

AI-Powered “Food as Medicine” using Cloud Computing for Personalized Health Recommendations

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Abstract: The growing incidence of lifestyle-related diseases has necessitated the development of personalized nutrition systems that integrate healthcare with intelligent technology. This paper presents an AI-powered “Food as Medicine” framework hosted on a cloud computing platform to provide personalized dietary recommendations based on individual health parameters, medical history, and lifestyle factors. The system employs machine learning and deep learning models for disease-risk prediction and food selection, coupled with natural language processing (NLP) for interactive recommendation delivery. Cloud infrastructure ensures scalability, security, and data interoperability across diverse health data sources. The proposed model promotes a proactive approach to healthcare by aligning nutrition with disease prevention and wellness management.

Keywords: Artificial Intelligence, Cloud Computing, Personalized Nutrition, Food as Medicine, Machine Learning, Healthcare Recommendation System