



From 'Tired but Wired' to 'Rested and Relaxed': Breaking the Hyperarousal Cycle

TIRED BUT WIRED

47% of Australians get **less sleep** because of a **busy mind**, with 31% affected by **restlessness**¹

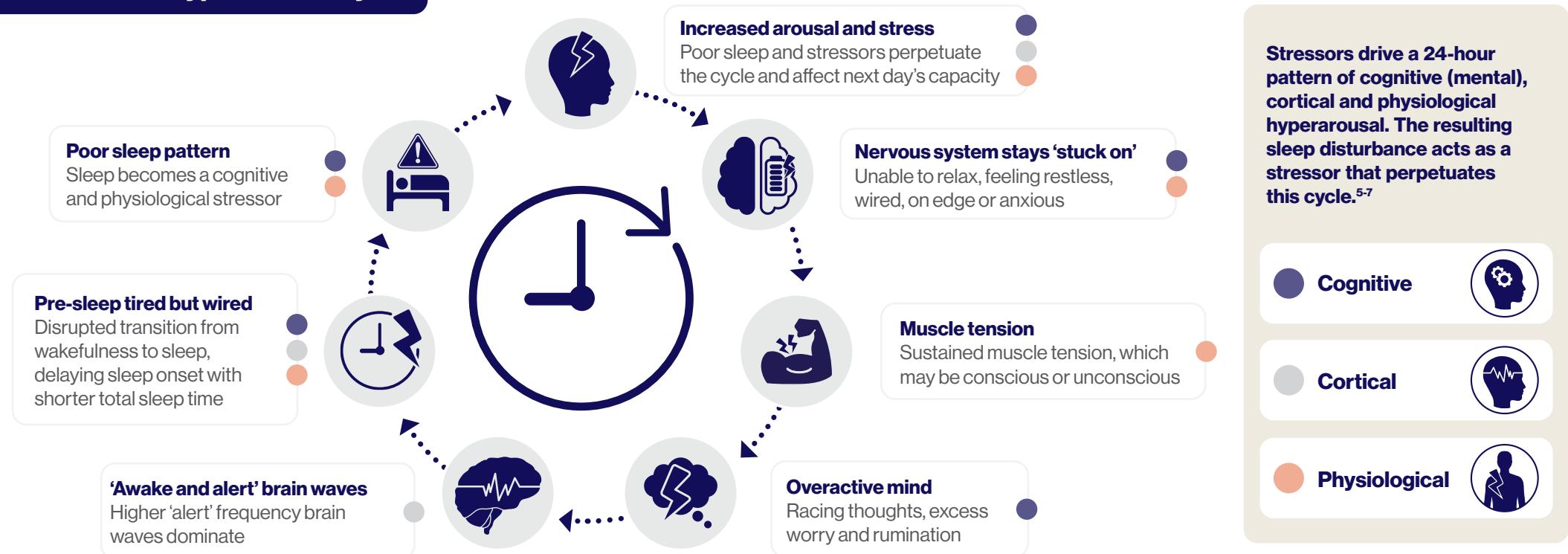
OVERACTIVE MIND

A racing, worried mind can **delay sleep onset by 1 hour** and reduce total **sleep time to less than 6 hours** each night²

MUSCLE TENSION

Around **1 in 2** people with **sleep issues** have somatic hyperarousal symptoms, including **muscle tension**^{3,4}

The 24-hour hyperarousal cycle



Key strategies to break the hyperarousal cycle



Are your customers struggling to get to sleep due to an overactive mind, muscle tension or an inability to relax? They may be in a state of mental and physical hyperarousal.

Rest and relax the mind and body

1 Foundation: Regulate the nervous system

Magnesium supports a shift from sympathetic to parasympathetic dominance and helps balance excitatory and inhibitory neurotransmitters, including serotonergic pathways.

L-theanine crosses the blood-brain barrier to antagonise glutamate receptors, dampening excitatory transmission, while increasing gamma-aminobutyric acid (GABA), dopamine and serotonin production.

Myo-inositol regulates cell signalling, including neurotransmitter transduction, and defends against cellular and metabolic stressors.

2 Somatic release: Relax the muscles

Magnesium counters neuromuscular hypercontractility by regulating nerve transmission, antagonising calcium at troponin C and myosin binding sites, and facilitating ATP-driven calcium reuptake for muscle relaxation.

3 Cognitive de-escalation: Calm the mind

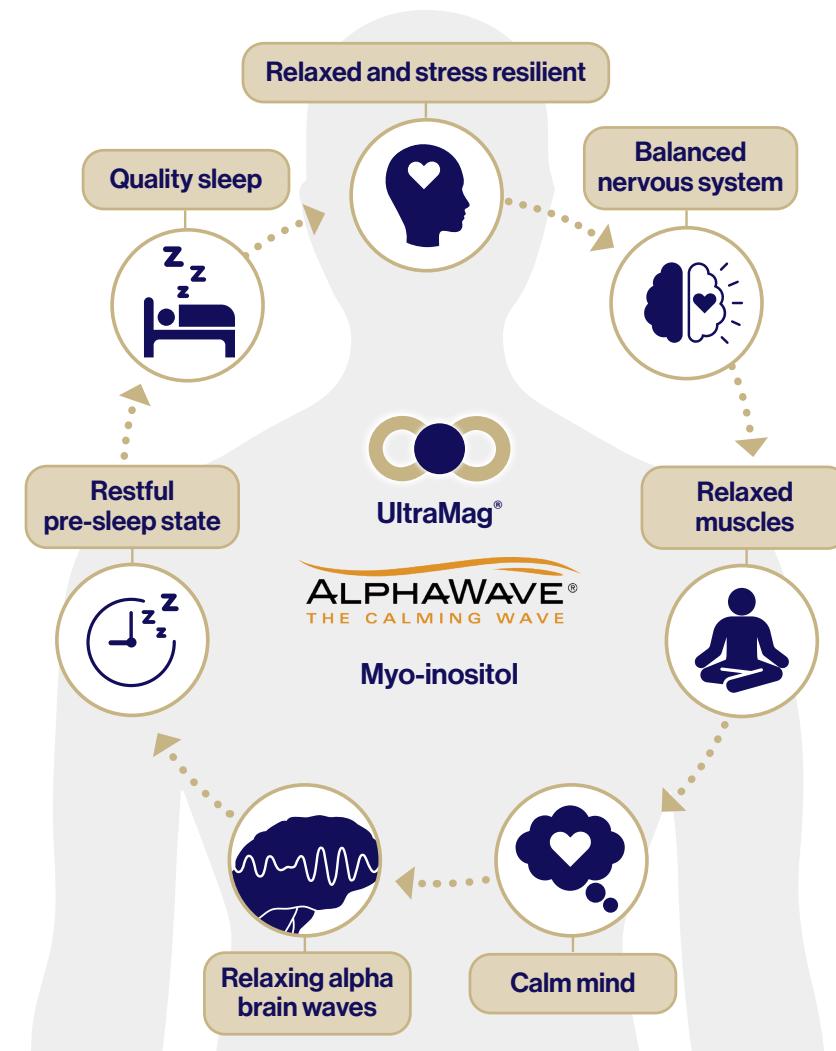
L-theanine increases alpha brain waves to induce meditative-like relaxation and aid sleep transition, and inhibits glutamate receptors to attenuate stress perception.

Magnesium and **L-theanine** lower cortisol levels and regulate neurotransmitters to calm the racing mind.

4 Regeneration: Optimise sleep

L-theanine supports sleep onset and quality through neurotransmitter regulation and enhanced alpha-wave activity, reducing stress and anxiety without sedative effects.

Magnesium reduces sleep latency while improving sleep quality through melatonin production, circadian regulation and GABA potentiation.



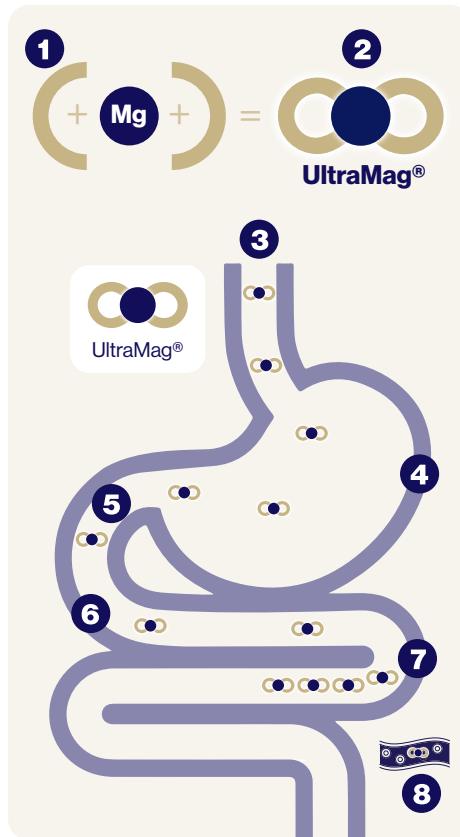
How magnesium, L-theanine and myo-inositol can help your customers:

- ✓ Break the cycle of hyperarousal
- ✓ Support mood and reduce stress
- ✓ Support pre-sleep relaxation
- ✓ Calm the mind and body
- ✓ Reduce daytime and night-time muscle tension
- ✓ Induce a restful sleep

Why UltraMag® magnesium?

UltraMag® is a proprietary blend of highly bioavailable magnesium amino acid chelates, including magnesium glycinate.

- 1 Magnesium plus ligands, including glycine
- 2 Two strong covalent bonds form stable heterocyclic rings, which **reduce the hydration shell (size) and improve solubility**
- 3 Increased **bioavailability**
- 4 **Low gastric irritation** with physical and ionic **protection** from dietary absorption inhibitors
- 5 **Glycine** buffers intestinal pH for **optimal absorption**
- 6 Ionically neutral **magnesium-glycine complex** (magnesium glycinate) stays intact, **reducing laxative effects**
- 7 **Increased magnesium absorption** via active and paracellular transport
- 8 **Once absorbed** the remaining intact **magnesium-glycine complexes dissociate**, where they **and glycine** perform separate physiological functions

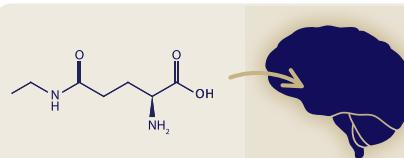
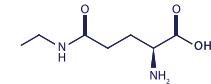


Key features and benefits of UltraMag® magnesium

- ✓ Highly bioavailable (increased absorption and utilisation)
- ✓ Reduced laxative and GIT side effects
- ✓ Can use different absorption pathway (dipeptide channel) for faster, more efficient uptake than minerals without amino acid carriers
- ✓ Efficacy at lower doses compared to inorganic salts

Why AlphaWave® L-theanine?

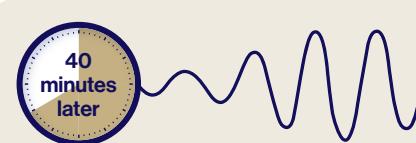
AlphaWave® is a patented, highly purified form, standardised to 98% of the biologically active L-theanine isomer, an amino acid naturally found in green tea.



After ingestion, AlphaWave® L-theanine is rapidly absorbed and crosses the blood-brain barrier

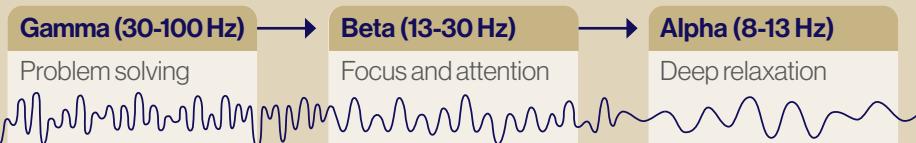


AlphaWave® increases neurotransmitter levels, including dopamine and serotonin



AlphaWave® generates relaxing alpha waves in the occipital and parietal regions of the brain

Brain waves: from daytime alertness to deep pre-sleep relaxation



Key features and benefits of AlphaWave® L-theanine

- ✓ Clinically trialled
- ✓ Standardised to 98% premium grade L-theanine
- ✓ Enhanced absorption
- ✓ Rapid effects
- ✓ Clinical research shows efficacy in acute and longer-term use

Key therapeutics for breaking the hyperarousal cycle and supporting restful sleep for daytime calm

INGREDIENT	Calm the overactive mind	Enhance alpha brain wave activity	Muscle tension release	Sleep latency	Sleep quality	Deep sleep	Nervous system regulation/support
Magnesium, including magnesium amino acid chelate (UltraMag®)	240–500 mg		300–360 mg	250–500 mg	250–500 mg	250–500 mg	300–500 mg
L-theanine (AlphaWave®)	200 mg	200 mg		200–400 mg	200–400 mg	200–400 mg	200–400 mg
Myo-inositol							300 mg–1g
Alpha-casozepine enriched hydrolysed protein				75–300 mg	75–300 mg		
Choline							300–550 mg
Glycine				250 mg–3 g	250 mg–3 g	250 mg–3 g	250 mg–3 g
Lutein and zeaxanthin							10 mg lutein 2 mg zeaxanthin
Saffron (Affron®)	14–28 mg			14–28 mg	14–28 mg	14–28 mg	28 mg
Valerian (Valeriana officinalis)	600 mg			300–600 mg	600 mg	600 mg	
Zizyphus (Zizyphus jujuba var. spinosa)	900 mg			900 mg			900 mg

Doses are for adults, per day. For information on drug-nutrient interactions refer to <https://www.blackmoresinstitute.org/cmig>



The most **commonly reported factors supporting better sleep** among Australians are strategies that **calm the mind and manage stress**.¹



L-theanine 200 mg has been shown to improve sleep quality by promoting relaxation and reducing anxiety, leading to fewer night-time awakenings, better recovery from fatigue and a more refreshed feeling upon waking.⁸
Magnesium 250 mg elemental (as magnesium glycinate) taken daily for 28 days led to modest but statistically significant improvements in sleep quality in adults with insomnia.⁹

References: 1. Sleep Health Foundation. Aussie Sleep Snapshot. June 2025. Viewed 12 December 2025. https://cdn.prod.website-files.com/64b4b7e38dda973fdbb7faf2/6895577cd6d387118217ed78_Australian%20Sleep%20Report%20Card%20Aug%202025.pdf 2. Kalmbach DA, et al. Nocturnal cognitive arousal is associated with objective sleep disturbance and indicators of physiologic hyperarousal in good sleepers and individuals with insomnia disorder. *Sleep Med* 2020;71:151–60. 3. Basishvili T, et al. Insomnia, pre-sleep arousal, psychosocial factors and changes in sleep pattern during the second wave lockdown of the COVID-19 pandemic in Georgia. *Brain Sci* 2021;11:217. 4. Correia IL, et al. A reliability generalization meta-analysis of the internal consistency and test-retest reliability of the pre-sleep arousal scale (PSAS). *Sleep Med* 2025;126:290–9. 5. Dresler RJ, Riemann D. Hyperarousal in insomnia disorder: Current evidence and potential mechanisms. *J Sleep Res* 2023;32:e13928. 6. Riemann D, et al. The psychoneurobiology of insomnia: Hyperarousal and REM sleep instability. *Clin Transl Neurosci* 2023;7:30. 7. Weiner L, et al. Investigating racing thoughts in insomnia: A neglected piece of the mood-sleep puzzle? *Compr Psychiatry* 2021;111:152271. 8. Wang L, Brennan M, Li S, et al. How does the tea L-theanine buffer stress and anxiety. *Food Sci Hum Wellness* 2022;1:467–75. 9. Schuster J, et al. Magnesium bisglycinate supplementation in healthy adults reporting poor sleep: A randomized, placebo-controlled trial. *Nat Sci Sleep* 2025;17:2027–40. **Full reference list available on request.**



UltraMag® is a proprietary blend of highly bioavailable magnesium amino acid chelates, including glycinate.

HAVE QUESTIONS?

Contact our Naturopathic Advisory Service:
advisory@bioceuticals.com.au | 1300 650 455



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BioCeuticals®

Product support 1300 361 832
AU Free 1300 650 455
Phone (+61) 2 9080 0900
info@bioceuticals.com.au

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AU Free 1300 650 455
Phone (+61) 2 9080 0900
info@bioceuticals.com.au