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INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

“INTEGRATING CLEANER PRODUCTION INTO SUSTAINABILITY STRATEGIES”

Is Healthy Eating, Healthy For The Environment? Barilla Center for Food and Nutrition Double Food Pyramid

RUINI, L.^a, CIATI, R.^a, PRATESI, C.A.^b, PRINCIPATO, L.^{b*}, MARINO, M.^c, PIGNATELLI, S.^c

a. Barilla G.e R. Fratelli S.p.A., Parma (Italy)

b. Roma Tre University, Rome (Italy)

c. StudioLCE, Turin (Italy)

**Corresponding author, ludovica.principato@uniroma3.it*

Abstract

It has been demonstrated that agriculture and animal farming are among the sources that yield the greatest amounts of greenhouse gasses (beating out transportation) and it is generally known that proper nutrition is an essential condition to health. In 2010 Barilla Center for Food & Nutrition (BCFN) decided to re-propose the food pyramid (the first time proposed by the US Department of Agriculture in the 1990s) elaborated and updated to carefully integrate the latest findings by research, involving global warming and the impact of food on the environment. The results were obtained with the use of Life Cycle Assessment methodology. But, a need for both communicational conciseness and clarity imposes a simpler method that accounts for all outcomes. This is why the ecological footprint served as base indicator in the construction of the double pyramid.

Thus, it has been made a reclassification of food that goes beyond their positive impact on health, encompassing their impact on the environment as well. These values are overlapped in descending order to obtain an upside-down pyramid that re-proposes the same succession of foods. This new Environmental Pyramid brought alongside the Food Pyramid, created a Food-Environmental Pyramid called “Double Pyramid”. It shows that those foods with higher recommended consumption levels are also those with lower environmental impact. Contrarily, those foods with lower recommended consumption levels are also those with higher environmental impact.

Applying the model to everyday life and in order to estimate the extent to which the food choices of individuals affect the environmental impact, two different daily menus were analysed: both are balanced from a nutritional point of view, but in the first one, the protein is of plant origin (“vegetarian menu”), while in the second, it is mainly of animal origin (“animal protein-based menu”). The vegetarian menu has an environmental impact that is two and a half times lower than the beef one.

It may be affirmed that the Mediterranean diet is the cheapest if the foods are selected judiciously, preferring those, which have a low cost and high nutritional value, such as pasta, legumes, certain types of vegetables, oil, and dried fruit. The creation of a single-course meal based on vegetables enriched with a modest addition of meat may be the best method to provide the proper caloric and nutritional intake at a limited cost. Sustainable eating definitely does not necessarily mean spending more money; accordingly it is also possible saying that eating well and healthy does not cost much more.

Keywords: Nutrition, ecological footprint, carbon footprint, water footprint, costs of diets.

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