LITERATURE REVIEW

S. NO	TITLE AND AUTHOR	YEAR AND PUBLICATIONS	METHODOLOGY	ADVANTAGE	DRAWBACKS
1.	Artifical Intelligence in Nutrients Science Research JaroslawSak, Magdalena Suchodolska.	**2020** MDPI Publication	Artificial Neural Networks (ANN), Machine Learning (ML) , Deep Learning (DP).	Improving predictive models of diet and disease outcomes, to better collecting , processing and understanding complex nutrition related data.	Research creates a very diverse spectrum of problems. Not limited to the field of biomedical sciences.
2.	Nutrition For Exercise in Hot Environment Alan J. McCubbin, Ben Desbrow, Ollie Jay	**2020** Human kinetics publication	Hydration Status Assessment Techniques.	Accuracy and reliability. Can be completed independently by athletes and low cost.	Resources required and long equilibration time and requiring rest.
3.	Prediction of Vitamin Interacting Residues in a Vitamin Binding Protein Using Evolutionary Information Bharat Panwar, Sudheer Gupta.	**2013** BMC Bioinformatics	Prediction of Vitamin -A interacting residues (VAIRs), Analysis of different protein-interacting residues of different vitamin classes.	Able to get all the nutrients you need for a balanced diet.	Dietary supplements are not regulated as strictly as pharmaceutical drugs.
4.	Dietary Fiber, Genetic Variations of Gut Microbiota-derived Short-Chain Fatty Acids ,and Bone Health. Mengying Wang, Hao Ma.	**2021** Endocrine Society Oxford Publications.	Bone Mineral Density (BMD),Dual Energy X-ray Absorptiometry (DXA),Hardy-Weinberg Equilibrium (HWE).	Through interaction with our gut microbes, dietary fibre also influences microbial ecology and enhances the production of key microbial metabolites.	No association was found between dietary fibre intake and all fractures.

5.	AI Based System To Provide Diet Plan For Older Hospitalized Patients. Hussain Quarishi, Mohammed Zaid, Dinesh Choudhary.	**2014** Journal of Emerging Technologies And Innovative Research (JETIR)	By using Python Programmer 3.6 with Related Libraries.	No more taking appointments from the dietician. Less expensive with greater efficiency and correct results.	If in accurate details are given to the system the output generated might be irrelevant to the users health condition.
6.	AI – Supported Automated Nutritional Intervention on Glycemic Control in patients with Type-2 Diabetes Mellitus Ayaka Yasugi, Yuko Gondoh.	**2019** Adis Diabetes Ther Publication.	AI Supported Nutrition Therapy. Human Nutrition Therapy.	The mobile phone app used for this study is called Asken and is one of the most popular app for behaviour change among individuals aspiring to lose weight.	Participants are limited to those who won and use a mobile phone, the results may not be generalized to generations with relatively lower information and communication technology literacy
7.	Validation of a Deep Learning System For the Full Automation of Bite and Meal Duration Analysis of Experimental Meal Videos. Petros Daras , Billy Langlet	**2020** MDPI Publications	Rapid Automatic Bite Detection (RABiD).	This is time consuming. RABiD achieved perfect agreement between algorithm and human annotations.	However, this methodology is time consuming and it is often affected by human errors, limiting its scalability.
8.	An Ontology to Standardize Research Output of Nutritional Epidemiology. Henry Ambayo, Carl Lachat, Filip Pattyn.	**2019** MDPI Publication	Review and Selection Process on Ontologies for Nutritional Epidemiology.	This study introduced a comprehensive ontology for reporting nutritional epidemiologic studies and data.	It requires the contribution of researches working in multiple research area.
9.	Multiomics Approach to Precision Sport Nutrition David C.Nleman	**2021** Frontiors in Nutrition	Collect Individuals Specific Science Based Information.	Physician nutrition relies are what can be accurately assessed at the individual level.	Lot the studies are needed that focus on mechanisms underlying metabolic , heterogeneity with deep phenotyping

					multiomix and machine learning.
10.	Artifical Intelligence Applications in Nutrition And Diatetics. Izzet Ulker, Feride Ayyildiz.	**2021** Akilli Sistemler ve Uygulamalan Dergisi Publiction	Multiple Component Method (MCM)	The further apps will help both in health promotion and monitoring and evaluation of dietary assessment.	It reflects only foods consumed in a single irregular day and may be less representative of an estimated individuals in take.