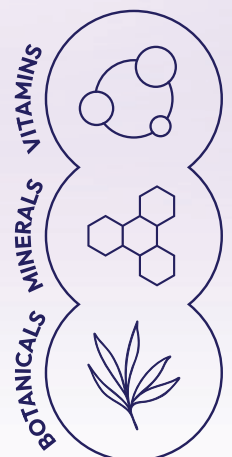


Evera[®]

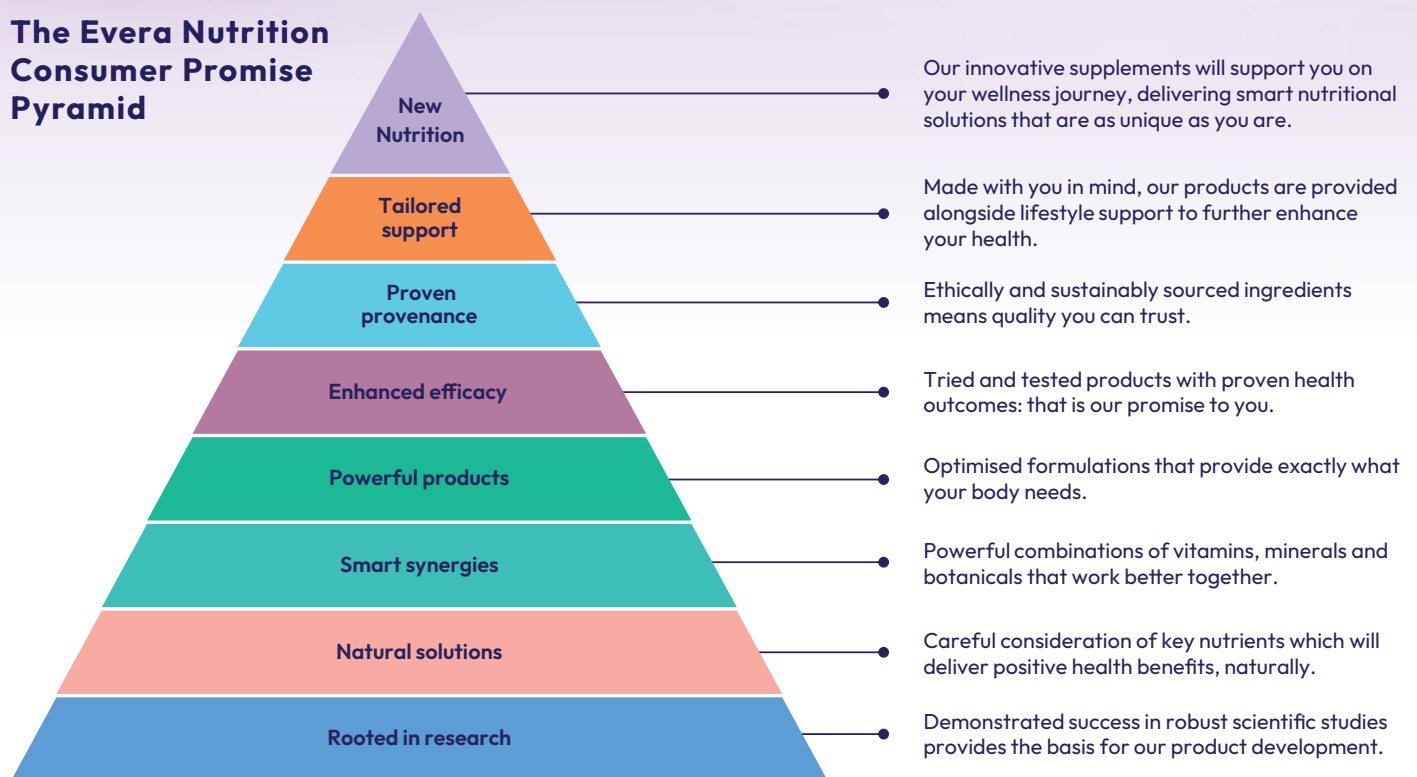
NUTRITION

Your Health Redefined



Society is grappling with a silent crisis: a widespread epidemic of insufficient sleep. The importance of sleep both in terms of quantity and quality cannot be underestimated when it comes to physical and mental health.

**The Evera Nutrition
Consumer Promise
Pyramid**



Delivering innovation in supplementation

Rest assured: Evera Nutrition understands sleep health

Sleep is an essential element of human health, playing an active role in processes such as synaptic plasticity and memory, emotional regulation, immunity, cognitive and metabolic function, energy balance, macromolecule biosynthesis, removal of toxic substances and metabolic waste, and cellular maintenance (1).

Historically, sleep medicine has defined itself in terms of sleep disorders and sleep deficiency. 'Sleep health' emphasises the important role that sleep plays in overall wellbeing, providing a positive frame of reference that is not simply to do with an absence of sleep.

Neurobiology of Sleep

There are two fundamental processes of sleep (2):

- The *homeostatic process* (Process S) which is explained as a building pressure for sleep with increasing time spent awake.
- The *circadian process* (Process C) which is the body's natural 24-hr rhythm that keeps track of time of day.

There are various substances that help to regulate sleep and these fall into two main categories (3):

- Wake-suppressing/sleep promoting substances such as γ -aminobutyric acid [GABA], prostaglandin D2, serotonin, adenosine, and melatonin
- Sleep-suppressing/wake-promoting substances such as orexin, catecholamines, and histamine

Measures of Good and Poor Sleep

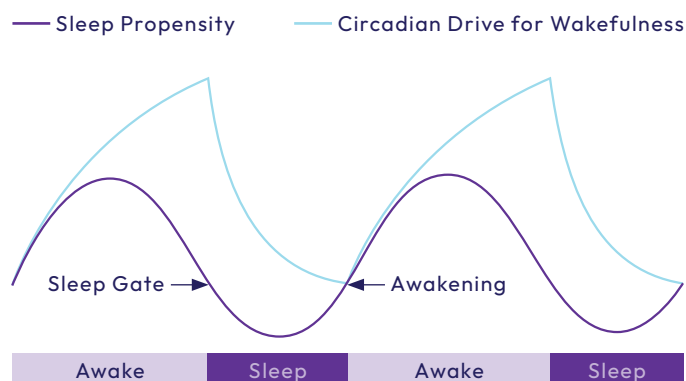
Typically, an average nightly sleep duration for adults is between 6-8 hours although this varies with age and the individual (4). The following parameters are commonly used as measures of sleep quality:

Sleep latency: Length of time in minutes that it takes an individual to fall asleep. Sleep latencies under 30 minutes are judged to be good sleep quality. A sleep latency of more than 60 minutes indicates poor sleep quality. Sleep latency in between 30 and 60 minutes is considered fair to low sleep quality (5).

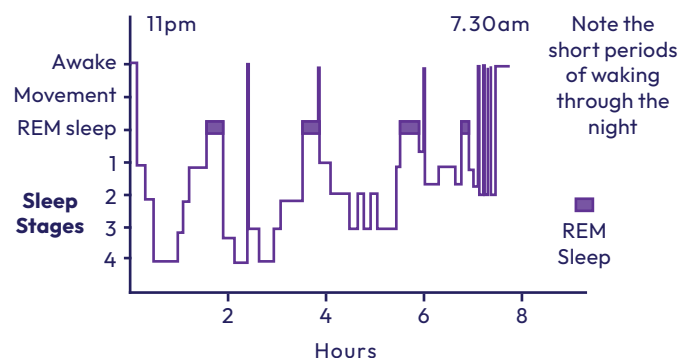
Awakenings: Number of episodes, per night, in which an individual is awake for longer than 5 minutes. Four or more awakenings per night is considered an indicator of poor sleep quality (6).

Wake after sleep onset: Amount of time, in minutes, spent awake after an individual has fallen asleep and before finally waking up (usually the next morning). Being awake during the night for 51 minutes or more across multiple wakeful periods or all in one go indicates lower quality sleep (7).

Sleep efficiency percent (%): Ratio of total sleep time to total time spent in bed.-A sleep efficiency of 75% or more is considered good sleep quality. 74% or less indicates lower quality of sleep (8).



Hypnogram - a recording of a normal night's sleep, displayed here as a chart



Factors Impacting on Sleep

Lifestyle and health factors:

High BMI; unbalanced diet; smoking; sugary drinks; less physical activity; poor mental health; excessive alcohol consumption; certain medications: excessive use of electronic and smart devices (9).

Personal and socio-demographic factors:

Financial concerns; unpaid care; children; male gender; marital status (10).

Workplace psychosocial and job factors:

Lack of choice in daily work routine; unrealistic time pressures; irregular hours; commuting more than 60 minutes to work (one way) (11).

Sleep Disorders

The most common sleep disorders in the general population include insomnia, obstructive sleep apnoea (OSA), circadian rhythm disorders, restless legs syndrome (RLS), and chronically insufficient sleep (12).

Common symptoms and the percentage of adults affected by them are (13):

- Prevalence of self-reported sleep latency of more than 30 min:18.8%
- Difficulty falling asleep once a week: 19.4%
- Broken sleep during the night: 20.9%
- Early morning awakenings: 16.5%
- Daytime sleepiness: 18.8%
- Nonrestorative sleep at least once per week: 28.7%
- Sleeping less than 7–8 hrs per night- 35-40%
- Sleeping less than 6hrs per night: 15%

The Burden of Sleep Disorders

Studies suggest an association between poor sleep quality, sleep debt and short sleep duration (≤ 6 h) with oxidative stress, inflammation, impaired immune function, an imbalanced microbiome, cardiovascular disease, depression, obesity and type 2 diabetes (13). Poor sleep health can directly influence productivity by slowing mental activity, degrading cognition and decision-making, and increasing mistakes on the job (14). It may also lead to lateness, absence, and withdrawal or disengagement while at work (difficulty with complex tasks, cognitive and emotional distraction, and work neglect) through daytime sleepiness. It is also associated with irritability, reduced memory recall, stress and anxiety, and being more easily frustrated. Sleeping 6-7 hours can result in a 1.5% productivity loss, whilst for those who sleep < 6 hours per day this is 2.4% higher compared to those sleeping 7-9 hours (15). This substantial **loss of working time due to insufficient sleep** across US, UK, Germany, Japan, Canada is estimated to amount to up to **\$680 billion each year** (16).

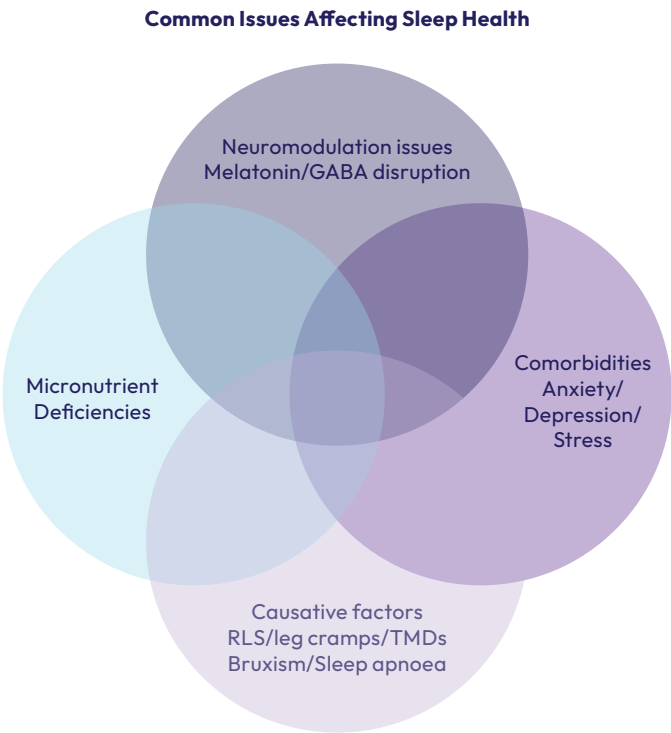
The Evera Nutrition Deep Sleep Formulation

Ingredient	Amount per 2 capsule serving	% NRV*
Vitamin D3	20mcg	400
Folic Acid as L-5-Methyltetrahydrofolate	400mcg	200
Magnesium as Magnesium Citrate	112mg	30
L-Theanine	100mg	**
Rest Assured Botanical Fusion :-consisting of standardised extracts of Lemon Balm; Tart Cherry; Purple Passionflower; Lavender; Hawthorn Berry; Ziziphus Jujuba (Chinese Red Date); Chamomile; Saffron	Equivalent to 1090mg of natural botanicals	**

How Evera Nutrition Deep Sleep Delivers a Restful Night

At Evera Nutrition we realise that the issues which might impact upon a healthy night’s sleep are complex and vary from individual to individual. Our team of scientists has reviewed the scientific literature to identify the most common causes and created a formulation that uses specific ingredients that work together synergistically to address these issues and deliver efficacy in the most natural way.

Evera Nutrition Deep Sleep Addresses the Most Frequent Common Issues Affecting Sleep Health



Rest Assured Botanical Fusion: The Ingredients That Work Together

Neuromodulation Issues:

- L-Theanine, Chamomile, Passionflower, Magnesium, Chinese Red Date extract, and Hops all upregulate GABA production (17-22).
- Vitamin D, Tart Cherry, Saffron, and magnesium are involved in melatonin production (23-26).

Comorbidities: anxiety, depression, stress

- Vitamin D, folic acid, Saffron, and Lemon Balm elevate mood (27-30).
- L-Theanine, Lemon Balm, Saffron, Chamomile, Lavender, Passionflower, Chinese Red Date extract, and magnesium all have benefits in stress and/or anxiety (31-38)

Micronutrient Deficiencies:

- Low levels of magnesium, folic acid and Vitamin D are associated with poor sleep (39-41)

Causative Factors:

- Low levels of Vitamin D are associated with sleep apnoea (a common disorder where breathing repeatedly stops and starts during sleep) (42).
- Low levels of magnesium are associated with leg cramps (43).
- Low levels of folic acid, Vitamin D, and magnesium are associated with restless legs syndrome (44-46).
- Low levels of magnesium and Vitamin D are associated with bruxism (teeth grinding) (47,48).
- Saffron can help with temporomandibular disorders (those affecting the jaw) (49).
- For Maximum benefit Evera Deep Sleep should be taken for a minimum of seven nights

Why Recommend Deep Sleep?

- Evidence-based ingredients that synergistically support all the important elements involved in delivering good sleep
- The European Medicines Agency (EMA) recommends Hops and Passionflower extracts for sleep disorders, temporary insomnia, mental stress, and mood disorders as well as Hawthorn Berry extract to relieve mild symptoms of mental stress and to aid sleep (50,51)
- Although all of the ingredients in Deep Sleep have been investigated in numerous high-quality clinical studies, the robustness of efficacy is further demonstrated by the outcomes of the systematic reviews and meta-analyses below:

Ingredient	Studies	Participants	Conclusions compared to placebo
L-Theanine	18	897	Significant improvement in subjective sleep onset latency, daytime dysfunction, and overall sleep quality score (52)
Chamomile	10	772	Improved sleep, especially the number of awakenings after sleep or staying asleep (53)
Lemon balm	5	375	A significant decrease in anxiety (54)
Lemon balm	3	233	A significant reduction in mean depression (55)
Ziziphus jujuba	14	1020	Significantly improved sleep quality compared to placebo and hypnotics (56)
Lavender	21	1595	Significantly decreases stress (57)
lavender	17	1485	Significant antidepressant effects (58)
Lemon balm	10	532	Improves anxiety and depressive symptoms (59)
Saffron	11	559	Significantly more effective than placebo and non-inferior to tested antidepressants (60)
Saffron	8	661	Improves sleep quality with great improvement on all efficacy outcomes and no serious adverse events (61)
Magnesium	3	151	Significantly reduced sleep onset latency (62)
Vitamin D	19	1627	Beneficial role in enhancing sleep quality (63)

Studies show:

- Clinical Evidence relating to the efficacy of combinations of Tart cherry extract and magnesium; chamomile and saffron; chamomile and Passiflora in various aspects of sleep (64-66).
- No rebound insomnia, dependency issues or side effects such as daytime drowsiness
- Suitable for long term use
- No sleep cycle or sleep architecture disruptions that can occur with commonly used medications
- May promote overall wellbeing and can be used safely with lifestyle changes
- Twice as many people (28.7%) choose to use natural OTC sleep remedies compared to (14.7%) medications (67).

(References available upon request)



Your Health Redefined



everanutrition.com



info@everanutrition.com