OPEN ACCESS Freely available online

ISSN: 2161-0509
Journal of Nutritional Disorders & Therapy

Short Communication

# Significance of Nutritional Equilibrium in Combating Fatigue and Sleepiness

**Seung Mina***

*Department of Clinical Nutrition, Yonsei University, Seoul, Korea*

## DESCRIPTION

Sleepiness and fatigue are common symptoms that can significantly impact an individual's quality of life. While various factors can contribute to these sensations, one potential aspect is the influence of low nutrition [1]. The food we consume serves as the primary source of energy and nutrients for the body, plays an important role in maintaining optimal health and well-being. When nutritional intake is insufficient or imbalanced, it can lead to a host of health issues, including sleepiness and fatigue. Understanding the intricate relationship between nutrition and these symptoms is potential in promoting overall wellness and preventing the onset of debilitating conditions. Adequate nutrition is essential for maintaining the body's energy levels and ensuring proper bodily functions. Macronutrients such as carbohydrates, proteins, and fats provide the necessary fuel for the body to carry out its physiological processes. Carbohydrates, in the form of glucose, serve as the primary energy source for the brain and muscles [2,3]. When individuals consume diets lacking in carbohydrates, the body's glucose levels can drop, leading to feelings of lethargy. Furthermore, a deficiency in essential vitamins and minerals, such as B vitamins, iron, and magnesium, can impair the body's ability to convert food into energy, exacerbating feelings of fatigue and sluggishness. Micronutrients, including vitamins and minerals, play a potential role in supporting various biochemical reactions that regulate energy production and metabolism [4-6]. For instance, iron is essential for the production of haemoglobin, which transports oxygen to the body's cells. Inadequate iron intake can lead to anemia, characterized by reduced oxygen transport, resulting in fatigue and weakness. Similarly, deficiencies in B vitamins, such as B12 and folate, can hinder the body's ability to produce red blood cells and metabolize nutrients, leading to a decrease in energy levels and an increase in feelings of exhaustion.

Moreover, the consumption of an unbalanced diet, characterized by excessive intake of processed foods, saturated fats, and sugars, can contribute to fluctuations in blood sugar levels. A diet high in simple sugars can lead to rapid spikes and subsequent crashes in blood glucose levels, resulting in increased feelings of fatigue and a tendency to seek out more sugary foods for quick energy boosts [7]. This cycle can perpetuate poor dietary habits and contribute to a continuous state of lethargy and drowsiness. In addition to the physiological impact, inadequate nutrition can also affect an individual's sleep patterns and overall sleep quality. It has been demonstrated that dietary habits can influence sleep-wake patterns and the body's circadian rhythm. For example, the consumption of high-fat, high-sugar diets has been linked to disrupted sleep patterns, including difficulties falling asleep and maintaining restful sleep throughout the night [8].

Addressing the issue of sleepiness and fatigue due to low nutrition requires a comprehensive approach that focuses on promoting a well-balanced and nutrient-dense diet [9]. Incorporating a variety of whole foods, including fruits, vegetables, whole grains, lean proteins, and healthy fats, can provide the body with the necessary nutrients to support optimal energy levels and overall well-being. Emphasizing the consumption of complex carbohydrates, such as whole grains and legumes, can help stabilize blood sugar levels and provide a steady source of energy throughout the day [10]. Additionally, incorporating a diverse range of fruits and vegetables can ensure an adequate intake of essential vitamins and minerals necessary for supporting various physiological processes and combating fatigue.

## CONCLUSION

Furthermore, individuals should prioritize adequate hydration, as dehydration can also contribute to feelings of fatigue. Consuming sufficient amounts of water throughout the day can help maintain proper hydration levels and support the body's overall energy and cognitive function. Additionally, establishing regular meal patterns and avoiding prolonged periods of fasting can help regulate blood sugar levels and prevent energy crashes throughout the day. Consulting with a registered dietitian or healthcare professional can provide individuals with personalized guidance and recommendations suited to their specific nutritional needs and health goals. Additionally, incorporating regular physical activity and

**Correspondence to:** Nakaji Davies, Department of Clinical Nutrition, Yonsei University, Seoul, Korea, E-mail: min@seu.kr

**Received:** 25-Sep-2023, Manuscript No. JNDT-23-23742; **Editor assigned:** 27-Sep-2023, PreQC No. JNDT-23-23742 (PQ); **Reviewed:** 17-Oct-2023, QC No. JNDT-23-23742; **Revised:** 24-Oct-2023, Manuscript No. JNDT-23-23742 (R); **Published:** 31-Oct-2023, DOI: 10.35248/2161-0509.23.13.267.

**Citation:** Davies N (2023) Significance of Nutritional Equilibrium in Combating Fatigue and Sleepiness. J Nutr Disord Ther. 13:267.

maintaining a consistent sleep schedule can further enhance overall energy levels and promote a healthy lifestyle.

## REFERENCES

1. Porter J, Charlton K, Tapsell L, Truby H. Using the Delphi process to identify priorities for dietetic research in Australia 2020-2030. Nutr Diet. 2020;77(4):437-443.
2. Du C, Almotawa J, Feldpausch CE, Folk SY, Parag H, Tucker RM. Effects of macronutrient intake on sleep duration and quality: A systematic review. Nutr Diet. 2022;79(1):59-75.
3. Wheeler M, Abbey KL, Capra SM. Meal choice for residential aged care is not yet defined: A scoping review of policies, standards, reports and guidelines. Nutr Diet. 2022;79(1):169-180.
4. Wright C, Barnett A, Campbell KL, Kelly JT, Hamilton K. Behaviour change theories and techniques used to inform nutrition interventions for adults undergoing bariatric surgery: A systematic review. Nutr Diet. 2022;79(1):110-128.
5. Chencharick JD, Mossman KL. Nutritional consequences of the radiotherapy of head and neck cancer. Cancer. 1983;51(5):811-815.
6. McQuestion M, Fitch M, Howell D. The changed meaning of food: Physical, social and emotional loss for patients having received radiation treatment for head and neck cancer. Eur J Oncol Nurs. 2011;15(2):145-151.
7. Bauer JD, Ash S, Davidson WL, Hill JM, Brown T, Isenring EA, Reeves M. Evidence based practice guidelines for the nutritional management of cancer cachexia. Nutr Diet. 2006;63(SUPPL. 2).
8. Fearon KC, Von Meyenfeldt MF, Moses AG, van Geenen R, Roy A, Gouma DJ, et al. Effect of a protein and energy dense N-3 fatty acid enriched oral supplement on loss of weight and lean tissue in cancer cachexia: a randomised double blind trial. gut. 2003 Oct 1;52(10):1479-1486.
9. Zhang L, Lu Y, Fang Y. Nutritional status and related factors of patients with advanced gastrointestinal cancer. Br J Nutr. 2014;111(7):1239-1244.
10. Cooper AB, Slack R, Fogelman D, Holmes HM, Petzel M, Parker N, et al. Characterization of anthropometric changes that occur during neoadjuvant therapy for potentially resectable pancreatic cancer. Ann Surg Oncol. 2015;22:2416-2423.