

# **Personalized Health-Centric Food Recommendation System**

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**Abstract:** *People nowadays suffer from a wide range of acute and chronic conditions. It is challenging to properly prescribe a diet in modern world. When a body does not obtain enough nutrients, it might develop nutritional disorders, which can cause a number of different health issues. Chronic conditions including hypertension, cardiovascular disease, diabetes, and others can be caused on by dietary deficiencies or excesses of particular nutrients as well as eating disorders. Primary root cause of these conditions is typically an inadequate or improper diet. We propose a diet suggestion system in this study that takes the user's physics details and symptoms into account. Machine learning methods (KNN) are used in this study. The system predicts the proposed meal plan for a user by leveraging its training data, which comprises daily calorie requirements and food consumption patterns. According to the evaluation of the dataset, the suggested model outperforms existing diet recommendation systems. Analyzing the user's dietary and nutritional requirements, the suggested system generates a prediction about the meal plan. It could result in a customized food plan for each person and promote better health.*

**Keywords:** Recommendation System, KNN, Disease, Nutrition

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