

Medicinal Plants with Anti-Obesogenic Potentials †

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Abstract: Obesity and Overweight are defined as excessive or abnormal fat accumulation that may impair health. Body mass index (BMI) is a measure of obesity that is commonly used to classify overweight and obesity in adults. A person with a BMI of 30 or more is generally considered obese, while a person with a BMI equal to or more than 25 is considered overweight. We undertook an extensive bibliographic review by analyzing classical textbooks and peer-reviewed papers and further consulting well-accepted worldwide scientific databases. The anti-obesogenic drugs, Orlistat and Sibutramine, which have been duly approved by Food and Drug Administration (FDA), USA, work very well on diet-induced obesity; however they are not getting popular to the people with overweight/obesity due to the higher cost and severe side effects. Over the past decades, herbal medicines have garnered growing attention as potential therapeutic agents due to their high efficacy and low risk of side effects. Our present review differentiated the anti-obesogenic effects of various medicinal plant extracts, fractions, and their bioactive compounds at *in vitro*, *in vivo*, and clinical conditions. The medicinal plants that have been subjected to thorough studies include *Hibiscus sabdariffa*, *Trigonella Foeniculum-graecum*, *Illicium verum*, *Terminalia arjuna*, *Calendula officinalis*, *Tagetes erecta*, *Jatropha tanjorensis*, *Fraxinus micrantha*. These herbal medicines are natural resources that can make the basis for innovative drug research and the development of phytopharmaceuticals for the treatment of obesity in the future. The experimental evidence suggests that several herbal medicines can prevent obesity through various underlying mechanisms. However, more systematic research needs to be undertaken.

Keywords: anti-obesogenic drugs; obesity; phytopharmaceutical.

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Conflicts of Interest

The authors declare no conflict of interest.