

SPORTS & LIFESTYLE

FOURTH EDITION
DECEMBER 2020

NUTRITION NEWSLETTER

Targeted
nutrition for
stress and
anxiety



Mental health: A global crisis

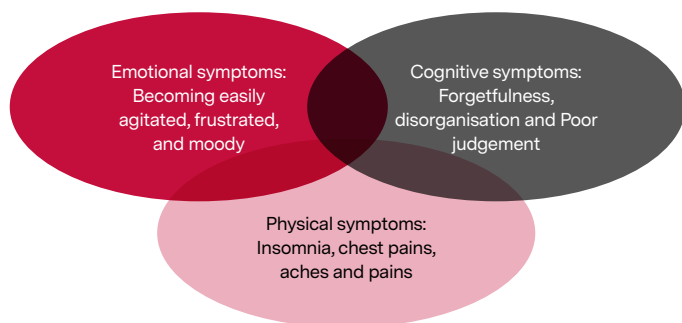
Recent years have seen drastic increases in mental health problems. A flagship study by the Institute for Health Metrics and Evaluation found that 792 million people globally (more than one in ten) were living with a mental health disorder¹. This worrying trend is largely a result of stressful modern lifestyles, but uncertainties around COVID-19 and the economy have accelerated it.

In our last newsletter, we explored the **potential of nootropics** for functions such as focus and memory. With stress and anxiety now commonplace, there is also growing demand for nutritional solutions targeting mental and emotional wellbeing.

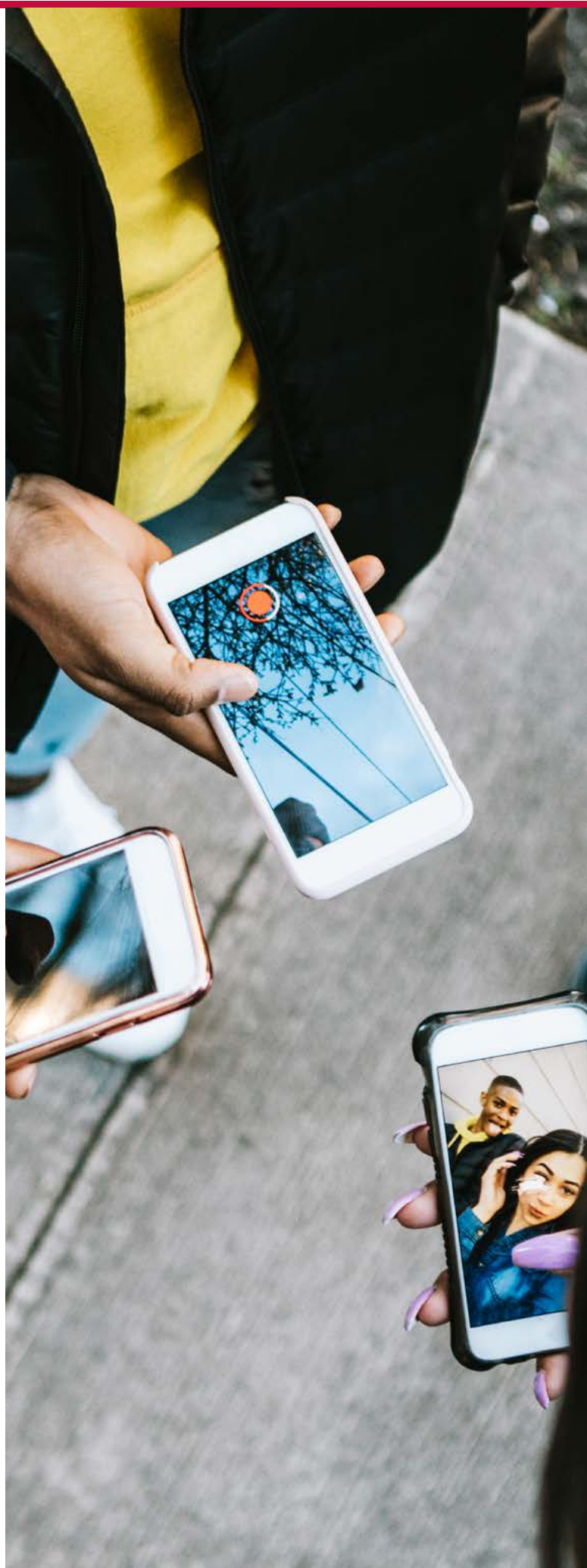
Mental health in the workplace

Anxiety and depression are frequently associated with issues in the workplace. A WHO-led study estimated that depression and anxiety disorders cost the global economy US\$1 trillion each year in lost productivity.²

Signs displayed by overly stressed individuals¹⁵



Occupational pressures are believed to be responsible for:¹⁵

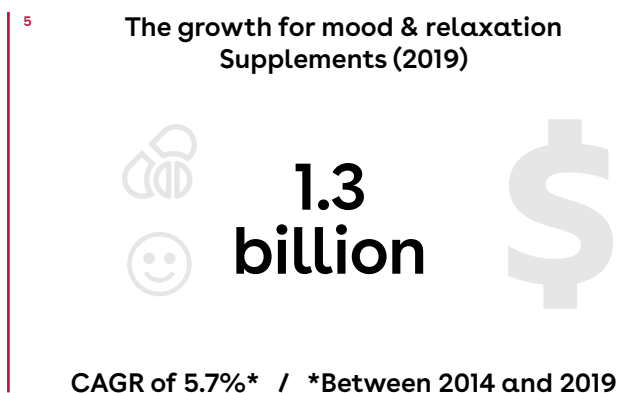
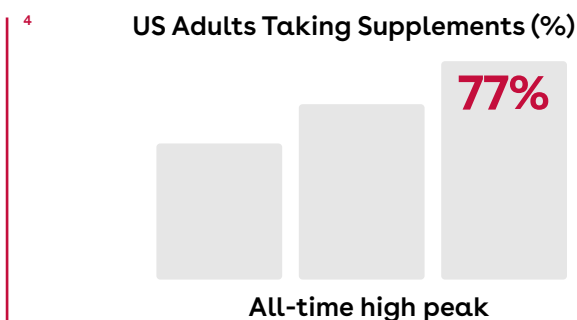


Stress hits Gen Z hard

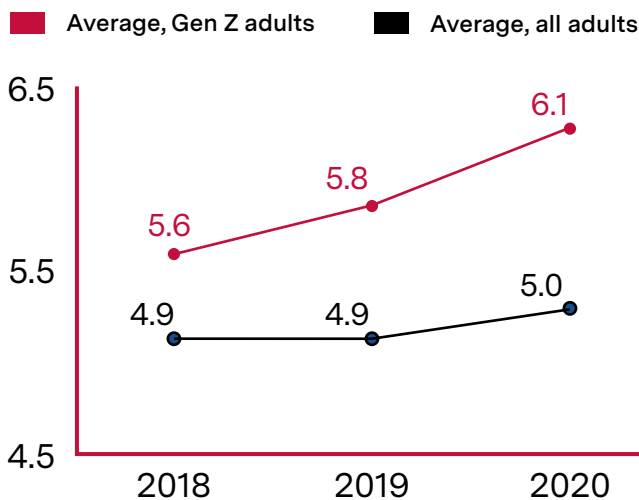
The mental health impact of COVID-19 has been particularly serious for the youngest individuals, commonly known as Generation Z. The American Psychological Association (APA) has found that they are experiencing unprecedented levels of uncertainty and elevated stress, with many reporting symptoms of depression.³

Tackling anxiety through nutrition

Supplement use in general is on the rise



Average reported stress level during the past month



Prinova offers a range of nutritional solutions to help meet this demand.








Prinova- a range of solutions for relaxation and stress relief

Powder Relax Blend - Chill Pills




Ingredients: Shagandha™ (Ashwagandha Extract), L-Tryptophan, L-Glycine, L-Theanine, Magnesium (as Aquamin™ Mg), 5-HTP (Griffonia Seed Extract), BacoPin® (Bacopa monnieri Extract) Rhodiola Rosea Extract, Zinc (as Zinc Citrate), Vitamin B12 (as Cyanocobalamin), Vitamin B9 (as Folic Acid), Vitamin B6 (as Pyridoxine Hydrochloride)

NUTRITIONAL INFORMATION	AMOUNT PER SERVING	% NUTRITIONAL REFERENCE VALUE
Shagandha™ (Ashwagandha Extract 2.5% Withanolides)	300 mg	-
L-Tryptophan	250 mg	-
L-Glycine	250 mg	-
L-Theanine	200 mg	-
BacoPin® (Bacopa monnieri Extract 20% bacosides)	100 mg	-
5-HTP (Griffonia Seed Extract)	100 mg	-
Rhodiola Rosea Extract (3% rosavins, 1% salidroside)	50 mg	-
Ginseng Extract (20% Ginsenosides)	50 mg	-
Magnesium (as Aquamin™)	56.25 mg	15.00%
Zinc (as Zinc Citrate)	10 mg	100.00%
Vitamin B6 (as Pyridoxine Hydrochloride)	2.8 mg	200.00%
Vitamin B9 (as Folic Acid)	400 mcg	200.00%
Vitamin B12 (as Cyanocobalamin)	400 mcg	200.00%
- NRV not established	5 mcg	200.00%

CLAIMS:

-  Normal cognitive function
-  Reduction of tiredness and fatigue
-  Maintenance of normal vision
-  Normal functioning of the nervous system
-  Normal psychological function

ADVANTAGES:

-  Comprehensive blend of specialist ingredients to support nervous system function.
-  Created to enhance wellbeing and mood and to help reduce stress.
-  Non-habit forming and sedative-free.






Powder Relax Blend - Calming Hot Chocolate



Ingredients: Coconut milk powder, natural flavouring, cocoa powder, dispotassium phosphate, sunflower lecithin, xanthan gum, MCT oil powder, L-Theanine, magnesium (as Aquamin™), Shagandha™ (Ashwagandha Extract), 5-HTP (Griffonia Seed Extract), sucralose

NUTRITIONAL INFORMATION	PER 100G	PER 7.5G SERVING (1 SCOOP)
Energy (kJ)	1013	70
Energy (Kcal)	246	17
Fat (g)	11.5	0.8
of which saturates (g)	6.1	0.4
Carbohydrate (g)	18.5	1.3
of which sugars (g)	2.1	0.1
Fibre (g)	10.0	0.7
Protein (on dry matter) (g)	6.6	0.5
Salt (g)	0.7	0.0
L-Theanine	10 mg	200 mg
Magnesium (as Aquamin™)	2.8 mg	56.25mg (15% NRV)
Shagandha™ (Ashwagandha Extract)	400 mcg	50 mg
5-HTP (Griffonia Seed Extract)	5 mcg	50 mcg

CLAIMS:

-  Reduction of tiredness and fatigue
-  Normal functioning of the nervous system
-  Normal psychological function

BENEFITS:

-  Indulgent chocolate drink featuring a blend of anti-stress aids
-  A great addition to your bedtime routine to help prepare your body for long, deep and restful sleep



Our natural ingredients for relaxation and stress relief

Adaptogens

Adaptogens are natural substances that increase the ability to adapt to, and protect against, environmental factors.

GINSENG

Used for centuries in Chinese traditional medicine, it has become one of the world's most popular medicinal herbs.

Known for its energy-boosting properties, ginseng has been shown to reduce the detrimental effects of stress by conserving vitamin C and diminishing adrenal hypertrophy. It also regulates immune response and the hormonal changes resulting from stress, thus maintaining homeostasis.

RHODIOLA ROSEA

Rhodiola Rosea is a highly active adaptogen. It produces a stimulating effect which begins within 30 minutes of use and continues for at least four to six hours. Rhodiola has a history of medical usage dating back thousands of years. It has been used to boost energy, improve mood, alleviate fatigue and reduce stress.

5HTP: GRIFFONIA SIMPLICIFOLIA

Griffonia Simplicifolia is a West African plant whose seeds are the main source of 5-HTP (5-hydroxytryptophan). This active compound is a metabolic intermediate in the biosynthesis of serotonin, which is essential in regulating mood. For this reason, griffonia is a natural antidepressant and 5-HTP has been shown in scientific studies to promote relaxation and alleviate stress. Griffonia is also sometimes recommended to treat insomnia since serotonin is a melatonin precursor, and melatonin regulates sleep.

The regulatory environment around 5-HTP is currently unclear and sales are not permitted in many European countries. However, Prinova's 5-HTP, which is from natural sources of griffonia seed extract, can be sold in the UK.



Branded Ingredients



The roots⁶ of *Withania somnifera* (Ashwagandha) are used extensively in Ayurveda to promote both physical and mental health.

Bioactives from the root of *Withania somnifera* have been shown to be effective in attenuating experimentally induced stress responses including anxiety, depression, analgesia, thermic change, gastric ulceration, convulsions and adrenocortical activation.



Bacopa monniera has been used by Ayurvedic medical practitioners in India for almost 3000 years. Its anti-anxiety effects and beneficial role in memory and cognition are well documented.

Preclinical and clinical studies have found that treatment with *Bacopa monniera* extract lowers the stress-related secretion of adrenal hormones. It is documented to improve learning and memory and is beneficial in improving attention span and intellectual functions in children.



Magnesium can suppress the ability of the hippocampus to stimulate the release of stress hormone.⁷ It can also act at the blood brain barrier to prevent the entrance of stress hormones into the brain.

Amino acids

L-Theanine

L-Theanine is a unique amino acid found in tea.⁸ It has a similar structure to inhibitory neurotransmitters in the brain and studies have established its beneficial role in stress reduction and relaxation.

Glycine

Glycine plays an important role as a signalling molecule. It acts as an inhibitory neurotransmitter, helping calm the nervous system and improve sleep.⁹

Tryptophan

Tryptophan is the sole precursor for serotonin, the “happy” hormone. A deficiency can affect the serotonin system and cognitive function.

Vitamins & minerals

B-Vitamins

Low energy¹⁰ and fatigue can contribute to irritability and stress. Clinical data suggests that supplementing with a vitamin B complex can help keep energy high and stress low.

B6 is known to have a key role the production of neurotransmitters such as serotonin and gamma-aminobutyric acid (GABA).¹¹ Deficiency in B6 may affect mood, sometimes contributing to depression, anxiety, irritability and feelings of pain.

B9 (folic acid) Although further research is needed, studies have found evidence of a link between folic deficiency and depression.¹² Research has also shown that folic acid greatly improves the action of antidepressants.¹³

Zinc

Increasing zinc intake is another nutritional option for people with chronic anxiety. Studies have shown that supplementation may help alleviate anxiety symptoms.¹⁴

References

- ¹ GBD 2017 'Disease and Injury Incidence and Prevalence Collaborators. (2018). Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017' The Lancet
- ² https://www.who.int/mental_health/in_the_workplace/en/
- ³ <https://www.apa.org/news/press/releases/stress/2020/sia-mental-health-crisis.pdf>
- ⁴ Council of Responsible Nutrition (CRN) 2019 Consumer Survey on Dietary Supplements.
- ⁵ Euromonitor 'Health & Nutrition Survey' January and February 2020
- ⁶ Sabinsa Corporation: "Stressed by Wall Street Woes? Explore Natural Actives That Help to Boost Your Resilience..."
- ⁷ <https://www.psychologytoday.com/us/blog/evolutionary-psychiatry/201106/magnesium-and-the-brain-the-original-chill-pill#:~:text=Magnesium%20can%20suppress%20the%20ability,the%20adrenal%20glands%20to%20ACTH.>
- ⁸ <https://pubmed.ncbi.nlm.nih.gov/15378679/>
- ⁹ <https://pubmed.ncbi.nlm.nih.gov/9131721>
- ¹⁰ <https://takecareof.com/articles/best-vitamins-supplements-for-stress-and-anxiety>
- ¹¹ <http://archive.foundationalmedicinereview.com/publications/6/1/87.pdf>
- ¹² <https://pubmed.ncbi.nlm.nih.gov/10967371/>
- ¹³ <https://pubmed.ncbi.nlm.nih.gov/26413529/>
- ¹⁴ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3738454/>
- ¹⁵ Innova Market Insights – Reports

