

Overcoming Depression Naturally



A Body Mind Energetics Publication

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- 1. introduction - about depression*
- 2. possible causes or contributing factors*
- 3. about anti-depressants*
- 4. effectiveness of anti-depressants*
- 5. the alternative approach – snippets of research*
- 6. dietary program for alleviating depression*
- 7. supplement program for alleviating depression*

1. Introduction – About Depression

Depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration. The incidence of depression is slightly higher in women than men. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities. At its worst, depression can lead to suicide, a tragic fatality associated with the loss of about 850 000 thousand lives every year.

Depression is a leading cause of disability and the 4th leading contributor to the global burden of disability in 2000. By the year 2020, depression is projected to reach 2nd place in the global burden of disability for all ages, both sexes. Today, depression is already the 2nd most common form of disability in the age category 15-44 years for both sexes combined. Depression occurs in persons of all genders, ages, and backgrounds.

Facts

- Depression is common, affecting about 121 million people worldwide.
- Depression is among the leading causes of disability worldwide.
- Fewer than 25 % of those affected have access to effective treatments.

Basically, there are two principle influences in the onset of depression.

a. Lifestyle pressures : social change, family or relationship pressures, work related stress

b. Physiological basis : depression is an emotional state which can have a very real physiological basis. "Chronic depression is now recognized as a disorder of chemistry, not character" (Medscape Mental Health 2(6), 1997). Decreased production of brain neurotransmitters (mainly serotonin, but including dopamine, norepinephrine, and acetylcholine) all play a role in depression. This imbalance in neurotransmitters, as well as the bombardment of environmental toxic assaults to the body can create these very real and intense feelings of sadness and despair.

Signs and Symptoms

- Depressed mood most of the day, nearly every day
- Sadness and guilt experienced almost every day
- Chronic fatigue
- Insomnia or excess sleep nearly every day
- Loss of appetite or weight gain
- Feelings of worthlessness and suicidal feelings
- Low self-esteem
- Inability to concentrate
- Compulsion to commit suicide
- Anxiety
- Lack of motivation or energy
- Diminished interest or pleasure in many activities

- Nervousness or “jitters”
- Despair
- Loss of sexual desire
- Irritability
- Headaches

The philosophy used by drug companies in their search for a safe remedy for depression seems to concentrate solely on one particular finding that depression is caused, in principle, by decreased levels of the neurotransmitters serotonin (influencing mood) and nor-adrenalin (influencing motivation). Therefore, research by drug companies has tended to focus mainly in this area. However, as we shall see later, there is far reaching evidence strongly suggesting that focusing on this narrow area does not in any way give the full picture.

2. Possible Causes or Contributing Factors Of Depression - The Top 7 Physiological Factors

- i) hypoadrenia - adrenal gland exhaustion*
- ii) hypothyroid - underactive thyroid*
- iii) chronic nutritional deficiencies*
- iv) food allergies*
- v) hypoglycaemia - low blood sugar*
- vi) poor detoxification capacity*
- vii) lack of exercise*

i) hypoadrenia – adrenal gland exhaustion

being under excessive stress can have a powerful effect on the way you think and feel. The adrenal glands are known as the anti-stress glands of the body, often being described as a reserve tank which support the body and mind during stressful situations. The adrenal glands accomplish this by secreting a number of hormones principally cortisol, adrenalin, nor-adrenalin and DHEA when you are under stress. These hormones help keep you motivated, mentally alert and strengthen your ability to cope with the everyday stresses of living. However, if the stress is prolonged and severe, the adrenal glands are often overwhelmed and their output of these hormones begins to wane. Hypoadrenia is a condition whereby, although there is no disease state present, the adrenals have been so overtaxed they are no longer capable of supporting you through stressful situations. The debilitating effects of adrenal weakness will weaken you physically, mentally and emotionally.

ii) hypothyroid - underactive thyroid

the body's metabolic rate is controlled by thyroid hormone - thyroxin. Thyroxin is well known for exerting a powerful influence on both body and brain as it is instrumental in helping your cells produce energy. Too little thyroxin and your cells become sluggish, making you physically and mentally sluggish too. Mental sluggishness is a forerunner of depression. Thyroid medication in the form of synthetically produced thyroxin is one the most prescribed medications in the world today and is frequently prescribed to depressed patients if their thyroid function is found to be low or inadequate.

iii) the inadequate diet and nutritional deficiencies

the average diet is riddled with refined, processed, demineralised, devitalised 'food'. What nature has set on our table has been replaced with man's own version of 'improvement'. Unfortunately, the human body can't make something out of nothing and regardless of their appealing taste, long shelf life and easy availability, the use of such foods has been found to promote physical and mental health problems. Virtually all of the major vitamins and minerals, together with protein, carbohydrate and essential fats have been found to exert a powerful influence on brain function and hence state of mind. Although essential fats such as fish oil, the B vitamins and chromium have been most notable in the scientific findings, a proper dietary foundation is of the utmost importance.

iv) food allergies

clinical tests and scientific analysis have proven that most food allergies provoke mental, emotional and thus behavioural changes. They can even induce criminal behaviour. Classic books such as *Food and Behaviour* by Barbara Reed Stitt and *Diet, Crime and Delinquency* by Alexander Schauss provide clear evidenced based research that allergies and poor nutrition has a powerful impact on human brain function.

v) hypoglycaemia (low blood sugar)

low blood sugar is strongly associated with an inadequate diet and has a powerful impact on the function of mind and mood. The primary source of fuel for your brain is glucose and receiving it in steady, regular amounts is essential for a healthy brain and mental well-being. Eating a diet high in sugar and refined foods causes blood sugar levels to fluctuate wildly and, the more uneven your blood sugar, the more uneven will be your mood. Since the brain requires an even supply of glucose, it is no surprise to find that sugar and refined foods have been implicated in aggressive behaviour, fatigue, anxiety states and depression.

vi) poor detoxification capacity

negative mental states expressed as anxiety, depression, self destructive feelings and a weak will to live can be triggered by toxic overload affecting the functional well-being of the mind. Toxins in the air we breathe, the food we eat and the water we drink should end up being detoxified from the body by proper liver function. However, in the 21st century, the liver is one of our most stressed organs and as a result, its detoxification capacity is often compromised. Toxins end up remaining in the circulation and being 'dumped' in the body's tissues because the body has no other way of dealing with them. A proper detoxification program very often leaves people feeling brighter and more mentally alive. ([see our rejuvenation retreats](#))

vii) lack of exercise

because of its overall stimulating effect, a number of studies have shown exercise to be as effective as taking anti-depressants. In an Australian study published in 2005 involving 60 adults, highly encouraging improvements were made when participants significantly increased their physical activity. Even mild exercise, particularly in the presence of sunlight, has a stimulating effect on brain and body and should always be a part of any therapeutic program. Exercise not only acts to release endorphins in the brain, it also serves to promote increased thyroid function providing an overall stimulating effect on body and mind because of the increased production of thyroxin.

3. About Anti-Depressants

Once upon a time, drug companies promoted drugs to treat diseases. In modern times, however, the opposite is often true. They promote diseases to sell their drugs. Anti-depressants are among the most profitable drugs on sale in the world-wide market today. Most anti-depressants fall into one of three main categories.

- 1) monoamine oxidase inhibitors (MAOIs)
- 2) tricyclic anti-depressants (TCIs)
- 3) selective serotonin reuptake inhibitors (SSRIs)

Anti-depressants worldwide account for a market worth an estimated \$22 billion. Prozac, made by Eli Lilly, quickly became one of their highest selling and most profitable drugs soon after its introduction with annual sales of \$2.6 billion, almost a quarter of their total revenues. In the USA, over 60 million prescriptions for anti-depressants were written in 2004 in a country with a total population approaching 250 million people. So, the market as a whole, is incredibly profitable to the drug companies.

One of the major controversies regarding depression is that the medical, drug based model regards depression as a disorder of brain chemistry alone rather than having any other physiological basis. In fact, doctors and psychologists often see depressed people as existing only 'from the neck up.' The truth is that depression is very often the end result of a series of physiological changes in the body, especially hormonal, that bring the system down as a whole. Hormones are powerful modulators of our physical, mental and emotional characteristics and well-being and have the power to make us the sort of person that we are at any one moment in time. The problem is extenuated by the fact that there is no physiological diagnosis tool which will give a clear diagnosis of depression. Rather, in the medical model, the indications of depression are provided by psychological tests, the most common being the Hamilton Rating Scale of Depression.

But according to The American Journal of Psychiatry (1981; 138: 629-35) as much as half of all cases of depression have as their causative factor issues other than disorders of brain chemistry and emotional or psychological problems. Two conditions that are often missed by doctors are :

- hypothyroidism. Up to 25 per cent of depressed individuals, most of them women, suffer from subclinical hypothyroidism, a subtle dysfunction of the thyroid gland (Curr Psychiatry Rep, 2003; 5: 384-90; Thyroid, 1998; 8: 951-6). The condition can be missed by the standard screening tests, so consider a thyrotrophin-releasing hormone (TRH) stimulation test, or one that looks for anti-thyroid antibodies. Once diagnosed, the use of thyroid hormones can help support thyroid function and hence alleviate depression.
- reactive hypoglycaemia. Compulsive snacking or bingeing on sweet or starchy food may be part of a cycle of reactive hypoglycaemia (Nutrition, 1997; 13: 503-14). Once you eliminate refined carbohydrates, take complex carbohydrates and

balance your diet as a whole, your moods should even out.

Unfortunately, people with depression are very often treated with anti-depressants alone. Approximately half of those who seek help from their doctor will be prescribed anti-depressants while a quarter are referred for counselling. Drug treatment for depression usually focuses on 'normalising' the main mood-enhancing neurotransmitter serotonin. But the manipulation of neurotransmitters is poorly understood, difficult to regulate and unlikely to have long lasting effects. And, just how effective are they anyway?

Well, the evidence, at best, is mixed and highly debatable. There is evidence that anti-depressants do work but any benefits gained are often outweighed by the fact that the side effects are numerous and potentially even more problematic. The British National Formulary, the drug bible in the possession of doctors, lists more than twenty side effects all associated with taking anti-depressants. Dry mouth, blurred vision, confusion, cardiovascular problems, loss of libido, fatigue are just some of the symptoms mentioned. Some patients have even died as a result of taking MAOIs, while others have become suicidal or developed violent tendencies. Perhaps one of the most significant findings is that withdrawal symptoms – getting off the drug – is fraught with difficulties. In effect, people swap one set of symptoms for another and some studies indicate that people have stopped taking the anti-depressants because they would rather have depression than some of the side effects the anti-depressants cause.

Prozac and Seroxat, two of the most frequently prescribed antidepressants, show clear evidence of agitation leading to potential aggressive and suicidal behaviour in as many as a quarter of patients in a number of clinical trials. There have now been 90 legal actions and one recent successful litigation with \$6.4 million dollars being awarded against the pharmaceuticals company.

Dr David Healy, a psychologist working in the North Wales Department of Psychological Medicine in Bangor University states, "I estimate that about one person a day has committed suicide as a direct result of taking Prozac since it was introduced." Dr Healy has even petitioned the government's Medicine Control Agency to take action to warn users about these potential adverse reactions. In the UK alone that means about 1,000 suicides and 10,000 attempts

BAD SCIENCE

So many studies, so many flaws, so many lies...

A report in the British Medical Journal in 2005 revealed that a full one-third of American scientists have been found guilty of serious misconduct while undertaking medical research over the last three years. Their misdeeds have included the falsification of data, removing data when it didn't fit the findings and failing to reveal commercial links with their sponsor (usually a drug company). Even worse, more than 15 per cent admitted

changing their study conclusions to meet the expectations of their sponsor (BMJ, 2005; 330: 1465).

Doctors and the public may therefore have been misled about the effectiveness of antidepressant drugs. Sometimes poor results have been suppressed, while even those that have been published have claimed the drug is far more effective than the findings suggest, new research has discovered. Doctors and the public have both been victims of spin that researchers have put on their findings in order to present the drugs in the best possible light. A recent report in the New York Times highlighting research published in The New England Journal of Medicine indicates the problems of research carried out by drug companies.

The makers of anti-depressants like Prozac and Paxil never published the results of about a third of the drug trials that they conducted to win government approval, misleading doctors and consumers about the drugs' true effectiveness anew analysis has found.

In published trials, about 60 percent of people taking the drugs report significant relief from depression, compared with roughly 40 percent of those on placebo pills. But when the less positive, unpublished trials are included, the advantage shrinks: the drugs outperform placebos, but by a modest margin, concludes the new report, which appeared in the New England Journal of Medicine.

Previous research had found a similar bias toward reporting positive results for a variety of medications; and many researchers have questioned the reported effectiveness of antidepressants. But the new analysis, reviewing data from 74 trials involving 12 drugs, is the most thorough to date. And it documents a large difference: while 94 percent of the positive studies found their way into print, just 14 percent of those with disappointing or uncertain results did.

In addition, researchers from Oregon Health and Science University analysed 74 separate trials into anti-depressant drugs that had been registered with America's Food and Drug Administration (FDA). Of these, a third was never published, and this was usually because the study discovered the drug was either not effective or was more dangerous than first thought.

Of the trials that were published, 94 per cent of them came up with a positive outcome about the effectiveness of the drug, and yet the FDA's independent analysis of the same trials concluded that just half were positive.

(Source: New England Journal of Medicine, 2008; 358: 252-60).

Despite the advent of new anti-depressant drugs such as SSRIs, psychiatrists are still prescribing the older tricyclic drugs such as amitriptyline and despite the fact that they have been in use for over 30 years. After a major review of the evidence, the embarrassing news is that psychiatrists have been prescribing too high doses. At the

standard dose of 125 mg per day, side effects become so intolerable that many patients simply give up - clearly preferring to be depressed rather than lose their appetite and libido, or suffer constipation, dehydration and confusion. (British Medical Journal, 2002: 325: 991)

4. Effectiveness of Anti-Depressants

In the UK, The National Institute for Health and Clinical Excellence (NICE) says: 'There is little clinically important difference between anti-depressants and placebo for mild depression. Therefore, for mild depression, NICE does not recommend antidepressants, favouring instead exercise, 'guided self-help' (effectively, keeping a journal) and counselling.

For moderate to severe depression, three major reviews show a significant but hardly spectacular improvement comparing anti-depressants to placebo. One from 2005, for example, found that 58 per cent of people taking an anti-depressant improved, compared to 45 per cent of those on placebos. Not much difference?

This following report produced in the International Journal of Neuropsychopharmacology September 2002; 5(3): 193-7 provides an even more accurate picture.

Sugar Pills (placebos) Work as Well As Anti-depressants

Sugar pills cure depression just as well as antidepressants. What's more is that sometimes they work better.

According to a new analysis, the majority of antidepressant trials conducted by drug companies have found that sugar pills, or placebos, produce results similar to or better than antidepressant drugs. In one study of 96 antidepressant trials conducted between 1979 and 1996, no difference could be determined between the effects of antidepressants and sugar pills in some 52 percent of trials.

Drug companies are required to conduct two trials that yield positive results before the product will be approved by the Food and Drug Administration (FDA), and reportedly numerous trials had to be conducted before positive results could be shown. The makers of Prozac ran five trials before obtaining two that were positive, while the makers of Paxil and Zoloft had to conduct even more, according to researchers.

In one recent trial, which compared the effectiveness of the herb St. John's wort to that of antidepressant drug Zoloft, St. John's wort alleviated depression in 24 percent of study participants compared with 25 percent for Zoloft. However, the placebo cured depression in 32 percent of participants.

The findings do not mean that antidepressants such as Prozac, Paxil and Zoloft do not work,

however researchers say that Americans may be overestimating the drugs' effectiveness. Much of the improvement shown during clinical trials may be due to the close attention and evaluation the patients receive during the study -- a phenomenon that does not occur for most patients who use the drugs in everyday life.

Moreover, the sugar pills actually cause changes to occur in the same areas of the brain affected by the antidepressant drugs, according to recent research. It was also found that more patients' depression is being alleviated due to placebos now than 20 years ago.

Placebos, or pills that have no effect, have long been used by scientists to distinguish the real effects of medicine from the illusive feelings of patients. Often in the field of medicine patients experience what is known as the placebo effect -- the feeling of getting better after being treated with placebos.

However, it seems that placebos may actually make a difference in the treatment of depression, as the disease is characterized by how people feel.

Many psychiatrists say that drugs alone will not cure depression. Instead, a combination of medication and psychotherapy appears to yield the best results. Despite this, antidepressants have become the automatic treatment for most cases of depression.

In 2002, there were close to 25 million doctor visits for depression, up from 14 million in 1987. Of these visits, medications were prescribed for nine out of 10 patients, according to recent research.

It is not known how many of these patients received therapy in addition to the medication, however, in 2001 less than one-third of doctor visits for depression were to psychiatrists and two-thirds of them were to primary care physicians. According to researchers, psychiatrists are more likely to administer medicines along with therapy, while physicians, who are less knowledgeable about therapy, are less likely to offer therapy to their patients.

Other studies have shown that in an average eight-week trial, each study participant, whether taking drugs or placebos, is questioned and examined by experts and caregivers for about 20 hours. Comparatively, the average depressed patient likely sees a doctor for only 20 minutes a month.

To add a piece to the puzzle, researchers say that often patients with similar symptoms have different problems with their brain chemistry. The neural mechanisms behind this, and the reasons

why antidepressant medications work, are not fully understood.

In one study that followed changes in the brain associated with antidepressant drugs, results showed that many of same changes occurred in patients who took placebos. The parts of the brain that were primarily affected are thought to play a role in mood.

In this particular study, 38 percent of depressed patients got better from taking the placebo, compared with 52 percent from the medicines.

However, once the trial ended and the patients were told what they had been taking, the patients who had been on placebos fell back into their depression. It appears that one's belief in the effect of antidepressant may account for the improved feeling in patients.

While some say that antidepressants drugs work primarily because of the placebo effect, others believe that the drugs produce an effect of their own. A related study found, through the use of a brain imaging technique, that these medications do in fact produce changes in the brain stem that did not occur in patients taking placebos. However, the effects of these changes are not yet understood.

analysis led many to say that an integrated treatment that takes into account both biological and mental aspects may prove beneficial in the treatment of depression.

[International Journal of Neuropsychopharmacology September 2002; 5\(3\):193-7](#)

5. The Alternative Approach –Snippets of Research

The brain is a chemical factory that produces neurotransmitters, chemical messengers that help to maintain the body's biochemical balance. To do this job, the brain needs raw materials in the form of amino acids, vitamins, minerals and other nutrients.

Most of us obtain these materials from a well-balanced diet plus daily supplements. But some people have absorption or metabolic disorders severe enough to significantly alter brain function. When this happens, a range of conditions such as bipolar disorder, depression, schizophrenia and attention deficit disorders can occur.

Each of us processes foods in our own way. This is why it is possible for some to thrive on a vegetarian/vegan diet while others need an omnivorous diet to be healthy. Similarly, some individuals seem to get all they need from food alone while others require supplements, sometimes at many times the recommended daily allowance (RDA), to remain healthy.

But who is the patient nutritionally? Finding the answer involves extensive chemical analysis of blood, urine and tissues to define the patient's biochemistry. Treatment requires supplements of specific vitamins, minerals and amino acids (see box above) that need to be supplied with rifle-shot precision - and sometimes in very high doses.

** Diet*

Eat foods which are as close as possible to their natural state. That means cutting out refined, processed foods that are severely lacking in nutrients the body can use. Remember that the human body can't make something out of nothing regardless of how 'good' such foods taste. Make sure you have enough fat in your diet from mono- or polyunsaturated fats. Cut out caffeine and refined sugar, which have been linked to depression. See action plan at end of report.

** Supplements*

Take B vitamins, particularly B6, and folic acid, thiamine, riboflavin and B12, lower levels of which have been linked to depression in patients. Other important mood regulators include vitamin C, calcium, copper, magnesium, potassium and the omega-6 fatty acids.

** Herbs*

At least 23 studies have proved that St John's wort (*Hypericum perforatum*) is as effective as most antidepressants with far fewer side effects (BMJ, 1996; 313: 253-8). Other herbs with scientific evidence of success include Siberian ginseng and Forskolin.

** Talking cures*

Therapy with a trained psychotherapist (not a psychiatrist, who may only prescribe drugs) has been shown to be just as effective as anti-depressants.

On Post Natal Depression

** Increase your omega-3 fats. Take fatty-acid supplements and eat more cold-water fish and seafood (J Affect Disord, 2002; 69: 15-29). Low fatty-acid levels just after birth are linked to postnatal depression (PND) (Life Sci, 2003; 73: 3181-7). Mothers' docosahexaenoic acid (DHA) goes to their fetuses during pregnancy to ensure optimal neurological growth so, unless you've been supplementing, you're likely to be deficient. To avoid PND, begin taking these supplements while pregnant.*

* Try bright-light therapy. Introduced to treat SAD (seasonal affective disorder), this can also help other non-seasonal forms of depression.

A 10,000-lux lightbox, used for 30 minutes every day between 7 and 9 o'clock in the morning, can significantly improve mood and other symptoms of depression, with no adverse effects (Am J Psychiatry, 2000, 157: 303-4).

** Consider acupuncture, which works just as well as conventional treatments for major depression in both acute and maintenance phases. Out of 26 women having acupuncture for eight weeks, 17 were cured and, six months later, three-quarters were still well (Complement Ther Med, 2001; 9: 216-8).*

* Take yourself and your baby to a baby-massage class. As mothers with PND often have problems interacting with their infants, a massage class will help them relate to their babies better - possibly through the release of oxytocin and by helping them to better understand their babies' communication signals.

** If nothing else works, try St John's wort, which can be as effective or better than a synthetic antidepressant for mild-to-moderate depression, with fewer side-effects (Fortschr Neurol Psychiatr, 2004; 72: 330-43). Also, the supplement does not appear to affect either milk production in mothers or infant growth (J Clin Psychiatry, 2003; 64: 966-8). But, as one side-effect of the herb is photosensitivity, don't use this treatment with light therapy.*

* Have your partner massage you during labour. In one study, this led to less postnatal depression (J Psychosom Obstet Gynaecol, 1997; 18: 286-91).

Although a deficiency of virtually any nutrient can cause depression, the most pronounced varieties are caused by deficiencies in vitamin C, biotin, vitamin B 12, folic acid, niacin (B3), pantothenic acid (B5), pyridoxine (B6) and thiamine (B1) (L Mahan and M Krause. Food, Nutrition

and Diet Therapy, Philadelphia, PA: W B Saunders & Co Inc, 1984). Deficiencies of zinc, magnesium, iron, manganese, chromium or potassium, an excess of vanadium, copper, aluminium, lead or mercury, and either too much or too little calcium can all cause depression or even more serious psychiatric problems (Drs Stephen Davies and Alan Stewart).

The vitamin like co-enzyme tetrahydrobiopterin is essential for the proper manufacture of neurotransmitters like serotonin, which regulate mood. Many patients with unexplained depression have been shown to have a reduced formation of tetrahydrobiopterin (*Lancet, 1984, i: 163*). Supplementing with vitamin C, folic acid and B12 can stimulate the production of this enzyme (*J Ment DefRes, 1982; 26: 21- 5*).

Perhaps the most famous alternative remedy for depression is St John's wort (Hypericum perforatum), which has been demonstrated to be safe and effective in numerous trials in prestigious medical journals. It has also been combined with Indian snakeroot (Rauwolfia serpentina), which reduces blood pressure, in a preparation marketed under the trade name 'Hyperforat' (Klein, FRG). (Arzneimittel-Forschung, 1971; 21: 1999).

However, even St John's wort is not without unwelcome side effects; one constituent of the herb causes patients to be photosensitive, and so users should exercise caution in going out in the sun.

Siberian ginseng (*Eleutherococcus senticosus*) has been proven to help a variety of psychological disturbances, including clinical depression (*Econ Med Plant Res, 1985, 1: 156-215*).

In naturopathic medicine, kava kava, a beverage made from the root of the pepper plant (*Piper methysticum*), is widely consumed in Pacific Islands. In one randomised, double blind study, a group of patients with depression showed a significant reduction in anxiety, compared with a group of matched controls taking a placebo, after only one week. This difference between the two groups increased over the four week course of the study, demonstrating the effectiveness of kava kava in patients with anxiety disorders (*Arzneimittelforschung, 1991; 41: 584-8*). Do beware, though, that liberal, long term consumption of kava kava can affect the skin, causing peculiar fish scaly eruptions, possibly due to its interference with cholesterol metabolism (*J Am Acad Dermatol, 1994; 31: 89-97*).

Depressed people may have an impaired ability to metabolise certain essential fatty acids (Prostagl Leukotr Essent Fatty Acids, 1999; 60: 217-34), leading to lower blood levels of omega-3s (Lipids, 1996; 31 Suppl: S157-61; Psychiatr Res, 1999; 85: 275-91). For these individuals, the typical Western diet, which greatly favours omega-6 fatty acids, may be disastrous. Conventional medication may also worsen the problem

(Eur Neuropsychopharmacol, 2003; 13: 99-103).

One double-blind trial discovered that people taking 9.6 g/day of omega-3s from fish oil in addition to their conventional medications had significantly improved bipolar symptoms compared with those taking a placebo (Arch Gen Psychiatry, 1999; 56: 407-12).

Both folic acid and vitamin B12 are used in the body to make serotonin and other neurotransmitters. A deficiency of either nutrient is associated with depression (Nutr Rev, 1996; 54: 382-90; South Med J, 1991; 84: 1475-81). Those diagnosed with mania also tend to have folate deficiencies (J Affect Disord, 1997; 46: 95-9), though some studies dispute this.

(Acta Psychiatr Scand, 1991; 83: 199- 201; J Affect Disord, 1992; 24: 265-70).

There is evidence that increasing levels of folate can improve the response rate to lithium (J Affect Disord, 1986; 10: 9-13) but, again, there are also other data that dispute this claim (Int Clin Psychopharmacol, 1988; 3: 49-52).

Supplemental 5-HTP (a serotonin precursor) at 200 mg/day had antidepressant effects in bipolar patients, although it was not as effective as lithium (Acta Psychiatr Scand Suppl, 1981; 290: 191- 201). 5- HTP may also enhance the effectiveness of antidepressants (J Affect Disord, 1980; 2: 137- 46).

Yet another amino acid, S-adenosylmethionine (SAME), has been proved in clinical trials to have significant antidepressant effects in bipolar patients (Acta Psychiatr Scand, 1990; 81: 432-6; Drugs, 1989; 38: 389-417).

6. Dietary Program For Alleviating Depression

The Basic Rules

- i) avoid products containing white flour, white sugar and caffeine where possible
- ii) eat oily fish 2 – 3 times per week
- iii) make seeds – flax, sunflower, pumpkin etc a regular snack during your week
- iv) make eggs a regular part of your weekly diet – but don't dry them, 4 – 6 is great
- v) eat protein with every meal – morning, noon and night

- vi) use only whole, unprocessed grains – especially brown rice in your diet
- vii) three times per week have a bowl of home made vegetable soup made with root vegetables and dark green vegetables.

See www.mystressandfatigue.com/mysearch.html for recipe ideas.

7. Nutrient and Herbal Supplement Program For Alleviating Depression

Essential

(1) B-Complex

The B vitamins synergistically treat depression. A folic acid deficiency has been directly linked to depressive symptoms. Vitamin B-6 is also necessary to convert tryptophan to serotonin. Serotonin depletion can cause depression.

Recommended Dosage: Dosage varies

References: JAm Geriatr Soc (1991) 39: 252-7, Am J Psychiatry (2002) 159: 2099-101, J Neural Transm Gen Sect. 1995;102(2):91-7.

2) Multiple Vitamin and Mineral

A multiple vitamin-mineral supplement is essential to provide all the basic nutrients.

Recommended Dosage: Varies by product. References: Am J Gastroenterol (2003) 98: 348-53, Aliment Pharmacol Ther (2003) 17: 307-20.

3) Tyrosine or Phenylalanine

Tyrosine and phenylalanine are amino acids that are precursors to dopamine, norepinephrine and epinephrine, which are neurotransmitters that help regulate mood and emotions. Tyrosine is synthesized from phenylalanine. Several studies report that both are beneficial for depressed patients.

Recommended Dosage: Tyrosine: 100 mg per kg (2.2 pounds) of body weight per day. Do not take tyrosine if taking a MAO-inhibitor drug. Phenylalanine: 75-1500 mg per day taken between meals. Do not use in PKU (phenylketonuria) and melanoma. Consult a physician for use with hypertension patients.

References: Conflicting trials. J Affect Disord (1990) 19: 125-32, Adv Bio Psychiatry (1983) 10: 148- 159, Arch Psychiatr Nervenkr. Jul1979;227(1):49-58, Lancet. 1980;2:364.

4) 5-HTP

Tryptophan is an essential amino acid that is not manufactured by the body. Tryptophan is converted to 5-HTP in the body, which in turn is converted to serotonin. Serotonin depletion can cause depression. It is now believed that 5-HTP may be more effective than tryptophan in elevating serotonin levels. Several studies have confirmed that 5-HTP may be as effective as tricyclic antidepressant medications.

Recommended Dosage: 100-300 mg daily. References: Altern Med Rev. Feb2000; 5(1):64-71, Altern Med Rev. Aug1998;3(4):271-80, Psychopathology. 1991 ;24:53-81.

4) Omega-3 Fatty Acids

Fish oil (omega-3 fatty acids) has been shown to improve depression after one to two weeks of supplementation. The ratio of omega-3 fatty acids to omega-6 fatty acids is also important. Low omega-3 fats compared to omega-6 fats has been correlated with increased incidence of depression.

Recommended Dosage: 1-4 grams of EPA daily. Doses as high as 8 grams of EPA may be necessary for depression.

References: Psychosom Med (1999) 61: 712-28, Psychiatry Res (1999) 85: 275-91, Bio Psychiatry (1998) 43: 315-9, Lipids. Mar1996;31 Suppl:S157-61, Rudin DO, Felix C. Omega-3 Oils. Honesdale, PA: Paragon Press; 1996:216.

5) SAM-e

SAM-e is an amino acid derivative that may be very beneficial in depression. SAM-e is synthesized in the body from the amino acid methionine and is critical in the manufacture of neurotransmitters. Several studies confirm that SAM-e is more effective than standard tricyclic medications.

Recommended Dosage: 400 mg 4 times per day.

References: Am J Clin Nutr (2002) 76: 1172S-6S, Mov Disord (2000) 15: 1225-9, Psychiatry Res (1995) 56: 295-7, Acta Neurol Scand Suppl. 1994;154:7-14, Am J

Botanical Applications

1) St. John's Wort

St. John's wort is a mood elevator in cases of depression and other psychiatric illness. It improves quality of sleep by relieving both insomnia and hypersomnia and provides significant improvement in symptoms of anxiety, depression, and feelings of worthlessness. St. John's wort is extensively used by physicians in Europe for the treatment of mild depression.

Recommended Dosage: Standardized Extract 800-900 mg (standardized to 0.3% hypericin and 3-5% hyperforin), divided into 2-3 doses, taken with meals until desired effect is achieved. Tincture: 2-4 ml(1 :5) 2-4 times per day. Give St. John's Wort for at least several weeks to see best results.

References: Adv Ther (2002) 19: 43-52, Schweiz Rundsch Med Prax (2000) 89: 2163-7, Pharmacopsychiatry.1997;30(Suppl2):72-76.

2) Kava Kava

Kava kava reduces anxiety yet improves mental function. Recommended Dosage: Standardized Extract 120-240 mg of kavalactones per day in two or three divided doses is commonly recommended. Kava extract is typically standardized to 30% kavalactones. Kava should be avoided in combination with alcohol or other hepatotoxic drugs. Do not take more than 300 mg of kavalactones daily. Do not use during pregnancy or while breast-feeding or in liver disease.

References: Life Sci (2002) 70: 2581-97, Aust N Z J Psychiatry (2002) 36: 657-62.

3) Siberian Ginseng

Siberian ginseng is an adaptogen that nourishes the adrenal glands. Siberian ginseng has the ability to increase the sense of well-being in a variety of psychological disturbances.

Recommended Dosage: Standardized Extract 300-400 mg per day of concentrated solid extract (standardized on eleutherosides B and E) per day, Dried Root: 2-3 grams per day is commonly recommended, Liquid Extract: 8-10 mL in two to three divided dosages per day (can vary based on tincture strength).

References: Int J Clin Pharmacol Res (1999) 19: 89-99, Adv Nurse Pract (2001) 9: 26-8, 33, Econ Med Plant Res, 1985, 1: 156-215.

4) Ginkgo Biloba

Ginkgo biloba improves microcirculation to the brain and delivery of nutrients. It has a positive effect on depression, especially in cases of cerebrovascular insufficiency.

Recommended Dosage: Standardized Extract: 80-240 mg of a 50:1 ginkgo extract (standardized to 24- 25% ginkgo flavone glycosides and 6% terpine lactones) taken daily by mouth in 2-3 divided doses, Liquid Extract: 3-6 mL of 40 mg/mL extract taken daily by mouth in three divided doses.

References: Pharmacopsychiatry (2001) 34: 50-9, Antioxid Redox Signal (1999) 1: 469-80.

