



Stress

Our heart rate, blood pressure and perspiration levels increase and our breathing quickens. This is our sympathetic nervous system taking over also known as “fight/ flight/ freeze”.

The physical nature of stress is the increased release of stress hormones including cortisol and adrenaline. These hormones constrict our blood vessels to send more oxygen to our muscles preparing them to tackle the stressful tasks at hand. Our heart rate, blood pressure and perspiration levels increase and our breathing quickens. This is our sympathetic nervous system taking over also known as “fight/ flight/ freeze”. Without this reaction our ability to avoid threats and perform demanding tasks significantly diminishes. However, our bodies are not designed to constantly be in stress for a long period time.

The stress response is well characterised as the flight or fight or freeze response and is highly variable between individuals. Therefore we need to develop individual strategies based on our symptoms, lifestyle and health goals.

Normal healthy stress responses are beneficial to mental and physical health; it challenges us, encourages change, creates adaptation and makes us resilient both emotionally and biochemically.

However, when faced with extraordinary or **constant stress**, without adequate recovery, we become predisposed to physiological and neurological changes. This then leads to major chronic conditions including neurological and hormone imbalances, insulin resistance and immune suppression.

Signs and Symptoms of Stress include:

- Neurological: anxiety, poor concentration, excessive worry, insomnia, depression, fatigue.
- Cardiovascular symptoms: palpitations, clammy palms.
- Digestion: cramping, irritable bowel syndrome, food intolerances, hypochlorhydria.
- Immune system: inflammation, increased risk of infection, predisposition to allergies.
- Metabolic symptoms: insulin resistance, obesity.
- Hormonal and Thyroid function: changes in hormonal function (e.g. PMS, mood changes), Thyroid imbalance both high and low.
- Muscular: tension headaches and muscles e.g. shoulders, cramps.
- Other common signs: declining vision and/or hearing, fatigue, loss of skin elasticity.

Dietary Guidelines assist in the management of stress:

- Eliminate refined foods and sugar.
- Emphasise foods high in essential fatty acids such as oily fish and nuts/ seeds.
- Eating a minimally processed diet rich in antioxidants, phytonutrients and bioflavonoids.
- Protein stabilizes blood sugar levels and therefore energy and mood.
- Support digestive health including fibre and yoghurt.
- Minimise intake of caffeine, alcohol and salt.
- Nutritional Support: Vitamins B5, B6 & C, Magnesium, Taurine & Glutamine.



Lifestyle guidelines to management stress:

- Take regular exercise, daily.
- Ensure regular adequate sleep.
- Practice meditation, yoga, guided visualisation and/or breathing techniques.
- Explore the available meditation and relaxation apps and use them throughout the day.
- Set clear boundaries for yourself and with family and work relationships.
- Get support from friends, family and colleagues.
- Assign "time to fret" then let it go.
- Take regular breaks throughout the day.
- Take weekend or holidays away from obligations and worries to gain a fresh perspective.
- Schedule time for yourself and express your creativity. Write, garden, paint, sing or take up a new hobby or classes.
- Promote "play" in your life ensuring that you are balancing work & play time every day.
- Regularly expressing gratitude helps reduce the negative effects of stress and improve overall wellbeing.
- Make a smoking cessation plan for current smokers.
- Set some achievable health goals to help facilitate positive change and reduce stress on your wellbeing.

Risk Factors contributing to stress

- Immune activation - chronic inflammation, autoimmunity, allergies & infection.
- Toxic gut - dysbiosis, heavy metals, environmental toxicity.
- Food intolerances and allergies.
- Nutritional deficiencies, especially B vitamins, zinc and magnesium.
- Underweight OR overweight and obesity.
- Sedentary lifestyle OR over exercise.
- Hormonal imbalances - cortisol and insulin resistance, sexual and thyroid hormones.
- Insufficient sleep.
- Substance abuse alcohol, tobacco, recreational drugs and excessive caffeine.
- Psychological stress including habitual worry, grief, trauma and constant life stresses.