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POTENTIATE ANTIOXIDANTS IN ANCIENT COOKING CONDIMENTS: A REVIEW

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Benefits of activity of antioxidants are now spoken widely. Antioxidants are chemicals that neutralize free radicals. Free radicals are formed naturally in the body and play an important role in many normal cellular processes. However over production of free radicals damage major components of cells. Interestingly our body has enzymatic antioxidant defenses include catalase (CAT), superoxide dismutase (SOD) etc. Synthetic antioxidants are also available but have serious side effects such as carcinogenic. In contrast, interestingly, natural antioxidant components derived from plants are pharmacologically potent, effective and have or no side effects. The study is to analyze antioxidants in ancient cooking condiments. Google Scholar, PubMed, and Web of Science databases were searched. 26 ancient cooking condiments were selected and taken into the search study. The search terms were ("condiments of different types" or "anti-oxidant" and "spices) without narrowing or limiting search elements. It was found, 20 condiments possess increase effectiveness of the antioxidant ability. DPPH, ABTS, Total phenolic, Total Flavonoid assay methods were used to find the antioxidant activity. DPPH free radical-scavenging ability found high in Cinnamomum Zeylanicum, Caryophyllus aromatics and Myristica fragrans. Total phenolic 66.5 ± 4.12 and 28.66 ± 2.52 in Trigonella foenum-graecum (leaves) and Allium sativum respectively. Total Flavonoid found high in Capsicum annum 74.33 ± 5.13 . Out of all condiments Myristica fragrans, Cinnamomum Zeylanicum, Ocimum basilicum etc possess high value of antioxidants. Extracts from spices of the Myrtaceae, Lauraceae and Lamiaceae .Allium cepa , Allium sativum, Capsicum annum, Pimpinella anisum, Hordeum vulgare also possesses moderate amount of antioxidants. Above 75% of condiments contains satisfactory level of antioxidant and hence encourage of usage of condiments should be increased.

Keywords: antioxidants, condiments, DPPH, spices