

Special Issue

Dietary Nutrient Intake and Disordered Sleep

Message from the Guest Editor

Dietary nutrient intake plays a key role in sleep quantity and quality through its influence on neurochemical, hormonal, and circadian processes. Macronutrients affect sleep regulation. A balanced carbohydrate intake facilitates melatonin synthesis, while high saturated fat is related to lighter and more fragmented sleep. Excessive protein intake late in the day may impair sleep onset. Micronutrients are also critical.

Magnesium supports neuromuscular relaxation and central nervous system inhibition. Calcium facilitates melatonin synthesis, while vitamin D affects circadian rhythm regulation. B vitamins are involved in neurotransmitter synthesis and circadian timing.

Omega-3 fatty acids are related to improved sleep efficiency and regulation of melatonin secretion. Dietary timing and patterns further modulate sleep outcomes.

Late-night energy-dense meals, caffeine intake in the hours preceding bedtime, and alcohol intake negatively affect sleep continuity and REM sleep. Conversely, nutrient-dense dietary patterns like the Mediterranean diet, are related to improved sleep quality. In this Special Issue, we welcome articles concerning the impact of diet on sleep and vice versa.

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Message from the Editorial Board

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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