

## Untimely Intake a Postmodern Public Health Bioterrorism

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The objective of this editorial article is to raise a postmodern concern on public health programs as for untimely intake of concentrated foods. This communication also warns the public health policy-makers and medical-nutritional programmers of inadequate education on timely food intake as an effective biodefense strategy.

Despite the tremendous efforts on establishing how quality and quantity of nutrient intake affect health and life quality, practically no considerable practical and global attention has been given to elaborating the timing of food intake as a working biodefense strategy [1]. The untimely intake, however, is of crucial significance in predisposing the body to a devastating collection of metabolic syndromes and health issues, such as abdominal obesity, liver abnormalities, diabetes, high blood pressure, cardiovascular problems and different cancers [2-6].

Inspired by ruminant metabolic models data, a global theory has been developed to relate ease and efficiency in metabolic physiology to when during the 24-h period nutrients are consumed [4]. This becomes more important should such timing of intake be specified for different food components including sugars, starches, soft and rough fibers, proteins and amino acids, various types of fatty acids, and vitamins and minerals. Discovering optimum circadian times of consuming different kinds of foods can strengthen public health and nutrition programs and more accurately meet nutrient requirements for diverse groups of individuals without compromising freedom in making desired food choices and restrictions on daily food regimens. This accomplishment describes a postmodern biodefense against an overlooked bioterrorism.

Morning is known to be an optimum time to receive and metabolize nutrients towards meeting cell requirements for growth, proliferation and waste management [5]. In contrast, evening and night are considered suboptimal times to assimilate large amounts of nutrients because the body is not readily and endocrinologically prepared to healthfully process foods [6]. Such a nocturnally reduced metabolic capacity stems from the evolutionary principle that human, likewise

other diurnal animals, has long been educated to have circadian rhythms in physiology and metabolism that dictate diurnal noise and activity but nocturnal silence and passivity. As a consequence, time to rest and sleep is when melatonin is secreted to cope with the reduced requirements for fueling nutrients. In other words, insulin and similar chemicals have little to contribute nocturnally [4-6]. When insulin is not adequately sensitive (i.e., overnight) is, thus, not the right time to load the liver and periphery with floods of nutrients that can only exacerbate the already created unhealthy conditions towards obesity, diabetes and subsequent diseases.

In a nutshell, discovering the healthiest time to ingest, digest and assimilate which food is a feasible biodefense strategy that must be pursued in overcoming the postmodern bioterrorism of untimely intake.

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### References

1. Dietary Reference Intakes (DRI)(2007) Recommended Intakes for Individuals, Food and Nutrition Board, Institute of Medicine, National Academies. National Academy of Sciences, Washington, D.C. USA.
2. Nikkhah A (2011) Science of eating time: A novel chronophysiological approach to optimize glucose-insulin dynamics and health. *J. Diab Mellit* 2:8-11.
3. Nikkhah A (2012) Time of Feeding an Evolutionary Science. Lap Lambert Publishing, GmbH & Co. KG, Germany.
4. Nikkhah A (2014) Optimizing cardiovascular health via food intake timing: Bioengineering of internal physiology. *Austin J. Biotechnol. Bioeng* 1: 2.
5. Nikkhah A (2014) When to eat to beat obesity and diabetes? *J. Diabetes Metab* 5:7.
6. Nikkhah A (2015) Avoid large night meals to stay fit. *J Obes Weight Loss Ther* In Press.

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