Depression and Nutrition

Clinical depression is a debilitating disease affecting millions of Americans annually. Therefore, identification and early treatment of depression is essential. The conventional treatments for depression include anti-depressant medications and psychotherapy. A nutritious diet can also aid in relieving the symptoms of mental illness, reducing the side effects of antidepressants, and improving their effectiveness. Numerous studies have shown a connection between mood and nutrition. The key nutrients upon which to focus during recovery include:

• **The B Vitamins.** The B vitamins, including folic acid, vitamin B6 and B12, are helpful in mild depression. In a recent study, investigators looked at folic acid concentrations in about 3,000 people and found deficiencies of this vitamin correlated with depression. This finding can be explained by the mechanism of B vitamins, because they are known to participate in brain chemistry and physiology as coenzymes in the synthesis of important neurotransmitters (serotonin, dopamine and norepinephrine.) B vitamins can also increase the efficacy of some prescription anti-depressants. Studies found that high levels of vitamin B12 in the bloodstream were linked to more successful outcomes among people being treated for depression.

• **Vitamin C.** This vitamin aids in reducing dry mouth, a common side effect of many anti-depressants. Deficiency of this vitamin has been found to cause irritability and depressed mood.

• **Selenium.** Studies indicate the mineral selenium significantly affects mood. One study found those with a depressed mood who consumed a diet high in selenium reported decreased feelings of depression after five weeks.

• **Tryptophan.** This amino acid is effective by way of serotonin, one of the key brain chemicals involved in regulating mood. Serotonin promotes feelings of calmness, relaxation and sleepiness. Lack of serotonin is associated with depression. Because the body cannot make tryptophan, it must be a part of the diet and for this reason tryptophan is known as an “essential” amino acid.

• **Omega-3 Fatty Acids.** Omega-3 fatty acids found in fish are also key in maintaining a healthy mind. Fish oil is an excellent source of docosahexaenoic acid (DHA), an essential fatty acid found in nerve and brain tissue. Omega-3 fatty acids are involved in chemical messaging in the brain, help regulate blood vessel activity and aspects of the immune system affecting the central nervous system. Studies have shown low levels of these fatty acids may be associated with depression, bipolar disorder and suicide. In addition to regulating these key nutrients, it is known that the following have a large impact upon mental health:

Caffeine. Removing caffeine from one's diet aids in relieving negative mood symptoms. Addiction to coffee and other forms of caffeine often interferes with normal moods and can aggravate depression. Caffeine is a potent chemical stimulant with psychoactive effects. Research has indicated that caffeine can interfere with our brain chemistry and, therefore, can exacerbate stress, anxiety, depression and insomnia. In one study, participants who drank caffeine reported higher depression scores than those who abstained. Caffeine also depletes vitamin B6, which compound one's depressive mood (see above discussion of the B vitamins).

Follow a well-balanced diet. Breakfast is the most important meal of the day, so starting the day off on the right foot is important. It is also important to eat three well-balanced meals a day with nutritious snacks consisting of fruits and vegetables in between if needed. Try to limit intake of refined sugars and replace those foods with whole grain carbohydrates. If a well-balanced diet cannot be eaten, a primary care physician should be consulted regarding an antioxidant multi-vitamin/mineral supplement to ensure getting all the essential nutrients the body needs for optimal health.

The following table includes the daily dietary reference intakes and food sources for vitamins and nutrients discussed above. These values are for adults. If pregnant or lactating, requirements for many of these vitamins and nutrients are increased and a primary care physician should be consulted for daily recommended requirements.

Nutrient Daily Recommended Amount Sources

Further Resources:

www.usda.gov

www.nutrition.gov

www.nlm.nih.gov/medlineplus/depression.html

www.emedicinehealth.com/depression/article_em.htm

www.medicinenet.com/depression/article.htm

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