

REGATA

REDE GALEGA DE TECNOLOXÍAS AMBIENTAIS

Research Stays 2018

Monitoring of the Portuguese diet sustainability over a period of nine years

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Objectives

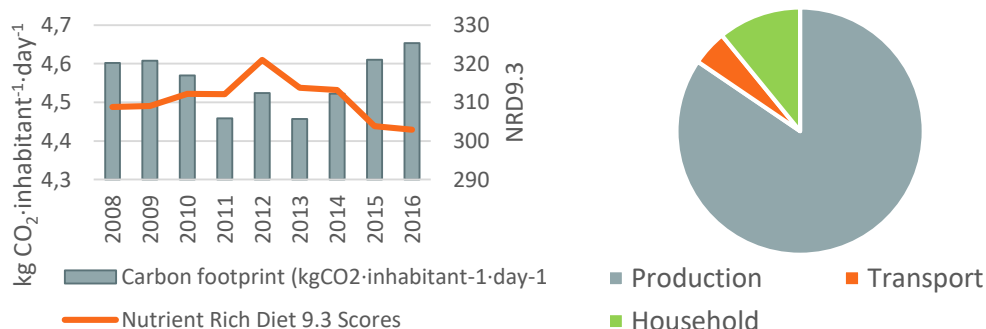
The main objectives of this research study are monitoring both the environmental and nutritional quality of the real Portuguese dietary pattern as well as proposing future changes in the dietary choices towards a more sustainable dietary pattern attainment. In addition, the total carbon footprint of the Portuguese diet also has been estimated from a cradle-to-mouth perspective.

Methodology

The environmental pillar of the dietary patterns will be determined in terms of the Carbon Footprint (CF) considering a Life Cycle Assessment (LCA) perspective. Regarding the nutritional pillar, it will be defined considering the estimation of the Nutrient Rich Diet 9.3 (NRD9.3) score.

Results

As far as concerns the CF of the Portuguese dietary patterns results, an average value of 4.56 kg CO₂ eq·inhabitant⁻¹·day⁻¹ is obtained for the period under study. The CF value ranges from 4.46 kg CO₂ eq·inhabitant⁻¹·day⁻¹ in 2011 and 2013 to 4.65 kg CO₂ eq·inhabitant⁻¹·day⁻¹ in 2016. Regarding the results achieved for the NRD9.3 score, it can be seen that the highest values of the index correspond to these years with the lowest figures for CF.



Attending to the CF for the most updated year of the studied period (2016), a final result of 5.52 kg CO₂ eq·inhabitant⁻¹·day⁻¹ is obtained for the Portuguese diet; production stage presents the highest GHG emissions (84%) followed by household activities (11%) and distribution (5%) stages.

Highlights

Measures for the improvement of the nutritional quality and a reduction of both the caloric intake and the CF should be taken in order to achieve a healthier and more environmentally friendly lifestyle for the Portuguese population.

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