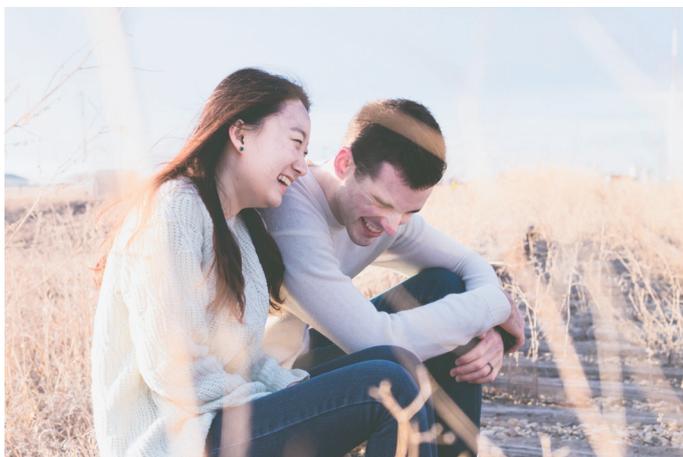


Stress

Stress plays havoc with health and is a major risk factor for many of the chronic illnesses we are faced with today. Health problems ranging from depression, anxiety and cardiovascular disease to IBS, type 2 diabetes, chronic fatigue and many more can all be linked to stress. In fact, it is difficult to overemphasise the negative health effects of chronic stress.

Stress - The good, the bad & the ugly

We have evolved remarkably well to deal with stress and are born with an in-built emergency response system. The 'stress response' prepares us to 'fight or take flight' when faced with a (real or perceived) threatening situation. Heart rate and blood pressure increase, pupils dilate, immune system is suppressed, blood sugar increases and energy diverts away from digestion and towards muscles, ready to spring into action. Once the threat is over, the body has another amazing physiological response - it can switch off this emergency mode and quickly restore calm and balance to all systems involved.



Unfortunately, 21st century stressors are very different to those we have evolved so brilliantly to deal with. Thousands of years ago, we'd have been faced with the very real physical threat of a tiger to escape from. Clearly, when running away from a tiger you need a fast heart rate, increased blood pressure, sharper vision and energy diverted to your muscles; immune defence and digestion can wait. Today, the 'tiger' has been replaced with very different types of threat: financial worries, hectic schedules, impossible deadlines, chronic pain, health anxieties, relationship difficulties and more. In days gone by, the tiger came and went and so too did the stress response; switching on and off as swiftly as nature intended. Typical 21st century stressors are very different;

they persist and are more chronic in nature. And so the stress response stays switched on and doesn't turn off. And herein lies the 21st century crux of the problem. When stress is chronic, the emergency stress response shifts from being a transient, powerful and protective force, to a persistent, debilitating and destructive, ticking time bomb.

In the words of renowned U.S. functional medicine expert, Dr Mark Hyman M.D.,

“*if you really knew what was happening to you when you are stressed, you would freak out. It's not pretty.*”

Chronic health effects of chronic stress:

- ✓ Depression
 - ✓ Anxiety
 - ✓ Irritability
 - ✓ Inability to cope
 - ✓ Poor sleep / insomnia
 - ✓ Cognitive dysfunction
 - ✓ Cardiovascular disease
 - ✓ Heartburn / acid reflux
 - ✓ Stomach ulcers
 - ✓ Poor digestion
 - ✓ Irritable Bowel Syndrome (IBS)
 - ✓ Frequent infections
 - ✓ Headaches / Migraines
 - ✓ PMS / Infertility / PCOS
 - ✓ Autoimmune disease
 - ✓ Thyroid health problems
 - ✓ Inflammatory problems
 - ✓ Low energy / chronic fatigue
 - ✓ Sugar cravings
 - ✓ Overweight / obesity
 - ✓ Lowered athletic performance
 - ✓ Type 2 Diabetes
-And many more

The 'Stress Bank Account'

The harmful effects of chronic stress can make for a depressing read; it can seem like the only path towards a happy and healthy life is to get rid of stress completely. Yet for most of us, that's neither realistic nor even desirable. "Without stress there would be no life," says stress researcher, Hans Selye, and it's true. Stress is necessary; we respond to stress and we adapt to become stronger - physically and mentally. It's only when stress is chronic and rages continuously that it's a problem. As with most things in life, the answer lies in finding a balance. The 'stress bank account' is a useful way of thinking about this. In order to have a healthy 'stress bank balance' you can make regular 'withdrawals', but you must make regular 'deposits' too or you will soon be in debt. The deposits help to bring the stress response back into balance and calm things down; they build resilience and switch off the stress response rather than letting it rage continuously.

| Stress 'withdrawals' | Stress 'deposits' |
|---|--|
| ✗ Processed / convenience / junk food | ✓ Healthy wholefood diet |
| ✗ Skip meals (eat on the run) | ✓ Regular meals (at a table) |
| ✗ Refined sugar | ✓ Key stress supplements (see below) |
| ✗ Caffeine / alcohol / smoking | ✓ Time spent in nature |
| ✗ Sleepless nights / shift work / jet lag | ✓ Regular good quality sleep |
| ✗ Chronic illness / chronic pain | ✓ Relaxation exercises / yoga / mindfulness |
| ✗ Worries (money, relationships etc.) | ✓ Read a book / watch a film / take a bath |
| ✗ Over-exercising | ✓ Regular exercise |
| ✗ Hectic schedule / working late | ✓ Finish work on time / take a holiday / afternoon off |
| ✗ No switch off (from work / devices) | ✓ Connect with family & friends |

Key stress supplements:

- ★ **Magnesium**
Vital for helping the body to deal with stress and yet lacking in a typical Western diet; mental & physical stress both increase magnesium elimination from the body, which can lead to a poorly functioning stress response. Multiple studies have now demonstrated improved stress response, anti-depressant and anti-anxiety effects of magnesium supplementation.
- ★ **Zinc**
Our bodies quickly eliminate more zinc when we're stressed. Although severe zinc deficiency is rare, it is likely that many are affected by a mild-to-moderate deficiency. Maintaining optimal zinc helps to protect against stress.
- ★ **Vitamin C**
Has a vital role to play in a balanced stress response and helps to regulate the release of stress hormones from the adrenal glands. Humans can't produce vitamin C and so must rely on dietary intake to replenish stores. Vitamin C requirements increase during times of stress.
- ★ **B Vitamins**
Often nicknamed 'anti-stress' nutrients for their powerful ability to balance mood and calm the nervous system, B vitamins are crucial for a balanced stress response.
- ★ **Adaptogens**
Rhodiola rosea, *Ashwagandha*, *Asian Ginseng* & *Cordyceps* are powerful adaptogens that have multiple individual benefits in helping to balance the stress response.
- ★ **Milk Protein Hydrolysate**
A unique milk protein fraction that has been studied for its relaxing properties. Research has shown it has anti-anxiety activity, improves sleep under mild chronic stress and helps to reduce sugar cravings.
- ★ **L-Theanine**
A naturally occurring amino acid that is found in tea leaves and has been shown to have calming, anti-anxiety effects via the induction of brain waves, yet without any side effects.