

Concept Paper

From a Reductionist to a Holistic Approach in Preventive Nutrition to Define New and More Ethical Paradigms

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Abstract: This concept paper intends to define four new paradigms for improving nutrition research. First, the consequences of applying a reductionist *versus* a holistic approach to nutrition science will be discussed. The need for a more focused preventive nutrition approach, as opposed to a curative one, will then be presented on the basis of the ‘healthy core metabolism’ concept. This will lead us to propose a new classification of food products based on processing for future epidemiological studies. As a result of applying the holistic approach, health food potential will be redefined based on both food structure and nutrient density. These new paradigms should help define a more ethical preventive nutrition for humans to improve public recommendations while preserving the environment.

Keywords: preventive nutrition; healthy life years; sustainability; reductionism; holism; healthy core metabolism; intervention studies; food ranking; food structure

1. Introduction

Although our production systems currently provide quality foods, they are far from being sustainable for various reasons. Healthier foods may have deleterious impacts on the environment and are often too expensive (*i.e.*, less accessible to the most disadvantaged socio-economic populations). Furthermore, widespread standardized diets do not always respect cultural habits or tradition (such as fast food), and