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Ethno Pharmacological and Ethno Medicinal Study of Plants Used in the Treatment of Obesity in Cameroon

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Aim of study: Obesity is a leading preventable cause of death worldwide, with increasing rates in adults and children. Nowadays, the number of fat and obese people is increasing in Cameroon and many of them in all likelihood develop various diseases, particularly heart diseases, type 2 diabetes, certain types of cancer and osteoarthritis. Fat or obese people present an abnormal accumulation or excess body fat that may have a negative effect on health, leading to reduce life hope and/or increased health problems. This disorder is most commonly caused by a combination of excessive energetic food intake, lack of physical activity, and genetic susceptibility, although a few cases are caused primarily by genes, endocrine disorders, medication and/or psychiatric diseases. People are considered obese when their body mass index (BMI), a measurement obtained by dividing a subject's weight by the square of the person's height, exceeds 30 kg/m^2, and fat when their BMI is equal or superior

Methods: In the present study, we carried out an ethno pharmacological survey of anti-obesity plants in Cameroon. Recorded herbal medicines were detailed described and the standardization of dosages were investigated. We also did a systematic review about their safety and efficacy in the management of obesity in human by searching bibliographic data bases such as, Google Scholar, Pub Med, Scopus and Web of Science, for studies reported between April 2012 to February 2014 on human or animals, investigating the beneficial and harmful effects of herbal medicine to treat obesity in Cameroon.

Results: A total of twenty anti-obesity plants were recorded. Flavonoids extracted from the fruits of Solanum melongena (Cheucheu in Bamileke tribe) at a dose of 1mg/100g BW/day showed significant hypolipidemic effect in normal and cholesterol fed rats. Studies reported on Irvingia gabonensis and I. wombolu (two species of West and Central Africa, African bush mangoes) showed significant decreases in body weight. African mangoes seeds seem to have satisfactory anti obesity effects. The effect magnitude of each of recorded medicinal plants is a critical point that should be considered for interpretation. While there was no report for side effect in these species, we believe that safety of these plants still remains to be elucidated by further literature researches or long-term studies for their better exploitations.

Key words: Herbal medicine, Obesity, Cameroon, Systematic review, efficacy, safety

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