NUTRITION ASSISTANT APPLICATION

LITERATURE SURVEY

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CLOUD APPLICATION DEVELOPMENT

NUTRITION ASSISTANT APPLICATION

1. A survey on nutrition monitoring and dietary management system

June 2019 **Authors:** **Kamaks9hi Priyaa Prakash Dr L Arockiam**

A well balanced diet with an estimated nutrient intake is vital for infants and children which reduces the risks of deadly diseases namely cancer, diabetes, obesity and cardiovascular diseases. Unlike adults, infants require some assistance in their food intake. The survey provides valuable insights about the various advancements of IoT in the healthcare industry and the need for nutrition and dietary monitoring. A varied number of nutrition monitoring systems for the estimation and prediction of calories have been developed using various machine learning techniques and also with advanced deep learning based techniques. A comparative view of the previous works of researchers in the recent times has been provided.

2. Precision nutrition

DanielKirk Received 17 January 2021, Revised 4 March 2021, Accepted 28 March 2021, Available online 7 April 2021, Version of Record 19 April 2021.

Precision Nutrition research aims to use personal information about individuals or groups of individuals to deliver nutritional advice that, theoretically, would be more suitable than generic advice. Machine learning, a subbranch of Artificial Intelligence, has promise to aid in the development of predictive models that are suitable for Precision Nutrition. As such, recent research has applied machine learning algorithms, tools, and techniques in precision nutrition for different

purposes. However, a systematic overview of the state-of-the-art on the use of machine learning in Precision Nutrition is lacking.

3. Effects and challenges of using a nutrition assistance system

Hanna Hauptmann, Nadja Leipold, Mira Madenach, Monika Wintergerst, Martin Lurz

Healthy nutrition contributes to preventing non-communicable and diet-related diseases. Recommender systems, as an integral part of mHealth technologies, address this task by supporting users with healthy food recommendations. However, knowledge about the effects of the long-term provision of health-aware recommendations in real-life situations is limited. This study investigates the impact of a mobile, personalized recommender system named Nutrilize.