

Shattered obesity by morning eating and evening exercise

Abstract

Obesity is a modern disease that can be prevented effectively. This article describes morning eating and evening exercise as effective complementary strategies to reduce obesity risk. The philosophy is based on the evolutionary human circadian physiology that necessitates reduced eating and increased exercise during the least metabolically active times of the circadian period or evening and night.

Keywords: obesity, morning eating, evening exercise, public health

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Discussion

Obesity is a complex metabolic disease that increases risks from a multitude of health abnormalities. Nevertheless, obesity can be effectively prevented and reduced if adequate willpower is practiced and taken advantage of.¹ Based on an evolutionary principle, human is a diurnal animal that means human is metabolically and physically most active during day and most passive overnight. This circadian property must be taken into account in formulating individual and public health and nutrition programs.²⁻⁶ Manipulating eating habits and intense physical exercise can help teach the body to follow nature-oriented physiology.^{2,7,8}

According to human evolutionary physiology, morning is when cells are most metabolically prepared to bioprocess substrates. For instance, insulin works optimally in regulating blood glucose and its metabolism by a variety of cells. In contrast, evening and night are when human body is least prepared to handle nutrients since insulin does not work properly and glucose bio processing can be easily mismanaged.⁹ Thus, should nutrient overload occur in evening and night by overeating and no exercise, risks from obesity, insulin resistance and glucose intolerance may considerably increase. This dictates programming reduced extent and rate of eating for evening and night hours. As such, morning is a suitable time for consuming energy and evening is appropriate for taking low-energy and high fibre foods.¹⁰⁻¹²

Due to reduced endocrinological capacity to metabolize nutrients, evening could be a suitable time for exercise to increase such a capacity.^{1,10} Regularity of evening exercise can teach the body to improve its ability of handling nutrients as day leaves for night. As a result, risks from obesity, visceral adiposity, insulin resistance, glucose intolerance, metabolic syndrome, and cardiovascular diseases can decrease. The matched patterns of eating and exercise on a circadian basis could help reduce cancer risk also.^{10,12}

Implication

Morning eating and evening exercise are complementary strategies that can harmonically reduce obesity risk. Public education will play a key role in establishing this policy's benefits in society.

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Conflict of interest

The author declares no conflict of interest.

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