

Project objectives

Team ID	PNT2022TMID13764
Project Name	AI-Power Nutrition Analyzer for Fitness Enthusiasts

Artificial Intelligence can be applied in multidisciplinary fields, including patient service and care. It enables Precise and personalized medical nutrition care by assessing food and nutrient intake, nutritional evaluation. The Application of AI for the provision of food services to hospitalized patients is of immense scope. This review Details the various ways through which AI can be applied for the nutrition assessment. Even though commercial AI-based nutritional assessment systems are available, many do not evaluate the nutrient intake, and the data Available through them were not validated. FatSecret is a commercially available AI-based food and nutrient Assessment system that can evaluate the food's calorie content. Also, the major challenge posed by such systems is the availability of locally appropriate data sets. Hence further research and validation are essential in this field. (Artificial Intelligence, food and nutrient intake, hospitalized patients)

Food is essential for human life and has been the concern of many healthcare conventions. Nowadays new dietary assessment and nutrition analysis tools enable more opportunities to help people understand their daily eating habits, exploring nutrition patterns and maintain a healthy diet. Nutritional analysis is the process of determining the nutritional content of food. It is a vital part of analytical chemistry that provides information about the chemical composition, processing, quality control and contamination of food.

The main aim of the project is to building a model which is used for classifying the fruit depends on the different characteristics like colour, shape, texture etc. Here the user can capture the images of different fruits and then the image will be sent the trained model. The model analyses the image and detect the nutrition based on the fruits like (Sugar, Fibre, Protein, Calories, etc.).