



HEBNI

HEALTH EMPOWERMENT THROUGH BEHAVIORAL AND NUTRITIONAL INITIATIVES

RECHARGE YOUR NUTRITION

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INTRODUCTION

Who are we?

- Non-profit organization founded in 1995 by RD's.
- We believe that disease knows no color and access to nutrition education should be available to everyone regardless of age, race or socio-economic status.
- We practice Health Empowerment through Behavioral and Nutritional Initiatives (H.E.B.N.I)
- Since 1995 HEBNI has created and implemented multiple platforms specifically designed to address diet-related diseases including diabetes.
- **Glen R. Providence**
Director of Business Development

Nutrition Resource Center

- STATE-OF-THE-ART TEST KITCHENS
 - MEETING THE NEEDS OF THE COMMUNITY & FILLING THE GAP
- NUTRITION EDUCATION CLASSES, COOKING DEMONSTRATIONS, COUNSELING, RESEARCH





Feeling Tired?

Common Causes of Fatigue/Tiredness

- Not enough high-quality sleep
- Nutrient Deficiencies
- Stress
- Dietary imbalances
- Consuming too much caffeine
- Inadequate hydration
- Overweight or obesity
- Certain medical conditions
- Drug and alcohol dependence
- Shift work
- Sedentary lifestyle
- Certain medications

Nutrient Deficiencies Linked to Fatigue¹

iron

riboflavin (vitamin B2)

niacin (vitamin B3)

pantothenic acid (vitamin B5)

pyridoxine (vitamin B6)

folate (vitamin B9)

vitamin B12

vitamin D

vitamin C

magnesium

Dietary Imbalances

- Undereating — may lead to calorie and nutrient deficiencies, which can cause exhaustion.
 - eating ultra-processed foods low in essential nutrients
- When you don't obtain enough calories and nutrients like protein, your body starts breaking down fat and muscle to meet energy demands.
 - Leads to a loss of body fat and muscle mass, which may trigger fatigue.²
- Diets high in ultra-processed foods impair energy levels

Hydration and Caffeine on Energy

- Several studies show that being dehydrated leads to lower energy levels and a decreased ability to concentrate.³
- Even mild dehydration may reduce energy levels and alertness. Make sure to drink enough to replace fluids lost during the day.
- Caffeine is a natural diuretic promoting dehydration



Hydration and Caffeine on Energy

- Drinking too much caffeine is linked to increased nighttime worrying, sleeplessness, increased nighttime awakenings, decreased total sleep time, and increased daytime sleepiness.⁴
- coffee and caffeinated beverages like green tea may benefit health when consumed in moderation, energy drinks are extremely high in stimulants and added sugar.⁵



Bodyweight and Fatigue

- Obesity may increase your risk of chronic fatigue.⁶
 - linked to increased daytime sleepiness regardless of sleep apnea, suggesting that obesity directly affects the sleep cycle
- People with obesity have a higher risk of conditions associated with fatigue, including depression and type 2 diabetes.⁷
- poor sleep quality and sleep restriction may cause weight gain or obesity.⁸

Nutrition Strategies to Fight Fatigue

1. Assess your diet
2. Create a plan
3. Execute



1. Assess your Diet

- Are you.....
 - Eating energy-stealing foods?
 - Undereating?
 - eating mostly processed foods?
 - Overeating? Check portions.

Energy-stealing foods:

- Processed grains
- Breakfast Cereals, Yogurts and Other Foods With Added Sugars
- Fried and fast foods
- Alcohol
- Energy drinks, soda, caffeine
- Juice and bottled smoothies



2. Create a Plan of Action

- Set new goals
- Simplify your meals
- Less processed more real food
- Avoid "health food" items
- Get back to meal planning

Meal Planning to Fight Fatigue

- Make
 - Make a list of meals you will prepare for the week
- Use
 - Use your menu to create your grocery list
- Make
 - You can make your meals ahead of time by batch cooking
 - Or you can just follow the weekly menu day to day

References

1. Tardy, A. L., Pouteau, E., Marquez, D., Yilmaz, C., & Scholey, A. (2020). Vitamins and Minerals for Energy, Fatigue and Cognition: A Narrative Review of the Biochemical and Clinical Evidence. *Nutrients*, 12(1), 228. <https://doi.org/10.3390/nu12010228>
2. Azzolino, D., Arosio, B., Marzetti, E., Calvani, R., & Cesari, M. (2020). Nutritional Status as a Mediator of Fatigue and Its Underlying Mechanisms in Older People. *Nutrients*, 12(2), 444. <https://doi.org/10.3390/nu12020444>
3. Taylor K, Jones EB. Adult Dehydration. [Updated 2021 Oct 10]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK555956/>
4. Chaudhary, N. S., Grandner, M. A., Jackson, N. J., & Chakravorty, S. (2016). Caffeine consumption, insomnia, and sleep duration: Results from a nationally representative sample. *Nutrition (Burbank, Los Angeles County, Calif.)*, 32(11-12), 1193–1199. <https://doi.org/10.1016/j.nut.2016.04.005>
5. Al-Shaar, L., Vercammen, K., Lu, C., Richardson, S., Tamez, M., & Mattei, J. (2017). Health Effects and Public Health Concerns of Energy Drink Consumption in the United States: A Mini-Review. *Frontiers in public health*, 5, 225. <https://doi.org/10.3389/fpubh.2017.00225>
6. Hruby, A., & Hu, F. B. (2015). The Epidemiology of Obesity: A Big Picture. *PharmacoEconomics*, 33(7), 673–689. <https://doi.org/10.1007/s40273-014-0243-x>
7. Chauvet-Gelinier, J. C., Roussot, A., Cottenet, J., Brindisi, M. C., Petit, J. M., Bonin, B., Vergès, B., & Quantin, C. (2019). Depression and obesity, data from a national administrative database study: Geographic evidence for an epidemiological overlap. *PloS one*, 14(1), e0210507. <https://doi.org/10.1371/journal.pone.0210507>
8. Cooper, C. B., Neufeld, E. V., Dolezal, B. A., & Martin, J. L. (2018). Sleep deprivation and obesity in adults: a brief narrative review. *BMJ open sport & exercise medicine*, 4(1), e000392. <https://doi.org/10.1136/bmjsem-2018-000392>

S.M.A.R.T GOALS

Specific	Get healthier	Eat more vegetables or minimize sugars
Measurable	Walk more often	Walk three times per week
Attainable	Go to the gym every day or stop eating out	Exercise twice a month or cook at home once a week.
Realistic/ Relevant	Lose 50lbs in one month.	Lose one pound per week
Time-based	Get fitter or eat healthy	Run one mile or eat veggies with every meal.