

Public Health Genomics & Nutrigenetics

Toplum Sağlığı Genomikleri ve Nutrigenetikler

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ABSTRACT Epidemiological and demographic transition has brought populations to an extended life expectancy in 21st century. The diseases of this century are complex diseases, which stem from mainly the complex interaction of human genome with life style and environmental factors. Cardiovascular and cerebrovascular diseases, cancers, diabetes and osteoporosis are among major complex diseases.

Genome based information has a very important potential to improve human health, quality of life and performance, and extend life span. At this point, a new concept called 'Public Health Genomics' emerges, which focuses on translating the genomic discoveries into individual and public health interventions.

Nutrigenetics, which studies individual's specific response to diet due to genetic variants (polymorphisms), is positioned as the emerging face of nutrition that, when considered with more classical approaches, will provide the necessary stepping stones to achieve the ambitious goal of optimizing an individuals' health.

Effective intervention models utilizing public health genomics and nutrigenetics is urgently needed to prevent and early detect complex diseases.

Key Words: Genomics, nutrigenetics, public health, life span

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