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Short Communication

## Stop Eating Fast, Keep Staying Last

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### Abstract

This article addresses an important abnormal eating behavior or ‘speedy eating’ that can predispose human body to diabetes (diabetes and obesity) development and its associated complexities in the stressful modern times. Although, more research is required to enlighten the various clinical and psychological aspects of this phenomenon, public health programs must take new initiatives in educating people of different ages to manage stresses and slow down eating to help optimize endocrinology and metabolism and minimize diabetes risks. Efforts must be focused on educating people how to overcome and manage their stresses first before ‘slow eating’ could be prioritized and practiced as a powerful lifestyle strategy. Meanwhile, stop eating fast, keep staying last!

### Keywords

Diabetes; Eating Speed; Fast Eating; Public Health; Education

### Philosophy and Discussion

The objectives of this article was to underline the biological and psychological importance of ‘eating speed’ on human health and wellbeing. Although seemingly not a large effector, eating

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fast recklessly, does possess long-lasting negative impacts on human endocrinology and metabolic health worldwide [1-7]. Diabetes and obesity (i.e., diabetes) are the rising world pandemics that reduce modern humans' life quality considerably. For instance, it is estimated that 1 in every 11 adults in the world is currently affected by diabetes, and its prevalence may reach 700 million by 2045 [1]. Numerous nutritional, behavioral, psychological, social, and gene-related factors are involved in diabetes prevalence. Nonetheless, simple-looking factors such as 'eating speed' require increasing attention from public health education perspectives [2,3]. Recent research suggest that fast eating could increase insulin resistance metabolic syndrome and weight gain [4-6]. These are significant alarms that necessitate refining public health education programs towards optimizing eating speed, especially for the modern world populations.

Generally, and mechanistically, the stomach takes about 20 minutes to send the brain fullness signals. When eating fast, people may not feel full timely, and thus, overeat. Although the exact mechanisms of how fast eating cause diabetes are yet to be comprehensively elucidated, following justifications may be presented in supporting such a relationship. The adipose tissue driven free fatty acids and adipokines decrease insulin sensitivity, and thereby, increase insulin requirements. This trend leads to rapid and pronounced glucose fluctuations that may further exacerbate the insulin resistance. In addition, as noted above, during fast eating, adequate time would not exist for the satiety hormones to be secreted timely. As a result, there would be a major delay in feeling full, leading to overeating and greater postprandial blood glucose concentrations [1,7]. Moreover, energy consumption would be reduced by slow eating, and satiety signals would have more time to be felt before overeating would occur. Hence, fast eating is associated with energy over-consumption and delayed satiety. Furthermore, mastication or chewing is reduced by fast eating, contributing to elevated blood glucose levels or hyperglycemia. As well, fast eating might trigger production of interleukins. These substances could ultimately reduce insulin sensitivity [1,2].

To sum up for implications, after considering the existing literature on the association between 'fast eating' and risks of diabetes and related metabolic and cardiovascular complexities, it sounds logical to recommend 'slow eating' to help optimize human health and welfare during the stressful times of the modern era. However, it is easy said than done. Educating people to slow down eating requires modifications of their background social and psychological trends and habits. Stress must be managed properly for 'eating speed' to be optimized or slowed down timely and effectively. The eating speed is a multi-factorial human health risk that requires further attention in public health programs initiatives worldwide [7]. Efforts must be directed to educate people how to overcome and manage their stresses first before 'slow eating' could be given priority and practiced as an influential lifestyle strategy. In other words, interventions must be targeted at optimizing social status as well as eating habits and behaviors across different human cultures and populations. Nonetheless, future long-term investigations are

warranted to further determine how eating speed affects modern and post-modern human metabolism and health. Meanwhile, stop eating fast, keep staying last!

## Conflict of Interest

Author declare no conflict of interest.

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