

Special Issue

Effects of Circadian Rhythm on Energy Metabolism

Message from the Guest Editor

Energy metabolism is affected by circadian changes in environment such as light and temperature, as well as by circadian-controlled behaviors such as meal times, exercise, and sleep–wake cycles. A forced desynchrony protocol, which uncouples sleep–wake and activity-related effects from the endogenous circadian rhythm, revealed a circadian component involved in resting energy metabolism in humans. Whole-room indirect calorimetry allows us to monitor energy metabolism without interruption over long timescales including sleep and meal ingestion. Time resolution of the monitoring system has greatly improved during recent decades. It is now possible to design studies to isolate each factor affecting energy metabolism, such as by adopting a special experimental protocol such as forced desynchrony or applying a statistical approach such as semi-parametric analysis to separately analyse the effects of individual factors.

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Nutrients is an on-line open access journal that was first published in 2009. *Nutrients* adheres to rigorous peer-review and editorial processes and publishes only high quality manuscripts that address important issues related to the impacts of nutrients on human health. The Impact Factor of *Nutrients* has risen rapidly since its establishment and it is now ranked in the first quartile of journals publishing in the field of nutrition and dietetics research.

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