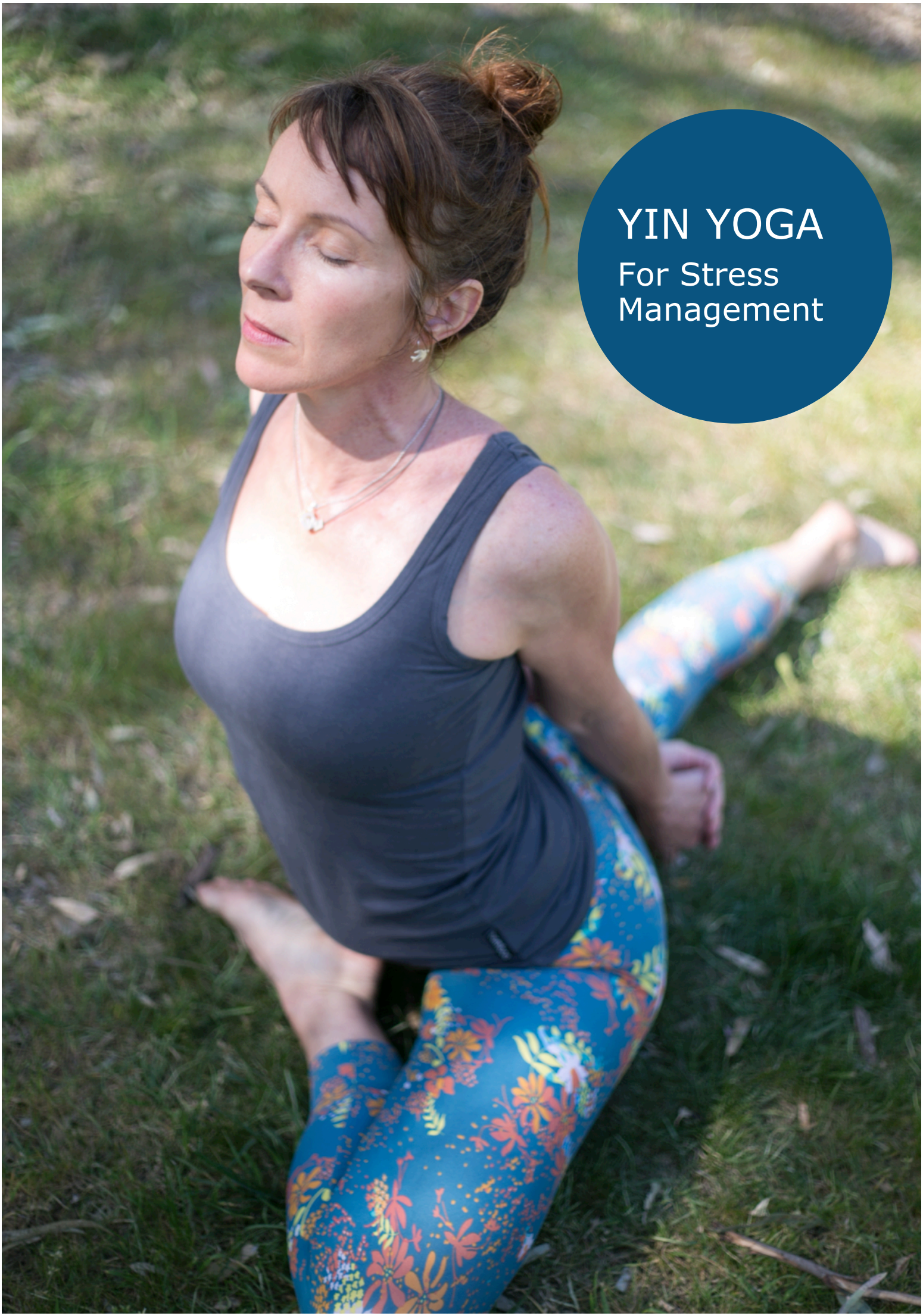
YIN YOGA
For Stress
Management

Leonie Lockwood

www.flowinglife.com.au

Our ability to ride the peaks and troughs of life can be learnt. With regular practice, dedicated focus and self-reflection, we can find simplicity and space within the complex nature of our current world.

Leonie Lockwood Yoga

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STRESS

Stress is a word that is bandied about frequently and much of the time associated with the negative; but there are times when stress can be exhilarating and can assist us to perform and achieve at higher levels than we might have thought possible. Its times like this we might feel very focussed and dynamic. It can in fact be exciting and stimulating at times to have the pressure of external stressors placed upon us. Under external pressure our body responds physiologically in a range of ways to sharpen our focus and assist us to perform optimally.

It's when these physiological stimuli fail to turn off that we start to run into difficulties in coping and head in to the territory of overwhelm, burnout and ill health.

Stress researcher, Richard Lazarus (dec), University of California of Berkeley defined stress as 'a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well being.'

Whether we view something as stressful or not comes down to the meaning we attach to events/situations. We can attach unhelpful or helpful narratives to situations that present themselves to us. Many may respond to a particular situation with creative problem solving techniques and a burst of energy, whereas others may feel over burdened, indecisive and paralysed.

So the MEANING we attach to an event/ situation determines whether we label it stressful or not and how then our body physiologically responds. We choose whether we see an event as either:

- Stressful
- Potentially positive
- Something which we can grow and learn from

Internal and external

Stressors are both external and internal. External stressors (from outside of our self) can come from multiple sources – environmental, physical, social, emotional, societal, economic, familial or political.

Internal stressors include our pain response, our thoughts and the emotions we attach to the external stimuli, usually unconsciously.

External sources + meaning attached (internal stressors) = our personal stress response.

Acute or chronic

Acute stressors – occur for a short period of time, usually 3 months or less and are generally resolved. For example a deadline at work, a relative coming to stay for a short period, a temporary downturn in finances. A number of changes at a physiological level occur, usually to assist us to deal with the stressor. These changes then return back to their baseline, once they are no longer required.

Chronic stressors – occur over a longer period of time, usually 3 months or more. Such as caring for an aging parent, a sick or disabled friend or relative, long term financial stress, workplace/school bullying, ongoing political turmoil etc. The physiological changes that occur in the acute phase continue to occur, long beyond what is desirable. In some instances the internal mechanisms 'forget' how to turn off leading to health problems and maladaptive behaviours as coping mechanisms.

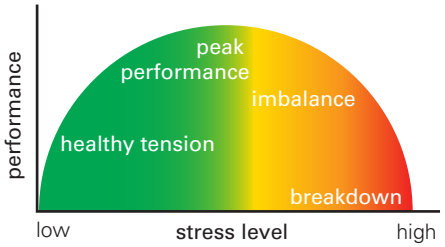
Exercise 1

- Jot down 5 ways in which you experience stress
- Are these stressors external or internal?
- Are these stressors acute or chronic?
- Do you view these stressors as:
    - Stressful
    - Potentially positive
    - Something you can grow and learn from

Situation	Internal/ external	Acute/ chronic	Stressful	Potentially positive	Something to grow and learn from

Stress continuum

The stress continuum tool developed by the US Navy measures the development and maintenance of resilience in their workforce. The tool provides a framework of behaviours that can occur at different stages along the continuum. Knowing this, the navy is better placed to provide appropriate interventions to rebuild or maintain resilience in the face of stressful situations such as combat zones.



Source: Cornell University, Gannett Health Services

Green zone behaviours

Calm, steady, confident, ethical and moral behaviour, eat healthily, exercise regularly, sense of humour, active socially and spiritually, get proper sleep, alcohol is used in moderation.

Yellow zone behaviours

Anxious, fearful, sad, angry grouchy, irritable, cut corners on the job, negative, pessimistic, loss of interest and enthusiasm, loss of energy, trouble concentrating, excessive internet use.

Orange zone behaviours

Lose control of emotions or thinking, have nightmares, sleep problems, obsessive thinking, guilt, shame, rage, panic, abuse drugs/alcohol, significant changes of appearance or behaviour, questionable moral values.

Red zone behaviours

Orange zone behaviours that persist may get better for a time and then come back, person unable to function well. Generally leads to PTSD, major depression, anxiety disorders, substance abuse disorders.

Most of us are not in combat situations on a repeated basis, however modern life presents numerous and continuous pulls on us, and our time affecting our overall physiology and emotional state. The US Navy found that sustained periods of time in the yellow/orange/red zones leads to chronic and acute illnesses.

Exercise 2

In relation to the situations you noted in exercise 1, where do you place yourself on the stress continuum and why? What are the behaviours that you think are manifesting and what have others said are your behaviours?

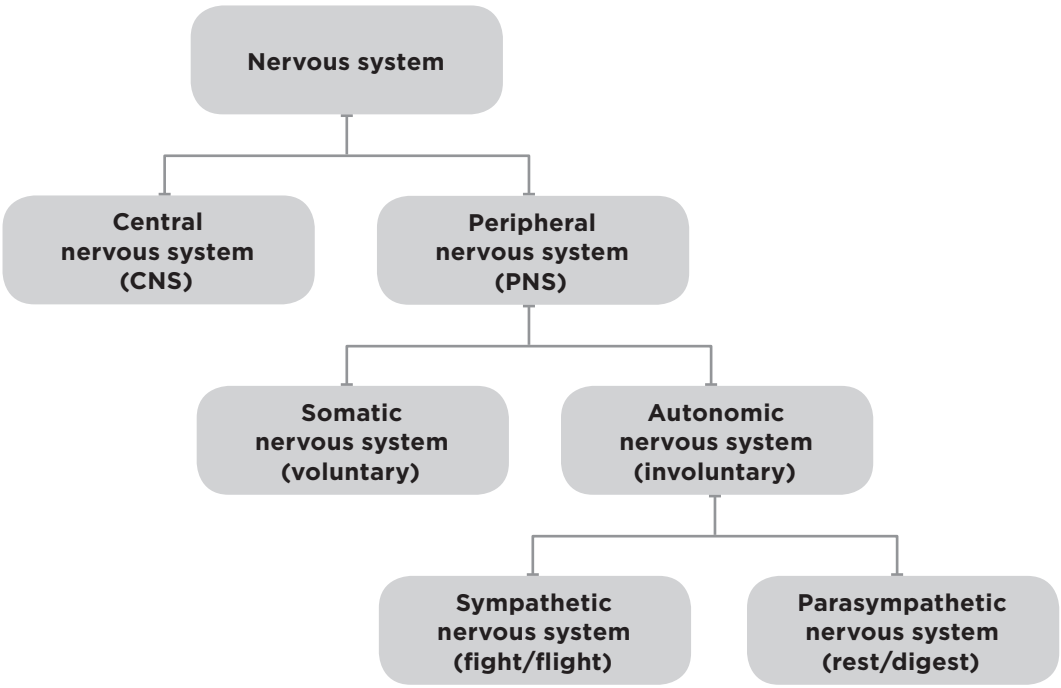
PHYSIOLOGY OF THE STRESS RESPONSE

The brain

Our response to stress begins with the perception of danger being sent to the amygdala, located in the brain. This area is responsible for our emotional processing, so it interprets the information it has received and sends a danger signal to the hypothalamus (also in the brain). The hypothalamus then communicates with the body via the autonomic nervous system and the endocrine system.

Nervous system

When the message from the hypothalamus is received by the autonomic nervous system (ANS), a lightning fast response is provided by it's subsidiary – the sympathetic nervous system (SNS). The SNS is in charge of the 'fight or flight' response and its co-worker the parasympathetic nervous system (PNS) has responsibility for the 'rest and digest' response. It provides a yin influence to the yang of the SNS. The functions of the SNS are largely involuntary and happen usually before we know what's hit us, but with a bit of awareness and some practice, we can exert some control to our benefit on some of these involuntary responses.



Endocrine system

The hypothalamus gland also communicates with the endocrine system and provides a method for the ANS and endocrine systems to communicate viscerally with each other through neurotransmitters (nervous system) and hormones (endocrine system).

Homeostasis

Our body endeavours to maintain homeostasis all times. This is a constant balance of complex systems operating and communicating within the body. It is a major function of the PNS.

However when we are faced with threat (a stressor), the functions of the SNS override and decrease the activity of the PNS. For example if we were experiencing a life-threatening event, the SNS would automatically take us into survival mode, with a fight/flight response. In extreme cases we might move into 'freeze' or 'submit'.

The SNS sends signals to the relevant body parts to body shut down unnecessary functions such as digestion, growth, and reproduction and channel blood instead into our big muscles so that we can run from danger or have enough power to fight back. These are automatic involuntary functions in reaction to stressors and are extremely valuable in times of acute stress, but not so useful when the brain perceives that stressors are ongoing. When we are no longer threatened, then the PNS helps restore homeostasis.

Other reactions that occur in the body in times of acute stress include:

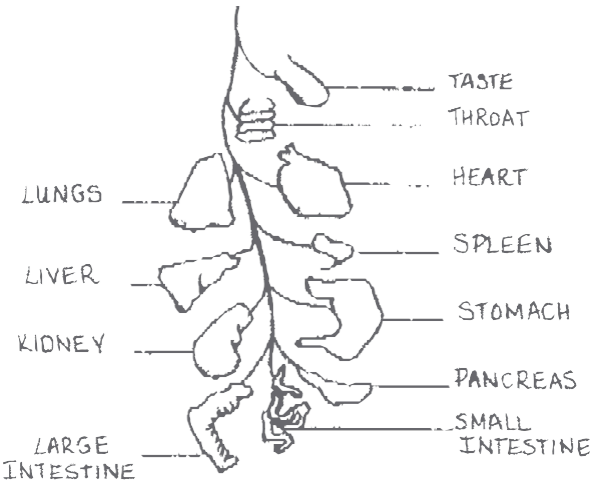
- Increased glucose (sugar) for energy.
- We become super focused – daydreaming part of the mind is switched off.
- Our sight (pupils dilate) and hearing sharpens and scans environment for threats, blocking out anything unnecessary for our survival.
- Lungs open to intake as much oxygen as possible.
- Increase in heart rate and blood pressure, leading to short shallow breaths
- Sweat glands open to cool us.
- Increase in stress hormone cortisol, which has anti inflammatory and enhanced immunity properties.
- Enhanced memory.

The Vagus nerve

One area of influence for us is the vagus nerve, which is the:

- Main nerve of the parasympathetic nervous system.
- Longest of 12 cranial nerves. and
- Travels from brainstem to heart, lungs, oesophagus, abdomen, bladder, liver, kidney, spleen, stomach pancreas and the intestines.
- Commands part of unconscious body procedures such as keeping heart rate regular, controlling food digestion.
- Feeds information from the brain to these areas and also feeds information back to the brain from these organs.

People with high vagal tone tend toward positive emotions, greater overall well being, are more calm and have greater levels of resilience and are more socially engaged. We can easily increase our vagal tone by slowing our breath down, and in particular the outbreath. This leads to increased heart rate variability, which is a key indicator of high vagal tone.



Associated health issues

A number of health issues may arise when people experience and interpret continuous events as stressors.

Short term health effects	Long term health effects
Hypertonic muscles	Chronic muscle, myofascial and joint pain
Increase in fasting blood sugar levels	Type 2 diabetes
Thicker blood viscosity	Artery hardening and constriction
High blood pressure	Heart disease
Destabilisation of key hormones in the thyroid gland which impact on every cell in	Poor tissue repair/chronic infections/insomnia
Sluggish digestion	Obesity/IBS
Bone loss	Osteoporosis
Anxiety/depression	Anxiety/Depression/possible death/other mental health disorders
Shortening of chromosomal telomeres	Fastened aging process/shortened life span
Sluggish immune system	Lessened capacity to protect our internal systems from disease
Maladaptive coping mechanisms	Addictive behaviours such as overeating, excessive drug or alcohol use

Common coping mechanisms

Internalization

Because we don't generally respond to stress with either fight or flight with the physical activity our ancestors would have and tend instead to suppress our outward expression, the activity of the SNS does not get the chance to switch off. The PNS does not get the opportunity to activate and calm the body. Our hyper aroused state is internalized and the stress response signals continue to zoom around our body demanding action. Over time this wreaks havoc on our bodies creating numerous health problems as outlined above.

Emotional

Internalization can lead to a sense of overwhelm, reactivity, helplessness, depression, anxiety.

Behavioural

Maladaptive hyper aroused responses – workaholism, denial, hyperactivity, addictive behaviours - food, substances etc. all of which can lead to mental health/emotional issues, creating a psychological response in addition to the already embedded physical response.

Physical tension

In response to the chemical messengers that fail to switch off and tip us into chronic stress, the body contracts. Sore shoulders, neck tension, abdominal tension and lower back pain are all common myofascial responses to ongoing stress.

THE ENERGETICS OF STRESS

Our responses to stressors hamper the strong, fluid and mobile flow of chi (prana) throughout the body. The fine internal balance of our chi becomes disturbed, and our meridian pathways unbalanced and lacking in harmony. There are at least 9 different types of chi, but we simply put we might like to think of it as an invisible energy, which permeates throughout the universe.

The Taoists also believe we are all born with a limited stock of Jing (essence), predetermined by what our parents have passed on to us. This essence can never be replenished. We can think of it as the primary well in the village, that is filled as soon as it is dug and never again. It can never be replenished by rain or the addition of water. But the village has a secondary well connected to the primary well, which can be replenished by rain and deposits of water and when it runs dry it can draw from the primary well to supply the village. However once the primary well has run dry, the secondary well no longer functions and the village will never have water again.

Similarly with our chi, we endeavour to preserve what we have rather than run the reserves down. We are all born with varying degrees of Jing; we can supplement and assist our Jing reserves with grain chi (food) and natural air chi (our environment), however the base stock can never be replenished. When Jing runs dry, we die.

It is believed that Jing is stored in the kidneys, and provides the base essence for all other organs of the body, so the harmony of the kidneys is essential in order for us to physically engage in the world. Our growth, maturation and graceful aging are governed by this essence.

Chinese medicine cites 7 main emotional responses that combined with other forces affect the harmony of our chi.

Spleen	worry	Heart	elation
Liver	anger	Lungs	Sadness and grief
Kidneys	fear and fright		

All these emotions affect or can result from our response to stress. These are considered yin meridians and have a corresponding yang meridian. So when we sequence our yin practices to target these pathways, we are also having an affect on the corresponding meridian and to a lesser affect, intertwined meridians.

For an instant pick me up – delve into these 15 minute yin yoga practices, created especially to support you in times where you are experiencing these emotions. If the link's not working head to **Flowing Life Yoga** on You Tube.

YOGA, BREATHWORK, MEDITATION

Yoga has physical benefits such as the cultivation of strength, flexibility and endurance in addition to the more abstract benefits such as a sense of greater self worth and self-control, deeper self-awareness, more energy. Regular practice of yoga produces a physiological state opposite to that of the flight-or-fight stress response and with that interruption in the body's stress response, a sense of balance and union between the mind and body can be achieved.

Yin yoga as an effective intervention

Yin yoga:

- Focuses on the application of tension and compression of the myofascial network, encouraging the pooling of blood and chi into areas of need to assist in repair.
- Provides us with an opportunity to observe the physiological responses that occur when we are responding ineffectively to our perceived stressors.
- Gives us the time to change the mental perception of our situation and create/ reinterpret a new narrative for our self.
- Provides an opportunity to observe and investigate the emotional nuances that occur when we are in a long held posture.
- Turning toward them rather than away.
- Provides an opportunity to practice meditation techniques and learn how to focus the mind. With a focussed mind, our chi flows smoothly and we attract chi to us.
- Gives us the time to practice moving our internal energy through breath techniques (pranayama).
- Provides an energetically focussed practice supported by Chinese Medicine meridian theory, Indian yogic theory and western science.

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Breath (pranayama) techniques

Ocean breath – 4:1, 4:1

Extended exhale – 4:5 or 3:4 ratio

Nadi shodana – alternate nostril breathing, with or without breath retention at the end of the inhale and/or exhale.

Meditation

There are multiple ways in which to meditate. Essentially the idea of meditation is to create a focussed awareness of the present experience. This in turn leads to an in depth understanding of self and our responses – physically, mentally, spiritually and emotionally. Coupled with ongoing self reflection, this understanding enables us to make changes in these four areas for our betterment and others, if we so choose. Dependent on your spiritual beliefs, this may lead to enlightenment of self and others.

Simple meditation techniques that can be practiced in yin yoga positions include breath work, body scanning, mantra recitation, counting techniques. All these techniques cultivate focussed awareness of the presently lived experience

HABITS

We would all like to implement new habits in our life, but we need to make behavioural change to do this. We cannot rely on motivation or willpower, as these are transient. However we can make small changes regularly to build new habits towards change. Implementation, however small, of new behaviours can lead to change emotionally, physically and mentally. Some of our habits were effective for us at one time in our life, but perhaps now no longer serve the same purpose for us.

For example, smoking was once a very effective habit for me when I began to work in the homelessness sector. By smoking and sharing cigarettes I had assistance in the engagement and rapport building process, necessary to gain trust with my clientele. Smoking also helped me feel less stressed (due to the bigger oxygen intake on my inhales, which provided a short term calming effect). However as I developed more self-confidence in my capacity to build rapport with my clientele, smoking no longer served me. I found more effective ways to breathe and calm myself through the practice of yoga, which fed into my self-confidence.

James Clear, who writes extensively on habits, states that habits form the following way

- Reminder – there's a trigger
- Routine – the behaviour/action
- Reward – self explanatory

To change habits, the outcome needs to be important to you. So if you're not really invested in creating something new, then it's not going to happen. Some of us get rewards from our bad habits, whether we realise it or not and are invested in these e.g. chronic depression for me, meant limited responsibility, particularly in my interpersonal relationships.

Identity change

Believe and prove to yourself that you can build a new identity e.g. 'I'm a person who manages pretty well with what life throws at me' as opposed to 'I'm a person who doesn't generally doesn't cope well and is constantly been dumped on by life.'

Decide the type of person you want to be and prove it to yourself by setting up small wins

Goal – I want to sleep all night

Identity – become the type of person who doesn't drink caffeine

Small win – I will save $4.00 every day in a separate jar Or

Goal – I want to reduce my negative responses to external stressors.

Identity – Become the type of person who turns my phone off and doesn't check my emails after 6.30 pm.

Small win – I will call a friend for a chat instead/I will hang out with my mates/ I will spend time with my kids.

Habit creation

1. Decide what new habit would you like to create based on your new identity
2. Link your new habit to an already existing habit e.g. after I wash the dinner dishes on Thursday, I'll sit down and practice ocean breath for 2 minutes.
3. Start small and be consistent. In the above example you are practicing your ocean breath for 2 minutes only. Given the rhythm of ocean breath, this means you only need to take approximately 12 conscious breaths each time you practice this new habit.
4. Reward yourself. It helps to reward yourself with positive self talk, even if you feel a little stupid. Sometimes I say 'you're a legend Leonie, you did it.' We naturally want to do things that make us happy, so rewards, even verbal are essential.
5. Set yourself a specific schedule to practice your new habit. Rather than 'as of Monday, I will never check my emails or answer my phone to work calls after 6.30 pm again.' try 'I will only check my emails and phone on Tuesdays and Thursdays.' Set yourself a reminder on your phone to take action on Tuesdays and Thursdays.

By focussing on practicing your new habit, you have something that is measurable, where small wins can be noted and which you can adjust as you get better and better at implementing your new habit. Starting small also helps those around you to adapt to these changes. It doesn't matter if you forget to practice once or twice, just simply return to the new habit when you remember and begin your practice again.

If you slip up or forget (I often do), then it helps to set reminders or work with a friend to help keep you accountable. So you could arrange with a friend to go to yoga class every Wednesday or set reminders in your phone to practice your new habit.

Slowly and surely the brain creates a new pathway for our new habit. Give yourself around 6 weeks to embed a new habit.

Exercise 3. Identity changing and habit forming

What is the new identity you want to create for yourself?

Goal

Identity

Small win

Document the new habit you would like to create and why – e.g. I would like to practice yin yoga so that my stress levels decrease and I have a better relationship with my kids/partner/friends/work colleagues.

List your daily habits - e.g. get out of bed, go to toilet, have a shower, get dressed, let the dog out, put the kettle on, take my vitamins, eat breakfast, clean my teeth, check the tram tracker app, head out the door to the tram stop etc.

Now link your new habit to one of these daily habits and remember to start small - e.g. get out of bed, go to toilet, do 2 x 3 minute yin postures, have a shower, get dressed, let the dog out, put the kettle on etc.

Decide on your reward – e.g. a bunch of flowers, a fresh juice, an extra 5 minutes at lunchtime or simply a 'well done Leonie' said with sincerity, whilst looking in the mirror and acknowledging myself.

When will I schedule my new habit? Remember it's the practice not the performance that is important – e.g. I will do this every Monday and Wednesday morning.

What's my back up plan for when I forget to stick to schedule?

RESOURCES

- YouTube/Flowing Life Yoga/yin yoga sequences for stress relief
- Meditation apps - Insight Timer, Buddhify2. Body scan meditations assist in developing awareness of the body's internal sensations.
- Yoga nidra – active participation in a yoga nidra practice is equivalent to about 4 hours sleep. Many available free of charge on YouTube or Apps. Experiment.
- www.jamesclear.com on habits and many other things.

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