

# Phytomedicine in Aging is Very Crucial as it Possesses Important Bioactive Compounds

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## Description

Phytochemicals are biologically active, naturally occurring chemical compounds found in plants, which provide health benefits for humans further than those attributed to macronutrients and micronutrients. They protect plants from disease and damage and contribute to the plant's colour, aroma and flavour. In general, the plant chemicals that protect plant cells from environmental hazards such as pollution, stress, drought, UV exposure and pathogenic attack are called as phytochemicals. Many phytochemicals, particularly the pigment molecules, are often concentrated in the outer layers of the various plant tissues. Levels vary from plant to plant depending upon the variety, processing, cooking and growing conditions.

## Biomedical Exploration

Moreover, species of *Mimosa* possess medicinal properties. Reported that *M. invisa* leaf and stem extract possess antifungal and antibacterial potentials. The specie *M. pudica* is known to possess sedative, emetic, and tonic properties, and has been used traditionally in the treatment of various ailments including alopecia, diarrhoea, dysentery, insomnia, tumor, and various urogenital infections. *Mimosa pigra* have been used by the Asapio's family of Goriga Timonde in the Bawku West District of the Upper East Region of Ghana to treat diarrhea, typhoid fever and gonorrhoea infections for the past fifty years. However, there is no much information on the phytochemical composition of the three parts of *M. pigra* found in Nigeria. Therefore, the objectives of this work are to determine the phytochemicals present in the leaves, stem and root of *M. pigra* as well as to assess their phytochemical differences. Phytochemicals are biologically active, naturally occurring chemical compounds found in plants, which provide health benefits for humans further than those attributed to macronutrients and micronutrients. They protect plants from disease and damage and contribute to the plant's colour, aroma and flavor. In general, the plant chemicals that protect plant cells from environmental hazards such as pollution, stress, drought, UV exposure and pathogenic attack are called as phytochemicals.

## Clinical Examinations

Old age is viewed as an unavoidable, undesirable, and problem-ridden phase of life. As people age, they become more susceptible to disease and disability due to various factors like low immunity, decreased functionality of cells, DNA damage, higher incidence of inflammation, etc. Healthy aging is very important. The nutrition and health of the elderly is often neglected. Nutritional interventions could play an important part in the prevention of degenerative conditions of the elderly and an improvement of their quality of life. The medicinal properties of plants are always believed for its therapeutic effect and its efficiency in treating many without adverse effects. The role of phytomedicine in aging is very crucial as it possesses important bioactive compounds and constituents (such as polyphenols, flavonoids, phenolic acids, and others) which are considered to provide anti-aging properties as well as helps in reducing age-associated problems. Some natural leaves such as *Moringa oleifera*, curry leaves, guava leaves, green tea, olive leaves, *Ginkgo biloba*, thankuni leaves, grape leaves, *vasaka* leaves, and *kulekhara* leaves are found to have therapeutic effects against diseases like cancer, diabetes, immunosuppression, hepatic damage, and neurodegenerative disorders. Hence, this review aims at understanding the effectiveness of these natural products in curing the geriatric population and the mechanism by which the therapeutic effects are exerted by them. Old age is viewed as an unavoidable, undesirable, and problem-ridden phase of life. Many philosophers have defined aging in different ways. However, the definitions were majorly based on features such as structural damage, the decline in functionality, any particular changes in phenotype, or the reason behind the change, depletion, and the increased probability of death (Lemoine, 2020). According to Khan et al. (2017), as aging takes place the body encounters a lot of problems and diseases. The decrease of the tissue and organ's regeneration capability is what biological aging is associated with. This leads to disturbances in the body's homeostasis resulting in the physiological failure of the body's ability to respond to physiological stress, thus causing several disorders. Aging occurs at the molecular, cellular, organ, and organism level with genetic, epigenetic, and environmental modulators.