



# STRESS SURVIVAL

 orthoplex®





{ intro }

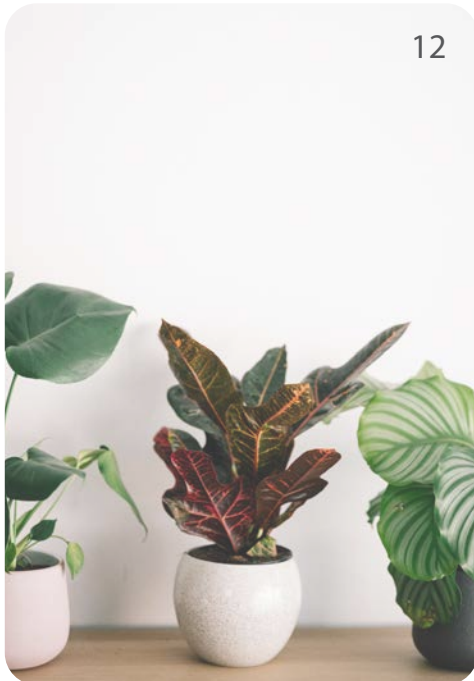
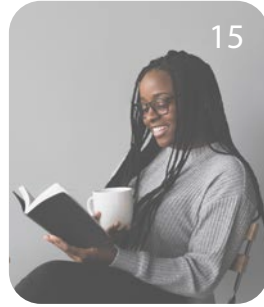
# WHAT IS STRESS?

Stress can be defined as any kind of change that causes physical, emotional, or psychological strain. Stress is your body's response to anything that requires attention or action. In 2020, the Australian Bureau of Statistics conducted a 4-month survey. It is estimated that more than half of Australians (59% or 14.5 million people) experienced at least one personal stressor in the preceding 12 months.<sup>1</sup>

## Different types of stressors include:

- Financial
- Psychological
- Family
- Work
- Work/life balance
- Loss of a loved one
- Life commitments
- Illness
- Parenting pressure
- Relationships
- World events
- Grief
- Traumatic events
- Moving house
- Relationship breakdowns
- Navigating difficult relationships or situations
- Change in circumstances





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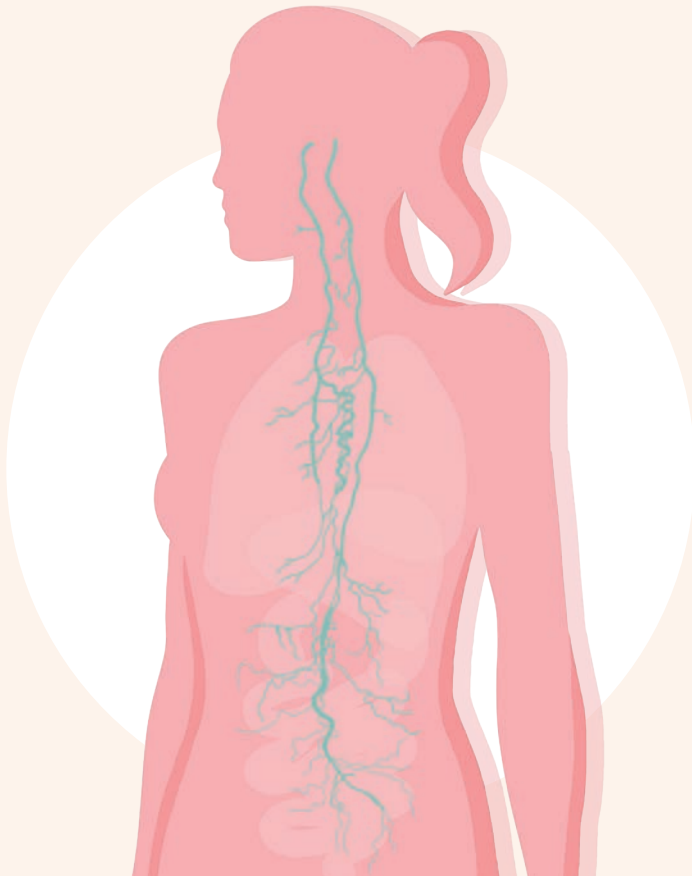
{ what is stress? }

# THE BIG PLAYERS

## **The Autonomic Nervous System and Vagus Nerve**

As the name suggests, the autonomic nervous system controls processes that we don't have to actively think about, they happen automatically – breathing, regulating heartbeat, immune function, and digestion. Its control system is the vagus nerve.

It is the body's longest cranial nerve, beginning in the cerebellum and brain stem and wrapping around our entire digestive system, heart and lungs. It works as the communication highway between the body and brain, constantly sending signals back and forth to keep the autonomic processes functioning optimally. This can also be referred to as the 'brain-gut' connection.



# The Nervous System

The sympathetic and parasympathetic nervous systems are part of the autonomic nervous system.



The **Sympathetic** Nervous System works as the **Accelerator**:

## The Fight/ Flight Response

Heartbeat and breathing rate increases blood flow and oxygenation to large muscle groups to prepare the body to fight or flee.

Adrenaline is released by the adrenal glands to increase heart rate and signals the liver to release stored glucose for quick-release energy.

Noradrenaline raises blood pressure.

Large muscles groups used for fighting or fleeing become ready for action.

Blood is redirected toward the brain and major muscles and away from the surface of the skin in the hands and feet, and the digestive and reproductive organs.

Dry mouth and reduction in stomach juices.

Heightened survival vigilance with dilated pupils, tunnel vision, increased sensitivity to noise, smells, and touch.

Increase in sweating.



The **Parasympathetic** Nervous System works as the **Brake**:

## The Rest & Digest Response

Heart rate slows.

Breathing becomes slower and deeper.

Relaxation and rest occur.

Sleep is deeper and more restorative.

Blood returns to the organs to aid digestion and excretion.

Saliva, bile and digestive enzyme production improves.

Digestion and detoxification are stimulated.

Reproductive hormones recalibrate.





## WHAT DOES CHRONIC STRESS LOOK LIKE?

The body's systems are inherently programmed through rigorous fine-tuning achieved during evolution to preserve a steady state of homeostasis. This optimal equilibrium is constantly challenged by intrinsic or extrinsic, real or perceived factors that are described as stressors.

Stress isn't inherently bad, it's necessary to maintain homeostasis and safety. However prolonged and chronic stress is where the problem lies. Chronic stress does not always present with the eye popping, sweaty, speedy intensity that we see in movies or cartoons.



## Chronic stress can appear as:



**The inability to relax**



**An increase in resting heart rate**



**Sleep disturbance**



**Elevated blood pressure**



**Appetite changes**



**Difficulty concentrating**



**Fear and worry**



**Muscular tension**



**Digestive upset**



**Trouble with thought processing and sequencing**



**Forgetfulness**



**Struggle with decision making**



**Easily flustered**



**Irritable**



**Freeze response**



**Overwhelm**



**Social anxiety**



**Jittery**



**Loss of libido**



**Rumination or an inability to let things go**

## { what is stress? }

### Surprising sources of stress

Living or working in an environment with exposure to toxic products causes a stress response in the body – living on a busy road, near a highway or industrial area. Occupations such as hairdressing, mining, mechanic, painting, farming – these occupations are exposed to a large amount of toxins which can contribute to a stress response in the body, regardless of how the nervous system is doing.

Hormonal transitions, particularly perimenopause can be an incredibly difficult time in womens' lives. Hormonal fluctuations and crashes create anxiety, insomnia, hot flushes and irritability. These symptoms can also kick off a stress response in the body which will worsen the hormonal symptoms.

### Why are we so frazzled right now?

The last three years have been particularly difficult, our brain and nervous system do not cope well with ongoing uncertainty. Even a year down the track, the ever-moving goal posts of restrictions and being separated from one another has created an ongoing constant hypervigilance. This can be front of mind but also sneaky and underlying. As we all figure out what life looks like going forward it's important to acknowledge that as a global community, we have all been impacted and our nervous systems and emotional brains are playing a game of catch up.



# WHAT CAN WE DO ABOUT IT?

## Vagus Nerve Stimulation:

High vagal tone is associated with emotional resilience, strong social connections, and robust physical health. Those with low vagal tone experience low mood, digestive issues, chronic inflammation, increased cardiovascular risk, loneliness and overwhelm.

### Simple ways to activate the vagus nerve:

- Singing, humming, chanting
- Gargling
- Daily body movement
- Diaphragmatic deep breathing
- Cold water immersion
- Meditation
- Acupuncture

## Find your stress support crew:

You don't have to go it alone and you also don't have to spend your entire take home pay on practitioners either, find one or two practitioners and styles that work for you.

### Supportive modalities include:

- Naturopathy, nutrition, integrative GP, general practitioner
- Counselling/ psychology
- Traditional Chinese Medicine and acupuncture
- Body work – massage, osteopath, chiropractor, aromatherapy
- Energy support – reiki, kinesiology, EFT or tapping, meditation group

Of course, friends and an understanding family can also provide support.

## What about testing?

Your GP or support practitioner may like to keep an eye on certain markers that can indicate that your body is being impacted by stress.

### Tests that can be used to monitor these parameters are:

Cortisol, C-reactive protein Homocysteine, Liver function, blood pressure, cholesterol panel, resting heart rate, thyroid panel

# DAILY SUPPORT STRATEGIES

Our nervous system likes habit and routine. Are your daily habits creating a calm nervous system or a frenetic one? Cultivating supportive daily habits enables you to be in control of your day, versus your day controlling you. Have a read through of the following suggestions and pick out a few that resonate to incorporate into your daily routine.



## Calm start to the day

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No phone or social media for the first 30 minutes after waking up. Use this quiet time to sip a cup of tea, meditate for 10 minutes or listen to a favourite song.



## Joy

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What brings you joy? Write a list of five things that bring you joy – they don't have to be big things. A simple cup of tea sipped in the sunshine, dancing in the kitchen, having a chat with your best friend, watering the garden, hugging the dog, watching the sun rise. Your homework is to incorporate three things from your list into each day. Where can you create pockets of joy in your day?



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## Morning sunlight

Our sleep hormone melatonin is optimised by natural light and sunshine exposure, particularly in the mornings. Aim for 15 minutes during low UV hours on sunny days and 25 minutes during low UV hours on cloudy days. This can help to regulate circadian rhythm and support melatonin production to improve sleep onset and quality. Natural light and sunshine in the morning can help to start your day on the right foot by increasing our feel-good neurotransmitters dopamine and serotonin.

## Gentle exercise

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When our nervous system and adrenals are in survival mode, the last thing our body needs is intense exercise or heavy cardio. This kind of movement elicits the same kind of body responses as stress. A frazzled mind will not thrive with jangly music, complicated movements and intense strain. Slow body movement sends a message to the nervous system that all is well, and no danger is present. Slow doesn't necessarily mean easy – some slow and strong options are pilates, yin yoga, strength training with weights, and hiking. These kinds of movements bring focus, intention, slower deeper breathing and a calmer headspace.



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## Mindfulness

This simply means bringing your attention and focus to where you are in the world. A quick way to bring mindfulness to a moment is to list three things you can see, hear and smell. This practice engages your 'practical brain' and brings you into presence rather than being lost in swirling 'emotional brain'. This is a handy tool when closing your eyes for meditation is not practical.

## Plant a herb garden

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Planting and looking after a garden gives you a daily task of watering, weeding and tending soil. Watching something that you planted grow can bring a great sense of achievement, joy and peace. We live in a world that often feels as though it is on fast forward, growing things is a beautiful reminder that nature never hurries. Take a leaf out of nature's book and listen to the pace your nervous system needs to feel balanced. Slowing down is always a good idea.



## Reading

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Reading is another form of mindfulness, however it deserves its own heading due to its multiple supportive benefits. Reading takes you out of your logic brain and engages the creative brain and imagination; you cannot dwell in this part of the brain and be anxious at the same time.

Genres that are helpful during times of stress are stories of hope, light-hearted fiction or humorous stories. Save the hard-hitting crime thrillers for another time. Re-reading old favourite books is calming for the nervous system as you already know what is going to happen. The nervous system can switch its 'surveillance' mechanism off – this also applies to rewatching your favourite movies or series.



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## Daily interaction

Humans are social beings. We are hardwired for connection and any interaction is important. Not everyone lives close to their family so connecting with people in your community can create a 'local family' who look out for one another. This can foster a sense of safety and belonging.

Some ideas to kick off new friendships is chatting to parents at school drop off and playgrounds, smiling at people in the street, a daily chat with your local barista, setting up playdates for the kids, join a local sporting club – as a player or support person, put your hand up to help with a fundraiser, hobbies, learn a new skill, sign up for a class or adopt a dog – they are the very best conversation starters!



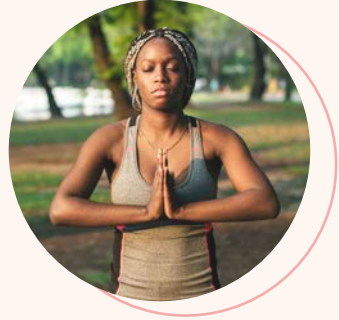
## Meditation

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Various studies show that a regular meditation practice not only improves our emotional outlook but also our body's physiological markers of stress! Meditation can reduce cortisol, blood pressure, heart rate, triglycerides and inflammation markers.<sup>2,3</sup>

Ever lay down for savasana at the end of a yoga class and suddenly, your thoughts are so loud you can't hear the meditation music? You are not bad at meditation, you are normal! Stress equals a very busy brain, expecting it to go from fifth gear down to first gear is too much of a leap.

Try a guided meditation (just make sure you like the speaker's voice!) and find an option that works for you – there are plenty of apps and YouTube options available. Sometimes just sitting quietly with your eyes closed and taking 3 big deep breaths can do the trick. Meditation is a journey in and of itself, you don't have to be perfect at it to reap the benefits.



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## Grounding

Grounding or earthing - is the connection of the feet or body to the earth. We are electrical beings and prefer a 'negative' energy charge.

Stale air, air conditioning, screens, Wi-Fi, fluorescent lighting, airborne pollutants, and some chemicals may emit a 'positive' charge. Mother Earth's natural charge is also negative and can be used to stabilise human energy.

This explains why you feel so good after a swim in the ocean or hiking by a creek.

You can make use of this nifty gift each day by walking on the grass barefoot, wiggling your toes in the dirt, sitting under a tree in your local park, bringing some beautiful indoor plants to your space, taking a bath with Epsom salts and gardening.

## Evening organisation

After dinner, spend 10 minutes organising lunch/es for the next day. Put lunch and all snacks into the lunchbox or fridge bag so all you need to do is take it out of the fridge when you're leaving the next morning. Doing this at night frees up a surprising amount of time (and pressure!) in the mornings.



## Journaling

Our lives and brains can feel very 'full'. Journaling can be a practical way to syphon some of the excess chatter out. Jotting down your thoughts can bring some structure, help identify patterns, clarify where you can take some action or simply just get the swirling thoughts out.

### Getting started: 3 questions to ask yourself

1

**How do I feel right now?**

2

**What are three experiences that happened in the last 24 hours that I am grateful for?**

3

**Can I take some action on issues that are bothering me?**

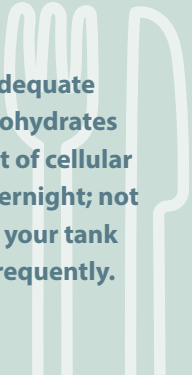


{ support strategies }


# SLEEP SUPPORT

When your mind is full of chatter, falling asleep quickly can seem like an elusive mirage. Some strategies that can send you to the land of nod include:

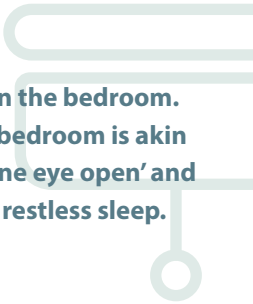





**Dinner containing adequate protein, complex carbohydrates and essentials fats. A lot of cellular repair work happens overnight; not having enough fuel in your tank will result in waking frequently.**



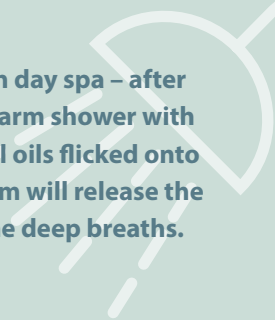
**All overhead lights off after 6pm. Soft lamps only. Low light stimulates the production of melatonin.**




**Blockout blinds in the bedroom. A light and noisy bedroom is akin to 'sleeping with one eye open' and makes for light, restless sleep.**



**Change your sheets weekly.**



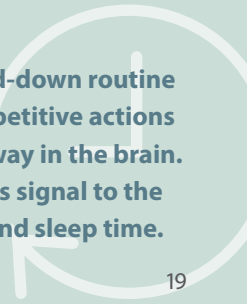
**Create your own day spa – after dinner, have a warm shower with calming essential oils flicked onto the wall, the steam will release the scent. Take some deep breaths.**



**Cosy pyjamas – soft materials make us feel comfortable and safe, essential feelings for sleep.**



**Screens off by 8pm.**

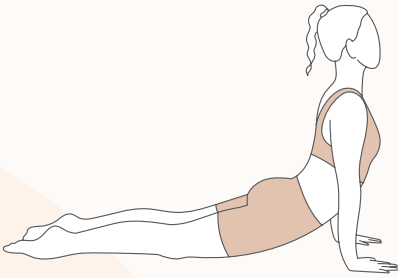


**Create a similar wind-down routine each night, these repetitive actions create a neural pathway in the brain. The recognised cues signal to the brain that it's bed and sleep time.**

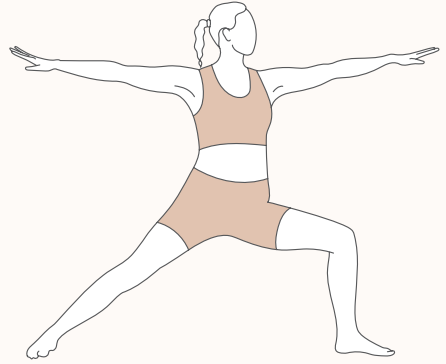
{ support strategies }

# CALM THE CHAOS

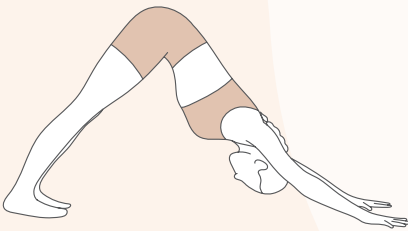
Yoga poses to help you unwind



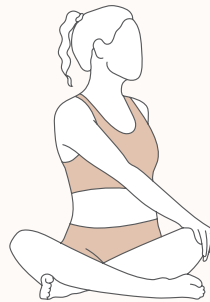
**Sun salutations**



**Warrior II**



**Downward  
facing dog**

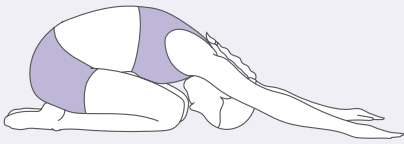


**Cross legged  
simple twist**

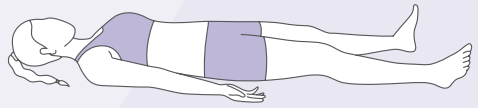
{ support strategies }

# STILLNESS & SERENITY

Yoga poses to recharge



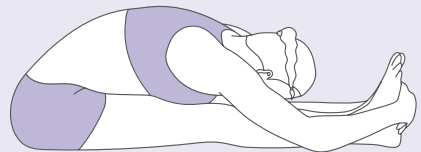
**Childs pose**



**Savasana**



**Left nostril  
breathing**



**Seated  
forward bend**

# STRATEGIES FOR SPIRALLING

Practical things you can do  
when you become lost in an  
anxiety spiral.

1



Ask yourself these  
four questions...



Do I need a snack?



Do I need a drink  
of water?



Can I go outside  
for a few minutes?



Can I take 5 big  
deep breaths?





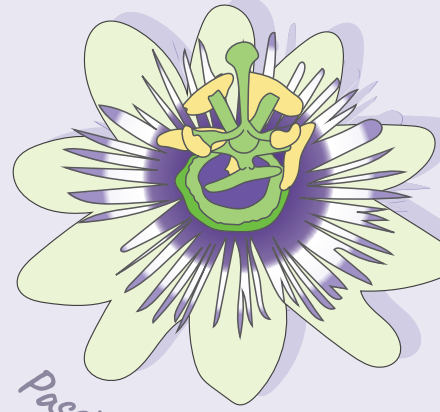
**Pop 1 drop of your favourite essential oil in your hand, rub your hands together then cup them over your nose and take a big deep inhale.**



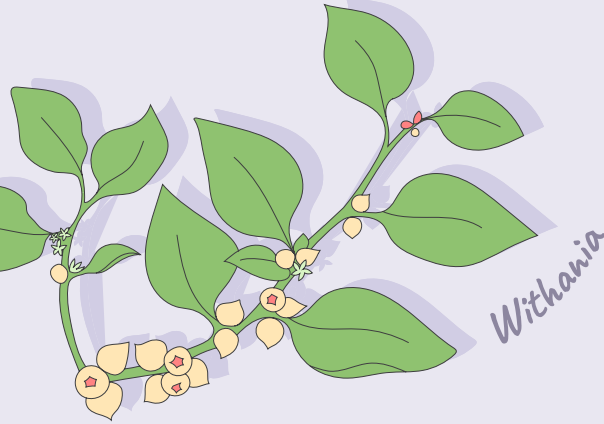
**Talk about it with your healthcare practitioner.**

# HERBAL SUPPORT

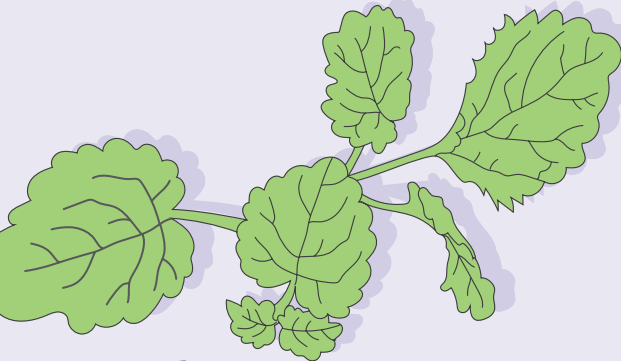
Talk to your healthcare practitioner about the potential benefits of these herbs and whether they are right for you.



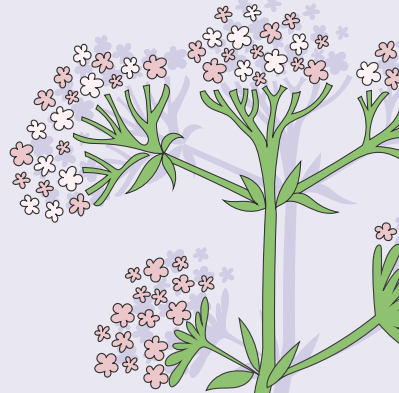
*Passionflower*



*Withania*



*Lemon Balm*

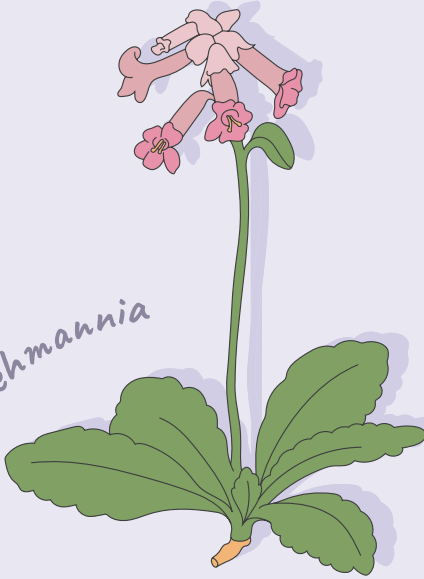


*Valerian*

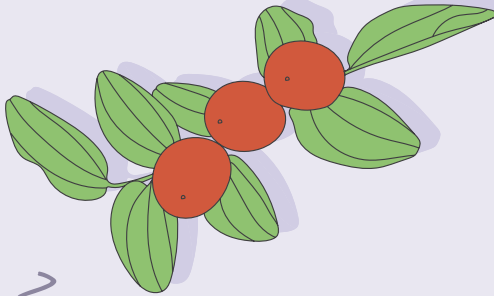


*Lavender*

Rehmannia

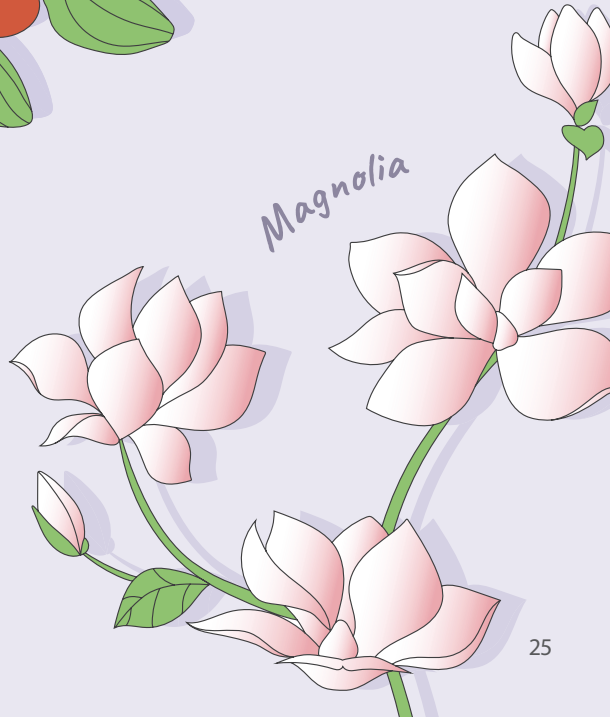


Hops



Ziziphus jujuba

Magnolia



{ support strategies }

# NUTRIENT SUPPORT

When we are under stress, our body can feel as though it's operating on 'fast forward', the extra nervous system and adrenal gland activity increases our nutritional requirements. Some key nutrients to discuss further with your healthcare practitioner include:



## Key Nutrients

- ✓ Magnesium
- ✓ Taurine
- ✓ Omega-3
- ✓ B vitamins
- ✓ Zinc

## Additional Support

- ✓ L-Theanine
- ✓ Glycine



{ other dietary considerations }

# THE BALANCING ACT

The daily blood glucose roller coaster can throw you up in the air, then toss you down the stairs leaving you craving coffee or a sweet snack for the next 'up'. Living this daily ride is a major contributing factor to feeling stressed, anxious, overwhelmed, fatigued and irritable. Our blood glucose levels should feel like riding a horse on the carousel – small ups and downs gently reminding us that it's time to eat or drink water, not the giant drop!

**Some ideas to buffer those big swings are:**







## Adequate protein

Throw logs on the fire, not twigs. Protein increases satiety or the feeling of 'fullness' after a meal. The molecules are more dense and slower to breakdown and burn. Think of protein as slow-release energy, this keeps your blood glucose steady while also reducing sugary cravings. Adequate protein and balanced blood glucose help to keep your mood on an even keel, support energy production and brain function.

Easily absorbed protein sources include – slow cooked animal meat, eggs, fish, good quality dairy products, collagen, good quality protein powders, nuts and seeds, tempeh, legumes and quinoa.



## Consume complex carbohydrates

Not all carbohydrates are created equal. Complex carbohydrates are also known as starches or polysaccharides. Their longer molecular structure allows them to be broken down and absorbed more slowly compared to simple or 'empty' carbohydrates (twigs on the fire for a quick burn). Complex carbs are also high in fibre. These two factors also contribute to keeping blood glucose stabilised.

Complex carbohydrate sources – root vegetables, fruits, legumes, ancient grains, cooked and cooled rice.





## Hydration

Ensure you are drinking plenty of fluids - water, herbal tea, mineral water. If drinking water can feel like a chore/bore, try adding a squeeze of lemon juice, some chopped up fruit or crushed mint leaves.

Mineral dense herbal teas include nettle, burdock, alfalfa, licorice and add some florals for flavour – calendula, hibiscus, rosehip. There are plenty of organic pre-made blends available on the market.



## Skip alcohol and energy drinks

These empty carbohydrate bombs spike blood glucose and dopamine levels, which is why you feel sensational immediately after drinking them, and then question your life choices not too long afterwards.



# HEARTY FARE

Give some of these  
blood glucose balancing  
recipes a try.



# LAMB SHANK STEW

## Ingredients

- 2 lamb shanks
- 1 brown onion – diced
- 4 cloves garlic – crushed
- 1 large potato – chopped into small cubes
- 1 large zucchini – chopped into small cubes
- 1 large carrot – chopped into small cubes
- 1 stalk celery - diced
- 2 cups water or bone broth
- 1 teaspoon salt
- ½ teaspoon pepper

## Method

1. Bring a large casserole pot to medium heat, add olive oil, onion and garlic, fry until translucent. Add the lamb shanks and sprinkle with salt and pepper. Sear each side until golden brown.
2. Add the vegetables and bone broth or water. Bring to the boil and then reduce heat to a simmer.
3. Cover with lid and simmer for 4 hours stirring occasionally. Add extra water if it becomes too dry or thick. The meat should flake apart easily after the 3-hour mark.
4. Serve with rice or sweet potato mash.

Makes 4 meals. Double quantities for a larger batch.







# CHILLI BEANS

## Ingredients

- 1 can black beans – BPA free can, drained and rinsed
- 1 brown onion – diced finely
- 4 cloves garlic – crushed
- 1 can diced tomatoes – BPA free
- 1 tablespoon tomato paste
- 1 cup filtered water
- 1 teaspoon cumin
- 1 teaspoon smoked paprika
- Chilli flakes to taste – 1 teaspoon for mild, 2 teaspoons for hot
- ½ teaspoon salt
- ½ teaspoon pepper

## Method

1. Heat large frypan over medium heat, pour in a splash of olive oil. Add onion and garlic and fry until translucent. Add beans, cumin, paprika, chilli flakes, salt and pepper, stir until beans are coated and fragrant.
2. Add tinned tomatoes, tomato paste and water and stir until thoroughly mixed. Bring to the boil. Reduce heat to low and simmer for 2 hours, stirring occasionally. May need to add more water if it becomes too dry.
3. Serve over a whole baked sweet potato and add some mashed avocado, handful of greens and top with grated cheese.

Makes 2 large serves.

# BUCKWHEAT PANCAKES

## Ingredients

1 cup buckwheat flour  
1 cup milk of your choice  
1 egg  
Butter or olive oil for frying

## Topping ideas

- Nut butter with sliced banana and sprinkle of cinnamon
- Cream and sliced strawberries
- Yoghurt with flaxseeds
- Nitrate free bacon and a drizzle of maple syrup

## Method

1. Pop all ingredients into the blender and blitz until smooth. Heat a large frypan on medium heat. Add a blob of butter or olive oil. Pour or ladle batter into the pan.
2. Thin crepe style pancakes – pour or ladle batter into the pan, turn the pan to spread the batter out finely and evenly.
3. Traditional pancakes – ladle batter into your favourite sized circle.
4. Flip pancakes once bubbles start to appear on the surface. Once both sides are golden brown, add toppings and serve.

Makes 6 crepes, 4 traditional pancakes.











# SALMON & QUINOA SALAD

## Ingredients

- ½ cup quinoa – rinsed
- 1 can wild salmon – drained and flaked apart
- ½ a red onion – diced
- Punnet of cherry tomatoes – sliced in half
- 1 Lebanese cucumber – diced
- ½ cup fresh basil leaves – roughly chopped
- Olive oil
- Apple cider vinegar
- Salt and pepper
- 2 cups water

## Method

1. Pour 2 cups of water into a small saucepan with a lid, add quinoa and a sprinkle of salt and pepper. Bring to the boil and remove from heat once all liquid has been absorbed, stir quinoa and put the lid back on to allow to steam.
2. Once cooled, scoop the quinoa into a large bowl, add the salmon, cherry tomatoes, red onion, cucumber and basil – toss all the ingredients together until well mixed. Drizzle with olive oil and a splash of apple cider vinegar, sprinkle with salt and pepper.

Makes 2 serves.

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1. Australian Bureau of Statistics. General Social Survey: Summary Results, cat. no. 4159.0. Published online 2014.
2. Pascoe MC, Thompson DR, Jenkins ZM, Ski CF. Mindfulness mediates the physiological markers of stress: Systematic review and meta-analysis. *J Psychiatr Res.* 2017;95:156-178. doi:10.1016/j.jpsychires.2017.08.004
3. Heckenberg RA, Eddy P, Kent S, Wright BJ. Do workplace-based mindfulness meditation programs improve physiological indices of stress? A systematic review and meta-analysis. *J Psychosom Res.* 2018;114:62-71. doi:10.1016/j.jpsychores.2018.09.010



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