

## Tetra Medical Solutions (Pty) Ltd

- The Natural Alternative -

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# C-Balance – Cortisol detox

## Blueberry flavoured

#### Overview

REFRESH, RELAX and REFOCUS!

C-Balance is an adaptogenic powder drink formulated to help manage stress and support healthy cortisol hormone levels to refine your focus (memory & concentration) and overall wellbeing. C-Balance consists of an array of natural compounds and ingredients each with their own set of benefits to promote balanced, healthy and happy hormones.

## Ingredients:

- Vitamin D3 (cholecalciferol)
- Magnesium (as bisglycinate)
- L-Theanine
- · Ashwagandha extract (Withania somnifera)
- SABEET® beet extract

#### Benefits of the C-Balance composition:

## **VITAMIN D3 (cholecalciferol)**

Vitamin D is a fat-soluble vitamin in a family of compounds that includes vitamins D1, D2, and D3.

Your body produces vitamin D naturally when it's directly exposed to sunlight. You can also get vitamin D from certain foods and supplements to ensure adequate levels of the vitamin in your blood. Cholecalciferol is needed by the body for healthy bones, muscles, nerves, and to support the immune system. It works by helping the body to use more of the calcium found in foods or supplements. Getting enough vitamin D is important for the typical growth and development of bones and teeth and for improving resistance to certain diseases.

In addition to its primary benefits, research suggests that vitamin D may also play a role in:

## Vitamin D may fight disease

- Reducing the risk of multiple sclerosis (MS)
- Decreasing the chance of heart disease: Low vitamin D levels have been linked to increased risk of heart diseases such as hypertension, heart failure, and stroke.
- Reducing the likelihood of severe illnesses
- Supporting immune health: People who do not have adequate vitamin D levels might be at increased risk of infections and autoimmune diseases, such as rheumatoid arthritis, type 1 diabetes, and inflammatory bowel disease.
- May regulate mood and reduce depression
- May support weight loss

People with higher body weights have a greater chance of low vitamin D levels. Research suggests that the extra calcium and vitamin D may have had an appetite-suppressing effect.

## MAGNESIUM (as bisglycinate)

Magnesium glycinate is also known as magnesium diglycinate and magnesium bisglycinate. Magnesium is a vital nutrient for regulating many body processes, including muscle and nerve function, blood sugar levels, and blood pressure. This mineral also supports the making of protein, bone, and DNA.

From regulating blood sugar levels to boosting athletic performance, magnesium is crucial for your brain and body. Yet, although it's found in various foods ranging from leafy greens to nuts, seeds, and beans, many people don't get enough in their diet. Here are health benefits of magnesium:

## • Involved in hundreds of biochemical reactions in your body

- Magnesium is found throughout your body. Every cell in your body contains this mineral and needs it to function. About 60% of the magnesium in your body occurs in bone, while the rest is in muscles, soft tissues, and fluids, including blood.
- One of its main roles is to act as a cofactor a helper molecule in the biochemical reactions continuously performed by enzymes. It's involved in more than 600 reactions in your body, including"
  - Energy creation: converting food into energy
  - Protein formation: creating new proteins from amino acids
  - Gene maintenance: helping create and repair DNA and RNA
  - Muscle movements: aiding in muscle contraction and relaxation
  - Nervous system regulation: regulating neurotransmitters, which send messages throughout your brain and nervous system

#### • May boost exercise performance

Magnesium helps move blood sugar into your muscles and dispose of lactate, which can build up during exercise and cause fatigue.

## May combat depression

Magnesium plays a critical role in brain function and mood; low levels are linked to an increased risk of depression

#### May support healthy blood sugar levels

Studies suggest that about 48% of people with type 2 diabetes have low blood levels of magnesium, which may impair the body's ability to regulate blood sugar levels effectively

#### May promote heart health

Magnesium plays an important role in keeping your heart healthy and strong.

#### Boasts anti-inflammatory benefits

Low magnesium intake is linked to increased levels of inflammation, which plays a crucial role in aging and chronic disease

#### • May help prevent migraine attacks

Migraine headaches can be painful and often cause nausea, vomiting, and sensitivity to light and noise. In one older study, supplementing with 1 gram of magnesium provided relief from acute migraine attacks more quickly and effectively than a common medication

#### • May improve PMS symptoms

Premenstrual syndrome (PMS) is one of the most common conditions in female-bodied people of childbearing age. It often causes symptoms such as water retention, abdominal cramps, tiredness, and irritability. This may be because magnesium levels fluctuate throughout the menstrual cycle, worsening PMS symptoms in those with a deficiency. As such, supplements may help reduce the severity of symptoms, including menstrual migraine attacks

## May promote bone health

Magnesium is crucial for maintaining bone health and protecting against bone loss. In fact, 50–60% of your body's magnesium is found in your bones

#### May support better sleep

Magnesium supplements are often used as a natural remedy for sleep issues such as insomnia. This is because magnesium regulates several neurotransmitters involved in sleep, such as gamma aminobutyric acid.

## • May help reduce anxiety symptoms

Research suggests that magnesium deficiency may increase your body's susceptibility to stress, which may amplify symptoms of anxiety.

#### L-THEANINE

Theanine, also known as L-theanine, L-gamma-glutamylethylamide, or N⁵-ethyl-L-glutamine, is a bioactive, non-proteinogenic amino acid similar to the proteinogenic amino acids L-glutamate and L-glutamine. It is primarily found in green and black tea and some mushrooms or supplements. Most known for helping people relax, L-theanine has other potential health benefits, including:

#### Anxiety and stress relief

L-Theanine can help you feel at ease, and research suggests that it not only relaxes the mind, but it also does so without causing drowsiness

#### Increased focus

Paired with caffeine, L-theanine may help increase focus and attention.

#### Better immunity

Research suggests that L-theanine may improve the function of the body's immune system and could help decrease upper respiratory tract infections or improve inflammation in the intestinal tract.

#### · Tumor and cancer treatment

L-theanine has also been associated with amplifying the anti-tumor effects of certain chemotherapy drugs. Because of these promising findings, researchers expect that L-theanine could also help improve chemotherapy's ability to fight cancer

#### Blood pressure management

L-theanine may be beneficial for those who experience increased blood pressure in stressful situations. Also, 200 mg of L-theanine was shown to help reduce resting heart rate, pointing to its ability to promote relaxation. L-theanine may also help boys diagnosed with attention deficit hyperactivity disorder (ADHD) sleep better.

## ASHWAGANDHA EXTRACT (Withania somnifera)

• Withania somnifera is an evergreen shrub cultivated in tropical and subtropical areas of Asia, Africa, and Europe. It is commonly called by the Sanskrit name, ashwagandha, because the plant's roots are said to smell like a wet horse ("ashwa" for horse and "gandha" for smell). Ashwagandha root has been used in the traditional Ayurvedic and Unani medicine systems of India as an adaptogen, which is loosely defined as a compound or product that increases the ability of a person to resist, adapt, or become resilient in nonspecific ways to biological, physical, or chemical stressors. In addition to sleep, ashwagandha is commonly promoted for stress and anxiety reduction. Ashwagandha is rich in phytochemicals, including steroidal lactones (known as withanolides) and alkaloids. Although the main benefits from ashwagandha are lowering stress, anxiety and cortisol hormones it has various possible health benefits, including:

#### May help reduce stress and anxiety

Ashwagandha is perhaps best known for its ability to reduce stress through regulating the cortisol hormones. It's classified as an adaptogen, a substance that helps the body cope with stress. Ashwagandha may help control mediators of stress, including heat shock proteins (Hsp70), cortisol, and stress-activated c-Jun N-terminal protein kinase (JNK-1). It also reduces the activity of the hypothalamic-pituitary-adrenal (HPA) axis, a system in your body that regulates the stress response.

#### • May benefit athletic performance

Research has shown that ashwagandha may have beneficial effects on athletic performance and may be a worthwhile supplement for athletes. Furthermore, it shows that taking ashwagandha significantly enhances maximum oxygen consumption (VO2 max) in healthy adults and athletes. VO2 max is the maximum amount of oxygen a person can use during intense activity. It's a measurement of heart and lung fitness. Having optimal VO2 max is important for athletes and nonathletes alike. Low VO2 max is associated with increased mortality risk, while higher VO2 max is associated with a lower risk of heart disease.

## May reduce symptoms of some mental health conditions

Some evidence suggests that ashwagandha may help reduce symptoms of other mental health conditions, including depression, in certain populations.

#### May help boost testosterone and increase fertility in men

Ashwagandha supplements have been shown in some studies to benefit male fertility and increase testosterone levels. Additionally, it is found that ashwagandha treatment significantly increases sperm concentration, semen volume, and sperm motility in males with low sperm count.

#### May reduce blood sugar levels

Limited evidence suggests that ashwagandha may have some benefits for people with diabetes or high blood sugar levels. The reason may beTrusted Source that certain compounds within ashwagandha — including one called withaferin A (WA) — have powerful antidiabetic activity and may help stimulate cells to take in glucose from the bloodstream.

#### May reduce inflammation

Ashwagandha contains compounds, including WA, that may help reduce inflammation in the body. Animal studies have shown that WA may also help reduce levels of inflammatory proteins such as interleukin-10 (IL-10), and there's some evidence ashwagandha may help reduce inflammatory markers in humans too.

## May improve brain function, including memory

Taking ashwagandha may benefit cognitive function. Compounds found in ashwagandha, including WA, have antioxidant effects in the brain, which may benefit cognitive health. Cognitive functions it may benefit include executive functioning, attention, reaction time and performance on cognitive tasks which may lead to significant improvements in immediate and general memory, attention and information-processing speed.

#### May help improve sleep

Many people take ashwagandha to promote restful sleep, and some evidence suggests it may help with sleep issues.

#### SABEET® BEET EXTRACT

Sabeet ® is standardized beetroot extract as a powdered juice extract from the root of Beta vulgaris. It is water soluble and standardized for minimum 2% Nitrates. Beetroot extract, derived from the beetroot vegetable, offers several potential health benefits due to its rich nutrient profile and antioxidant properties. It is known for potentially improving athletic performance, lowering blood pressure, and supporting heart health. Beetroot extract may also boost brain function, reduce inflammation, and aid in detoxification.

Furthermore, beetroot is a great source of many essential vitamins and minerals like Protein, Fiber, Vitamin C, Vitamin B6, Folate, Magnesium, Potassium, Manganese, and Iron. It can do the following for you:

#### Lowers blood pressure / supports heart health

Beetroot contains nitric oxide which can reduce blood pressure up to 3-10mm Hg for a few hours. Nitric oxide sends signals to the tiny muscle cells around the arteries and tells them to relax. When these muscle cells relax, the blood vessels dilate and blood pressure goes down.

## • Supports heart health

Beetroot contains betaine. Betaine is best known for helping to reduce homocysteine levels in the blood, which is directly related to lowering the risk of heart disease. By helping to fight the hardening and blocking of arteries due to elevated homocysteine, betaine is beneficial in reducing the risk for heart attacks, stroke, and other forms of cardiac arrest and heart disease.

## • Boost brainpower

Reduced blood circulation and oxygen play a big role in age-related memory loss and degenerative conditions like dementia. The nitrates in beetroot stimulate blood vessels in the brain and support healthy blood and oxygen supplies. In particular, beets stimulate blood flow in the brain's frontal lobe which is the area responsible for sharp decision making.

## • Improves athletic performance

The nitrates found in beetroot can enhance physical performance, particularly during high-intensity endurance exercise. They improve the efficiency of the mitochondria, the cell organs responsible for producing energy. Consumption of beetroot may improve running and cycling performance, increase stamina, boost oxygen use, and lead to better exercise performance overall.

#### Fights inflammation

Beetroot contains Betalain, the water-soluble pigments that give beets their vivid red colour. Betalains have a wide range of potential health benefits: they counter inflammation, protect the liver, and have anticancer and antioxidant properties. Studies show that pigments in Betalains inhibit the growth of several different types of malignant tumours, including breast, liver, colon, and bladder cancers.

#### Supports liver health

Your liver is responsible for some 500 different functions in your body. In a nutshell, it helps remove toxins to keep your body healthy. The Betalain in beets serves as a powerful tool to help your liver detoxify itself so it can function more efficiently. Not only that, but betalain also encourages healthy bile production and flow throughout the small intestine to keep your liver functioning at optimal levels. The folate and iron give your liver a little extra support, too.

## **Dosage Information:**

Mix 4g (1 Scoop) with 250-300ml water. Stir or shake until dissolved. Consume immediately.

## Warning:

- If you are on chronic medication, speak to your physician about taking Cortisol balancing supplements.
- Keep out of reach of children.

#### Disclaimer:

C-Balance (Cortisol detox) is a natural food supplement therefore no medical claims are made or inferred, no claims regarding ameliorating, curing or positively affecting any medical conditions. The above content provided for informational purposes based on information and studies undertaken by numerous progressive and leading Cortisol balancing supplement manufacturers worldwide.

#### Storage:

Store in a cool dry environment below 25°C. Keep away from direct sunlight.

#### Label:

