

RETHINKING PLANTS AS EXCELENT SOURCES OF HEALTH AND WELLNESS- PROMOTING COMPOUNDS: INSPIRED BY NATURE AND SCIENCE

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INTRODUCTION:

Since the beginning of life on earth, plants have been used as a source of nutrients and compounds with therapeutic effects and/or promoters of well-being. Over the centuries, eating habits have changed, as well as the strategies for the treatment and prevention of diseases. Today, society and several public and private institutions have expressed their concerns regarding many of these changes and the negative impact they have on our quality of life.

According to World Health Organization (WHO), despite we are living on a planet with more than 50000 edible plants, 60% of our intake comes from just three types of plants: rice, maize and wheat, and the global demand for these three crops is projected to increase 33% by 2050. The lack of dietary diversity has huge impact on health and environment and is fueling the “double burden”, i.e. it is not uncommon to find undernutrition and obesity co-existing within the same country, and even within the same community. On the other side, it is known that we are over-producing some foods, like red meat and whole grains, and under-producing others, such as vegetables, fruits and nuts.

Thus, taking advantage of the great developments that have been observed in terms of analytical technologies that have allowed the prospecting of numerous bioactive compounds in plants, as well as the evaluation of their physical-chemical, sensory and biological properties, we are in time to rethink their role in the diet of today's society. The diversity of the diet can be achieved even by the rational use of natural resources, in which non-conventional parts of plants can be safely used, as well as by-products or residues from agricultural and industrial activities. Local species can also play a very important role, especially those that are forgotten and have never entered the large food distribution networks, whose marketing can have a very significant impact on the economy of local communities. The strategies to be used to rethink the use of plants as a raw material of excellence for obtaining bioactive compounds and their role in the relationship between food and health will be discussed in this presentation, based on recent knowledge in the area. Finally, the TOP Covid-19, a 100% vegetable training kit for olfactory deviations recovery will also be presented.

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