

VitaVoice™ Optimise Daily Food Supplement:

The Science behind the UK's Number 1 Nutritional Brand for Vocalists

Here at VitaVoice™ we recognise the many lifestyle and environmental factors which can impact the fine balance of essential nutrients and vitamins performers require, potentially leaving you deficient and at risk of less-than-optimal vocal performance.

VitaVoice™ Optimise seeks to mitigate these deficiencies through providing your body and mind a much-needed daily nutrient and vitamin boost, with specially selected botanicals scientifically proven to provide benefits which support vocal-health and improve performance.

Take VitaVoice™ Optimise daily food supplement as part of your personal health strategy for vocal improvement.

Ingredients

Vitamin B6

Vitamin B12

Vitamin C

Vitamin D3

Vitamin K2

Iron

Magnesium

Selenium

Zinc

Ashwagandha

Black Pepper

Citrus Bioflavonoids

Elderberry

Grape Seed

Panax (Korean) Ginseng

Lemon Balm

Lion's Mane

Turmeric

Full ingredients list

Why do I need VitaVoice in my life?

Poor Diet Choices

In the UK, a National Diet and Nutrition Survey showed that people consume too much salt, sugar, and saturated fat, while not eating enough fruit and vegetables. In the survey, only 30% of adults said they consumed their 5-a-day. This has huge implications for the average person's consumption of essential nutrients. The knock-on effects of poor diet can affect both our physiological and neurological function. Ultimately negatively affecting our body's overall performance.

According to the World Health Organisation the 6 essential nutrients essential for disease prevention, growth and good health. **are Proteins, Carbohydrates, Fats, Vitamins, Minerals and Water.**

VitaVoice™ Optimise daily food supplement provides nutritional support when you can't access or maintain the recommended amounts of vitamins and minerals your body requires for normal functioning.

Seasonal Affective Disorder

Come wintertime Seasonal Affective Disorder (or 'the winter blues') can result in low energy, feeling glum and being further unmotivated to eat healthy foods. In the UK this may partially be affected by low amounts of vitamin D from low levels of winter sunshine and an unwillingness to go outside during the colder months.

"According to HFMA (2021), Vitamin D is reported to be the most popular supplement in the UK, followed by Vitamin C, with improved immunity being the nation's key influence in supplement choice"

We're happy to say we have the recommended daily amount of both **Vitamin D** and **Vitamin C** within VitaVoice™ Optimise, along with a whole host of other vitamins, minerals, and

botanicals essential for supporting the good health and wellbeing of performers all year round.

Low Mood, Stress, and Anxiety

Poor nutrition may be a causal factor in the experience of low mood, stress, and anxiety, and improving diet may help to protect not only the physical health but also the mental health of performers. The inflammatory effects of poor diet choices (e.g. high in calories and saturated fat) have been proposed as one mechanism through which the Western diet may have detrimental effects on brain health. Various mental health conditions, including mood disorders, have been linked to heightened inflammation. VitaVoice™ Optimise supports to your body so it can better work towards reducing inflammatory effects of poor diet.

Ashwagandha, Magnesium, Zinc, Lemon Balm, Vitamin D, Vitamin B12, and Turmeric (curcumin) have proven therapeutic benefits and research suggests they may all contribute to the reduction of depression, stress, and anxiety.

Vegetarian and vegan diets

Taking an **Iron** supplement is especially important if you don't eat meat. It can be hard to get enough iron in your diet, as plant-based iron is less available to the body. When you aren't getting enough iron, you might display symptoms like irritability, fatigue, and trouble focusing. If you have sufficient iron levels, however, your blood can efficiently deploy oxygen throughout your body, which improves your mood and makes you less tired. **B12, Vitamin D and Zinc** may also be in short supply if you follow a vegan or vegetarian diet. All boosted from taking VitaVoice™ Optimise.

Lack of routine and poor appetite

Poor diet choices and unhealthy eating habits are more likely whilst we are busy and stressed. For performers this may include around rehearsals, recording, seasonal work, and other performance runs. Tiredness, and lack of food options available can lead to regular eating late at night after performances and poor food choices being made due to lack of places to purchase healthy food options. Fast food is renowned to have too much fat, salt, and sugar (all taste and little nutritional substance). Fast food is often also low in fibre and essential nutrients.

Long-term use of antibiotics

Antibiotic medicines may destroy bacteria in the gut, thereby potentially decreasing essential vitamin and mineral levels, especially if taking the medicine for more than a few weeks.

VitaVoice™ Optimise is a daily food supplement which can support your body to balance out your lifestyle choices, providing you with essential vitamins, minerals and botanicals and the best chance possible for a voice that achieves and maintains top condition.

Why use Nutritional Supplementation: The Evidence

Global Goals

<https://www.globalgoals.org/goals/3-good-health-and-well-being/>

New National Diet and Nutrition Survey shows UK population is eating too much sugar, saturated fat and salt

<https://www.gov.uk/government/news/new-national-diet-and-nutrition-survey-shows-uk-population-is-eating-too-much-sugar-saturated-fat-and-salt>

HFMA: Health of the Nation Survey 2021

https://hfma.co.uk/wp-content/uploads/2021/03/hfm_health-of-the-nation_17.pdf

Fruit and vegetable intake is inversely associated with perceived stress across the adult lifespan

<https://pubmed.ncbi.nlm.nih.gov/33940399/>

The Role of Vitamins in Mental Health

<https://addictiondomain.com/wp-content/uploads/2018/09/The-role-of-Vitamins-in-mental-health.pdf>

Food and mood: how do diet and nutrition affect mental wellbeing?

<https://www.bmj.com/content/369/bmj.m2382>

Healthy Eating, Physical Activity, and Sleep Hygiene (HEPAS) as the Winning Triad for Sustaining Physical and Mental Health in Patients at Risk for or with Neuropsychiatric Disorders: Considerations for Clinical Practice

<https://pubmed.ncbi.nlm.nih.gov/32021199/>

Vitamin B12 Supplementation: Preventing Onset and Improving Prognosis of Depression

<https://www.cureus.com/articles/42615-vitamin-b12-supplementation-preventing-onset-and-improving-prognosis-of-depression>

Adjunctive Nutraceuticals for Depression: A Systematic Review and Meta-Analyses

<https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.2016.15091228>

Curcumin for depression: a meta-analysis

<https://www.tandfonline.com/doi/abs/10.1080/10408398.2019.1653260?journalCode=bfsn20>

Inflammation-related biomarkers in major psychiatric disorders: a cross-disorder assessment of reproducibility and specificity in 43 meta-analyses

<https://pubmed.ncbi.nlm.nih.gov/31534116/>

Martin, S & Lockhart, M, 2000, Working with voice Disorders, Speechmark, Milton Keynes.

Vitamin B6

As Pyridoxine Hydrochloride - 1.4mg – 100% of daily NRV in VitaVoice™ Optimise food supplement.*

Key Benefits:

- **Aids in stress management, promoting calm**
- **Helps reduce tiredness**
- **Contributes to the regulation of hormonal activity**
- **Supports the immune system to work properly**
- **Supports normal psychological and metabolic function**

Vitamin B6 is one of the most impressive B vitamins. It protects your body and goes above and beyond to deliver some truly amazing results that can help to maintain your overall health.

Stress management and promoting calm

B vitamins become depleted during times of stress. Performances can be stressful! By supplementing your daily nutrition with VitaVoice™ Optimise you will ensure adequate amounts of vitamin B6, helping support stress management, promoting calm. B vitamins also aid hugely in digestion, and we all know stress can go straight to our stomach.

Neurological Benefits

By boosting neurotransmitter activity in your brain, vitamin B6 fights back against psychological conditions like depression and bipolar disorder. The neurotransmitters dopamine, serotonin, and gamma-aminobutyric acid (GABA) play critical roles in regulating your mood, and vitamin B6 is a crucial component in these chemical messengers. Research has linked the non-essential amino acid homocysteine to depression, and vitamin B6 reduces the levels of this harmful amino acid throughout your body. When you don't have enough vitamin B6 in your system, research has shown you may be twice as likely to get depressed. Therefore, research suggests there is a link between vitamin B6 and mood.

*You can read about dietary reference values here: <https://nutraceuticalsgroup.com/uk/tools/tools-dietary-reference-values/>

Premenstrual syndrome

The role of vitamin B6 in producing neurotransmitters may also help with the symptoms of premenstrual syndrome (PMS). One study found that women who take vitamin B6 daily are less likely to report common PMS symptoms such as irritability and depression.

Anemia Benefits

Anemia is a condition in which you lack enough healthy red blood cells to carry adequate oxygen to your body's tissues. Having anemia, also referred to as low haemoglobin, can make you feel tired and weak. It can also cause shortness of breath, dizziness, and headaches. Vitamin B6 helps your body produce haemoglobin. Therefore, when you're deficient in this vitamin, you're at risk of becoming anaemic and so consuming adequate vitamin B6 in your diet is important to support red blood cell production.

Vitamin B6: The Evidence

Pyridoxine (vitamin B6) and the premenstrual syndrome: a randomized crossover trial

<https://pubmed.ncbi.nlm.nih.gov/2558186/>

Superiority of magnesium and vitamin B6 over magnesium alone on severe stress in healthy adults with low magnesemia: A randomized, single-blind clinical trial

<https://pubmed.ncbi.nlm.nih.gov/30562392/>

B6-responsive disorders: a model of vitamin dependency

<https://pubmed.ncbi.nlm.nih.gov/16763894/>

[Review of the role of hyperhomocysteinemia and B-vitamin deficiency in neurological and psychiatric disorders--current evidence and preliminary recommendations]

<https://pubmed.ncbi.nlm.nih.gov/17729191/>

Vitamin B6 is associated with depressive symptomatology in Massachusetts elders

<https://pubmed.ncbi.nlm.nih.gov/18838531/>

Mayo Clinic - Anaemia

<https://www.mayoclinic.org/diseases-conditions/anemia/symptoms-causes/syc-20351360>

Vitamin B12

As Cyanocobalamin (Vitamin B12) – 25ug – 1000% of daily NRV in VitaVoice™ Optimise food supplement.*

Key Benefits:

- Perceived benefits include improved stamina, confidence, and control, and reduced effort whilst singing.
- Energy boosting and anxiety fighting effects
- Contributes to the reduction of tiredness and fatigue
- Supports normal psychological function
- Supports the immune and nervous systems

Vitamin B12 deficiency is common. The body doesn't produce this vitamin and as it's found in animal products, Vegetarians and Vegans are at risk of vitamin B12 deficiency. Nuts and seeds tend to be the main plant-based source of minerals, but B12 is difficult to get, so if you're fully vegan you can take a supplement like VitaVoice™ Optimise for a boost.

Performance Benefits

While there have been no clinical trials to confirm its effects on singing, perceived anecdotal benefits from singers include improved stamina, confidence, and control, and reduced effort whilst singing. It's widely thought that the anti-inflammatory properties within vitamin B12, help remedy hoarseness. The increased energy effects can also help with performances. It can make you feel healthier and more capable of tackling the world.

It's better to take your vitamin B supplement early in the day, as it can give you a burst of energy (not great just before bed).

Vitamin B12: the Evidence

Vitamin B12 Supplementation: Preventing Onset and Improving Prognosis of Depression
<https://pubmed.ncbi.nlm.nih.gov/33251075/>

Vitamin B12 in health and disease
<https://pubmed.ncbi.nlm.nih.gov/22254022/>

The Singer's and the Clinician's Perspective on Vitamin B₁₂ Treatment for Vocal Benefits
<https://pubmed.ncbi.nlm.nih.gov/29306524/>

Effect of Vitamin B12 Injection on the Vocal Performance of Professional Singers: A Randomized, Double-blind, Placebo-Controlled, Crossover Trial <https://pubmed.ncbi.nlm.nih.gov/33180098/>

Vitamin C

As ascorbic acid – 80mg – 100% of daily NRV in VitaVoice™ Optimise food supplement.*

Key benefits:

- **Supports the immune system in fighting the effects of colds and flu – helping you get over them faster.**
- **Powerful antioxidant - protects cells against damage from oxidative stress**
- **Increases iron absorption**
- **Supports normal energy-yielding metabolism**
- **Contributes to the reduction of tiredness and fatigue**

Vitamin C is involved in tissue repair, the production of neurotransmitters (taking messages from your brain to your muscles and back again), and is also important in the function of the immune system. Smokers are advised to take 35mg a day more of this essential vitamin than non-smokers.

VitaVoice™ Optimise uses the recommended daily intake of Vitamin C* to keep your immune system ticking over, whilst reducing the risk of stomach irritation, reflux, or 'leaching' the body of hydration - which higher dose Vitamin C formulations may contribute to. Your vocal folds need all the hydration they can get, and our team of clinical voice-professionals and nutritionists have provided the optimal amount of nutrients in the VitaVoice™ Optimise daily food supplement to support you staying nutritionally balanced all year round, promoting the likelihood of optimal vocal performance.

Much like the citrus bioflavonoids also included in the VitaVoice™ Optimise formulation, ascorbic acid is an antioxidant. It protects your cells from damage caused by oxidative stress, and it helps your other tissues fight back against free radicals too. When you're poorly from common winter bugs, taking Vitamin C can reduce the symptoms you experience and the length of time you experience them – ideal for those who want to get over their cold faster!

*You can read about dietary reference values here: <https://nutraceuticalsgroup.com/uk/tools/tools-dietary-reference-values/>

Vitamin C: the Evidence

The effect on winter illness of large doses of vitamin C
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1947567/>

Ascorbic acid induces salivary gland function through TET2/acetylcholine receptor signaling in aging SAMP1/Klotho (-/-) mice <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9417236/>

Understanding the Therapeutic Potential of Ascorbic Acid in the Battle to Overcome Cancer
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8392841/>

Vitamin C and Infections
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5409678/>

Vitamin D3

Cholecalciferol from algae (Vitamin D3) – 200iu – 100% of daily NRV in VitaVoice™

Optimise food supplement.

Key Benefits:

- **Helps your immune system to work better**
- **May lower the risk of catching colds and flu**
- **Anti-inflammatory effects which may reduce several allergic symptoms**
- **Maintains normal bone and muscle function**

Staying Healthy During Flu Season

Wintertime brings flu season. During this time vitamin D can be particularly effective at reducing the risk of illness. The NHS recommends taking a vitamin D supplement in the wintertime to boost vitamin D levels during the months when there's less sunlight, as when times are hectic it isn't always possible to get outside to soak up the winter sunshine and get your daily dose of vitamin D. A recent study has suggested that vitamin D can help lower your risk of falling ill with the flu and acute respiratory illnesses.

Anti-inflammatory Benefits

Since chronic inflammation is related to an overactive immune system, the immune-balancing effects of vitamin D may reduce inflammation throughout your body. In fact, the scientific community widely accepts that consuming the right amount of vitamin D reduces inflammation even though the exact mechanisms behind this effect remain unknown.

Anti-Allergy Benefits

Children who don't get enough vitamin D are more likely to develop allergic conditions like asthma, dermatitis, and eczema. Substances called glucocorticoids help prevent asthma, and vitamin D may strengthen the effects of these anti-inflammatory compounds.

Vocal Cord Dysfunction

Although rare, vocal cord dysfunction (VCD) has been linked to a lack of this vitamin. Symptoms of VCD include feeling short of breath or feeling that it's hard to get air into or out of your lungs; a feeling of choking or suffocation; a high-pitched wheezing sound when you inhale, called stridor; frequent cough or clearing your throat; a feeling of tightness in the throat or chest; voice changes; hoarseness. If you have VCD, your vocal cords don't open all the way when you breathe in. This blocks your airways, and you may struggle to breathe. VCD is often misdiagnosed as asthma, which has similar symptoms. Nearly 80% of VCD episodes are wrongly diagnosed as asthma, especially asthma caused by exercise. You can have both VCD and asthma – even episodes at the same time. VCD is also called inducible laryngeal obstruction, paradoxical vocal cord movement (PVFM) and laryngeal dysfunction. VCD can be aggravated by reflux, high-intensity exercise, environmental triggers (such as strong scents, fumes, pollutants, chemicals), medications, colds or viral infections, stress, and anxiety.

Vitamin D3: the Evidence

Vitamin D's role in health – Deterministic or Indeterminate?
<https://www.todaysdietitian.com/newarchives/070114p48.shtml>

Vitamin D (Oregon State University)
<https://lpi.oregonstate.edu/mic/vitamins/vitamin-D>

Vitamin D in atopic dermatitis, asthma, and allergic diseases
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2914320/>

Vitamin D Deficiency Linked to Vocal Cord Dysfunction
<https://www.medscape.com/viewarticle/755046>

Vitamin D
<https://www.nhs.uk/conditions/vitamins-and-minerals/vitamin-d/>

High Vitamin D Levels May Downregulate Inflammation in Patients with Behçet's Disease
<https://www.hindawi.com/journals/iji/2017/8608716/>

Vocal Cord Dysfunction
<https://my.clevelandclinic.org/health/diseases/17623-vocal-cord-dysfunction>

Vitamin K2

As MK-7 (Menaquinone -7) – 70ug – 93% of daily NRV in VitaVoice™ Optimise food supplement.*

Key benefits:

- Part of a winning combination which may help prevent ‘the winter blues’
- Supports the effectiveness of vitamin D
- May help with blood clotting and helping wounds to heal
- May have neuroprotective qualities

The VitaVoice™ team have included **vitamin D3 and vitamin K2**, a combination that offers a holistic boost to your everyday life and overall health. In the short term, this may help prevent ‘the winter blues’ (also known as Seasonal Affective Disorder). In the long term, it may help reduce the risk of developing bone-related health issues or other chronic diseases later in life.

It’s recommended Vitamin K2 is always taken with Vitamin D3, that’s why we have included it here in VitaVoice™ Optimise. Vitamin D increases calcium levels in the body. Vitamin K helps the body use calcium by shuttling it to your bones. Increasing your intake of vitamin D without enough vitamin K can cause an increase in calcium levels without the ability to use it effectively, which raises the risk of depositing calcium in arteries and soft tissue. This is dangerous because it can lead to heart disease, heart attack and even stroke. It’s crucial that these vitamins be taken together because supplementing vitamin K with D helps the body use calcium properly to build bone instead of depositing it dangerously in arteries and soft tissue. Vitamin K has a protective effect on arteries, preventing build-up and therefore protecting against cardiovascular disease.

Preventing vocal fold haemorrhage

Our bodies need Vitamin K for blood clotting and helping wounds to heal. It helps make four of the thirteen proteins needed for the process of blood clotting. Although blood clotting might sound like a bad thing, it plays several important roles in our bodies. This includes

*You can read about dietary reference values here: <https://nutraceuticalsgroup.com/uk/tools/tools-dietary-reference-values/>

stopping wounds from continuously bleeding so that they can heal. Especially important in preventing and reducing the impact of vocal fold haemorrhage which may occur to anyone, depending upon circumstances.

When the voice is used forcefully, the delicate blood vessels in the vocal fold may burst open, and leak blood into the vocal fold. After a short time, this leakage stops and the blood which remains in the vocal fold is called a vocal fold haemorrhage. Forceful voice use can include:

- Singing overly aggressively and/or incorrectly (i.e. poor technique or singing environment)
- Singing in poor environments (i.e. poor amplification, poor monitors, loud environment, etc.)
- Singing when unwell
- Throat clearing, Coughing, Shouting... even Sneezing!

Neuroprotective properties

Vitamin K appears to have neuroprotective properties, so it may prevent damage to nerve cells caused by oxidative stress. Also, vitamin K has appeared to prevent neuroinflammation, so it may support the reduction of inflammation in your brain and nervous system.

Vitamin K: the Evidence

Low vitamin K intakes in community-dwelling elders at an early stage of Alzheimer's disease
<https://pubmed.ncbi.nlm.nih.gov/19027415/>

The Nutrition Source: Vitamin K
<https://www.hsph.harvard.edu/nutritionsource/vitamin-k/>

Vocal Haemorrhage
<https://voicedoctorla.com/voice-disorders/vocal-hemorrhage/>

Iron

As Ferrous Bisglycinate – 14mg – 100% of daily NRV in VitaVoice™ Optimise food supplement.

Key benefits:

- **Contributes to the reduction of tiredness and fatigue**
- **Supports normal oxygen transportation in the body**
- **Maintains normal cognitive function**
- **Supports your immune system**
- **May make you more psychologically resilient**

Iron deficiencies sometimes occur in winter, especially for women. In terms of performance, this essential mineral improves energy and focus, gastrointestinal processes (reducing the risk of reflux causing irritation/throat issues), the immune system, and the regulation of body temperature. A lack of iron can cause iron deficiency anaemia, where cells don't get enough oxygen. This leads to tiredness and fatigue. Essentially, not having enough iron forces your body to work harder to do everything. Therefore, you experience more fatigue no matter what you do when you are deficient in iron.

The expert nutritionists who formulated VitaVoice™ Optimise have made sure to include 100% of your daily requirement of iron to nip potential iron deficiencies due to poor nutritional intake in the bud* and enable your body to thrive. Iron deficiency among athletes is commonly encountered in sports medicine.

“Iron deficiency is one of the most common deficits globally with a clear predominance in adolescence and in menstruating females”

(Consensus statement of the Swiss Society of Sports Medicine, 2015)

Taking an iron supplement is especially important if you don't eat meat. It can be hard to get enough iron in your diet, as plant-based iron is less available to the body. When you aren't

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getting enough iron, you might display symptoms like irritability, fatigue, and trouble focusing. If you have sufficient iron levels, however, your blood can efficiently deploy oxygen throughout your body, which improves your mood and makes you less tired.

Iron: the Evidence

Iron treatment normalizes cognitive functioning in young women

<https://pubmed.ncbi.nlm.nih.gov/17344500/>

Iron deficiency and cognitive functions

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4235202/>

Dietary zinc and iron intake and risk of depression: A meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/28189077/>

Intermittent iron supplementation for reducing anaemia and its associated impairments in menstruating women

<https://pubmed.ncbi.nlm.nih.gov/22161448/>

Consensus statement of the Swiss Society of Sports Medicine

Iron deficiency in sports – definition, influence on performance and therapy

<https://smw.ch/article/doi/smw.2015.14196>

Vegan diets: practical advice for athletes and exercisers

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5598028/>

Magnesium

As Citrate – 45mg elemental – 12% of daily NRV in VitaVoice™ Optimise food supplement.*

Key benefits:

- Boosts energy production in the body - reducing tiredness and fatigue
- Provides relief from stress, anxiety, and migraines
- Supports psychological function and can improve mood
- Improves sleep and relaxation
- Improves immune health
- Helps in absorption of minerals

Magnesium is vital to your overall health. Specifically, it supports your nervous system, psychological function, and energy levels. Your body may lose magnesium, or not have enough, when you don't consume enough in your diet, or when you're ill. Stress, coffee, alcohol, sweating, or taking medications can all contribute to a magnesium deficiency. Long term magnesium deficiency can lead to poor immune health, increased stress, lack of sleep and more.

Natural remedy for reducing anxiety

Magnesium reduces the hormones that provoke the “fight-or-flight” response in humans, so works as a natural remedy for preventing anxiety.

Supports sleep regulation

Keeping irregular hours? Working until late at night? Suffering insomnia? – Magnesium can help. When we're stressed or nervous, we lose more magnesium than normal through our urine. So, if you often experience pre-show anxiety, you might become deficient in this and possibly struggle to sleep - resulting in fatigue and poor immune resilience. Taking VitaVoice™ Optimise can help to balance your magnesium levels alongside other important nutrients for energy, immunity and brain function.

*You can read about dietary reference values here: <https://nutraceuticalsgroup.com/uk/tools/tools-dietary-reference-values/>

Magnesium: the Evidence

The effects of Magnesium supplementation on subjective anxiety
<https://pubmed.ncbi.nlm.nih.gov/27869100/>

Magnesium Status and Stress: The Vicious Circle Concept Revisited
<https://pubmed.ncbi.nlm.nih.gov/33260549/>

Magnesium for treatment-resistant depression: a review and hypothesis.
<https://pubmed.ncbi.nlm.nih.gov/19944540/>

Magnesium: Its proven and potential clinical significance.
<https://pubmed.ncbi.nlm.nih.gov/12602735/>

Effect of magnesium and vitamin B6 supplementation on mental health and quality of life in stressed healthy adults: Post-hoc analysis of a randomised controlled trial
<https://pubmed.ncbi.nlm.nih.gov/33864354/>

Selenium

L-Selenomethionine – 60ug – 110% of daily NRV in VitaVoice™ Optimise food supplement.

Key benefits:

- **Powerful antioxidant**
- **Supports your immune system**
- **Contributes to normal thyroid function**
- **Appears to improve symptoms of asthma**

Antioxidant Benefits

Free radicals are natural parts of your immune system that can get out of hand. Alongside normal essential internal metabolic processes in the human body, external sources of free radicals include exposure to X-rays, ozone, cigarette smoking, air pollutants, and industrial chemicals. So, you can see why certain lifestyle choices and environmental factors can increase the levels of free radicals in your body, which leads to oxidative stress. Selenium is a powerful antioxidant which contributes to the protection of cells from oxidative stress, therefore minimising inflammation in the body. By eliminating free radicals, this nutrient allows your body to do its work unimpeded. Through its antioxidant action, selenium appears to keep your nervous system healthy (brain) and improve the responsiveness of your immune system (immunity).

Thyroid function

Selenium contributes to normal thyroid function. One of the thyroid's main functions is to produce hormones that help regulate the body's metabolism (the process that turns food into energy). These hormones are called triiodothyronine (T3) and thyroxine (T4). Many of the body's functions slow down when the thyroid does not produce enough of these hormones.

Other Benefits

Supplementing with selenium appears to improve the symptoms of asthma. Anything beneficial for our respiratory system is a win for vocalists.

Selenium: the Evidence

Selenium: its role as antioxidant in human health <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2698273/>

French adults' cognitive performance after daily supplementation with antioxidant vitamins and minerals at nutritional doses: a post hoc analysis of the supplementation in vitamins and mineral antioxidants (SU.VI.MAX) trial. <https://pubmed.ncbi.nlm.nih.gov/21775560/>

The influence of selenium on immune responses
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3723386/>

Oxidative stress, Mitochondrial dysfunction and Aging
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3184498/>

Decreased consumption of corticosteroids after selenium supplementation in corticoid-dependent asthmatics
<https://pubmed.ncbi.nlm.nih.gov/12061082/>

Selenium, selenoproteins and the thyroid gland: interactions in health and disease
<https://pubmed.ncbi.nlm.nih.gov/22009156/>

Zinc

Zinc citrate – 7mg – 70% of daily NRV in VitaVoice™ Optimise food supplement.

Key benefits:

- **Supports vocal fold tissue strength and repair**
- **Improves the body's ability to fight infection, cutting the length of colds**
- **May reduce symptoms of depression**

Your body doesn't produce zinc, which means you need to ingest this mineral daily. Zinc is essential to collagen synthesis, which means that zinc supplementation can improve the collagen levels in your skin and other tissues. Collagen is a major component in your vocal folds, representing 43% of total tissue protein. Anchored fibrils of collagen create secure structural regions within the vocal folds and are strong enough to sustain vibratory impact and stretch during phonation. Collagen influences vocal fold health, including tissue injury and repair, effectively speeding up wound healing.

Zinc reduces the risk of infection in adults through increasing the activation of cells responsible for fighting infection. A 2017 US study carried out over six weeks found that taking just 4mg extra of zinc a day made a major difference to the health of cells, which in turn makes your body better able to fight infections and diseases. There are several ways zinc supports the immune system but primarily it activates enzymes that break down proteins in viruses and bacteria, so they are less able to spread.

It can also reduce inflammation through reducing oxidative stress. This is vital for speedy recovery during intense periods of voice use. Zinc might also reduce the duration of the common cold better than vitamin C. A study found that ingesting about 80mg of zinc per day during a period of illness reduced the duration of cold symptoms by 33%. This includes cutting duration of nasal discharge by 34%, nasal congestion by 37%, scratchy throat by 33%, and cough by 46%.

Zinc supplementation appears to reduce the symptoms of depression and making sure you get enough zinc in your diet also improves the effectiveness of selective serotonin reuptake inhibitors (SSRIs), which are common anti-depression drugs.

Zinc is such an important all-rounder it was essential to us to include it in VitaVoice™ Optimise.

Zinc: the Evidence

Fact Sheet for Health Professionals

<https://ods.od.nih.gov/factsheets/Zinc-HealthProfessional/>

Insights into the role of collagen in vocal fold health and disease

[https://www.jvoice.org/article/S0892-1997\(16\)30486-6/fulltext](https://www.jvoice.org/article/S0892-1997(16)30486-6/fulltext)

Collagen Type I, Collagen Type III, and Versican in Vocal Fold Lamina Propria

<https://jamanetwork.com/journals/jamaotolaryngology/fullarticle/716330#>

Zinc in Human Health: Effect of Zinc on Immune Cells

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2277319/>

The Immune System and the Impact of Zinc during aging

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2702361/>

Got Zinc? New Zinc Research Suggests Novel Therapeutic Targets

<https://www.sciencedaily.com/releases/2009/07/090730103740.htm>

Zinc Acetate Lozenges May Improve the Recovery Rate of Common Cold Patients: An Individual Patient Data Meta-Analysis

<https://academic.oup.com/ofid/article/4/2/ofx059/3098578?login=false>

The effectiveness of high dose zinc acetate lozenges on various common cold symptoms: a meta-analysis

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4359576/>

Zinc monotherapy increases serum brain-derived neurotrophic factor (BDNF) levels and decreases depressive symptoms in overweight or obese subjects: a double-blind, randomized, placebo-controlled trial

<https://pubmed.ncbi.nlm.nih.gov/24621065/>

The effects of zinc supplementation on wound healing and metabolic status in patients with diabetic foot ulcer: A randomized, double-blind, placebo-controlled trial

<https://pubmed.ncbi.nlm.nih.gov/28395131/>

Pressure ulcers: Current understanding and newer modalities of treatment

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4413488/>

Evaluation of oral zinc sulfate effect on obsessive-compulsive disorder: a randomized placebo-controlled clinical trial

<https://pubmed.ncbi.nlm.nih.gov/22465904/>

Zinc lozenges and the common cold: a meta-analysis comparing zinc acetate and zinc gluconate, and the role of zinc dosage

<https://pubmed.ncbi.nlm.nih.gov/28515951/>

Organic KSM-66® Ashwagandha

Withania somnifera (with 5% withanolides) - 250mg – equivalent as 10:1 root extract in VitaVoice™ Optimise food supplement.

Key benefits:

- One of the UK's most popular natural adaptogens for stress support
- Helps promote enhanced memory and cognitive function
- Helps promote endurance and muscle recovery rate

Ashwagandha is an essential therapeutic plant of Indian subcontinent regions. It is regularly used, alone or in combination with other plants for the treatment of various illnesses in Ayurveda - the 3000-year-old Indian system of medicine - as a rejuvenative, and a daily tonic. KSM-66 Ashwagandha is a specialized root extract that closely resembles the natural ratios of bioactive constituents of the Ashwagandha root and is more uplifting. It is a branded, full-spectrum extract, with the highest concentration of all major root-only extracts available on the market today.

Studies have presented extensive clinical evidence showing KSM-66 to be effective in supporting a variety of health conditions, including reduced stress and anxiety, improved memory, and cognitive function, promoted strength, cardio-respiratory endurance and immunity in athletes.

Additionally, researchers have also shown that KSM-66 ashwagandha extract boosts sexual wellness in both men and women, improving testosterone production in men and alleviating perimenopausal symptoms in women.

It comprises a broad spectrum of phytochemicals which have a wide range of biological effects. Research has shown Ashwagandha has demonstrated various therapeutic potentials such as anti-cancer, anti-inflammatory, anti-diabetic, anti-microbial, anti-arthritic, adaptogenic (anti-stress), neuro-protective, cardio-protective, hepato-protective, and immunomodulatory properties.

Ashwagandha: the Evidence

Pharmacological evaluation of Ashwagandha highlighting its healthcare claims, safety, and toxicity aspects
<https://pubmed.ncbi.nlm.nih.gov/32242751/>

Why KSM-66® has become the best-selling Ashwagandha extract today
<https://insights.figlobal.com/ksm-66/why-ksm-66-has-become-best-selling-ashwagandha-extract-today>

Withania somnifera (L.) Dunal - Modern perspectives of an ancient Rasayana from Ayurveda
<https://pubmed.ncbi.nlm.nih.gov/32783987/>

Effects of *Withania somnifera* (Ashwagandha) on Stress and the Stress- Related Neuropsychiatric Disorders
Anxiety, Depression, and Insomnia
<https://pubmed.ncbi.nlm.nih.gov/34254920/>

Scientific basis for the therapeutic use of *Withania somnifera* (ashwagandha): a review
<https://pubmed.ncbi.nlm.nih.gov/10956379/>

Efficacy of *Ashwagandha* (*Withania somnifera* [L.] Dunal) in improving cardiorespiratory endurance in healthy athletic adults
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4687242/>

Effects of eight-week supplementation of *Ashwagandha* on cardiorespiratory endurance in elite Indian cyclists
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3545242/>

What is ksm-66®
<https://ksm66ashwagandhaa.com/ksm-66/what-is-ksm-66/>

Black Pepper

As Piperine from Piper Nigrum – 5mg in VitaVoice™ Optimise food supplement.

Key Benefits:

- **Piperine is a potent antioxidant**
- **Boosts vitality of healthy people**
- **Helps to boost absorption of nutrients in your gut**
- **Supports bioavailability of various nutrients, including turmeric (curcumin) absorption**

Curcumin, the active ingredient in turmeric, appears to be one of the world's most potent antioxidants, with a range of brilliant benefits from fighting inflammation to helping with memory. Curcumin, however, has poor bioavailability. This means it's difficult for the body to access these benefits. Piperine occurs naturally in black pepper and recent research has indicated this natural substance improves turmeric (curcumin) absorption significantly. If you consume turmeric at the same time as piperine, this natural substance will kick in just in time to support the absorption of turmeric into your system. How lucky both piperine and turmeric are included in VitaVoice™ Optimise!

Anti-Reflux benefits

Laryngopharyngeal reflux can cause problems for the voice, leading to symptoms such as hoarseness, excess throat mucus or postnasal drip, difficulty swallowing, breathing difficulties, choking episodes, troublesome or annoying cough, sensations of something sticking in your throat or a lump in your throat, heartburn, chest pain, indigestion, or stomach acid coming up. **Taking steps to reduce reflux can directly improve your voice and vocal tract function.**

Piperine has potential digestive benefits which may reduce the risk of reflux. A 2007 study discusses the potential digestive benefits of piperine:

“Dietary piperine, by favourably stimulating the digestive enzymes of the pancreas, enhances the digestive capacity and significantly reduces the gastrointestinal food transit time.”

Reduced food transit time lessens the potential for reflux. When the stomach doesn't empty properly because of poor motility then the pressure inside the stomach will exceed the Lower Oesophageal Sphincter (LOS) pressure causing reflux symptoms. Its literally like a damn across a river causing upstream pressure.

Not only does piperine appear to reduce digestive conditions, but it appears to aid nutrient absorption in healthy people as well.

Black Pepper: the Evidence

Recent Developments in Delivery, Bioavailability, Absorption and Metabolism of Curcumin: the Golden Pigment from Golden Spice

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3918523/>

Black pepper and its pungent principle-piperine: a review of diverse physiological effects

<https://pubmed.ncbi.nlm.nih.gov/17987447/>

Reflux: [get relief from reflux](https://refluxuk.com/)

<https://refluxuk.com/>

Role of Reflux Symptom Index and Reflux Finding Score in Evaluation of Treatment Outcome in Patients with Laryngopharyngeal Reflux

<https://www.ijopl.com/doi/IJOPL/pdf/10.5005/ijp-journals-10023-1141#:~:text=An%20RSI%20of%20more%20than,laryngeal%20findings%20related%20to%20LPR.>

Citrus Bioflavonoids

Standardised to contain 30% Hesperidin – 43.75mg in VitaVoice™ Optimise food supplement.

Key benefits:

- **Powerful antioxidant - protects cells against damage from oxidative stress**
- **May protect against allergic conditions**
- **Supports brain health**

Bioflavonoids are antioxidants that naturally occur in a variety of plants. These potent, natural antioxidants help you attain optimum health in a variety of ways.

Antioxidant and Anti-Allergy Benefits

Researchers have carried out different studies which prove the antioxidant benefits of bioflavonoids (also known as flavonoids). They prevent your body from producing free radicals, deactivate free radicals, and increase your body's antioxidant defences. Free radicals cause oxidative stress, which in turn leads to allergic conditions. The antioxidant power of bioflavonoids may support the immune system when it comes to allergic conditions. Research shows that flavonoids are effective against asthma, rhinitis, and dermatitis.

Cognitive Benefits

Research indicates that ingesting bioflavonoids may help with healthy blood flow to the brain, which can lead to improved cognitive function. If you want to reduce oxidative stress and maintain a healthy brain, you should add flavonoids to your diet.

Other Benefits

Scientists have established that bioflavonoids help with a variety of inflammation-related conditions. Flavonoids may also remove the toxins in your body, and they appear to have antimicrobial properties that defend your body against bacteria.

Citrus Bioflavonoids: the Evidence

Flavonoids as complementary medicine for allergic diseases: current evidence and prospects

<https://www.oapublishinglondon.com/article/589>

Chemistry and Biological Activities of Flavonoids: An Overview

<https://www.hindawi.com/journals/tswj/2013/162750/>

The inflammation theory of disease

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3492709/>

Citrus Bioflavonoids: Benefits, Uses & Synergy with Vitamin C

https://www.nutraceuticalsworld.com/issues/2018-03-01/view_features/citrus-bioflavonoids-synergy-with-vitamin-c-beyond/

Elderberry

Sambucus nigra (Elderberry) – 25mg – equivalent as 5:1 extract in VitaVoice™ Optimise food supplement.

Key Benefits:

- May support respiratory health
- Provides protection against flu
- Immune boosting properties

Elderberry (*Sambucus nigra*) fruit contains flavonoids. Flavonoids have beneficial anti-inflammatory effects, and they protect your cells from oxidative damage that can lead to disease.

Elderberry is considered a natural remedy with antiviral properties, especially against different strains of influenza virus. In a recent study, Elderberry extract was found to activate the healthy immune system by increasing inflammatory cytokine production. Taking VitaVoice™ Optimise (with elderberry extract) regularly may therefore be beneficial to your immune system activation.

Elderberry: the Evidence

Elderberry for prevention and treatment of viral respiratory illnesses: a systematic review
<https://pubmed.ncbi.nlm.nih.gov/33827515/>

Black elderberry (*Sambucus nigra*) supplementation effectively treats upper respiratory symptoms: A meta-analysis of randomized, controlled clinical trials
<https://pubmed.ncbi.nlm.nih.gov/30670267/>

Elderberries-A Source of Bioactive Compounds with Antiviral Action
<https://pubmed.ncbi.nlm.nih.gov/35336621/>

The effect of Sambucol, a black elderberry-based, natural product, on the production of human cytokines: I. Inflammatory cytokines
<http://alkalinediet.com/pdf/Elderberry/ElderberryAntiViral.pdf>

Antioxidant and Prooxidant Activities of Elderberry (*Sambucus nigra*) Extract in Low-Density Lipoprotein Oxidation
https://pubs.acs.org/doi/abs/10.1021/jf980296g?crsi=6624973103&cicada_org_src=healthwebmagazine.com&cicada_org_mdm=direct

Grape Seed Extract

Grape Seed Extract (with 95% Proanthocyanidins and 90% Polyphenols) - 50mg - equivalent as 120:1 extract in VitaVoice™ Optimise food supplement.

Key Benefits:

- Nature's antihistamine*
- Powerful source of antioxidants, a natural defence against free radicals
- Improves collagen development
- May have a beneficial effect on blood pressure and circulation
- May improve cognition

*Based on traditional use only, Grape seed extract is anecdotally said to reduce the production of histamine, and this may reduce the severity of nasal allergies. It has been claimed:

Grape Seed Extract (Grapine) 'can eradicate allergic reactions within 20 to 30 minutes. Musty, sweaty, smelly clubs, old dusty dressing rooms and pre-show flowers may never bother you again'.

Skin benefits and wound healing

Back in the research, Grape seed proanthocyanidins have been found to have several antioxidant activities. Research shows that, when applied topically, Grape Seed Extract can improve health and appearance of the skin by improving collagen development, sebum production, skin appearance, skin elasticity and providing beneficial effects against skin aging. There's compelling evidence that Grape Seed Extract accelerates wound healing both when used topically and as a supplement. Scientists speculate that the tissue growth-inducing benefits of proanthocyanidins cause this effect.

Supports circulation

Grape Seed Extract has been shown to support venous circulation, maintaining healthy blood vessels and the integrity of the capillaries. Scientists demonstrated that subjects who supplemented with grape seed extract experienced less leg swelling after sitting. This may be great news for performers who travel a lot and therefore spend a large part of their time sitting down.

Antioxidant benefits

It's a well-known powerful source of antioxidants, a natural defence against free radicals, and this keeps cells healthy and functioning normally. All the benefits of wine without the hangover!

Increases Collagen Levels

This extract also appears to increase collagen levels throughout your body, which benefits your skin health. The more collagen you have in your skin, the plumper it will look, and the better it will feel. **Collagen is a major component in your vocal folds**, representing 43% of total tissue protein. Anchored fibrils of collagen create secure structural regions within the vocal folds and are strong enough to sustain vibratory impact and stretch during phonation. Collagen influences vocal fold health, including tissue injury and repair, effectively speeding up wound healing.

Neurological Benefits

Since neurodegenerative conditions like Alzheimer's disease may be caused by oxidative stress and inflammation, the flavonoids in Grape Seed Extract might protect your brain from age-related brain diseases. Some studies provide evidence that Grape Seed Extract has antioxidant properties that improve cognition and prevent memory loss.

Grape Seed Extract: the Evidence

Proanthocyanidin-rich grape seed extract reduces leg swelling in healthy women during prolonged sitting
<https://pubmed.ncbi.nlm.nih.gov/22752876/>

Insights into the role of collagen in vocal fold health and disease
[https://www.jvoice.org/article/S0892-1997\(16\)30486-6/fulltext](https://www.jvoice.org/article/S0892-1997(16)30486-6/fulltext)

Collagen Type I, Collagen Type III, and Versican in Vocal Fold Lamina Propria
<https://jamanetwork.com/journals/jamaotolaryngology/fullarticle/716330#>

Polyphenols in Human Health and Disease: Volume 1, 2014, Pages 819-830
Chapter 63 - Polyphenols against Skin Aging
<https://www.sciencedirect.com/science/article/pii/B9780123984562000633>

Evaluation of the clinical efficacy and safety of grapeseed extract in the treatment of fall seasonal allergic rhinitis: a pilot study
<https://pubmed.ncbi.nlm.nih.gov/11926620/>

Grape seed extract: having a potential health benefits
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7054588/>

Formulation and evaluation on human skin of a water-in-oil emulsion containing Muscat hamburg black grape seed extract
<https://pubmed.ncbi.nlm.nih.gov/25402429/>

Role of dietary polyphenols in the management of peptic ulcer
<https://pubmed.ncbi.nlm.nih.gov/26074689/>

ISingMag
<https://www.isingmag.com/top-six-supplements-for-singers/>

Improvement in Memory and Brain Long-term Potentiation Deficits Due to Permanent Hypoperfusion/Ischemia by Grape Seed Extract in Rats
<https://pubmed.ncbi.nlm.nih.gov/24171080/>

Wound-healing activity of the skin of the common grape (Vitis Vinifera) variant, Cabernet Sauvignon
<https://pubmed.ncbi.nlm.nih.gov/20066659/>

The topical effect of grape seed extract 2% cream on surgery wound healing
<https://pubmed.ncbi.nlm.nih.gov/25948437/>

Panax Ginseng

Panax (Korean) Ginseng – 25mg – equivalent as 4:1 root extract in VitaVoice™ Optimise food supplement.

Key benefits:

- **Potent antioxidant that may reduce inflammation and help to protect against oxidative stress.**
- **May strengthen the immune system to help reduce symptoms and fight off disease.**
- **May help fight fatigue and enhance physical activity.**
- **May benefit brain function and mood, reducing mental fatigue.**

Not be confused with other forms of ginseng, Panax ginseng (also known as ‘Korean’ or ‘Asian’ ginseng) is a herb that has been used for various health purposes in traditional Chinese medicine for centuries. Panax ginseng is an adaptogen - a natural substance that is believed to stimulate the body's resistance to stressors, helping the body to maintain balance in an ever-increasingly chaotic world.

The main active components of Panax ginseng are ginsenosides, which have been shown to have a variety of beneficial effects, including neuroprotective, anti-inflammatory and antioxidant effects. Through clinical research studies, Panax ginseng has been shown to benefit mental function, improving feelings of calmness and mood in both healthy people and those with Alzheimer’s disease. Studies have also shown there may be wider benefits to psychologic function and cognitive performance, including reducing mental fatigue. Ginseng may strengthen the immune system, helping the body fight fatigue and enhance physical activity by lowering oxidative damage and increasing energy production in cells. It seems that ginseng extract could also enhance the effect of vaccinations against diseases like influenza (flu).

Panax Ginseng: the Evidence

Panax ginseng and Panax quinquefolius: From pharmacology to toxicology
<https://pubmed.ncbi.nlm.nih.gov/28698154/>

Efficacy and safety of the standardised Ginseng extract G115 for potentiating vaccination against the influenza syndrome and protection against the common cold [corrected]
<https://pubmed.ncbi.nlm.nih.gov/8879982/>

Antifatigue effects of Panax ginseng C.A. Meyer: a randomised, double-blind, placebo-controlled trial
<https://pubmed.ncbi.nlm.nih.gov/23613825/>

Neuroprotective effects of ginsenosides
<https://pubmed.ncbi.nlm.nih.gov/17265697/>

The Effect of Ginseng on the Nutritional Status and the Immune Functions after Curative Operations on Gastric Carcinoma Patients
<https://koreamed.org/SearchBasic.php?RID=0037JKSS/1998.54.6.854&DT=1>

Effects and mechanisms of ginseng and ginsenosides on cognition
<https://pubmed.ncbi.nlm.nih.gov/24666107/>

Ginseng for cognition
<https://pubmed.ncbi.nlm.nih.gov/21154383/>

Ginseng for health care: a systematic review of randomized controlled trials in Korean literature
<https://pubmed.ncbi.nlm.nih.gov/23560064/>

Single doses of Panax ginseng (G115) reduce blood glucose levels and improve cognitive performance during sustained mental activity
<https://pubmed.ncbi.nlm.nih.gov/15982990/>

Effects of Panax ginseng supplementation on muscle damage and inflammation after uphill treadmill running in humans
<https://pubmed.ncbi.nlm.nih.gov/21598413/>

Potential of antioxidative and anti-inflammatory properties of cultured wild ginseng root extract through probiotic fermentation
<https://pubmed.ncbi.nlm.nih.gov/23356855/>

Effects of Panax ginseng on tumor necrosis factor- α -mediated inflammation: a mini-review
<https://pubmed.ncbi.nlm.nih.gov/21455094/>

Panax Ginseng
<https://pubmed.ncbi.nlm.nih.gov/14596440/>

Mechanisms of Panax ginseng action as an antidepressant
<https://pubmed.ncbi.nlm.nih.gov/31599060/>

Botanical characteristics, pharmacological effects and medicinal components of Korean Panax ginseng C A Meyer
<https://pubmed.ncbi.nlm.nih.gov/18718180/>

Ginseng: potential for the enhancement of cognitive performance and mood
<https://pubmed.ncbi.nlm.nih.gov/12895687/>

Lemon Balm

Melissa Officinalis - 250mg – equivalent as 4:1 extract in VitaVoice™ Optimise food supplement.

Key benefits:

- **Supports your immune system through preventing oxidative stress**
- **May help reduce mild-to-moderate anxiety**
- **May help improve sleep**

Research has shown *Melissa officinalis* (Lemon balm) as an anti-stress and anxiolytic (used to reduce anxiety) agent. The leaves of *Melissa officinalis* are used in Iranian folk medicine for their benefits to the digestive system. Various studies have shown that *Melissa officinalis* possesses a high amount of antioxidant activity through its chemical compounds including a high amount of flavonoids, rosmarinic acid, gallic acid, phenolic acid contents. Many studies have confirmed the antioxidative effects of *Melissa officinalis*.

Lemon Balm: the Evidence

Pilot trial of *Melissa officinalis* L. leaf extract in the treatment of volunteers suffering from mild-to-moderate anxiety disorders and sleep disturbances
<https://pubmed.ncbi.nlm.nih.gov/22207903/>

Melissa officinalis L: A Review Study with an Antioxidant Prospective
<https://pubmed.ncbi.nlm.nih.gov/27620926/>

The effects of lemon balm (*Melissa officinalis* L.) on depression and anxiety in clinical trials: A systematic review and meta-analysis
<https://pubmed.ncbi.nlm.nih.gov/34449930/>

Does *Melissa officinalis* consumption improve the salivary antioxidant status of smokers?
<https://pubmed.ncbi.nlm.nih.gov/33680387/>

Attenuation of laboratory-induced stress in humans after acute administration of *Melissa officinalis* (Lemon Balm)
<https://pubmed.ncbi.nlm.nih.gov/15272110/>

Lion's Mane

Hericum Erinaceus - 250mg – equivalent as 5:1 extract in VitaVoice™ Optimise food supplement.

Key benefits:

- **Therapeutic potential to boost your immune system**
- **May help reduce mild symptoms of anxiety**
- **May have neuroprotective benefits and help repair nerve damage**

Lion's mane mushrooms (*Hericum erinaceus*) are big, white mushrooms that resemble a lion's mane (hence the name). Research has found that lion's mane contain many vitamins and minerals that have been promoted for health benefits, as well as specific compounds that have been shown to have neuroprotective effects and help improve cognitive function & brain health. Benefits range from reducing anxiety & depression, to anti-inflammatory, antibiotic, anti-fatigue, and immune-boosting properties. It's said to bestow "*nerves of steel and the memory of a lion*" to those who consume it. Studies show taking Lions Mane regularly may improve long-term memory, mental clarity & brain health.

Lion's Mane: the Evidence

Therapeutic Potential of *Hericum erinaceus* for Depressive Disorder
<https://pubmed.ncbi.nlm.nih.gov/31881712/>

Improvement of cognitive functions by oral intake of *Hericum erinaceus*
<https://pubmed.ncbi.nlm.nih.gov/31413233/>

Hericum erinaceus: an edible mushroom with medicinal values
<https://pubmed.ncbi.nlm.nih.gov/23735479/>

Lion's Mane Mushroom
https://www.alzdiscovery.org/uploads/cognitive_vitality_media/Lions-Mane-Cognitive-Vitality-For-Researchers.pdf

Chemistry, Nutrition, and Health-Promoting Properties of *Hericum erinaceus* (Lion's Mane) Mushroom Fruiting Bodies and Mycelia and Their Bioactive Compounds
<https://pubmed.ncbi.nlm.nih.gov/26244378/>

Reduction of depression and anxiety by 4 weeks *Hericum erinaceus* intake
<https://pubmed.ncbi.nlm.nih.gov/20834180/>

Turmeric

Turmeric with 95% Curcuminoids – 50mg - equivalent as 50:1 extract in VitaVoice™

Optimise food supplement.

Key Benefits:

- Contains a powerful healing compound called curcumin
- Can help reduce inflammation and oxidative stress
- Helps decongest airways and clear phlegm
- May contribute to the protection and flexibility of joints

Turmeric may be the most effective nutritional supplement in existence. Used for thousands of years in ayurvedic medicine, many high-quality studies show that turmeric has major benefits for your body and brain. Many of these benefits come from its main active ingredient, curcumin. To enhance absorption of curcumin, VitaVoice™ Optimise also contains piperine (black pepper). Piperine is a natural substance that enhances the absorption of curcumin by 2,000%.

To get the best performance possible from your voice you need clear airways that are not congested. This helps improve resonance and projection during vocal performances, and prevents unhelpful throat clearing and coughing which can be damaging to the delicate tissues of the larynx (voice box). The curcumin in turmeric can help fight off infection that may be triggering mucus production. Through supporting the excretion of excess mucus, turmeric can help with clearing phlegm and decongesting airways.

It has anti-inflammatory and antioxidant properties which can reduce inflammation associated with allergies and illness and reduce the levels of free radicals in your body.

Turmeric: the Evidence

Antioxidant and anti-inflammatory properties of curcumin

<https://pubmed.ncbi.nlm.nih.gov/17569207/>

Influence of piperine on the pharmacokinetics of curcumin in animals and human volunteers

<https://pubmed.ncbi.nlm.nih.gov/9619120/>

Diverse effects of a low dose supplement of lipidated curcumin in healthy middle aged people

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3518252/>

Curcumin boosts DHA in the brain: implications for the prevention of anxiety disorders

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4754352/>

Dietary curcumin counteracts the outcome of traumatic brain injury on oxidative stress, synaptic plasticity and cognition.

<https://pubmed.ncbi.nlm.nih.gov/16364299/>

Curcumin reverses impaired cognition and neuronal plasticity induced by chronic stress

<https://pubmed.ncbi.nlm.nih.gov/19540859/>

Multiple antidepressant potential modes of action of curcumin: a review of its anti-inflammatory, monoaminergic, antioxidant, immune-modulating and neuroprotective effects.

<https://pubmed.ncbi.nlm.nih.gov/23035031/>

Curcumin Attenuates Asthmatic Airway Inflammation and Mucus Hypersecretion Involving a PPAR γ -Dependent NF- κ B Signaling Pathway In Vivo and In Vitro

<https://www.hindawi.com/journals/mi/2019/4927430/>

Appendix 1

VitaVoice™ Optimise: Ingredients

Magnesium Citrate Buffered (Mg content 30%), Brown Rice Flour – Gluten Free, Citrus Bioflavonoids 35% Extract Hesperidin 30%, Ascorbic Acid (Vitamin C 97%), Ferrous BisGlycinate 19% (Iron), LEMON BALM (MIN 4:1 EXTRACT)(MELISSA OFFICINALIS) , Lions Mane (Hericium Erinaceus Extract 5:1), Organic KSM-66® Ashwagandha 10:1 Root Extract with 5% withanolides , Zinc Citrate 31.2% Dihydrate Powder, Panax/Korean Ginseng 4:1, Vitamin K2 (MK-7) 1.3% Powder, Elderberry (5:1 Extract), Nu-flow, Piper Nigrum (Black Pepper Extract) 25:1 95% Piperine, Vitamin B12 (Cyanocobalamin) 1%, Cholecalciferol From Algae (Vitamin D3) (Vegan) 100,000iu/gm, Rice Extract Blend, Pyridoxine Hydrochloride (Vitamin B6 82%), Turmeric 50:1 Extract 95% Curcuminoids, Grape Seed Extract 120:1 – 95% Proanthocyanidins 90% Polyphenols (Grapeseed), L-Selenomethionine 40% Se low odour.