Welcome Message

Welcome to the 16th issue of the Nutrition Informatics newsletter SHINE (April 2023) of the Foundation of Healthcare Technologies Society. This newsletter aims to bring together the advancements in the field of Nutrition Informatics Research, Innovation, Policy, Practice, and Entrepreneurship. The newsletter will also provide recent updates about the various national and International nutrition informatics projects, and highlight some of the major nutritional challenges that can potentially be solved through various nutrition informatics interventions using data, information, and knowledge frameworks. We also highlight some of the student successes in the field of nutrition informatics research and practice. In addition, we bring together stories of the student's learning experience with the real nutrition informatics projects addressing real public health challenges. I encourage you to make a meaningful contribution to this newsletter by sharing data-driven, evidence-based ideas, innovations, and interventions that aim to address nutritional challenges impacting health among individuals, families, and communities across diverse Indian settings.

Dr. Ashish Joshi
Ph.D. MBBS MPH

INTERSECTION BETWEEN NUTRITION SECURITY AND BEHAVIOUR HEALTH & WELLNESS

Nutrition security is one of the leading nutrition and health concerns in India. There is an increasing need to understand that nutrition at the individual and population levels depends on a lot of internal and external factors. Environment, nutrition, water availability, disease, and social and political circumstances are just a few of the factors that influence a population's health.

The United Nations Committee on World Food Security defines food security as everyone having constant physical, social, and economic access to enough, safe, and nourishing food that meets their dietary needs and food preferences for an active and healthy life. By taking into account the nutritional content of food and the systemic aspects that affect a person's nutritional condition, nutrition security extends beyond food security. It's not just about calories; it's about a community's access to vital nutrients.

On the other hand, health and well-being are not merely the absence of disease; they also refer to complete physical, mental, and social well-being and a balanced and nutritious diet is crucial to the development of good health. Lack of nutrition security can also lead to a lack of proper access to nutritious food for the growing population.

READ MORE

SMAARTHub for Informatics enabled Nutrition Education (SHINE™)
Research, Innovate, Policy, Practice, Entrepreneurship

CERTIFICATE IN HEALTH AND NUTRITION INFORMATICS-2023

We are delighted to welcome a group of

12 students

from

St. Ann's College for Women

to the

Certificate in Health and Nutrition Informatics - 2023

the program offered by the

Foundation of Healthcare Technologies Society.

It is a pleasure to have these enthusiastic learners join our community of health and nutrition professionals, and we look forward to supporting them in their educational journey towards a brighter future in this field.

NUTRITION RESEARCH IN GLOBAL SETTINGS

BIBLIOMETRIC ANALYSIS OF FUNCTIONAL CROPS AND NUTRITIONAL QUALITY: IDENTIFICATION OF GENE RESOURCES TO IMPROVE CROP NUTRITIONAL QUALITY THROUGH GENE EDITING TECHNOLOGY

The review covers aspects such as production technology, nutritional profiles, potential impacts on health and the eFood security and hidden hunger are two worldwide serious and complex challenges nowadays. As one of the newly emerged technologies, gene editing technology and its application to crop improvement offers the possibility to relieve the pressure of food security and nutrient needs. In this paper, we analyzed the research status of quality improvement based on gene editing using four major crops, including rice, soybean, maize, and wheat, through a bibliometric analysis.

The research hotspots now focus on the regulatory network of related traits, quite different from the technical improvements to gene editing in the early stage, while the trends in deregulation in gene-edited crops have accelerated related research. These findings will provide useful reference information and gene resources for the improvement of functional crops and nutritional quality based on gene editing technology.

Source : https://www.mdpi.com/

READ MORE

A SMART MONITORING SYSTEM FOR SELF-NUTRITION MANAGEMENT IN PEDIATRIC PATIENTS WITH INHERITED METABOLIC DISORDERS: MAPLE SYRUP URINE DISEASE (MSUD)

A gene mutation causes a metabolic disorder, such as Maple Syrup Urine Disease (MSUD), which affects metabolism. Patients and families face challenges in managing the MSUD diet due to a lack of food label information and difficulty keeping track of the diet. A proposed smart plate system could help manage the diet with knowledge-based food identification techniques and a mobile application. The system's requirements were specified using questionnaires, and the design includes a software (mobile application) and hardware (3D model of the plate). Patients found the smart plate system helpful for tracking and recording their daily diet, making self-management more efficient and accurate than paper records. The system could support dietetic professional practitioners and patients in achieving sustainable results.

READ MORE

Source : https://www.mdpi.com/

BLOCKCHAIN'S COMING TO HOSPITAL TO DIGITALIZE HEALTHCARE SERVICES: DESIGNING A DISTRIBUTED ELECTRONIC HEALTH RECORD ECOSYSTEM

READ MORE

Source : https://www.sciencedirect.com

The healthcare industry has been revolutionized by blockchain technology, which presents a significant opportunity for digital transformation. A major challenge is the fragmentation of patient medical records across various healthcare organizations. To address this issue, a proposed platform integrates electronic medical reports into a private and permissioned blockchain to establish a distributed electronic health record (EHR) ecosystem.

Using the information processing theory (IPT), the design of the blockchain-based EHR system was validated and improved medical record storage and data exchange among healthcare providers while reducing environmental uncertainty. Implementing this distributed network could lead to better clinical outcomes (e.g., improved quality, reduced medical errors), organizational outcomes (e.g., financial and operational benefits), and managerial outcomes (e.g., better research capabilities, improved population health, and reduced costs). Future research should explore the application of the proposed blockchain platform to various healthcare services and organizations.

SMAART Hub for Informatics enabled Nutrition Education (SHINE™)
Research, Innovate, Policy, Practice, Entrepreneurship

FOUNDATION OF HEALTHCARE TECHNOLOGIES SOCIETY

DELHI OFFICE ADDRESS-
321, 322 & 323 THIRD FLOOR
SOMDATT CHAMBER – 2
9 BHIKAJI CAMA PLACE, NEW DELHI
DELHI – 110066
PHONE: (011) 41621004
PHONE:+91-8527897771
EMAIL: CONTACT@FHTS.AC.IN

HTTPS://FHTS.AC.IN/

CLICK ON LOGOS TO FOLLOW US ON SOCIAL MEDIA