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Personalized and Precision Medicine (PPM) thought The View of Reproductive Healthcare and Natural Family Planning: An Option for clinicians and caregivers realize the potential of genomics-informed care to secure the Individualized Human Biosafety

Abstract:

A new systems approach to diseased states and wellness result in a new branch in the healthcare services, namely, personalized and precision medicine (PPM). Metabolomics (along with the other OMICS technologies) and nutritional research proved to be valuable tools for the measurement of biochemical changes associated health changes related to diet. It is also, highly, promising in identification of nutritional biomarkers to monitor nutritional intervention studies. This will enhance our knowledge of diet-health relationships. The latter requires collaboration among translational and clinical researchers with overlapping expertise areas including nutritionists, clinicians, nurses, bioinformaticians, statisticians and chemists, and many other stakeholders. This expertise integration is vital to develop the knowledge to establish the evidence-based PPM-based nutrition. Those strategies should include nutriogenomics information, other factors such as dietary and physical activity patterns, metabolome, and microbiota. Various genes and polymorphisms have been defined as relevant factors to explain diet-specific metabolic responses. PPM-based nutrition should be part of the normal daily diet to prevent and reduce the besides diseases we see typically in metabolic diseases. We will see a full new PPM – PPM-based nutrition – PPM-based health value-chain which will also include new food logistics as food delivery services of PPM-based nutrition directly to the patient at home by surrounding restaurants as well as cooking classes for PPM-based nutrition integrating an individualized world map of food. An individual's personal integrative nutritional biomarker profile can be combined with the identification of food ingredients to determine that individual's PPM-based nutrition. Those advances are paving the way for the design of innovative strategies for the control of chronic diseases. PPM-based nutrition has the huge potential to maintain health, as a result of a rigorous nutrigenomic analysis whilst considering the genetic makeup of an individual. There is thus a need for the identification of

novel nutritional biomarkers or patterns of biomarkers that link nutrition with health and will lead to further understanding the role of food in health and disease. This is the reason for developing global scientific, clinical, social, and educational projects in the area of PPM to elicit the content of the new branch.

Biography

Sergey Suchkov was born in the City of Astrakhan, Russia, in a family of dynasty medical doctors. In 1980, graduated from Astrakhan State Medical University with MD. From 1980 through 1983 has been working as Res Associate, and from 1983 through 1985 as Senior Res Associate at the Inst of Medicical Enzymology, USSR Academy of Medical Sciences. In 1985, maintained his PhD at the Sechenov University. From 1986 through 1989, has been working as Senior Res Associate at the Koltzov Institute of Dev Biology, USSR Academy of Sciences. From 1989 through 1994, was a Director of the Division of Clinical Immunology, Helmholtz Eye Res Institute in Moscow.