

Date	13 November 2022
Team ID	PNT2022TMID43508
Project Name	AI-Powered Nutrition For Fitness Enthusiast

## **Project Objectives**

1. Nutritional intake is fundamental to human growth and health, and the intake of different types of nutrients and micronutrients can affect health.
2. The content of the diet affects the occurrence of disease, with the incidence of many diseases increasing each year while the age group at which they occur is gradually decreasing.
3. Methods: An artificial intelligence model for precision nutritional analysis allows the user to enter the name and serving size of a dish to assess a total of 24 nutrients.
4. A total of two AI models, including semantic and nutritional analysis models, were integrated into the Precision Nutritional Analysis.
5. A total of five different algorithms were used to identify the most similar recipes and to determine differences in text using cosine similarities.
6. The model structure consists of a digital data semantic analysis model, an AI precision nutrient analysis model, a database of 1590 recipes, and 7869 ingredients from common Taiwanese recipe databases
7. This study proposed an Intelligence Precision Nutrient Analysis Model based on a digital data collection framework, where the nutrient intake was analyzed by entering dietary recall data. The AI model can be used as a reference for nutrition surveys and personal nutrition analysis