

## Food: a medicine for a population's health and a country's economy

The connection among the several facets and suitability of food as a medicine is a complex debate yet not well explored and depth by agricultural economists, governments, industry and producers. The food sector can act as a medicine both metaphorically and literally. It can support the health of a country's economy by exporting food, as well as improving and strengthening tourism and related sectors (restaurants, fairs, food festivals, gastronomic-wine routes, food-cultural heritage events, etc.).

Food means heritage, culture and lifestyle. Food is also a crucial aspect of family and individual family human existence fulfilling physiological as well as psychological needs, i.e. all people eat to live but some also live to eat. The latter includes those with a hedonistic lifestyle, who eat "food for food's sake," and this is linked to food memory. Food meets physiological needs but to do so must be nutritional as well as organoleptically appetizing (Aridi *et al.*, 2017; Belay *et al.*, 2017; Neff *et al.*, 2015).

Finally, linking a healthy economy to human needs the food industry drives and responds to new healthy food trends, and must meet consumer expectations and requirements (Snopek *et al.*, 2018; Close *et al.*, 2018; FAO, 2017). To be innovative it necessary to consider the role of functional food, organic food, safe food and healthy food, so food is a medicine (as opposed to junk and fast food). Food can also represent a natural medicine for the consumers' psychological well-being (Gardner *et al.*, 2014). The approach to food as medicine represents the existence of different "souls" rooted in the food concept that actually address new scientific and policy paths in a changing food world.

Therefore, research, practice, EU programmes and policy paths have to aim at focusing on discussion of issues related to behavior of firms, consumers and politicians within these main trends that otherwise would tend to remain implicit and unspoken. Addressing these new trends and issues appears decisive in order to govern food and agriculture policy debates at the global level (Thompson and Scoones, 2009).

All of this has inspired the promotion of this special issue on "Food: a medicine for a population's health and a country's economy" of the *British Food Journal* in order to investigate and capture the main intrinsic and extrinsic dynamics. We have selected 17 papers that even without dealing with all the relevant issues related to these new trends of the food systems disclose interesting features to be stressed. The dealt topics have only been covered peripherally in other academic papers and not in a holistic way. The theme of considering the role of food as medicine for economy, for human health and psychological well-being is unique and has been received little attention.

Aspiration of consumers for healthier and well-being food is more and more rooted because nutrition, health and lifestyle are new key words for healthy life of present and future generations (CIHEAM/FAO, 2017; Fiore *et al.*, 2017; Nassivera and Sillani, 2015; Dagevos and Ophem, 2013). Nowadays, Nutrition Economics is the main discipline devoted to defining health and economic aspects of feeding for the wellness of the society (Lenoir-Wijnkoop *et al.*, 2011).

Furthermore, special attention in selecting these seventeen papers for this Special Issue have been devoted to works dealing with new consumer behavior and nutritional issues, lifestyles and habits of consumption, novel product development, food wastage and innovative technologies, food trends for psychological and mental well-being, fascinating horizons and paths for health and economy.



Specifically Rojas-Rivas *et al.* in their study “Consumers’ perception of amaranth in Mexico: a traditional food with characteristics of functional foods’ expectations about amaranth, a traditional Mexican food with characteristics of functional foods thus highlighting the crucial role of marketing strategies and education regarding the incorporation of healthy foods in personal diet.

Among healthy foods, fruit and vegetable (FV) boast a place of privilege, since are a main part of a healthy diet. In the work “Fruit and Vegetable Expenditure Disparities: Evidence from Chile” by Carreño and Silva Montes the aim is exploring fruit and vegetable procurement disparity across income groups in Chile, a mid-high income country with the largest income disparity of all OCDE countries.

The paper “Perceived Value Dimension in Repetitive Fish Consumption in Indonesia” by Fiandari *et al.* identifies the perceived value owned by repetitive fish consumers by applying the theory of behavioral planning to identify factors that influence a person’s fish consumption explained by health (as a non-monetary value) and monetary values. In Indian system of medicine-Ayurveda, *Musa paradisiaca* is considered as a remedy for treatment of various diseases and ailments; Bhinge *et al.* in “Comparative *In vitro* hypoglycemic studies of unripe, ripe and over ripe fruit extract of *Musa paradisiaca* (Indian banana),” verify and compare the hypoglycemic potential of unripe, ripe and over ripe fruit extract of *Musa paradisiaca*.

In addition, mushrooms have always been treasured and appreciated thanks to their nutritional as well as medicinal properties. In the work “Phenolic profile of three wild edible mushroom extracts from Ordu, Turkey and their antioxidant properties, enzyme inhibitory activities” by Çol Ayvaz *et al.* phenolic profiles, antioxidant activities and enzyme inhibition potentials of three mushroom species from Turkey are investigated by using spectrophotometric methods. “Understanding Typical Foods Consumption of Young People under the Experience Perspective. The Case of Truffle” by Savelli *et al.* investigates attitudes and behaviors of young people towards a commonly known Italian typical food, which is truffle. The main focus is to examine whether this product is perceived as a high experiential-based food or simply a nutritional-based one.

Another special healthy food is certainly honey. Šedík *et al.* in their paper “Honey: food or medicine? A comparative study between Slovakia and Romania” examine different profiles of honey consumers in Slovakia and Romania by using a segmentation approach, thus giving insights for honey producers on different marketing strategies in different segments, recognized honey as both food and for health benefits. In line with this work, the paper “Physicochemical properties, bioactive components, antioxidant and antimicrobial potentials of some selected honeys from different provinces of Turkey” by Erturk *et al.* try to characterize monofloral and heterofloral honey samples (chestnut, lavender, acacia, sunflower) from different region of Turkey according to their physicochemical properties.

Within these new healthy trends, in 2010, UNESCO inscribed on the List of Intangible World Heritage, the Mediterranean Diet (MD). In line with this trend, we present two scientific works: the first one “Mediterranean diet and mental distress: ‘10.001 Dalmatians’ study” by Salvatore *et al.* investigates the association between mental distress and MD in a community-dwelling adult population of Dalmatia, Croatia, by highlighting the importance of educational campaigns aimed at promoting more traditional dietary patterns. “Is the Mediterranean Diet for all? An analysis of socioeconomic inequalities and food consumption in Italy” by Cavaliere *et al.* is the second work on the topic. The aim of the latter was to investigate the role of the main socioeconomic and demographic factors in affecting the consumption frequency of specific food categories and to analyze whether socioeconomic status is related to the overall level of adherence to the MD of the Italian population.

An effective, quick and cheap instrument to scrutinize sentiments on food and nutrition is the questionnaire eating behaviors (QEB) that is the topic of the paper “The QEB

questionnaire as an instrument to examine opinions on food and nutrition and indicators of the quality of diet” by Wawrzyniak *et al.* This study assesses the QEB developed by the Science Committee of Human Nutrition of the Polish Academy of Sciences in women in various age groups.

Regarding the new tendencies, organic agriculture is clearly a crucial path. “The land is what matters. Factors driving family farms to organic production in Poland” by Chmieliński *et al.* investigate tendency of farms to switch from conventional to organic production, by analyzing data from the Polish Farm Accountancy Data Network (FADN). From the same country, Drejerska *et al.* in “Marginal, localized and restricted activity – business models for creation a value of local food products. A case from Poland” investigate marginal, localized and restricted activities (MLR) operating in pork processing on local food markets in Poland by means of the business model canvas that allow to investigate business potential from different perspectives.

Another important challenge in the agri-food systems is try to decrease food losses and waste all over the world. The paper “Household food waste reduction: Italian consumers’ analysis for improving food management” by Pellegrini and other researchers study food waste minimization from a food-related behavior perspective. In line with the latter, the work by Galati *et al.* “Consumer awareness and acceptance of irradiated foods: the case of Italian consumers” evaluate through an Exploratory factor analysis (EFA) and a Structural Equation Model (SEM) the acceptability of foods treated with ionizing radiation in Italy, where exist a growing problem related to the food loss and waste.

Finally, the last work about the consumer behavior is by Nazzaro *et al.* “Do consumers like food product innovation? An analysis of willingness to pay for innovative food attributes.” It tries to reveal the openness of consumers towards the implementation of innovative attributes in a traditional food at detecting the matching between the innovative product attributes and the current consumer food lifestyles.

In conclusion, the scientific works presented in this special issue confirm an increasing interest for these new develops and approaches to food. In this way, this SI can offer and shed some light on novel aspects, definition and concepts in order to provide industry, researchers, politicians, and students with tools to extend perspectives of food systems.

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