

*Here are some of my thoughts/beliefs on the biological components of depression. Please note, I am not a physician and any questions relating to medical needs must be addressed by an appropriate person.*

- (1) Always consult with your doctor to explore physical disease which may be contributing; if a disease is not present a variety of factors can contribute to depressive symptoms. Prescription and nonprescription drugs, imbalances in hormones, sensitivities to food, deficiencies in nutrients, and excess of toxic substances will affect mood.
- (2) Consultations with naturopathic physicians and chiropractors, who rely primarily on natural, non-pharmacological remedies, can fill a role of exploring subtle and obscure biological causes which are beyond the confines of conventional wisdom.
- (3) Dietitians and nutritionists may be very helpful in addressing food-related issues and developing programs of supplementation.
- (4) Explore your own medical history. Some drugs can contribute to depression, sometimes the drugs that are prescribed for depression can exacerbate symptoms. You and your physician need to be aware of this. Typical drugs that can contribute to depression include, but are not limited to: anti-anxiety medications, antidepressants, antihistamines, antihypertensives (a variety of drugs that lower blood pressure), Anti-inflammatory agents, Antiseizure medications, birth control pills, chemotherapeutic agents, corticosteroids (synthetic versions of the adrenal stress hormones used for a wide variety of conditions from arthritis to asthma and eczema), and sleeping pills of all kinds.
- (5) Other substances we put into our bodies may have an impact. Alcohol, nicotine, marijuana, amphetamines, cocaine, sugar, and caffeine are some common substances. Excessive amounts of coffee with sugar, colas, Aspartame can contribute to depression in some people.
- (6) Some medical conditions may give rise to, and/or be accompanied by, depression. These include: Acquired immune deficiency syndrome (AIDS); Adrenal gland overactivity, with hypersecretion of stress hormones (Cushing's disease) and underactivity (Addison's disease); Autoimmune illnesses, including lupus erythematosus and

rheumatoid arthritis where the body's immune cells attack its own tissue in a variety of locations; cancer, especially cancer of the brain, where pressure on the brain may contribute to the symptoms, and cancer of the pancreas; cerebrovascular disease, in particular, strokes, or cerebrovascular accidents, where the blood supply to the brain, and therefore its adequate functioning is compromised; Chronic fatigue immune deficiency syndrome (CFIDS), a multisystem condition, perhaps precipitated by Epstein-Barr or another viral illness, characterized by extreme fatigue and sometimes, muscle and joint pain, and depression; Chronic pain; Diabetes, a disease in which major problems in sugar metabolism and in circulation are caused by the body's inability to produce, or adequately use, insulin; Heart disease, including heart failure and heart-valve malfunction – these are often accompanied by shortness of breath; infections, both bacterial and viral, including Lyme disease; Lung disease, particularly chronic obstructive pulmonary disease, which may be present in longtime smokers, coal miners, asbestos workers etc; Multiple sclerosis, a disorder with a variety of symptoms, including visual problems and weakness of limbs, produced by inflammation of the “white matter” that surrounds the nerve cells in the brain; Parkinson's disease, a disease characterized by dopamine deficiency in the *substantia nigra* of the brain, with symptoms including trembling, especially of hands – muscular rigidity and difficulty moving; Thyroid disease including both overactivity (hyperthyroidism) and underactivity (hypothyroidism); trauma to the head, and; Wilson's disease, an inherited illness in which abnormal copper metabolism may damage the nervous system and liver.

(7) If none of the above fit, and the depression cannot be lifted with medication, it may be worth exploring Adrenal Abnormalities, Chronic Yeast Infections, Heavy Metal Toxicity, Small Intestinal Bacterial Overgrowth (SIBO), Seasonal Affective Disorder (SAD), and Subclinical Hypothyroidism.

To Sum Up:

A complete history and physical exam and routine lab tests from a primary care physician should be routine. Make sure you disclose all prescription drugs and any nonprescription substances you're taking; If nothing significant appears in your conventional workup, and if your energy is

really low and/or you often have other physical symptoms that don't register on conventional testing or fall into a clear, conventional medical pattern, its time to consider consulting with a holistic or integrative physician, naturopath, nutritionist, chiropractor etc. If you are depressed and other causes have been ruled out, and particularly if you have other symptoms like frequent colds, GI upset, low energy, you may want to see if you are sensitive to any foods.

Gordon, James. S. MD. (2008). *Unstuck: Your guide to the Seven-Stage Journey Out of Depression*: New York, NY: Penguin Books.