Smart Eating & The 4th Industrial Revolution: Harnessing New and Innovative Technologies for Nutritious and Sustainable Foods

Biography

Prof. Purwiyatno Hariyadi is a Professor in Food Processing and Engineering at the Department of Food Science and Technology, Faculty of Agricultural Engineering and Technology, Bogor Agricultural University (IPB), Indonesia. He was the Director of Southeast Asian Food and Agricultural Science and Technology (SEAFAST) Center, IPB. Prof. Hariyadi was also the Vice Dean of Faculty of Agricultural Engineering and Technology (1995 to 2000) and the Head of the Department of Food Science and Technology (2000 to 2004) at Bogor Agricultural University, Indonesia.

Prof. Hariyadi is actively involved with many professional organizations, including the Institute of Food Technologist (IFT) and Institute for Thermal Process Specialist (IFTPS). Prof. Hariyadi has been consulting for the Government Agencies (National Agency for Drug and Food Control and Ministry of Agriculture) as well as for food industries. His research interests are (i) post-harvest handling and processing; especially for palm oil and (ii) food processing and engineering; especially on sterilization, pasteurization and aseptic processing/packaging, including irradiation of foods. In 2012, he was elected to the Indonesian Academy of Sciences as a Member of Commission of Engineering Sciences, and in 2016, he was elected to the International Academy of Food Science and Technology (IAFoST - IUFoST).

He is also a Member of CODEX National Committee since 2010, and in 2017, Prof. Hariyadi was elected the Vice-Chair of Codex Alimentarius Commission. He was the President of the Indonesian Palm Oil Society (2005-2009) and the President of Indonesian Association of Food Technologist (IAFT) for two periods (2006-2008; and 2008-2010). Prof. Hariyadi is also the Chief Editor of monthly magazine of FOODREVIEW Indonesia. He received his Ph.D. in Food Chemistry (with minor in Chemical Engineering) from the University of Wisconsin-Madison, USA (1995).

Abstract

Generally, there is an increase awareness about the important relationship between eating - as individual actions - with many other aspects of human life. Eating activities are not only linked and influenced by health aspect, but also by, inter alia, enjoyment, pleasure, socio-cultural environment, faith (religion), life style, certain expected performance and sustainability aspects. Therefore, the challenge is that one must be smart and mindful of these multi-factors when it comes to smart eating. With the emergence of the 4th industrial revolution, this challenge is even greater due to the abundances and rapid flow of information regarding smart eating. What makes smart eating especially more problematic is because eating provides an aspect of enjoyment and pleasure. So problematic that sometimes we are confused on whether we live to eat or eat to live.
First thing first, smart eating starts from the smart selection of many variety food available. This presentation will discuss the importance of establishing the simple metric, considering all important aspect of smart eating, that can be used not only by consumer to make better food selection but also by producers, manufacturers, traders and retailers to provide food choices. The importance of new and innovative technologies, such as genetic engineering, irradiation, high pressure processing, ohmic heating and modified atmosphere packaging, to assure the availability variety of safe, nutritious and sustainable foods, to support the smart eating, will also be discussed.