

AI-powered Nutrition Analyzer for Fitness Enthusiasts

LITERATURE SURVEY

S.NO	TITLE	FOUNDERS/ PUBLISHERS	OBJECTIVE	INFERENCE
1	Nutrient Management Using Artificial Intelligence Based on Digital Data Collection Framework.	Hsiu-An Lee , Tzu-Ting Huang, Lo-Hsien Yen, Pin-Hua Wu, Kuan-Wen Chen, Hsin-Hua Kung, Chen-Yi Liu, and Chien-Yeh Hsu (20 April 2022)	<p>✓ 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.</p> <p>✓ AI model has very little error and can significantly improve the efficiency of the analysis.</p>	<p>✓ This study proposed an Intelligence Precision Nutrient Analysis Model based on a digital data collection framework, where the nutrient intake was analysed by entering dietary recall data.</p> <p>✓ The AI model can be used as a reference for nutrition surveys and personal nutrition analysis.</p>
2	A Mathematical AI-Based Diet Analysis and Transformation Model	1.L.K. Gautam 2.S.A. Ladhake (2018)	<p>✓ Educational software which should perform the routine task of analysing, optimizing, and transforming diet by considering their energy requirements and medical problems.</p> <p>✓ The different nutritional values present in a diet are generally affected by imprecision, which can be represented and analysed by fuzzy logic.</p>	<p>✓ The AI-based mathematical model for diet optimization and transformation solves the common nutritional problems of public health problems in India using fuzzy arithmetic.</p> <p>✓ The proposed transformation algorithm balances the diet by developing the state space, considering the needs of user and applying minimum possible changes.</p>
3	Swasthya : The Virtual Dietician	1.Diya Garg 2.Chakshita Gupta 3.Mishika Rawat (2020-21)	<p>✓ The system creates a meal plan in accordance with a person's lifestyle and health requirements.</p>	<p>✓ This software is going to boost up the confidence of the user and make them more physically and mentally fit.</p>

4	AI Based System to Provide Diet Plan for Older Hospitalized Patients.	1.Hussain Quraishi 2. Mohammed Zaid 3. S. Dinesh Choudhary 4.Mohammed Imran (2022)	<ul style="list-style-type: none"> ✓ AI nutritionist is indeed a machine intellect health professional that supplies its users with an appropriate eating strategy depending on some evaluation parameters. ✓ It functions as a nutrition advisor, much like an actual health professional. 	<ul style="list-style-type: none"> ✓ The work of administrator is to monitor the client data and discard invalid database. Various nutritionists can visit the application and access data via dietician login page. ✓ Activity and workout information to spend the calories according to the consumption is included.
5	HealthifyMe	1.Tushar Vashisht 2.Sachin Shenoy 3.Mathew Cherian (1 Jan 2012)	<ul style="list-style-type: none"> ✓ Providing nutritional and fitness advice from nutritionists and fitness coaches to users with premium subscription. ✓ It has developed a calorie counter for regional foods and an exercise tracker for logging in physical activities. 	<ul style="list-style-type: none"> ✓ A connected Fitness ecosystem that helps to achieve the health goals faster and more consistently. ✓ Detailed insights to keep you on track and help to improve health regimen, provided with extensive diet and workout plans.