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Autophagy Acceleration and Self-Healing by the Revolution against Frequent Eating, High Glycemic and Unabsorbable Substances as One Meal a Day Plan

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Abstract : Human age could exceed further by altering gene expression through food intaking, although as a consequence of recent century eating patterns, human life-span getting shorter by emerging irregulating in autophagy mechanism, insulin, leptin, gut microbiota which are important etiological factors of type-2 diabetes, obesity, infertility, cancer, metabolic and autoimmune diseases. However, restricted calorie intake and vigorous exercise might be beneficial for losing weight and metabolic regulation in a short period but could not be implementable in the long term as a way of life. Therefore, the lack of a dietary program that is compatible with the genes of the body is essential. Sweet and high-glycemic-index (HGI) foods were associated with type-2 diabetes and cancer morbidity. The neuropsychological perspective characterizes the inclination of sweet and HGI-food consumption as addictive behavior; hence this process engages preference of gut microbiota, neural node, and dopaminergic functions. Moreover, meal composition is not the only factor that affects body hemostasis. In this narrative review, it is believed to attempt to investigate how the body responded to different food intakes and represent an accurate model based on current evidence. Eating frequently and ingesting unassimilable protein and carbohydrates may not be compatible with human genes and could cause impairments in the self-renovation mechanism. This trajectory indicates our body is more adapted to starvation and eating animal meat and marrow. Here has been recommended a model that takes into account three important factors: frequent eating, meal composition, and circadian rhythm, which may offer a promising intervention for obesity, inflammation, cardiovascular, autoimmune disorder, type-2 diabetes, insulin resistance, infertility, and cancer through intensifying autophagy-mechanism and eliminate medical costs.

Keywords : metabolic disease, anti-aging, type-2 diabetes, autophagy
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