

# Secure weight management through fitting circadian patterns of physical activity, resting and eating

## Abstract

This public health article develops a feasible global strategy to effectively manage body weight and prevent obesity through circadian fitting of physical activity, rest and eating. The special emphasis is placed on the circadian nature of such a fitness to avoid building obesity upon negligible but quite devastating daily weight gains. Thus, with no necessity to compromise life satisfaction and quality by overly limiting eating, resting and exercising, this doable program minimizes risks from obesity, diabetes, metabolic syndrome and related cardiovascular complexities.

**Keywords:** weight management, circadian pattern, physical activity, rest, eating

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## Strategy development and critiques

Debate has long existed on the optimal strategies of weight management and control to avoid obesity. But, no single program has been developed to enable effective management of energy balance and successful prevention of obesity. Recently, efforts have been made to draw attention towards adequate physical activity mainly on a weekly and in some cases on daily bases. But, the fact is that none of these programs and guidelines works optimal for the general world population with unique individual life style and food regime. Therefore, public health programs continue to strive for a feasible approach that can take into account such inter-person variations and even intra-person fluctuations in life style.<sup>1-4</sup> Any successful philosophy must stem from establishing rhythmic regularities in gene, cell, tissue, organ and whole body physiology crucially on a circadian basis.<sup>5,6</sup> This is simply because human cells have evolved to function optimally on a 24-h cycle, following the surrounding nature.<sup>7-9</sup>

This article, thus, aims to eradicate the above-mentioned limitation of the health programs developed to-date through establishment of a global practicable strategy that accomplishes the complex task of weight management and control on each and every 24-h phase of life. A major critique of weight control strategies is that until unless the job is not well-done on a circadian basis, it will not prove promising and accountable. For health benefits to be realized, such a daily accomplishment of weight management must be secured.<sup>5,6</sup>

In a nutshell, harmonies among eating, resting and physical activity rhythms must be reached on daily basis. This means that if the timing or duration of any of the three determinants changes on any given day, the timing and duration of the others must also harmonically change. For instance, during any certain 24hr phase, if for any reason, energy intake significantly increases, then accordingly, resting must equally decrease and physical activity must sufficiently increase to not carry any unwanted weight gain on the next day. This plan must be extended to all days and be practiced regularly. Should be done so, the strategy works optimal in efficacious weight management and obesity prevention. Public education on such a health program must be persistently pursued and where applicable, explanations on circadian budgeting of energy balance equivalents from eating, resting and physical activity must be provided.

## Implication

Effective body weight management is guaranteed by circadian fitting of eating, resting and physical activity rhythms. No other strategy, particularly in longer terms, can accomplish the same great success. The task must be accomplished on each and every day.

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## Conflict of interest

The author declares no conflict of interest.

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