, such as olive variety and cultivation, olive ripening stage, olive processing, and oil filtering clarification.

In the present study, attention was focused on the composition of extra virgin olive oils related to the olive extraction process. The amounts of the main “minor components” and their health implications were here considered. In particular, the biological effects of oleuropein, iridoid polyphenols, lignans, squalene, and triterpenic alcohols, were evaluated.