

## Supplements:

**Proteins, Minerals, Vitamins and other substances are essential for brain to function properly as they represent the cellular basis. The chances that your anxiety, or at least a portion of it, can be traced to a vitamin or mineral deficiency are quite high. Do not underestimate the power of simple supplements such as B-complex as deficiency of this particularly abundant vitamin can cause symptoms of mania, psychosis, fatigue, memory impairment, irritability, depression and personality changes**

### For betterment of cognition/improving focus:

**Alpha GPC (choline)** - A more potent supply of choline, as compared to lecithin. It is a great auxiliary substance to piracetam, which depletes acetylcholine, ergo adequate transmission will be maintained.

**Aniracetam** - A nootropic (memory/learning enhancing) dietary supplement that is immensely useful when your thinking is obscured by anxiety. Depersonalization often causes brain fog and therefore I found it to be a helpful implement when learning/working. Furthermore it also exhibited anxiolytic properties in laboratory mice via action on dopamine. Take 2 - 3 750mg pills daily.

**Centrophenoxine/Meclofenoxate** - Acetylcholinesterase inhibitors reduce the break down of acetylcholine, an essential transmitter involved not only in muscular function and other somatic (bodily) aspects, but also in cognitive processes such as memory. Additionally, this supplement was proposed to cause up-regulation (increase in density) of dopamine receptors through a compensatory mechanism (inhibits release of dopamine resulting in sensitization of corresponding receptor sites - thus the effects arising from this mechanism will only be felt after the cessation from chronic administration). Overall an interesting nootropic that helps with focus and the consolidation of new information into long-term memory.

**Piracetam** - Another nootropic from the racetam family that improves cognition. It acts as a positive allosteric modulator of the NMDA glutamate receptor, which proved essential in learning and memory. Dissociative drugs such as Ketamine are NMDA antagonist placing them opposite to piracetam and since depersonalization is a form of dissociation it might prove to be helpful. 1.2g – 12g is a typical dose range. Efficiency varies among individuals so you will have to find the right dose for you. Combines well with Aniracetam, Lecithin, AlphaGPC, Centrophenoxine because they work in synergy.

### Fatigue – relief:

**BCAA (Branched Chain Amino Acids)** - Comprised of 3 amino acids: Valin, Leucine and Isoleucine. This supplement will find its use not only in body-

builders who are looking to gain some muscle tissue, but also in those struggling with fatigue and depression. Because Amino Acids are essential to protein synthesis, which make up almost every cell and structure in our bodies, it can't hurt to provide yourself with the bodily structural basis. Works great in alleviating physical exhaustion/fatigue, which is inherent to depression and anxiety.

**Rhodiola Rosea** - a plant based supplement, which is thought to alter the levels of serotonin and dopamine to our mood's favor through monoamine oxidase inhibition (enzyme breaking down neurotransmitters). This plant has been used in Siberian and Scandinavian countries for centuries to alleviate stress and depression. If it has helped people in such desolate climates and conditions its beneficial properties shall not be ignored. The active ingredients of this plant, rosavins, provide among the abovementioned reduction in fatigue by increasing your mental and physical stamina as well making it a great aid in depression and exercise.

### **Relaxation:**

**GABA** - A supplement that is essential in regulating anxiety, GABA in this supplement form, does not readily cross the blood brain barrier (BBB) in lower doses. Nevertheless, it indirectly calms you down (the exact mechanism is yet to be elucidated, but as the name suggest it might be involved in regulation of the inhibitory transmitter GABA). Majority of our brain has an inhibitory role not a productive one, when there is lack of inhibition anxiety and/or other symptoms often arise as a result of information overload. Once or twice a day of 750mg should be enough (morning/evening before sleep). This dose can be exceeded, but in such cases it may have paradoxical effects and work against you by increasing anxiety.

**Lecithin** - Not only does it reduce the frequency and severity of migraines, but it also helps you to achieve an overall calm state of mind. I found it to be outstanding in reducing panic attacks which many people report along with depersonalization. The cholinergic system is involved in memory and learning among myriad other sympathetic and parasympathetic responses. Therefore lecithin, being a precursor to acetylcholine, will positively address cognitive impairments such as brain fog

**L-theanine** - Extract from green tea that evokes a focused state of relaxation without making you tired or overly stimulated. Along with its nootropic properties it is also a worthy mood-enhancer. 400-800mg daily should do the job.

### **Improvement without noticeable sedation/stimulation:**

**Vitamin B** – chronic supplementation of b-complex has been shown to reduce work related stress in addition to attenuating confusion and depression. I recommend using the sublingual form if accessible due to its high bioavailability. It is difficult to overdose on B-vitamin since it is water-soluble, so don't be afraid to incorporate it into your daily diet.

**Omega 3-6** – also known as fish oil, this dietary supplement supplies plenty of benefits to not only psychiatric patients suffering from anxiety by reducing its symptoms, but also by actively involving in prevention of cancer, inflammation and depression.

**Magnesium** – deficiency can precipitate depression and anxiety so make sure to keep proper levels in check. Usually magnesium is contained, in sufficient daily amounts, in green vegetables, but if you need immediate relief magnesium can act as a gateway to sleep and calmness.

**Zinc** – zinc levels on its own are rarely relevant, more important is the zinc-copper ratio that determines functions necessary in keeping a healthy mindset. A low zinc/copper ratio has been correlated with autism and increased prevalence of violent behavior. Furthermore, zinc has been identified in some neurons (specifically in synaptic vesicles) where it might aid cognitive functions.

## Herbal Remedies

There is a large variety of herbs which have the potential to alleviate nervousness and anxiety to a noticeable extent. The major advantages of this anxiety remedy are that these forms of medication are considered to be relatively safe (mainly because of their dilute potential) and rarely carry a risk of developing dependence since it is all just plant matter and not some potent alkaloid tincture or other concentrated derivative intrinsic to prescription medication. Furthermore, unpleasant side effects are also quite infrequent making them a well-tolerated treatment. I have experimented with a wide range of herbal remedies and often found them more efficient than actual prescription medication, especially in the long run. The following have proven to work most efficiently:

**Lactuca Virosa (Opium Lettuce)** - do not be frightened by the name as this plant is no relative to the producer of opium (*papaver somniferum*), although it is known to have some of its beneficial properties. The main ingredient of this plant, lactucarium, has been appreciated for its analgesic, sedative, and anti-inflammatory mode of action for centuries. Two or three grams of leaves made into a tea will give you a pleasant relief!

**Mitragyna speciosa (Kratom)** - another plant with opiate resembling properties. This tea, sold as a legal high, does in fact act upon some of the opioid receptors in your body (delta receptors and slightly mu receptors), but lacks any of the traditional opiate side effects such as the risk of developing addiction (although it is possible to become addicted with frequent use of heavy doses, especially by the use of strong extracts). Its anxiolytic and anti-depressant made it popular among anxiety sufferers and quitting opiate users.

**Scutellaria lateriflora (Skullcap)** - A herb of the mint family with a broad medical application. This herb has proven to possess antitumor, anti-angiogenesis, hepatoprotective, antioxidant, anticonvulsant, antibacterial, and antiviral properties. Furthermore it has exhibited noticeable anxiolytic properties without any potentially harmful or unpleasant side effects and thus is a benign alternative for anxious patients. The proposed mechanism of action can be attributed to its inherent affinity for the GABA-A benzodiazepine receptors.

## Prescription medication

**In case you choose to visit a psychiatrist hoping him/her to help you with the management of anxiety, these are some of the options you have and will most likely be presented with. However I do not advocate the use of prescription medication as they tend to be addictive (respect granted to exceptions) and have many, unpleasant side effects, both short and long term. Prescription medication only create a room for your anxiety to hide in and as soon as you quit or do not increase the dose in respect to increasing tolerance the anxiety will escape this room and haunt you once again, often to a greater extent (rebound anxiety) than before.**

**Benzodiazepines** - Strong anxiolytics, anti-convulsants and, hypnotics that enhance the effect of the neurotransmitter gamma-aminobutyric acid (GABA). These are very helpful especially with panic attacks, but do great for anxiety too. Nevertheless, these are incredibly addictive and therefore I would not advise to use them long term, maximum of twice a week should eliminate development of any dependence upon this psychoactive drug, but even such a subtle regimen can become habitual if practiced long enough.

**Bupropion** - An atypical anti-depressant and a successful smoking cessation aid. Bupropion works by inhibiting the reuptake of the catecholamines dopamine and nor-epinephrine thus making them more available to the receptors in the entrapped synaptic cleft. Because the role of these transmitters is mostly excitatory, anxiety and insomnia can be aggravated. However it might appeal to depressed patients suffering from fatigue and lack of concentration.

**Buspirone** - Is a psychoactive drug that has proven to be quite efficient at treating anxiety and is to a lesser extent an anti-depressant. It possesses also nootropic properties by enhancing spatial learning and memory. It takes couple of weeks before the anxiolytic effects become fully noticeable (although immediate effects can be felt), but it is worth a try as it has few side effects, especially it does not affect sexual drive as many commonly prescribed anxiolytics tend to do.

**Cerebrolysin** - Neuropeptides from a pig's brain have been revealed to have neurotrophic (enhance neural formation) properties and therefore have found their place in the treatment of Alzheimer's disease among many other somatic/psychiatric maladies. Efficacy is high and few administrations have a long lasting effects making it necessary to administer only a few times. No significant side effects have been noted and this medication is generally well tolerated among a wide spectrum of patients. The only drawback, which might deter some from contemplating this approach, is that the most prevalent and ergonomic form available is in vials which require to be administered intramuscularly (IM) or intravenously (IV).

**Hydroxyzine** - Primarily an antihistamine, but has shown to be successful in treating mild anxiety. It possesses hypnotic properties making it suitable for insomniacs. For me it proved to be quite helpful, you may notice changes in appetite and drowsiness (both elevated).

**Naltrexone** - is an opioid receptor antagonist that is used in managing opiate dependence. It is not an anxiolytic but several studies have proven that it can be helpful in depersonalization. This is because opioid receptors have the ability to alter perception (therefore while on opiates you may feel depersonalized). Due to its antagonistic potential, it binds to the opioid receptors and blocks the access/function of any agonists trying to bind. The carried out studies had quite positive results for the participants that were treated for 6-10 weeks, at a fairly high average dose of 120 milligrams per day. Three individuals were relieved of their condition, the other subjects experienced partial alleviation of symptoms. On average a 30% decrease in depersonalization symptoms was reported.

**SSRI's** - Selective Serotonin Reuptake Inhibitors are a favorite option for many psychiatrists. These medications such as setraline, fluoxetine, paroxetine, and many others increase the levels of Serotonin in one's brain and thus intend to relieve anxiety. However these proved to have a low rate of efficiency (around 15%), ranking them below placebo, and many times make matters worse. It takes couple of weeks before the body adapts to the medication and effects start to show (if any show) and these medications usually possess horrible side effects including sexual problems. SSRI's also make you numb and this is not wanted by depersonalization sufferers as they are looking for the exact opposite, to feel emotions to a greater extent.

**SSRE (Tianeptine)** Selective Serotonin Reuptake Enhancer. Works in an opposite way to SSRI's described above. Instead of inhibiting the transmission at the synaptic cleft, SSRE's enhance the uptake which results in an uplifted mood, rather than emotional numbness as experienced with SSRI's

**Tramadol** - A synthetic opiate with affinities for serotonin and nor-epinephrine systems. In addition to the binding of Mu and Delta opioid receptors, this medicament inhibits the uptake of nor-epinephrine and serotonin, increasing its availability to binding in the synaptic cleft and leading to a down-regulation of these receptor sites in long run (might be beneficial in cases where the receptor sites are hypersensitive). Although the chances of developing dependence is high (as it is with benzodiazepines in chronic use) it works great at alleviating symptoms of depression and anxiety by enhancing focus, eliminating psychosomatic pains, and lifting mood.

**Pregabalin** - A GABA analogue, which does not alter the GABAergic system as it may imply, but works via a different mechanism. Used for peripheral neuropathy (nerve pain) management, but has proven to be great at relieving

the symptoms of Generalized Anxiety Disorder too. Its efficiency is comparable to the one of benzodiazepines, but with a lower addictive potential and a reduced list of side effects it seems like a better alternative.