

Executive summary of UPF session

Due to a controversy regarding ultra-processed foods (UPFs), IUFoST GOIR Working Group in collaboration with FoSTAT and FIFSTA organized the roundtable discussion (RT) entitled **“Understanding Ultra-Processed Food and Its Potential Consequences”** at the Food Innovation Asia Conference 2023 on June 15th, 2023, BITEC Exhibition and Convention Center, Bangkok, Thailand. The objective of this RT discussion session was to provide the platform for the introduction of UPF concept as well as for the public discussion, based upon scientific evidence, regarding UPF potential consequences on the aspects of food industry and human health. The panelists of roundtable discussion consisted of representatives from Europe, Latin America, and ASEAN to provide the viewpoints of food scientists, food technologists, food toxicologists, nutritionists and food industry.

The status of UPFs and the NOVA food classification system in each region was updated. In Europe, the term “UPFs” has not been focused and have no regulation regarding UPFs. Anyhow, in January 2023, FOODDRINK EUROPE published a position paper on the consumption of thermal-processed and processed foods. In the paper, three interesting points included 1) warning consumers about UPFs would lead to many unintended consequences, 2) food safety is at the heart of public policy, and 3) there are better solutions to enhance health and sustainability. Currently, the European has implemented the regulation of food information to consumers in a form of nutritional front labeling. EU emphasizes more on nutrition than the degree of food processing. In ASEAN, food consumption data of 2019 showed that Singapore consumed the highest amount of UPFs in ASEAN at 45.4 kg per capita per year, followed by Malaysia, Thailand, Indonesia, Vietnam and the Philippines, respectively. Today, Singapore has a high demand for foods that are categorized as UPFs due to its convenience. The government aware of dietary-related health impacts. They and has promoted the use of nutrition labeling (FOPL), modified from EU Nutri-score. They also encouraged consumers to include a healthier choice symbol in their purchasing consideration, and local food processors to use healthier ingredients with, in return, a special incentive. Thailand has not yet given a definition of UPF and no action has been taken on UPFs. Thai Food and Drug Administration, Ministry of Public Health is responsible for the protection of the health and safety of consumers, by ensuring the quality of food products. Food additives and novel foods are the two examples of food products that the manufacturers must verify the safety the before the products are launched to the market. This is also included packaging. Thai consumers can monitor nutrition labels, GDA labels and health choice symbols as the tools for purchasing nutritious foods. As for Latin America, the term UPFs is widely implemented in the region. The Pan American Health Organization (PAHO) in which foods were grouped based on processing level (NOVA classification system) has been released in 2015. Chile was the first country to introduce a warning label when a nutrient is exceeded showing black octagons stating HIGH IN. After that, several countries (i.e., Peru, Uruguay, Mexico, Argentina, Brazil, Paraguay and Colombia) have also established their warning label systems. However, because consumers are advised to choose the products with less warning logos, using the PAHO Nutrient Profile Model as basis for warning labeling can be misleading.

In the session, definition of UPFs according to the FAO report (2019) as well as NOVA classification system were introduced to the audience However, it appeared to the audience

that it was difficult to precisely categorize several food items as the NOVA classification criteria remain unclear. Furthermore, the recommendation stated in the FAO report that classification of UPFs can be achieved by checking the ingredient list. This has raised a question whether the NOVA and UPFs are about degree of food processing or just food formulation and ingredients. The confusion of NOVA food classification was because NOVA incorporated 3 criteria at the same time; degree of processing level, purpose of processing, and type of processing. It could be a concern if dietary guidelines with a recommendation to avoid UPFs based on only observational studies between UPF consumption and health impact without in-depth understanding what UPFs are. Consumers do not understand nor able to identify UPFs. Due to incomplete scientific evidence, an issue of warning logo may create unintended drawbacks for both consumers and food industry.

One concern to be aware of about UPFs is the excessive use of food additives, especially the synthetic ones. Therefore, food manufacturing should emphasize more on balanced diets, offer more nutritious foods with healthy ingredients. Research and development on healthy processed foods are therefore essential. Clearly, more scientific information particularly on bioavailability and bioaccessibility of processed food are clearly needed before drawing a conclusion on UPF-related health impacts.

On the other hand, food processing offers several advantages, e.g., convenience, microbial safety, long shelf stability, improved food accessibility and security. Regarding economic and social aspects, family members can worry less on food preparation. Traditional dishes can be processed and distributed to several regional either within the country or abroad. UPFs can also be nutritious alternatives. For example, nutrient fortification can offset the nutrient losses from daily household cooking, especially for vitamin B and C. Hence, instead of banning UPFs, it was suggested that adhering bodies should work together to assure that UPFs are safe and nutritious. This requires the collaboration of all stakeholders from many disciplines such as food scientists, food technologists, nutritionists, dietitians, and health-care staff.

Nonetheless, it was emphasized that an adverse health impact does not depend solely on consumption of a single UPF but it is a collective result of diets and lifestyles. Therefore, it is worth returning to the basic principles of nutrition; moderation and nutrition-balanced diets. it is recommended to avoid repeated consumption of food products, eat variety of foods, and include fruits and vegetables in the meals.

Ultimately, NOVA food classification system is still unclear, leading to confusion. UPF is yet to be understood by consumers. At the same time, it is now impossible for consumers to limit their food consumption only to natural or minimally processed foods. Particularly, the world is facing the issue of food security with the challenge to feed the increasing world population. Lifestyle transformation towards urbanization is expected to continue in many regions. Therefore, it is difficult to solely rely on fresh, unprocessed foods. What should be done is to create collaboration through research and development of processed foods as part of a healthy balanced diet.