

Five Impactful Outputs

- Nutrient requirement for Indians: widely used by national regulatory bodies- FSSAI (adequacy estimation, fortification), NITI Aayog (Fixing of minimum wages), WCD (ICDS), HRD (MDM), Industry (Food Labelling), Advisory to police, army, sports, space scientists, Dietitians, nutritionists: diet planning for population & Individuals, Planning food production, Planning import of food etc
- The National Food Security Act (NFSA) Schedule-II was revised for Ministry of food and Public Distribution (DFPD), which has been gazette, MoCAFP
- Establishment of Sports Nutrition Facility with Ministry of Youth Affairs and Sports; Executed the ENACT course with FAO: five universities implement this course in syllabus
- E- learning modules on nutrition <https://www.nin.res.in/paelm.html#> : nearly 10,00,000 visitors with 8,18,000 certificates generated. 'My plate for the day' – English, Hindi & Telugu- widely used by dietitians and academicians
- Rollout of Diet and Biomarker Survey-I

Translational Impact of Research on Public Health Programme at State, National or International level

- Database on 160 micronutrients and macronutrients of 560 Raw foods- many policy implications and widely used in India and all Asian countries
- Dietary intake data, 2016: The urban survey covering 1,71,928 individuals 52,500 households – has been extensively used for Population nutrient Adequacy calculation, fortification, ICDS and MDM programmes
- Significant reduction in CKD incidence and indiscriminate use of NSAIDs in the community with groundwater replacement with surface water.
- No new cases of AES and AES-related child deaths (25% mortality) after the 2019 outbreak study recommendations in Bihar
- Identified traditional plants (*Cocculushirsutus*, *Cuscutareflexa* & *Tinosporacordifolia*) as immunomodulatory and anti-inflammatory agents
- Codex (International): contributed to CCNFSDU, Food labelling regulations, Infant food etc
- IFCT (International): FAO advocates this comprehensive data for use by other countries

Impact of research on clinical practice or clinical treatment guidelines

- Developed an accurate point of care estimation of hemoglobin for diagnosing anemia needed for implementing 'Screen and treat' strategy of AMB (Anaemia Mukh Bharat) as well as for large scale community surveys.
- Developed food based models using low cost foods to manage acute malnutrition in the hospital and community. The food models developed are used to treat both SAM and MAM in the community.

Patents filed

- Methods and compositions for treatment of idiopathic pulmonary fibrosis (SK Madala, HE Ediga, **GB Reddy**). Application Number: **PCT/US23/21978**
- *CMR-NIN-d-c – National (2020)* Herbal formulation for the treatment of menopausal syndrome-Filed Patent no – 202011025626