

## **Am I depressed?**

Are you feeling sad, tired or irritable? Are you sleeping too little or too much? Have you noticed a drop in your appetite or sex drive or are you finding it difficult to concentrate? These may be signs and symptoms of depression. Depression or major depressive disorder (MDD) is more than just momentary episodes of feeling blue or down in the dumps, rather it is a chronic medical condition like high blood pressure or diabetes that is characterized by feelings of sadness and loss of interest and requires long-term treatment. The prevalence of depression is on the rise in the Western hemisphere and is rapidly becoming one of the most common chronic diseases of modern society.

Over the years, newer antidepressants have become more effective in treating depression with response rates reaching as high as 50% [1], but the side effects often hinder compliance and for many people, they simply do not work. The reported effectiveness of these new drugs may also have been overrated due to a preponderance of industry-led publications [2]. More and more, complimentary and alternative medicine (CAM) therapies are being used to treat depression. More than half of 2055 people interviewed between 1997 and 1998 reported using herbal medicine or CAM for severe depression during the previous 12 months [3]. So, what are some of the options available and what is the evidence to support their effectiveness and safety?

## **CAM and depression**

St John's wort, S-adenosylmethionine, exercise, omega-3 fatty acids, folate and acupuncture are a few among many available therapies whose effectiveness in treating depression has been the subject of a number of studies [4]. A recent comprehensive review has also evaluated the benefits of herbal medicine in the treatment of depression, anxiety and insomnia [5].

### **St John's Wort (SJW)**

St John's wort (SJW) is an extract of a yellow-flowering perennial herb *Hypericum perforatum* whose efficacy and safety has been well established. A recent review of 29 double-blind randomized controlled trials (RCTs) found that SJW was more effective than placebo and as effective as anti-depressants in improving symptoms of depression, with far fewer side effects [6]. Because of potential drug interactions, individuals taking immunosuppressants, antiretrovirals and chemotherapeutic agents should avoid taking SJW [7].

### **S-adenosylmethionine (SAM-e)**

SAM-e is a naturally occurring molecule in all human cells. Patients with depression have been found to have low levels of SAM-e in their serum and cerebral spinal fluid [8]. Seven out of 7 trials using intravenous SAM-e and 4 of 5 using pills reported some benefit in improving symptoms of depression [9], though additional larger trials are recommended in order to confirm these results [4]. Side effects were uncommon and included nausea, gastrointestinal upset and anxiety.

### **Exercise**

Twenty three RCTs have found the exercise improves symptoms of depression [10]. Aerobic, resistance and mindfulness-based exercise such as yoga or qigong were all equally effective [11]. Exercise appears to lower your levels of the stress hormone cortisol, alter neurotransmitter function and promote growth of your hippocampus [12], a structure in the brain that may be affected in severe depression [13].

### **Omega-3 fatty acids**

Docosahexaenoic acid (DHA) and eicosapentenoic acid (EPA) are fatty acids primarily found in oily fish. Your neurons contain high levels of these fatty acids. There is a lower prevalence of depression in society's with high fish consumption, and patients who are depressed have lower red blood cell omega-3 levels [14] suggesting that omega-3 fatty acids may be of use in treating depression. Sixteen RCTs found a small benefit of omega-3 fatty acid supplementation in improving symptoms of depression [15].

## **Folate and acupuncture- less certain of the benefits**

Only three small trials have investigated the efficacy of folate supplementation in treating depression and only one evaluated it as a single therapy [4] . Therefore, the data is considered insufficient to recommend this supplement as a treatment for depression. As for acupuncture, a review of 30 RCTs of different forms of acupuncture found no consistent benefit [16].

## **Take home message**

Depression is a serious chronic medical condition that needs to be properly evaluated and diagnosed. Studies suggest that a number of complementary and alternative medicine therapies improve symptoms of depression with fewer side effects than traditional antidepressants.

## **References**

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