

NUTRITION ANALYSER FOR FITNESS

ENTHAUSIEST

ARTIFICIAL INTELLIGENCE

TEAM ID: PNT2022TMID39808

TEAM MEMBEERS:

DEEPIKA.V

AISHWARYA.S

KAVIYASHRI.P

S.NO	TITTLE	AUTHOR	YEAR OF PUBLICATION	PROBLEM IDENTIFIED	TECHNIQUES USED	
1.	Leveraging traditional crops for better nutrition and health - The case of chickpea	<u>ShahalAbbo</u> et.al.,	June 2017	Although poor feeding practices is a problem predominantly thought to exist in low-income and middle income countries, malnutrition is rapidly rising among developed nations as well.	In this context, and in light of scarcity of protein sources, utilization of crops- such as chickpea -as a source of micro and macro nutrients is mandatory in the long route to nutritional improvement.	For all these reasons, this crop should be considered as an outstanding source of protein, the ultimate alternative to soybeans, as well as the next healthfood for human consumption. View at infona.pl
2.	Machine learning and artificial intelligence based Diabetes Mellitus detection and selfmanagement: A systematic review	Jyotisma Chaki et.al.,	Aug 2017	Diabetes Mellitus (DM) is a condition induced by unregulated diabetes that may lead to multi-organ failiure in patients	This review delivers an analysis of the detection, diagnosis, and self-management techniques of DM from six different facets viz., datasets of DM, pre-processing methods, feature extraction methods, machine learning based identification, classification, and diagnosis of DM, artificial intelligence-based intelligent DM assistant and performance	There are two drawbacks to this study. First, only papers written between January 2015 and March 2020 have been included in this study. Second, it might be that the authors have overlooked certain valuable keywords and certain bibliographic sources that might have some relevant papers

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3.	The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms	Spyros Makridakis	June 2017	Will the forthcoming AI revolution produce similar, farreaching effects.	The paper concludes that significant competitive advantages will continue to accrue to those utilizing the Internet widely and willing to take <u>entrepreneurial risks</u> in order to turn innovative products/services into worldwide commercial success stories.	The greatest challenge facing societies and firms would be utilizing the benefits of availing AI technologies, providing vast opportunities for both new products/services and immense productivity improvements while avoiding the dangers and disadvantages in terms of increased unemployment and greater wealth <u>inequalities</u> .
4.	A Survery on Automated food Monitoring and Dietary Management System	Vleira Bruno	Aug 03 2017	In order to provide users feedback with nutritional information accompanied by insightful dietary advice, various techniques in light of the key computational learning principles have been explored.	the goal to conquer drawbacks of the traditional manual food journaling that is time consuming, inaccurate, underreporting, and low adherent.	the prevention of life-threatening diseases such as obesity, cardiovascular disease, and cancer.

5.	A review on IoT based m-Health systems for diabetes	diabetesSankalp Deshkar	Jan 2017	Long-term diabetes care requires involvement from patients as well as doctors and family caregivers	With rapid advancements in wireless and web technologies, a number of applications based on Internet of Things have been proposed for management of diabetes.	We analyze the working and underlying architecture of these latest applications and discuss the major issues and challenges faced by them.
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S.NO	TITTLE	AUTHOR	YEAR OF PUBLICATION	PROBLEM IDENTIFIED	TECHNIQUES USED	DRAWBACKS
1.	Artificial intelligence for diabetes management and decision support: literature review	Ivan Contreras, Josep Vehi	Dec 2018	The objective of this paper is to review recent efforts to use artificial intelligence techniques to assist in the management of diabetes, along with the associated challenges.	A review of the literature was conducted using PubMed and related bibliographic resources. Analyses of the literature from 2010 to 2018 yielded 1849 pertinent articles, of which we selected 141 for detailed review. Results	Our results indicate that artificial intelligence methods are being progressively established as suitable for use in clinical daily practice, as well as for the self-management of diabetes. Consequently, these methods provide powerful tools for improving patients' quality of life.
2.	Food, microbiome and colorectal cancer	Lukas Niederreiter et.al.,	June 2018	This adage has been confirmed by many studies demonstrating the high impact of nutrition on risk of cardiovascular diseases, many malignancies and other diseases	Various aspects are involved in colorectal carcinoma pathogenesis including genetics, lifestyle, age, chronic inflammation and others	It has only recently been recognized that the gut microbiota might reflect an important missing link in the interaction between diet and subsequent

3	Recommendations to maintain immune health in athletes	Neil P Walsh et.al.,	Mac 2018	the prominent risk factors and appropriate countermeasures. Recent studies have identified prominent risk factors, including: intensified training in the winter; long-haul travel; low energy availability; high levels of ps	Both innate and acquired immunity are often reported to decrease transiently in the hours after heavy exertion, typically 15-70%; prolonged heavy training sessions in particular have been shown to decrease immune function; potentially providing an 'open window' for opportunistic infections.	The various challenges that athletes encounter on immune health, including: heavy exercise; life stress; sleep disruption; environmental extremes and nutritional deficits.
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4	The role of diet in multiple sclerosis: A review	Sabrina Esposito et al.,	July 2018	Since nutritional status and dietary habits in MS patients have not been extensively reported, the lack of a scientific based consensus on dietary recommendation in MS could encourage many patients to experiment alternative dietetic	This work investigates the health implications of an unbalanced diet in MS, and collects recent findings on nutrients of great interest among MS patients and physicians	the disease and to encourage future studies demonstrating the role of a healthy diet on the onset and course of MS.
				regimens, increasing the risk of malnutrition.		

5.	Heavy metal exposure and nasal <i>Staphylococcus aureus</i> colonization : analysis of the National Health and Nutrition Examination Survey (NHANES)	Shoshannah Eggers et.al.,	April 2018	Infection by methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) is a major cause of global morbidity and mortality	The analytical sample consisted of 18,626 participants aged 1 year and older. Multivariate logistic regression, including adjustment for demographic and dietary factors, was used to analyze the association between blood Pb and Cd, and nasal colonization by MRSA and MSSA.	While further research is needed, reduction in heavy metal exposures such as lead, concurrently with maintaining a healthy microbiota may be two modifiable options to consider in the fight against antibiotic resistance.
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