

Short Communication

Chemical Substance and Human Health

N'Guessan Bra Yvette Fofie

Department of Pharmacognosy, Félix Houphouët Boigny University, Ivory Coast

***Corresponding author:** N'Guessan Bra Yvette Fofie, Department of Pharmacognosy, Félix Houphouët Boigny University, Ivory Coast. Tel: +22508885387; Email: yvette.fofie08@yahoo.fr

Citation: Fofie NGBY (2018) Chemical Substance and Human Health. Arch Nat Med Chem: ANMC-115. DOI: 10.29011/ANMC-115.000015

Received Date: 08 February, 2018; **Accepted Date:** 16 March, 2018; **Published Date:** 22 March, 2018

Communication

Health has always been at the heart of human concern since the beginning of human existence. It is very complex, is the sum of a complex set of multiple components [1], here we will only be interested in the state of individual or collective that is to say when living in community, talking about the influence of chemical substances in the drug.

The state of human Physical health is measured with regards to diseases and injuries that affect the human body individually or the community at large in the cases of epidemic. The latter is the reason for considering the community aspect. Chemical compound has a central role in every living being, both animal and vegetable. In plant life, chemical substance is responsible for the synthesis of many compounds some of which are remarkably identified as inert such as sucrose and starch or active such as Flavonoids [2]. Chemical substances play an active role in every living being, in both animals and plants. Plant life starts by drawing resources from the inorganic matter that is water and soil. Thus, in the presence of sun, plants synthesize chemical compounds. These various chemical compounds, product of photosynthesis contribute to satisfy human needs in particular food and medical care [3]. A very good example is the case of aspirin, which is one of the first major synthetic discovery (1899) whose model comes from a natural molecule from the leaves and bark of *Salix alba* (white willow) of the family Salicaceae. The decoction of leaves and bark of this plant were used 3200 BC [4] to treat gout and fever. Thus, over the years, the growing need for drugs has led to the practice of synthesis of drugs in most cases from natural substances.

Rapid urbanization and promiscuity has led to overpopulation, impoverishment followed by malnutrition, stress and the emergence of communicable diseases and non-communicable diseases. These later affections, rare, including diabetes, has become, over the years, common disease [5].

Now among the plants there are some that are declared medicinal because of their importance to human health. The active

compounds are organic matter entirely synthesized by the plant itself [2]. However, mineral substances absorbed by the plant remain as such in the plants, which contribute to some extent to the health of all living beings, especially human who consumes it. Indeed, these minerals are present in the human organism, they are trace elements or micronutrients whose presence are essential to the good functioning of the body [6]. This is the case, for example, of calcium, whose electro-physiological potential makes it an ion of great importance to the body. Potassium is the main positive charge ion in the cells of the body. Its contribution is not related to a particular compound of the plant, but promote a good absorption of the mineral resources of the substrate by the plant [6] (<https://www.amazon.fr/Physiologie-V%C3%A9g%C3%A9tale-Michel-Coup%C3%A9/dp/2340014093>). Like magnesium or manganese, many other trace elements contribute to the proper functioning of human body enzymes. Therefore, enlightening the population to feed themselves properly, could solve and prevent a lot of non-communicable diseases [7,8]. (http://campus.cerimes.fr/nutrition/enseignement/nutrition_11/site/html/cours.pdf).

This improved health condition could come from the plant consumed as food, to a certain extent, organic compounds of biosynthesis and inorganic substances, mineral such as zinc and chromium, whose presence and importance in the plant could be elucidated.

References

1. World Health Organization (2001) International Classification of Functioning, Disability and Health: CIF.
2. Guignard J-L (1996) Plant Biochemistry, By Jean-Louis Guignard. In : 2nd edition, Paris, 264p.
3. Convention on Biological Diversity / Report on Plant Conservation (date of consultation).
4. Lévesque, Lafont (2000) Aspirin through the centuries: historical reminder. Rev Med Interne 1 : 8-17.
5. OMS (2017) Noncommunicable diseases.

6. Michel Coupé, Bruno Touraine (2016) Plant Physiology.
7. (2011) Trace Elements. Francophone Virtual Medical University, french.
8. Fofie NBY, Kiendrebeogo M, Coulibaly K, Sanogo R, Kone-Bamba D (2016) Mineral Salt Composition and Secondary Metabolites of *Ocimum gratissimum* L.: An Anti-hyperglycemic Plant. Nat Prod Chem Res 4: 235.