

# ETERNAL HEALTH

## CONDITION OF THE WEEK

### Depression - Why it's such a problem and what we can do about it?

The World Health Organisation reports that depression is the most disabling disease in the Western World today, so it's no surprise that antidepressants are currently the most prescribed medications in the U.S., according to a new government study.

Incredibly science has yet to unravel the scrambling of normal brain biochemistry that underlies this debilitating disorder, but new research points to inflammation and the hormone cortisol as the underlying triggers, which unhinge the making of brain chemicals that support healthy emotional responses. This means that at least for some whose lives are derailed by unremitting depression, hosing down inflammation and harnessing cortisol appropriately, might get their lives back on track.

Normally the brain uses a protein called tryptophan, found in red meat, dairy products, nuts, seeds, bananas, soybeans and soy products, tuna, shellfish, and turkey to make serotonin and melatonin, chemicals that facilitate evenness of temper. Inflammation is the body's immune response to invasion by threatening organisms, which is vital, but when inflammation develops a life of its own and becomes unremitting, it becomes harmful. What is done in the brain is to prevent tryptophan making serotonin, setting off biochemical reactions, which make other proteins that impair mental functioning, disturb sleep and depress mood.

Cortisol is commonly seen as the stress hormone, but it's what the body makes to get us out of bed in the morning, which means we need it. Ironically it's also a natural anti-inflammatory, making it a prime candidate for preventing depression, when inflammation is the proposed cause. Unfortunately when we make too much of it, like inflammation, it can set off the abnormal biochemistry, that prevents tryptophan from manufacturing serotonin. This is when it does become the stress hormone, with excessive pressure and the exacting demands of everyday living ratcheting up the production of cortisol.

How do you know if your cells are being spooked by inflammation or perturbed by cortisol? A blood test called HS-CRP measures inflammation, while saliva tests are the best way to find out if cortisol is in overdrive. The logical next step is to uncover what is causing inflammation.

### What causes inflammation that could lead to depression?

1. Excess fat cells.
2. The decline in hormones including oestrogen in women and testosterone in men.
3. Food allergy or intolerances.
4. Heavy metal toxicity with lead, aluminium and mercury being the major offenders.
5. Homocysteine, a protein that is harmless, when recycled by B vitamins and folic acid, but potentially lethal if this doesn't happen and it accumulates in excess.
6. Insulin resistance, a process usually but not always linked with weight gain, which is associated with diminished capacity to use glucose to produce energy.
7. A decline in the production of cortisol.

All of these can be identified with the appropriate tests and treated. It's not a guaranteed panacea for depression but it might offer a safer and healthier alternative for managing depression with medications, whose side-effects can be worse than the problem they're attempting to address.