**Vitamin A**
Studies suggest vitamin A deficiency alters brain waves in non-REM sleep causing sleep to be less restorative.24,25

**Zinc & Copper**
Both interact with NMDA (N-methyl-D-aspartate) receptors in the brain that regulate sleep; A higher Zn/Cu ratio is linked to longer sleep duration.15,19,20

**Oleic Acid**
This fatty acid is a precursor of oleamide, which regulates our drive for sleep and tends to accumulate in the spinal fluid of sleep-deprived animals. Oleic acid also facilitates the absorption of vitamin A.21,22,23

**Vitamin B1 (Thiamin)**
In clinical trials, supplementation of healthy individuals that had marginal B1 deficiency improved their sleep.1,2,3

**Folate & Vitamin B6**
Both are cofactors for several neurotransmitters in the brain such as serotonin and dopamine, many of which regulate sleep patterns.4,6,7,8,9

**Vitamin B3 (Niacin)**
Increases REM sleep; Improves both quality and quantity of sleep by converting tryptophan to serotonin.4,5

**Magnesium**
Improving magnesium status is associated with better quality sleep; Mimics the action of melatonin; Also alleviates insomnia due to restless leg syndrome.14,15,16,17,18

**Vitamin B12**
Normalizes circadian rhythms (sleep-wake cycles); Therapeutic benefits of B12 supplementation, both oral and intravenous, seen in studies.10,11,12,13

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REFERENCES


