

P45: SUPERFOODS AND SUPERHERBS: CHARACTERIZATION OF ANTIOXIDANT, ANTIFUNGAL CAPACITY AND NUTRITIONAL DESIGNATION

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Nowadays more and more people are opening up to a healthier way of life and follow a diet that includes foods which promote healthy aging. Some of these foods are superfoods and superherbs that possessed functional health properties beyond its nutritive value. These foods containing exogenous nutrient and phytochemical antioxidants that could protect the human body from damage arising from chronic oxidative stress caused by excessive production of free radicals.

The main purpose of this work was the study of superfoods and superherbs produced in Greece and which consist the raw material for the production of innovative products. In this study, a variety of superfoods and superherbs cultivated in regions of Greece was investigated for the nutritional value, the vitamins' content and the antioxidant capacity. Moreover the potential of these superfoods and superherbs to inhibit the growth of mycotoxigenic fungal was also studied.

Some of the foods that studied were goji berries (*Lycium barbarum*), sea buckthorn (*Hippophae rhamnoides*), chokeberries (*aronia*), golden berries (*Physalis peruviana*), rose-hip (*Rosa canina*) and more others.

The antioxidant capacity measured by spectrophotometric methods (dpph, folin ciocalteau) while phenolic compounds and vitamins were detected by HPLC analysis. For the antifungal assay, the aflatoxigenic fungi *Aspergillus parasiticus* and the ochratoxigenic fungi *Aspergillus carbonarius* were inoculated in *Aspergillus Flavus Parasiticus* Agar (AFPA) and in Potato Dextrose Agar (PDA) medium, respectively.