Kao and Nissin Agree to Collaborate to Utilize the Virtual Human Body Generative Model

Aim to provide consumers personalization of nutritional balance and portions of Complete Nutrition Meals based on their visualized health status.

Kao Corporation (President: Yoshihiro Hasebe) and Nissin Food Products Co., Ltd. (President: Noritaka Ando) agreed to start a joint initiative that will aim to further evolve Nissin's Complete Nutrition Meals[1], which is currently under research based on the latest food technology, utilizing Kao's Virtual Human Body Generative Model[2].

The statistical model will enable full management of the human body statistics based on comprehensive estimate data on more than 1,600 attributes related to health and lifestyles

With the concept of "a meal that is controlled in calories, salt, sugar, fats, etc., while providing all essential nutrients without the sacrifice of taste or appearance", Nissin Food Products is advancing the development of Complete Nutrition Meals leveraging various nutritional studies, as well as unique and cutting-edge food processing technologies cultivated through the instant noodles business. By popularizing Complete Nutrition Meals, Nissin Food Products' goal is to realize a world where anyone can enjoy whatever they want, whenever they want, and as much as they want [1].

In addition, Nissin Food Products will take on the unprecedented challenge of "promoting health and extending healthy life expectancy through foods" and propose a solution to common social issue throughout the world, illness prevention, through the realm of food.

*1 Nissin Food Products' Complete Nutrition Meals Project official website
   https://www.nissinfuturefood.com/ (Japanese)

Kao is pursuing initiatives that focus on the practical application of their statistical model, the Virtual Human Body Generative Model, which can estimate various elements related to a person's health and life at a certain point in time. The Virtual Human Body Generative Model was constructed by utilizing Kao's numerous studies related to the body, etc.. By simply entering the data for a limited number of items, the data for other items is generated. It is easy to see and estimate your own health condition in detail[2].

*2 Kao News Release (February 28, 2022): Kao and PFN Co-Develop Virtual Human Body Generative Model
   https://www.kao.com/global/en/news/business-finance/2022/20220228-001/
   Kao and Preferred Networks, Inc. (PFN) have developed a statistical model which covers a comprehensive set of over 1,600 attributes related to the body such as health check results, diet, exercise, sleep, personality traits, preferences, stress and menstruation and can show possible ways these attributes will appear.

Nissin Food Products focused on the fact that the Virtual Human Body Generative Model can quickly estimate health measurements that would impose physical burdens during the measurement process, such as blood glucose levels, from data that can be easily entered like questionnaire items that do not cause strain to measure, or height and weight. Nissin Food Products have decided to collaborate with Kao with belief that by utilizing this Model, consumers themselves may be able to specifically understand the effects of Complete Nutrition Meals on their health status.

In the future, findings will be applied to the creation of a personalized Complete Nutrition Meal based on individual's health conditions which may be defined through questionnaire items related to food preferences, lifestyles, or even important values necessary for everyday life but deemed not have clear correlation with foods (for example, regarding skin condition, body odor, etc.).