

Mind, Mood & Food Dietary Supplements

The following chart provides evidence-based recommendations from the research on natural products used to manage depression, anxiety, sleep, and memory. It has been compiled from scientific databases and is intended as an exploratory learning guide, not a personal prescription. *We highly recommend that you consult with a nutritionist or MD trained in integrative medicine for an individualized supplement prescription based on your unique needs and medical history.*

Supplements for Depression

SUPPLEMENT	DESCRIPTION	DOSAGE	CAVEATS
St. John's Wort (SJW)	Extracted from <i>Hypericum perforatum</i> . SJW has multiple proposed mechanisms with several known biologically active components that influence HPA axis, gene expression, and inhibit re-uptake of multiple monoamine neurotransmitters.	600-1200mg, dosed two or three times daily; standardized to 0.3% hypericin	<p>Effective for mild-moderate depression.</p> <p>Caution: with Alzheimer's, schizophrenia, bipolar disorder, diabetes, renal transplants. May elevate TSH; decrease PT/INR if on warfarin.</p> <p>Contraindicated: with pregnancy, breastfeeding, pre-surgery HIV/AIDs, transplants as SJW Induces CYP450 3A4 causing drug interactions, (i.e. warfarin, oral birth control, anti-retrovirals, immunosuppressants, tramadol, sertraline, digoxin)</p>
SAMe (S-adenosylmethionine)	Cofactor (non-protein substance needed for certain reactions in the body). Needed for production of dopamine, serotonin, and cartilage components.	400-800 mg twice daily	<p>Likely Effective for mild-moderate depression especially augmentation of conventional antidepressants</p> <p>Caution: diabetes, anxiety, 3rd trimester pregnancy, bipolar disorder (mania induction and hypomania reported)</p> <p>Contraindicated: 1st trimester pregnancy,</p>

SUPPLEMENT	DESCRIPTION	DOSAGE	CAVEATS
Lithium	Mineral with natural sources found in whole grains, vegetables, and animal products.	Take under medical supervision! Blood level of lithium and thyroid function must be checked regularly.	breastfeeding Used by some psychiatrists/MD's for treating mania and depression in bipolar disorder, suicide prevention, treatment resistant major depression. Caution: with kidney and thyroid disease, check for possible adverse drug-drug interactions. Avoid: Pregnancy/breastfeeding
5HTP (5-hydroxytryptophan)	Precursor to serotonin. Supplement is made from the seeds of <i>Griffonia simplicifolia</i> (African plant).	150-300 mg daily, divided into 3 doses	Caution: If currently on SSRI's- may induce hypermania; Kidney disease, HIV/AIDS, epilepsy, history of mental disorders. Some reports of eosinophilia myalgia syndrome EMS both past (1990's due to contamination) and recent years. Contraindicated: in eosinophilia syndromes, Down's syndrome, mitochondrial encephalomyopathy, pregnancy/breastfeeding with antidepressants, 5-HTP receptor agonists, carbidopa, phenobarbital, pindolol, reserpine, tramadol, zolpidem.
Folic Acid 5methyltetrahydrofolate (5MTHF)	Water-soluble B-vitamin. Found in green leafy vegetables, lentils, beans, spinach, Used in combination with antidepressants to optimize their effect.	200-500 mcg daily (Higher doses may be indicated)	MTHFR Genetics recommended to dose folic acid Caution: Folic acid may mask pernicious anemia, thus it is important to determine type of anemia before treating with folic acid.

SUPPLEMENT	DESCRIPTION	DOSAGE	CAVEATS
L- Methylfoalte (Deplin)	Form of folate transported across blood-brain barrier	10-15mg daily	Likely effective as augmentation for clinical depression esp. for individuals with MTHFR mutations.
Omega-3 Fatty Acids	EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid)	2-6.6g daily of fish oil; Ratio of EPA:DHA varies greatly among supplements, depending on quality/fish source.	<p>Likely Effective as augmentation for major depression, possibly effective for mild cognitive impairment</p> <p>Caution: with liver disease, diabetes, bleeding disorders, antiplatelet/coagulation meds, low blood pressure, familial adenomatous polyposis, implantable defibrillators.</p> <p>Contraindicated: with known fish/seafood allergy</p>
Rhodiola rosea	Known as golden or arctic root. Plant root extracts function as adaptogen modifying stress response, mental focus, and mood. Monoamine Oxidase Inhibitor (A+B). Multiple bioactive compounds. Grows in cold regions of Europe/Asia.	170-340 mg daily or twice a day. Standardized 3% rosavin (SHR-5 formulation most studied)	<p>Possibly Effective for increasing focus, mild depression, and decreasing “mental fatigue.” Role as augmenter to conventional antidepressants.</p> <p>Caution: with diabetes, coagulation disorders, cardiovascular disease, hypotension; antihypertensive, arrhythmia, CNS depressants, immunosuppressants, anticoagulation, antiplatelet, or antidepressants</p> <p>Contraindicated: pre-surgery, pregnancy, breastfeeding</p>

NAC (N-Acetyl Cysteine)	Comes from L-cysteine (an amino acid). Increases the innate antioxidant glutathione in plasma and brain. Effects glutamate and dopamine pathways. Commonly used to treat Tylenol and carbon monoxide toxicity.	No standard dosing, but 1g of NAC twice daily for 24 weeks has been used in studies.	<p>Possibly Effective: depression in bipolar disorder, addiction (cannabis and cocaine)</p> <p>Caution: with hypertension, bleeding disorders; cardiovascular, gastrointestinal, and respiratory disorders; zinc deficiency, diabetes; anticoagulants, antiplatelet, antihypertensive, and antidiabetic medications, antibiotics, nitroglycerin.</p> <p>Contraindicated: breastfeeding</p>
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Supplements for Anxiety

SUPPLEMENT	DESCRIPTION	DOSAGE	CAVEATS
Kava (<i>Piper methysticum</i>)	Native to Pacific Islands where it is a traditional medicine. Belongs to the pepper family. Psychoactive effects due to multiple kavolactones.	100 mg three times daily Use kava extract standardized to 70% kava-lactone content.	<p>Caution: Can cause liver toxicity, thought to be primarily in preparations that include leaves.</p> <p>Contraindicated: with liver disease, Parkinson's disease, alcohol, CNS depressants, pregnancy, breastfeeding, pre-surgery</p>
Passionflower (<i>Passiflora incarnate</i>)	Popular in Native American culture. Named for its flower resembling Jesus' crucifixion.	45 drops of liquid extract, 90 mg daily, or 1 tsp of dried leaves steeped in 1 cup for 15 min three times daily have been used	<p>Caution: with hypotension, CNS depressants</p> <p>Contraindicated: with operating heavy machinery, pre-surgery, pregnancy, breastfeeding</p>
L- theanine	Amino acid found mostly	200 mg daily	Caution: with hypotension, history of headaches,

	in tea (i.e. green/black)		caffeine, antihypertensive medications Contraindicated: pregnancy, breastfeeding
Valerian (<i>Valeriana officinalis</i>)	When selecting products look for: 1. <i>Valeriana officinalis</i> , not "valerian." 2. States that part of the plant used is root/rhizome.	200 mg one to four times daily Look for extracts standardized to 0.8% valerenic acid, but not <0.3%	Caution: with liver disease, cardiovascular disease, operating machinery/driving Contraindicated: CNS depressants, alcohol, pre-surgery, pregnancy, breastfeeding
Lemon Balm (<i>Melissa officinalis</i>)	Indigenous to Southern Europe; grown in garden to attract bees.	Often a component in herbal formulas used for anxiety or sleep	May reduce agitation in Alzheimer's patients Caution: with thyroid disorders, glaucoma, alcohol, CNS depressants, operating machinery Contraindicated: pre-surgery, pregnancy, breastfeeding

Supplements for Sleep

SUPPLEMENT	DESCRIPTION	DOSAGE	CAVEATS
Melatonin (N-acetyl-5-methoxytryptamine)	Hormone made by the pineal gland (in the brain) from tryptophan. Regulates sleep cycle, released with decreasing light exposure. Melatonin in supplements comes from plants or is synthetically produced.	0.5-5 mg nightly	Caution: with seizures, hypotension, diabetes, hormonal imbalances, glaucoma, myopia, retinal damage, psychiatric disorders; calcium channel blockers, warfarin, pre-surgery. Contraindicated: women attempting pregnancy, pregnancy, breastfeeding
Valerian (<i>Valeriana officinalis</i>)	See previous valerian description	200-900 mg at bedtime	
Chamomile (<i>Matricaria recutita</i>)	German chamomile is commonly used in studies and commercial products.	3+ cups of tea daily May also be an ingredient in sleep formulas with a mixture of botanicals.	Caution: with asthma, hypotension, hormone sensitive cancers, calcium channel blockers, blood pressure medication, anti-inflammatory drugs, alcohol, CNS depressants, birth control drugs, operating heavy machinery Contraindicated: cardiovascular disease, bleeding disorders, pre-surgery; anti-platelet/coagulation, hormone replacement medications, pregnancy, breastfeeding; allergy to plants in Asteraceae/Compositae family

Supplements for Memory

SUPPLEMENT	DESCRIPTION	DOSAGE	CAVEATS
Huperzine A	A chemical that is made or extracted from the leaves of Chinese club moss	No standard dose. 50-200 mcg one to twice daily has been used in studies	Possibly effective Caution: with liver disease, vertigo, asthma, COPD, seizure disorder, cardiovascular disease, bradycardia, urogenital tract obstruction, peptic ulcer disease, acetylcholine inhibitors Contraindicated: pregnancy, breastfeeding
Red Korean Ginseng	Dried root of various species of the Araliaceae family of herbs. Red Korean ginseng is Panax (Asian) ginseng that has been steamed or sundried. Alone it doesn't improve memory, but in combo with ginkgo it may. Purported to help with abstract thinking, mental math skills.	No standard dose. 100-600 mg daily divided. Supplements standardized to contain a minimum of 5% ginsenosides per dose. For optimal benefit take for 4 weeks, then discontinue for 2 weeks. Max 900 mg three times daily has been used.	Possibly effective Caution: with hyper/hypotension, diabetes, bleeding disorders, sleep disorders, seizures, depression, schizophrenia, ulcers, tension headaches, drugs that prolong long QT interval, estrogen, hormone sensitive cancers, morphine, alcohol, other drugs (many drug-drug interactions), pre-surgery Contraindicated: pregnancy, breastfeeding
Acetyl-L-carnitine	A form of carnitine (amino acid). Other sources: red meat and dairy. Possibly improves memory and cognition in people with age-related memory difficulties.	No standard dose. 500-2000 mg daily in divided doses; up to 3 g daily have been used	Possibly Effective Caution: with hypertension, liver cirrhosis, peripheral vascular disease, diabetes, seizures, hypothyroidism, hemodialysis; anticoagulants, beta blockers, calcium channel blockers, warfarin Contraindicated: Acenocoumarol, pregnancy/breastfeed

SUPPLEMENT	DESCRIPTION	DOSAGE	CAVEATS
Bacopa (<i>Bacopa monnieri</i> ; Brahmi)	Leaf extract. Used in Ayurveda for enhancing memory/cognition.	300-450 mg daily Two different, specific commercial products have been used in clinical trials (KeenMind, Flordis; BacoMind, Natural Remedies)	Possibly Effective Caution: Drug-Drug interactions Contraindicated: pregnancy, breastfeeding
Ginkgo biloba	Extracted from Ginkgo biloba tree leaves.	No standard dose. 40-80 mg three times daily. Standardized to contain 24% to 27% ginkgo flavone glycosides and 6% to 7% triterpenes per dose	Possibly Effective Caution: with seizures, diabetes, bleeding disorders, infertility, electroconvulsive therapy, many drug- drug interactions Contraindicated: anticoagulation drugs, pre-surgery/dental work, women trying to conceive, pregnancy, breastfeeding

Natural Medicines Comprehensive Database Grading System

Effective: “This product has a very high level of reliable clinical evidence supporting its use for a specific indication. Products rated Effective are generally considered appropriate to recommend. Evidence from multiple (2+) randomized clinical trials or meta-analysis including several hundred patients (level of evidence = A). Studies have a low risk of bias and high level of validity by meeting stringent assessment criteria (quality rating = A). Evidence consistently shows POSITIVE outcomes for a given indication without significant valid evidence to the contrary.”

Likely Effective: “This product has a very high level of reliable clinical evidence supporting its use for a specific indication. Products rated “Likely Effective” are generally considered appropriate to recommend. To achieve this Effectiveness Rating a product is supported by all of the following: Evidence from multiple (2+) randomized clinical trials or meta-analysis including several hundred patients (level of evidence = A). Studies have a low risk of bias and high level of validity by meeting stringent assessment criteria (quality rating = A). Evidence consistently shows POSITIVE outcomes for a given indication without significant valid evidence to the contrary.”

Possibly Effective: “This product has some clinical evidence supporting its use for a specific indication; however, the evidence is limited by quantity, quality, or contradictory findings. Products rated “Possibly Effective” might be beneficial, but do not have enough high-quality evidence to recommend for most people.”

Possibly Ineffective: “This product has some clinical evidence showing ineffectiveness for a specific indication; however, the evidence is limited by quantity, quality, or contradictory findings. People should be advised NOT to take products with a “Possibly Ineffective” rating.

The following resources were used in preparing the supplement chart and offer extensive information, precautions, and contraindications on natural products:

- Natural Medicines Comprehensive Database (subscription) (www.naturaldatabase.therapeuticresearch.com)
- ConsumerLabs.com (subscription) (www.consumerlabs.com)
- The American Botanical Council has translated the German Commission E monograph on the proper use of herbal medicines. (www.abc.herbalgram.org)

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