

## Measuring Health Promotion: Translating Science into Policy

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**Abstract:** Commonly, it is the end of life when our health is deteriorating, that many will make drastic lifestyle changes to improve their quality of life. However, it is increasingly recognized that bringing good health-promoting behaviors into practice as early in life as possible has the most significant impact across the maximal healthspan. The WHO has brought clarity to health promotion over the last fifteen years, always centering on language relating to a process of enabling people to increase control over, and to improve, their physical, mental and social health. A good healthspan is not just freedom from morbidity and mortality, it is that *joie de vivre* (“joy of living”) that should accompany every day of our lifespan. Therefore, health promotion includes not only the health sector but needs individual commitment to achieve that target of a healthspan aligned with the lifespan. This paper explores health promotion and health literacy, and how to design appropriate nutritional studies to characterize contributors to a positive health outcome, the role the human microbiome plays in promoting health and addressing and alleviating morbidity and diseases, and finally how to characterize phenotypic flexibility and a physiologic resilience that we must maintain as our structural and functional systems are bombarded with the insults and perturbations of life.

### INTRODUCTION

Over the last four years, the Council for Responsible Nutrition-International (CRN-I) has endeavored to significantly add to the body of science through their focus on orchestrating and moderating a series of expert presentations, with concomitant publications, held at the annual Codex Alimentarius (Codex) Committee on Nutrition and

Foods for Special Dietary Uses (CCNFSDU). The most recent topics are inter-related and have covered optimal nutrition, healthy ageing, and in this most recent iteration, concepts around health promotion. These previous publications included perspectives from the World Health Organization (WHO), and the symposium which spawned this conference report was also presented against a backdrop of the WHO's activities from the Department on Health Promotion, summarized here from publicly available WHO materials.

## **CONCLUSION**

Primary prevention is the most effective and affordable means to prevent chronic disease. Emphasizing diet quality and quantity may be the best preventative measure to accomplish long-term personal and societal objectives at every stage of the lifespan. Optimal nutrition, coupled with appropriate physical activity have been shown to play a central role in decreasing the observable hallmarks of corpulence and obesity. As discussed, the loss of healthspan is apparent by the myriad of non-communicable diseases that are insidious and become manifest by sudden cardiovascular events, liver failure, pulmonary disease, diabetes, and cancers of all types. And even if these severe morbidities are avoided, the loss of cognition, mobility, and social connections are often the greatest fear.

There is consensus among public health workers that nutritional inadequacy and/or overconsumption are influenced by many different factors and reshaping dietary and lifestyle choices will require wider stakeholder collaboration, including but not limited to academic researchers, nutrition product formulators, the medical, dietetic and physical activity professionals, regulators, and public health policy advocates. But the most important investor, and the one against which success could eventually be measured (or not) would ultimately be the individuals comprising *in toto* the general public. There have been many different public health recommendations provided in the past by the architects of public health and nutrition policies, but results have mostly failed due to lack of engagement with all the stakeholders. The WHO initiative on health promotion will require an integrated approach to the problem.

Lack of commitment by policy- and decision-makers to engage the full breadth of interested parties, a lack of understanding and/or inability to address literacy issues and cultural and communication issues have been major barriers. These factors should be considered and addressed before any health promoting program starts. The success of

program(s) will depend on clear goals, expectations and setting milestones to measure or confirm societal health is on an upward beneficial trajectory, maintaining the status quo, or worse, decrements to the overall health. The latter may be characterized by the recent downturn in life expectancies for some developed countries, perhaps due to a lack of commitment by the public to understand the objectives, and to put off until tomorrow any changes in behavior, such as smoking, excess alcohol consumption, sugar/salt/fat intake, lack of exercise, high stress/high risk activities, etc. Two hundred years ago, Benjamin Franklin opined “You may delay, but time will not,” and never has that been more true than in the realm of health promotion and healthy ageing.

The nutrition science community must set credible recommendations and communicate those in a way that the public will adopt a health-promoting mindset, promoting eating habits that maximize healthy and enjoyable lives. Nutrition messaging needs to be based on appropriate evidence and communicated in a manner that encourages individuals to adopt healthier dietary and lifestyles, e.g., increased physical activity, energy balance, nutrient density, moderate alcohol consumption, no smoking, and stress reduction, will benefit the individual, the society as well as the planet.

Understanding what is a “healthy gut”, and the diet and lifestyle changes needed to tweak a person’s microbiome into a beneficial state would have an impact on a person and thus society’s overall pathway to a healthspan that coincides with a lifespan. Progress is being made in “defining a healthy microbiome’ but there is much more to do. It will be important for food and supplement manufacturers and public health experts to avoid mixed and to apply the findings as clearly stated opportunities for the person and the populace.

Concepts of personalized nutrition can only reach fruition when the technologies and analytics to measure baseline and perturbations to baseline exist. Resilience and flexibility will need to be known at the individual level, such that subsequent adaptations to insult can be determined and appropriate lifestyle corrections made almost in real-time. By tailoring one-on-one instructions to the unique individual, then incrementally the population should see beneficial results.

Integrated health promotion will need to have the support of the food and nutrition industry. To overcome this challenging societal problem, policy makers should not only focus on solutions such as additional taxes or incentives, but also embrace programs that

touch many different areas, such as education of school-age children, improved nutrition and labelling literacy, promotion of an active and engaging lifestyle, community and city designs to encourage exercise and access to fresh and wholesome food choices, and a trusted clearinghouse for nutrition advice and options. However, the most important point will be to encourage individual and societal behavioral change. Eating is both a necessity and a social and cultural phenomena, and adoption will require additional community support from family, friends, health care providers, lifestyle counselors, or social organizations.