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Eat Slowly to Beat Bowling

Mini–Review

Akbar Nikkhah[1,*]

[1] Chief Highly Distinguished Professor and Scientist, National Elites Foundation, Tehran, Iran.

***Corresponding author**

Akbar Nikkhah,
Chief Highly Distinguished Professor and Scientist, National Elites Foundation,
Tehran, Iran,
Tel: 0098–241–5152801
Fax: 0098–241–5283202;
Email: anikkha@yahoo.com.

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Abstract

This mini–review article highlights the importance of 'slow eating' for human protection against metabolic disorders, namely diabetes, obesity, and associated complexities in today's stressful times. Recent findings suggest that fast eating increases insulin resistance, metabolic syndrome, and weight gain. Although future complementary investigations are needed to illuminate the various clinical and behavioral aspects of slow vs. fast eating, public health programs should take new initiatives and come up with interventions to educate people on how to manage stress and slow down eating to help improve endocrinology and metabolism and minimize risks of diseases. Efforts should concentrate on educating and mentoring the public on how to overcome and manage their stresses, first, before 'slow eating' could be realized and practiced as a healthy nutritional and lifestyle strategy. Meanwhile, eat slowly to beat bowling.

Keywords: Diabetes; Obesity; Slow Eating; Fast Eating; Public Education.

Philosophy and Review

The objective of this mini–review article was to signify the nutritional and psychological importance of 'slow eating' on human health and metabolism. Although overlooked, slow eating may have long–lasting and large effects on optimizing human endocrinology and metabolic health [1–7]. Diabetes and obesity (i.e., diabesity) are among the rising world pandemics that reduce modern human life quality seriously. For example, it is estimated that 1 in every 11 adults in the world is currently affected by diabetes and that its prevalence may reach 700 million by 2045 [1]. In addition, nearly >30–40% of some regional world adult populations suffer from obesity. Various nutritional, behavioral, psychological, social, and genetics–related factors are involved in the occurrence and prevalence of diabesity and related metabolic issues. However, 'slow eating' requires increasing consideration in public health and education programs worldwide [2,3]. Recent research indicates that fast eating may increase insulin resistance [4], metabolic syndrome [5], and weight gain [6]. Important alarms exist that necessitate refining public health and education programs towards reducing eating speed, especially for the modern human populations facing or at high risk of diabesity.

In general, the stomach takes about 20 minutes to send the brain fullness signals. When eating too fast, one may not feel full on time, and thus one may overeat. The precise mechanisms of how fast eating leads to diabesity are yet to be illuminated. Nevertheless, the following reasoning and cascade may justify such a connection. The free fatty acids and adipokines released from adipose tissue may decrease insulin sensitivity and thereby increase insulin requirements. This trend leads to rapid and marked glucose fluctuations that may aggravate insulin resistance. Additionally, with fast eating, there would not be enough time for satiety hormones to be secreted and act promptly. As a consequence, a significant delay in feeling full would occur, leading to overeating and durable postprandial hyperglycemia [1,7]. In addition, energy intake can be decreased by slow eating; therefore, one may well feel the satiety signals before over–eating can occur. Hence, slow eating reduces the likelihood of energy over–intake and delayed satiety. Moreover, chewing is increased by slow eating, thus reducing hyperglycemia. Furthermore, slow eating could reduce the production of interleukins which would ultimately reduce insulin resistance [1,2].

To imply, after taking into account the literature on fast eating, it appears reasonable to recommend 'slow eating' to help minimize metabolic disorders and diseases and optimize human health in the stressful modern era. This is very easy said than done, however. Educating and mentoring people of different ages to slow down eating, first, requires optimization of their social and psychological trends and habits. Stress should be managed properly for 'slow eating' to be realized and practiced effectively.

Conclusion and Implication

Slow eating is an overlooked nutritional strategy, that if well–practiced, may improve human health and longevity. By nature, eating speed is a multifactorial risk that requires increasing attention in global public health programs and initiatives. Efforts should focus on educating and mentoring people on how to

overcome and manage their stresses before 'slow eating' could be prioritized and practiced as a persuasive nutritional strategy. Pragmatic interventions should target optimizing social status and eating habits across different human cultures and populations. Long–term prospective research is warranted to precisely determine and illustrate how slow eating may affect and likely improve human metabolism and health. Meanwhile, eat slowly to beat bowling.

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Conflict of interest

None.

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