AI –POWERED NUTRITION ANALYZER FOR FITNESS ENTHUSIASTS

LITERATURE SURVEY

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LITERATURE REVIEW

S.NO	TITLE & AUTHOR	YEAR & PUBLICATIONS	METHODOLOGY & ALGORITHM	ADVANTAGE	DRAWBACK
1.	Artificial intelligencein food science and nutrition Infomation Technologies Institute(ITI) Kosmas Dimitropoulos	**April 2019** Published by Oxford University Press on behalf of the International Life Sciences Institute.	AI in areas such as immunity-boostingfoods, dietary assessment, gut microbiome profile analysis, and toxicity prediction of food ingredients.chniques are growing rapidly. They are a type of ML algorithms that requires very little human supervision when training and can crunch huge amounts of data in a short time. As for their application in healthcare, ANNs are used to analyze medical imaging, biochemical studies.	tells exactly what to eat according to thebody type. All ofthis is packaged in a comprehensive nutrition and activity tracker	The AI system may not always make the right decisions, but it will eventually learn from theseerrors and adjust its decision-making processes to improve over time.
2.	Artificial Intelligencein Nutrients Science BALAKRISHNA .Y	**JUNE 2022** This article belongs to the Section Nutrition Methodology & Assessment	The possibilities of artificial intelligence in the field of medicaldiagnostics, risk prediction and support of therapeutic.	creation of a global network that will be ableto both actively support and monitor the personalized supply of nutrients..	The AI System May Be Buggy At First it can take timeto work correctly. This isnormal.

			AI algorithms may help better understand and predict the complexand non-linear interactions betweennutrition-related data and health		
3.	AI-Based Dietician Professor, Department of Computer Science, Dayananda Sagar Academy of Technology	**April 2022** International Journal of Creative Research Thoughts (IJCRT	Consulting a dietician is something that every-one cannot afford. Also, consulting a dietician could be time-con-suming. An ex-pert system method to rec-ommend a per-sonalizeddiet plan. AI could significantly improve packaging, increasing shelf life, a combination of the menu by using AI algorithms, and food safety by makinga more transparent supply chain management system.	Helps the user to in-teract bet-ter with the system, Pro-videinfor-mation to the system as input and take the recommended diet plan as output	Doesn't have acknowl-edgabledie-tician Don't value customer timeWorst service
4.	Virtual Nu-tritionistus-ing AI Internation al Journal	**June 2019** Blue Eyes Intelligence Engineering and science publication	It will generate the diet plan as well asit also monitor the user health to classify the category of the diseaseand to create the diet	A user can trackhis/her progresstо-wards his/hergoal from the day he'd started using the ap-plication.	High Costs. No creativity. AI is that it cannot learn to think out-side the

	of Engineering and Advanced Technology (IJEAT) ISSN: 2249-8958, Volume-8 Issue-5,		plan. It will also reduce the cost of consulting the person nutritionist. Gradient boosting Regression was used to generate the model, as the method non-linear relationships between PGGR and different factors inour dataset.Gradient boosting Regression uses decision trees to classify the data.	Reminders forevery meal. Inbuilt personalized customization of meals depending upon one's preferred foods	box.Unemployment-Make Humans Lazy. No Ethics. Emotionless. No Improvement
5.	A Computer Vision-based Indian Food Detection and Nutrition CalculationApp Durgesh Samariya	**MAY 2022** DEVELOPERS CORNER	The task of food detection/classification is not easy as it seems. all possible options related to the given Image. For example, if a user uploads a dal image then the Foodify.ai app return all dal's from our nutrition database such as Dal Tadka, Dal Fry, Dal Makhni, etc. AI algorithms can help the food delivery systems to manage the orders accurately. It will reflect the customer's order to two different	Easy to use Highly productive No more man power required	Calculation cannot be accurate Software development isdifficult Image processing canalways not be correct

			delivery partners, one who is in the nearby location of the delivery address and the other who is in the nearby location of the restaurant where the customer has ordered the food		
6.	Diet Monitoring and Health Analysis Using Artificial Intelligence AUTHOR: R. Divya Final year Students, Dept of CSE, Velammal Engineering College, Chennai, India(TN) S. Vithiya Lakshmi YEAR :2021		Our food recognition system employs visual sensors to capture food images as the source data. Due to the recent advances of electronics, visual sensorsare now available in many Internet-of-Things(IoT) devices, such as smart phones Control of health and well-being. Additionally, AI increases the ability for healthcare professionals to better understand the day-to-day patterns and needs of the people they care for,and with that understanding they are able to provide better feedback, guidance and support for staying healthy.	The diseases can be identified accurately by the classifiers Wearable are used by the userto keep track of the diet.Intake of the food is taken into count and suggestionsare provided to improve the health of the user.	By integrating AIwith the user data, map its user's nutritional patterns and needs fitness coach is an AI