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total world population of older people was about 200 million in 1950 and is expected to rise to 1.9 billion by 2050 — a nine-fold increase in 100 years. Currently, about 6% of the world’s population comprises people over 65 years. The ageing population of the world presents major challenges for society and for health services.

Mental health issues are extremely important, as mental disorders, notably dementia and depression, are common in old age and can profoundly affect the quality of a person’s old age.

Taking into account the fact that the mild cognitive impairment is considered as a prodromal phase of dementia, it is important to identify it early and to start the primary prevention - the specific treatment of cognitive features and the changes of the lifestyle. The compliance and the lifestyle can stop the progression of the disease.

Early detection and the treatment of mild cognitive impairment can maintain the elderly at a maximum level of functionality as much as possible. It is therefore important to improve the quality of the elderly life, in order to maintain them healthy and functional for as long as possible.

**POTENTIAL CANCER CHEMOPREVENTIVE AGENTS ISOLATED FROM MEDICINAL HERBS**

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Chemoprevention is a promising new approach to cancer prevention. Since the beginning of chemoprevention studies, short-term in vitro models have been applied in the identification of antitumor-promoting agents. The development of strategies to inhibit human cytomegalovirus (HCMV) immediate-early (IE) antigen expression is an important goal in research designed to prevent and treat certain forms of cancer. We have evaluated the chemopreventive effect of three groups of natural compounds: extracts from herbs used in the Chinese clinical medical routine, dihydro-β-agarofuran sesquiterpenes isolated from *Euonymus* species and some lignan derivatives. The aim of these studies was to identify potent IE antigen-targeting natural compounds as antitumor promoters in an *in vitro* model of tumor promotion. The possible chemopreventive effect of the herbal extracts and compounds was studied on the expression of HCMV IE antigen in human lung cancer cells (A549). Many of the herbal extracts studied inhibited the growth of tumor cells. Certain chloroform extracts of herbs decreased the IE antigen expression of HCMV. Five esters of penta- and hexahydroxydihydro-β-agarofuran proved to be active compounds inhibiting the IE antigen expression of HCMV. Most of the evaluated lignans reduced IE antigen expression of HCMV, the best result being obtained with 4,4'-dihydroxy-3-methoxyliignan. The results of these studies suggest that some of these compounds might be valuable as potential cancer chemopreventive agents.

**ONONIS ARVENSIS – A NEW SOURCE OF MEDICINAL FLAVONOIDS**

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*Ononis arvensis* (field restharrow) is a perennial shrub widely spread in Central Romania. Its aspect is similar to *Ononis spinosa* (spiny restharrow). *Ononis radix* (*O. spinosa* roots) is a well known diuretic, saluretic and uricosuric vegetal drug, which contains mainly saponins and flavonoids. Due to the high resemblance of the botanical description which could easily lead to the substitution of the established medicinal product, and to encouraging previous results regarding the presence of saponins in *O. arvensis*, the aim of this study was to identify the flavonoid profile of *O. arvensis*. Various methods were used: qualitative thin layer chromatography (TLC), spectrophotometry and high performance liquid chromatography associated with mass spectrometry (HPLC/MS). Preliminary TLC assays showed *O. arvensis* and *O. spinosa* roots have