

Pyjama Time



Specialist night time blend



PyjamaTime is a specialist combination night time blend, with synergistic herbal, amino acid, vitamin and mineral ingredients for calm nights and refreshed, energised mornings.

This food supplement combines *Montmorency tart cherry*, *ashwagandha KSM66*, *passion flower*, *German chamomile*, *lemon balm*, *L-Taurine*, *L-Tyrosine* and *lavender* with *niacin*, *pantothenic acid*, *vitamin B6*, *biotin* and *magnesium*.

EFSA approved health claims:

- ★ **Niacin** contributes to the reduction of tiredness and fatigue and to normal psychological function.
- ★ **Pantothenic acid** contributes to normal mental performance and contributes to the reduction of tiredness and fatigue.
- ★ **Vitamin B6** contributes to normal energy-yielding metabolism and to normal functioning of the nervous system.

BENEFICIAL FOR...

- Insomnia / sleep disorders
- Tiredness and fatigue
- Stress and anxiety
- A sense of calm
- Restlessness
- Quality of sleep
- Mild depression
- Relaxation
- Psychological function
- Mental performance
- Hormonal activity
- The nervous system

About the vitamin and mineral ingredients

Niacin (as nicotinamide): Niacin (also known as **vitamin B3**) is one of the water-soluble B vitamins. “Niacin” is the generic name for nicotinic acid (pyridine-3-carboxylic acid), nicotinamide (niacinamide or pyridine-3-carboxamide) and related derivatives, such as nicotinamide riboside. It is naturally present in many foods, added to some food products and available as a dietary supplement. It contributes to normal **psychological function**, normal **energy-yielding metabolism**, normal functioning of the nervous system, the maintenance of normal mucous membranes, the maintenance of normal skin and the **reduction of tiredness and fatigue**.

Pantothenic acid: Pantothenic acid (also known as **vitamin B5**) is an essential nutrient that is naturally present in some foods, added to others and available as a dietary supplement. The main function of this water-soluble B vitamin is in the synthesis of coenzyme A (CoA) and acyl carrier protein. CoA is essential for fatty acid synthesis and degradation, transfer of acetyl and acyl groups and a multitude of other anabolic and catabolic processes. Acyl carrier protein’s main role is in fatty acid synthesis. A wide variety of plant and animal foods contain pantothenic acid. It contributes to normal **energy-yielding metabolism**, normal **mental performance**, normal synthesis and metabolism of steroid hormones, vitamin D and some neurotransmitters, and the **reduction of tiredness and fatigue**.

Vitamin B6: Vitamin B6 is a water-soluble vitamin that is naturally present in many foods, added to others and available as a dietary supplement. It is the generic name for six compounds (vitamers) with vitamin B6 activity: **pyridoxine**, an alcohol; pyridoxal, an aldehyde; and pyridoxamine, which contains an amino group; and their respective 5'-phosphate esters. Pyridoxal 5' phosphate (PLP) and pyridoxamine 5' phosphate (PMP) are the active coenzyme forms of vitamin B6. Vitamin B6 in coenzyme forms performs a wide variety of functions in the body and is extremely versatile, with involvement in more than 100 enzyme reactions, mostly concerned with protein metabolism. Vitamin B6 contributes to the normal function of the immune system, the regulation of **hormonal activity**, normal cysteine synthesis, normal **energy-yielding metabolism**, normal homocysteine metabolism, normal protein and glycogen metabolism and the **reduction of tiredness and fatigue**.

Biotin: Biotin, a B vitamin, is an essential nutrient that is naturally present in some foods and available as a dietary supplement. This water-soluble vitamin is a cofactor for five carboxylases (propionyl-CoA carboxylase, pyruvate carboxylase, methylcrotonyl-CoA carboxylase [MCC], acetyl-CoA carboxylase 1 and acetyl-CoA carboxylase 2) that catalyze critical steps in the metabolism of fatty acids, glucose and amino acids. Biotin also plays key roles in histone modifications, gene regulation (by modifying the activity of transcription factors) and cell signaling. Most biotin in foods is bound to protein, although some dietary biotin is in the free form. Biotin contributes to normal **energy-yielding metabolism**, normal functioning of the **nervous system**, normal macronutrient metabolism, normal psychological function, normal hair and skin and the maintenance of normal mucous membranes.

Magnesium: Magnesium, an abundant mineral in the body, is naturally present in many foods, added to other food products, available as a dietary supplement and present in some medicines (such as antacids and laxatives). Magnesium is a cofactor in more than 300 enzyme systems that regulate diverse biochemical reactions in the body, including protein synthesis, muscle and nerve function, blood glucose control, and blood pressure regulation. Magnesium is required for energy production, oxidative phosphorylation and glycolysis. It contributes to the structural development of bone and is required for the synthesis of DNA, RNA, and the antioxidant glutathione. Magnesium also plays a role in the active transport of calcium and potassium ions across cell membranes, a process that is important to nerve impulse conduction, muscle contraction, and normal heart rhythm. Magnesium contributes to a **reduction of tiredness and fatigue**, electrolyte balance, normal **energy-yielding metabolism**, normal functioning of the **nervous system**, normal muscle function, normal protein synthesis, normal **psychological function**, the maintenance of normal bones and teeth, and it has a role in the process of cell division.



About the amino acid and herbal ingredients

Ashwagandha KSM66: Ashwagandha, one of the most powerful herbs in Ayurvedic healing, has been used since ancient times for a wide variety of conditions, and is most well-known for its **restorative** benefits. In Sanskrit, ashwagandha means “the smell of a horse,” indicating that the herb imparts the vigour and strength of a stallion, and has traditionally been prescribed to help people strengthen their immune system after an illness. Ashwagandha is frequently referred to as “Indian ginseng” because of its rejuvenating properties, even though botanically, ginseng and ashwagandha are unrelated.

Traditionally, it has been prescribed as a **nerve tonic and adaptogen** - an agent which helps the body adapt to various emotional and physical stressors. It is a highly effective remedy to help **reduce stress and anxiety**, by lowering cortisol levels and mimicking the inhibitory neurotransmitter GABA.

Not all ashwagandha supplements are created equal and when it comes to choosing the best ashwagandha, **KSM66** is the gold standard. It is derived using a unique extraction process which harnesses a full spectrum extract from just the ashwagandha root - not the leaves. The result is an ashwagandha extract which has the highest quality and best bioavailability.

KSM66 ashwagandha has the highest concentration of all major root-only extracts available on the market. Together with good manufacturing processes which use no solvents or added active ingredients, KSM66 is the most natural, potent and effective formulation of ashwagandha root.

Passion flower: *P. incarnata* has many common names, including purple passionflower and maypop. Studies suggest it might help to relieve insomnia and anxiety. It appears to boost the level of gamma-aminobutyric acid (GABA) in the brain. This compound lowers brain activity, which may help you to relax and sleep better. Research from 2017 also suggests that passion flower can have a positive effect on sleep patterns.*

*<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5542920/>

A second study found that it significantly increases slow-wave (deep) sleep, reduced rapid eye movement sleep and helped the subjects fall asleep more quickly.**

**<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5699852/>

Another study found that it reduced the time it took to fall asleep and increased the duration of sleep.***

***<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5542920/>

German chamomile flower: There are two plants known as “chamomile”: the more popular German chamomile (***Matricaria recutita***) and Roman, or English, chamomile (*Chamaemelum nobile*). Although they belong to different species, they are used to support similar ailments. Both are used to calm frayed **nerves**, to treat stomach problems, to relieve muscle spasms and to treat skin conditions and mild infections.

Traditionally, chamomile preparations such as tea and essential oil aromatherapy, have been used to treat **insomnia** and to induce **sedation** (calming effects). Chamomile is widely regarded as a **mild tranquilliser and sleep-inducer**.*

Sedative effects may be due to the flavonoid, apigenin, that binds to benzodiazepine receptors in the brain. Studies in pre-clinical models have shown anticonvulsant and CNS depressant effects respectively. Chamomile extracts exhibit benzodiazepine-like hypnotic activity.

In another study, inhalation of the vapour of chamomile oil reduced a stress-induced increase in plasma adrenocorticotrophic hormone (ACTH) levels. Diazepam, co-administered with the chamomile oil vapour, further reduced ACTH levels, while flumazenil, a BDZ antagonist blocked the effect of chamomile oil vapour on ACTH.

Compounds, other than apigenin, present in extracts of chamomile can also bind BDZ and GABA receptors in the brain and might be responsible for some sedative effect.

*<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2995283/>



About the amino acid and herbal ingredients cont...

Lemon balm leaves: Lemon balm (*Melissa officinalis*) is a lemon-scented herb that comes from the same family as mint. It is native to Europe, North Africa and West Asia, but is grown around the world.



Lemon balm has traditionally been used to improve mood and cognitive function, but it can also help to **ease insomnia** and other sleep disorders, as well as help to help **relieve restlessness**.

Researchers in one 2006 study* found that children who took a combined dose of lemon balm and valerian experienced a 70% to 80% improvement in symptoms.

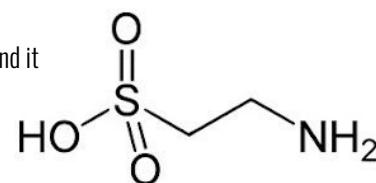
*<https://linkinghub.elsevier.com/retrieve/pii/S0944711306000250>

L-Taurine: Taurine (2-aminoethanesulfonic acid) is an organic compound that is widely found in the human body. It has many fundamental biological roles, and is essential for cardiovascular function and the development of skeletal muscle, the retina and the central nervous system.

It is considered a **conditional amino acid**, because it can be manufactured by the body (as opposed to an essential amino acid, which can be provided only by diet or supplements).

Historically, it was first isolated in 1827 from ox bile, which may help to explain its name and the enduring "made from bulls" myths.

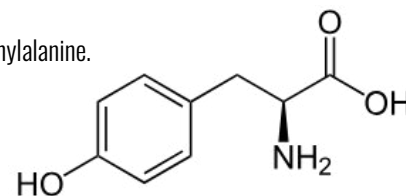
Taurine is one of many naturally-occurring compounds in the body that, like melatonin, increase in response to prolonged periods of being awake. Biochemically, taurine activates GABA(A) receptors in a brain region known to **regulate sleep**, and it is involved in the creation of the "sleep hormone" **melatonin** in the pineal gland.



Early research shows that taurine – especially if combined or "stacked" with other ingredients – acts as a **neural sedative** to **calm anxiety** and **lessen reactivity to stress**. It can also help to **resolve depression**, which is often a factor that leads to insomnia and other sleep disorders.

L-Tyrosine: Tyrosine is a non-essential amino acid. The body makes tyrosine from another amino acid, called phenylalanine.

In the diet, tyrosine can be sourced from dairy products, meats, fish, eggs, nuts, beans, oats, and wheat.



It plays a crucial role in producing several **neurotransmitters** (like dopamine, epinephrine (adrenaline) and norepinephrine) which are vital for **brain function** and **mood regulation**, making ideal for those who suffer with **stress and depression**. It also helps the body to produce enzymes, thyroid hormones and melanin, as well assisting with communication between nerve cells and the regulation of metabolism.

Tyrosine helps make several important substances, including:

- **Dopamine:** Dopamine regulates your reward and pleasure centers. This important brain chemical is also important for **memory** and motor skills.
- **Adrenaline and noradrenaline:** These hormones are responsible for the fight-or-flight response to **stressful situations**.
- **Thyroid hormones:** Thyroid hormones are produced by the thyroid gland and primarily responsible for regulating metabolism
- **Melanin:** This pigment gives your skin, hair and eyes their colour.

About the amino acid and herbal ingredients cont...

Montmorency tart cherry: Montmorency cherries (also known as “sour cherries” or “tart cherries”), are considered to be a superfruit because they are packed with nutrients, including **potent antioxidants**. They have been used as a herbal remedy for centuries. For instance, the cherry (either as bark, root or fruit) has historically been used by Native Americans as natural pain relievers.



The active phenolic acids found in the fruit include chlorogenic acid, caffeic acid and ellagic acid. Plus, an abundance of flavonoids such as isorhamnetin, kaempferol, quercetin, epicatechin, catechin and procyanidin. The main bioactive ingredient of interest in tart cherry is **anthocyanin** - the chemical responsible for the deep red pigmentation of cherries.

Tart Montmorency cherries have also been reported to contain **high levels of phytochemicals including melatonin**, a molecule critical in regulating the **sleep-wake cycle** in humans. Back in 2006, a study measured the effects of tart cherry on biomarkers of muscle damage* in a group of 14 male college students. While the results supported the supplement as a way of reducing strength loss and muscle pain, it was also interesting to note that some participants also reported **improved sleep** - which sparked huge interest in Montmorency tart cherry as a potentially **effective sleep aid**. Since then, several studies have fuelled the link between tart cherry ingestion and **production of melatonin**.

*<https://www.ncbi.nlm.nih.gov/pubmed/16790484>

The effects of tart cherry on melatonin production are well known, being shown to have a significant effect on baseline urinary melatonin levels** during bedtime, total sleep time and sleep efficiency periods.

**<https://www.ncbi.nlm.nih.gov/pubmed/22038497>

In one randomized crossover study***, a group of older adults suffering with **insomnia** were administered either 8oz of Montmorency tart cherry as a supplement or placebo for two weeks. Then after a two-week washout period, the tart cherry and placebo were exchanged. Results indicated that tart cherry increased sleep time by nearly 90 minutes on average compared to placebo.

***https://www.fasebj.org/doi/abs/10.1096/fasebj.28.1_supplement.830.9

Similarly, a study using polysomnography to measure sleep quality found that a daily dose of cherry juice (480 ml) resulted in **increased sleep time and efficiency******, with reduced inflammatory biomarkers and **increased tryptophan availability** – a key amino acid used to make melatonin.

****<https://www.ncbi.nlm.nih.gov/pubmed/28901958>

Lavender: *Lavandula angustifolia* has traditionally been used as **sleep enhancer**. Lavender oil is mainly linalyl acetate (51%) and linalool (35%), which are chemicals that are both rapidly absorbed into the bloodstream. Studies have shown that these compounds inhibit several neurotransmitters and have a **sedative and pain-relieving effect**.



Lavender also lowers the heart rate and **reduces anxiety**. It works as an **anxiolytic** (an anxiety reliever) and as a sedative, to increase **relaxation and calm**, and help bring about sleep. It also interacts with the neurotransmitter GABA to help **quiet the brain and nervous system activity**, reducing agitation, anger, aggression and restlessness.

A study* of an orally administered lavender oil preparation showed that it improved **sleep quality** and lowered anxiety as effectively as a low dose of the sedative lorazepam (the drug Ativan).

*<https://pubmed.ncbi.nlm.nih.gov/19962288/>

In a 2013 publication in the journal Evidence-Based Complementary Medicine, the authors reviewed the up-to-date research in animals and humans, of the effect of lavender on the **nervous system**. The authors quoted 3 studies, involving healthy college students, coronary heart disease sufferers and middle-aged women complaining of **insomnia**, all of which concluded that use of lavender **improved their quality of sleep**.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3612440/#B74>

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and can be dropshipped by us.

*See our Trade Price List for trade prices, RRP's, discounts, dropshipping rates etc.