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A Sustainable and Global Health Perspective of the Dietary Pattern of French Population during the 1998–2015 Period from INCA Surveys

Anthony Fardet ^{1,*}, David Thivel ², Laurent Gerbaud ³ and Edmond Rock ¹

¹ INRAE, UNH, Unité de Nutrition Humaine, CRNH Auvergne, Université Clermont Auvergne, F-63000 Clermont-Ferrand, France; edmond.rock@inrae.fr

² European Childhood Obesity Group, Clermont Auvergne University, EA 3533, Laboratory of the Metabolic Adaptations to Exercise under Physiological and Pathological Conditions (AME2P), CRNH Auvergne, 63178 Clermont-Ferrand, France; david.thivel@uca.fr

³ Service de Santé Publique, CHU de Clermont-Ferrand, Clermont-Ferrand, Université Clermont Auvergne, CNRS-UMR 6602, Institut Pascal, 63178 Clermont-Ferrand, France; lgerbaud@chu-clermontferrand.fr

* Correspondence: anthony.fardet@inrae.fr; Tel.: +33-4-73-62-47-04

Citation: Fardet, A.; Thivel, D.; Gerbaud, L.; Rock, E. A Sustainable and Global Health Perspective of the Dietary Pattern of French Population during the 1998–2015 Period from INCA Surveys. *Sustainability* **2021**, *13*, 7433. <https://doi.org/10.3390/su13137433>

Academic Editors: Nazimah Hamid and Kevin Kantono

Received: 26 May 2021

Accepted: 29 June 2021

Published: 2 July 2021

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Abstract: In France, the evolution of dietary pattern relative to sustainability and global health remains insufficiently studied. The objective of this study was to assess dietary changes during 1998–2015 through three generic metrics potentially related to sustainability. Food consumption data were collected from three French National Individual Study of Food Consumption surveys (INCA) for children (0–17 years) and adults (18–79 years) representative of the French population. The consumed foods were converted into plant (metric 1) and non-ultra-processed (UPF, metric 2) calories, and analyzed in meeting dietary recommended intakes (metric 3). French children and adults consumed high levels of animal and UPF calories, and nutrient deficiencies were observed in adults from the 2015 survey, e.g., fiber, EPA, DHA, magnesium, retinol, and vitamin C. In children, UPF daily calories increased from 42.8 to 45.5% and decreased in adults from 39.2 to 35.0%. In children and adults, diet revegetation was observed. While the level of physical activity decreased, overweight, obesity and type 2 diabetes prevalence increased in French adults. The French dietary pattern is not sustainable for global health unless public health policy is reinforced, with at least a twofold decrease in animal and UPF calories and improved food diversity.

Keywords: sustainability; global health; French dietary pattern; animal products; ultra-processed foods; nutritional needs

1. Introduction

Western countries, including France, have faced an important nutrition transition for the last seven decades, i.e., after the Second World War, nutrition began to be characterized by a progressive increase in animal and ultra-processed food (UPF) product consumption [1–4]. This transition is now at work in emerging countries such as Brazil [5], some Southeast Asian countries [6,7], and China [8] and is emerging in developing countries such as those in Africa [9]. Paralleling this transition, a dramatic increase in the prevalence of chronic diseases has been observed in Western countries, progressively replacing that of infectious diseases, but at a higher rate than in low- and middle-income countries [10–12]. Thus, in 2016–2017, worldwide deaths from noncommunicable diseases represented 72.3% of all deaths [12,13], for which the three main leading and combined triggering factors were malnutrition (both over- and undernutrition and/or nutritional deficiencies), environmental pollution, and physical inactivity [14]. Dietary risk factors alone