LITERATURE REVIEW

S.NO	TITLE & AUTHOR	YEAR & PUBLICATIONS	METHODOLOGY & ALGORITHM	ADVANTAGE	DRAWBACK
1.	Artificial Intelligence in Nutrients Science BALAKRISHNA .Y	**JUNE 2022** This article belongs to the Section Nutrition Methodology & Assessment	The possibilities of artificial intelligence in the field of medical diagnostics, risk prediction and support of therapeutic. AI algorithms may help better understand and predict the complex and non-linear interactions between nutrition-related data and health.	creation of a global network that will be able to both actively support and monitor the personalized supply of nutrients.	The AI System May Be Buggy At First it can take time to work correctly. This is normal.
2.	Artificial intelligence in food science and nutrition Information 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-boosting foods, 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 the body type. All of this 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 these errors and adjust its decision-making processes to improve over time.
3.	Android Based Monitoring System With Diet And Calorie Tracker V. Ramkumar, S.Priyanga Devi , K. Laxmi Priya, M. Kavya Dharshani.	**AUG 2022** Publisher Name IJERT	It serves as a calorie tracker, allowing users to lose weight and track their food and exercise regimens through their phones. The A.I. Diet is an algorithm that tells you how to eat to live a longer and healthier life. As you know, an algorithm is a process or set of rules followed by a computer used in calculations or problem-solving, so the A.I diet is all based on science	the fitness coach is an AI that can handle 77% of all user questions,	It is clearly lacking appropriate regulations and some political, ethical, and financial transformations

LITERATURE REVIEW

4.	AI DIETICIAN Prajakta Dadasaheb Jadhav, Apurva Madan Sinnarkar, Sneha Vaideswaran & Prof. Bharati.M. Narute	**March 2019** Content uploaded by Feride Ayyıldız Author content	messages to help its users stay healthy and engaged with the app. By integrating AI with user data, this app is able to map its user's nutritional patterns and needs. AI algorithms may help better understand and predict the complex and non-linear interactions between nutrition-related data and health outcomes, particularly when large amounts of data need to be structured and integrated, such as in metabolomics.	A system in which if the user is at a remote place, he/she can send details through SMS and system can send diet plan to user.	One has to sure about their details while entering filds like age height weight working hours and many more
5.	Computer learning based on Food recognition system Chang Liu, Yu Cao, Guanling Chen, Peng Hou are with the University of Massachusetts.	**JANUARY 2019** Procedia Computer publications	To maintain health and to have our health in good condition, everyone should take a diet. This work exactly fulfills this requirement. We developed a deep learning algorithm (DLA) to predict serum PLP based on dietary intake, dietary supplements, and other potential predictors	Free immunity assesment test Works on a freemium model	AI cannot learn to think outside the box. AI is capable of learning over time with pre-fed data and past experiences, but cannot be creative in its approach
6.	Diet Monitoring and Health Analysis Using Artificial Intelligence	**MARCH 2021** Int. Jnl. Of Advanced Networking & Applications **(IJANA)**	Our food recognition system employs visual sensors to capture food images as the source data. Due to the recent advances of electronics, visual sensors are now available in many Internet-of-Things(IoT) devices, such as smart phones	The diseases can be identified accurately by the classifiers.	By integrating AI with the user data, map its user's nutritional patterns and needs fitness coach is an AI .

LITERATURE REVIEW

	AUTHOR: R. Divya Final year Students, Dept of CSE, Velammal Engineering College, Chennai, India(TN) S. Vithiya Lakshmi YEAR :2021		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.	Wearable are used by the user to keep track of the diet.Intake of the food is taken into count and suggestions are provided to improve the health of the user.	
7.	Virtual Nutritionist using AI International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249-8958, Volume-8 Issue-5,	**June 2019** Blue Eyes Intelligence Engineering and science publication	It will generate the diet plan as well as it also monitor the user health to classify the category of the disease and to create the diet 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 in our dataset.Gradient boosting Regression uses decision trees to classify the data.	A user can track his/her progress towards his/her goal from the day he'd started using the application. Reminders for every meal. Inbuilt personalized customization of meals depending upon one's preferred foods.	High Costs. No creativity. AI is that it cannot learn to think outside the box.Unemployment Make Humans Lazy. No Ethics. Emotionless. No Improvement.
8.	Healthify Me Tushar Vashisht, Mathew Cherian and Sachin Shenoy. Initially, incubated by Microsoft Accelerator	**OCT 2012** YAZDI TANTRA PUBLICATIONS	It consists of three components. First is its lifestyle tracker, as the first calorie counter in India. The second is its social feed, which allows users to find others like themselves, with similar goals and problems. The third, and most innovative aspect, is tech augmented coaching.	HealthifyMe app serves as a calorie tracker, allowing users to lose weight and track their foodandexercise regimens through their phones or computerss, fitness experts and yoga instructors.	It cannot be creative in its approach. A classic These reports only contain data and facts already provided to the bot.

LITERATURE REVIEW

9.	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 everyone cannot afford. Also, consulting a dietician could be time-consuming. An expert system method to recommend a personalized diet plan. AI could significantly improve packaging, increasing shelf life, a combination of the menu by using AI algorithms, and food safety by making a more transparent supply chain management system.	Helps the user to interact better with the system, Provide information to the system as input and take the recommended diet plan as output.	Doesn't have acknowledgable dietician Don't value customer time Worst service.
10.	A Computer Vision-based Indian Food Detection and Nutrition Calculation App 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 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	Easy to use Highly productive No more man power required	Calculation cannot be accurate Software development is difficult Image processing can always not be correct