Antidepressants

Description

To Jesus:

You can save this to a “Health” folder for easy access later.
Use this as a starting point for your own research and share with your doctor as appropriate.

You can use drugs.com or other trusted health websites to look up the latest information on
prescription & herbal drugs possible side & interaction effects.
Typing in the name of two
medications or a medication & an herb in a search bar of most browsers will bring up results
with their interaction effects.

Antidepressants

What to do first that’s cheapest-

Eating all organic to avoid toxins causing depression & anxiety

Low dose 1-5mg lithium chloride (cheapest), orotate or aspartate

Spirulina 500mg eaten with a vegetable, then increase as it increases mood & energy & concentration & is source of all EPA & DHA omega3 fatty acids in fish oil

Multivitamin & high dose vitamin B complex sustained release after breakfast

125mc/5000 IU vitamin D3 under the tongue (2x faster, stronger, longer) or with a meal with fat

Dark leafy greens for SAM-e mood boost, magnesium, boron, calcium, & vitamin K1 the body makes into vitamin K2 making the vitamin D3 many times more effective

Amino acids DL-phenylananine (body makes into tyrosine), L-phenylananine, L-tyrosine that body makes into dopamine, serotonin, norepinephrine, epinephrine, thyroid hormones. Very low side effects & so effective may even stop cravings/depression/anxiety in people withdrawawing from opiates/benzos/alcohol/meth/nicotine

Saving this to a “Health” email folder may make access easier.

You can use this as an aide to your own research and share with your doctor as appropriate.

You can use drugs.com or other trusted health websites to look up the latest information on prescription drugs, herbs, foods or other treatments possible side & interaction effects.

Here's some certifications or registrations to look for on supplements & herbs:

USP may be best because they buy products in stores & test 6x a year

http://www.usp.org/usp-verification-services/usp-verified-dietary-supplements/verified-supplements/participating-companies

Quality Supplements

GMP includes testing for professional sports banned lists

Certifications

NSF

Listing Category Search Page

UL

Consumerlab has testing available to review by prescription

ConsumerLab.com – independent tests and reviews of vitamin, mineral, and herbal supplements | Consumerlab.com

Pharmaceutical grade is a higher level of purity & review in manufacturing as well.

US manufacturing & processing may have better supervision even of pharmaceutical grade

https://www.consumerreports.org/supplements/how-to-choose-supplements-wisely

Victor Frankel- Man's Search for Meaning (logotherapy)

Have a reason, a purpose for getting out of bed that demands attention

Do things that pull us out of ourselves- community, nature, art…

Embrace suffering as painful but not bad, & see how can we use our experience to help others

Dereflecting- see own experiences from another's eyes

Fear creation- work to overdue & catastrophise fear while dereflecting

Have sense of humor

Couples

Have missions together to help others, keep updating

Depression treatments

Safe depression treatments

The therapies that may help depression without causing a personality change, aggression/suicidality, or withdrawal symptoms are:

Eating organic to avoid added mercury, lead, & glyphosate/Roundup & other added toxins in foods

Lithium orotate

Psychotherapy

Spirulina’s EPA & DHA omega3 fatty acids for bipolar disorder

Alpha-linolenic acid (ALA)

Modafinil (Provigil) & Armodafinin (Nuvigil)

N-acetylcysteine (NAC)

Anti-inflammatories

Avoiding gluten

Ashwaganda

Ketamine for unipolar & bipolar depression

Selegiline (Eldepryl) a selective MAOI-B inhibitor

What works fastest for depression crises:

Compassion & gratitude contemplation/meditation

Brief cognitive therapy

Therapeutic Evaluative Conditioning (TEC) 2 minute app

tDCS

tACS/CES

infrared therapy

gratitude journal

meditation

Medications:

Modafinil (Provigil) & Armodafinin (Nuvigil)

Selegine (Emsam)- patch MAOI

Supplements:

spirulina (when taken with a vegetable)

vitamin B100 complex (methyl may be most effective, especially methylfolate B9)

carnitine (acetyl-L may be fastest)

vitamin D3 (with a meal)

Mucuna

kale (raw-raises SAM-e levels)

curcumin (cheaper is turmeric with a little black pepper)

probiotics (with bifidobacterium longum, lactobacillus helveticus, lactobacillus reuteri and lactobacillus rhamnosus)

bright light therapy

zinc

lemon oil (a little rubbed under nose for smelling)

saffron

sarcosine

What appears to cause depression-

Refined vegetable oils- mercury, formaldehyde

Cooked oils other than organic cold/expeller pressed coconut, macadamia nut, MCT oil- formaldehyde

All modern wheat especially bleached- mercury & 10x inflammation

Bleached rice- mercury & arsenic

FD&C food colorings (color & number like red #5)- mercury & lead

Fructose of any kind including high fructose corn syrup (CFCS)- mercury

Suicidality

Who is at risk?

Jobs with highest rates

85 per 100,000 people

Farming

Fishing

Foresting

53-Construction

48-

Installation

Maintenance

Repair

Bottom Line Personal magazine p15 12/15/16

Social media & (pre) teen depression

Youth suicides were lowest ever recorded in 2007, right before smartphones & social media exploded. Eight years later (2015) they were at record highs, with a 300% suicide rise for 12-14 year old girls, and 200% for boys. Even seniors in high school have seen a big drop in spending time with friends, working, dating- instead reporting using social media alone in their room.

Being on social media- Instagram was the worst followed closely by Snapchat, then Facebook & Twitter- appears to increase loneliness, unhappiness, depression & suicides in preteens & teens.

The worst outcomes appear to be when on social media for 2 hours or more per day, when used in isolation, & especially at night-

causing sleep deprivation. Sleep interruption to view or answer texts/posts (or watch Youtube) appears to increase anxiety & make return to sleep very difficult, and may be causing feelings of loneliness, unhappiness & depression to spiral out of control. 57% more teens were reported as sleep deprived in 2015 than 1991.

Red shift to turn off blue light at night on phone & wearing red laser glasses help by turning on melatonin in the brain (mimicks color of last rays of sunlight).

What appears to help preteens' & teens' moods was any activity not in front of a smartphone/tablet/computer/television.

What may be worst is being alone in a room with a smartphone/tablet/computer/television, especially at night.

What helps reduce suicide, depression, loneliness & isolation in (pre) teens

Locking up the smartphone/tablet/computer/television at bedtime appears to have the largest effect on reducing screen time when it is the most damaging to the (pre)teens overall physical & mental health. What appears to help sleep the most is reading books & magazines before bed.

Keeping the smartphone/tablet/computer/television during the daytime in common rooms only & out of the teens bedroom appears to have the best chance of reducing the isolation & loneliness (pre) teens feel when using a smartphone/tablet/computer/television.

Make it a condition of getting a phone/tablet/computer from the very beginning, or implement it immediately and use this article & study as the reason why. It can serve as a conversation starter for older teens as well.

https://www.rsph.org.uk/our-work/policy/social-media-and-young-people-s-mental-health-and-wellbeing.html

https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/

How to test for effectiveness of intervention for depression

If a person makes a full recovery of their functioning at work, they are 400% more likely to not need extra intervention, other than the ones they are already using. That may also help determine how much help they need when they are initially looking for or contemplating getting treatment.

Compassion/Gratitude Meditation

Meditating on the emotions of compassion & gratitude (either separately or moving back and forth between them) reduces anxiety & depression greatly and has been shown to have long lasting effects on the brain & on happiness. And it increases empathy for others as well. When I'm feeling the strongest depression or anxiety I contemplate/meditate for half a minute or longer on compassion for myself (no one should have to feel depression or anxiety) then compassion for others who are feeling depression &/or anxiety, then move it to contemplation of gratitude because I often don't feel that way, & then to gratitude that most people don't have to feel that way. By far it has worked on my worst depression & anxiety like nothing else, and quicker than anything else.

Ketamine for unipolar & bipolar depression

Ketamine is an anesthetic (used frequently in emergency rooms or in palliative pain care) that when IV infused by a doctor at 1/10th the anesthetic dose appears to often relieve even suicidal depression within minutes or hours for up to 75% of people studied (using an IV infusion), much higher than almost any other legal antidepressant studied. It may also promote a sense of social connection often missing in people struggling with depression.

It is not the ketamine that appears to have the antidepressant effect, but one form of a metabolite (hydroxynorketamine) called (2R,6R)-HNK. This metabolite appears to activate a glutamate receptor- ?-amino-3-hydroxy-5-methyl-4-isoxazole propionic acid (AMPA), not inhibit NDMA receptors.

NMDAR inhibition-independent antidepressant actions of ketamine metabolites . Zanos P. et al. Nature. 2016 May 4. doi: 10.1038/nature17998. PMID:27144355.

When starting off, a singular ketamine infusion typically works immediately to relieve depression & lasts days or up to a week before the next infusion is needed. Rather than people having to come in every three to six days when the antidepressant effect wears off, most clinics now see if after the first infusion or two someone has a strong antidepressant response, then follow up with a total of four to six infusions within 2 weeks. This initial infusion schedule appears to help lengthen the time the next infusion is needed. After that people come back when they feel they need a single booster infusion, often at 3 weeks to one month. The antidepressant effect lasts for different amounts of times for different people, for weeks at a time after the first four to six infusions, but often gets longer & longer for each subsequent infusion. At first it may last for only a couple weeks, but eventually may get to where it lasts for up to six months between infusions.

Ketamine can have temporary dissociative side effects as well as increase the heart rate and/or blood pressure for the first hour, minimized by the ultralow dosage for depression & relaxed setting. Ketamine used outside of this slow infusion protocol appears to be ineffective for depression & often addictive.

When ketamine is used for depression & PTSD, phone therapy can be done starting at the time during infusion when the depression relieves. Then people are often able to recall painful memories & reintegrate them with a sense of calmness & new perspective.

I've talked with doctors in half a dozen clinics around the nation that use ketamine IV infusion for depression and they all say it works about 75% of the time, same as the studies below report. One doctor in Denver cited a study showing that four infusions over the first two weeks works as well as six, and they tried it & now reliably find it works as well as six for extending the length between when each new booster infusion is needed to three to four weeks when beginning treatment.

Below are a number of reviews of the clinical studies on ketamine IV infusion for depression.

J Clin Psychiatry. 2017 Apr;78(4):e415-e419. doi: 10.4088/JCP.17f11567.

Ketamine for Depression, 1: Clinical Summary of Issues Related to Efficacy, Adverse Effects, and Mechanism of Action.

Andrade C.

Coyle CM, Laws KR. The use of ketamine as an antidepressant: a systematic review and meta-analysis. Hum Psychopharmacol. 2015;30:152-163.

The Use of Ketamine in the Acute Management of Depression

Andrew J. Hvizdos

US Pharm. 2016;41(11):HS28-HS32.

A systematic review and meta-analysis of randomized, double-blind, placebo-controlled trials of ketamine in the rapid treatment of major depressive episodes

A. McGirr

Psychological Medicine (2015), 45, 693–704. © Cambridge University Press 2014

doi:10.1017/S0033291714001603

http://www.psychiatrist.com/_layouts/PPP.Psych.Controls/ArticleViewe

http://www.ketamineadvocacynetwork.org/route-of-administration/

https://www.washingtonpost.com/national/health-science/a-one-time-party-drug-is-helping-people-with-deep-depression/2016/02/01/d3e73862-b490-11e5-a76a-0b5145e8679a_story.html?utm_term=.18ca68d6f3f2

http://time.com/4876098/new-hope-for-depression/

https://www.sciencealert.com/ketamine-found-to-have-an-unbelievable-effect-in-treating-severe-depression

https://www.webmd.com/depression/features/what-does-ketamine-do-your-brain#2

https://www.webmd.com/mental-health/news/20170706/ketamine-and-depression-faq

As seen in the above studies, IV infusion of ketamine for depression is the best studied with the best outcome research (75% effectiveness). Other routes of administration have been studied,

just not as much.

Sublingual

Sublingual ketamine in at least one study was as effective as IV infusion (20 of 26 people with full response, 77%, and another three with moderate or partial response) in relieving depression in unipolar or bipolar depression, at a small fraction of the cost. 10mg (2 drops of 100mg/ml of racemic ketamine) was placed under the toungue for five minutes before swallowing (increased by 1 drop as needed in subsequent dosing later in the week). It produced rapid, clear & sustained mood, stability, cognition, & sleep improvement for a couple days to a week. People experienced only mild & transitory light-headedness & no euphoria, disassociation, or psychosis. If there was no response after a week, the dosage was raised.

If a doctor doesn't want to prescribe the liquid form, compound pharmacies can make 10mg doses that will dissolve sublingually that can be safely prescribed (because of the ultra low dosage).

One doctor I talked to said significantly higher sublingual doses eventually led to tolerance to the antidepressant effects, but other doctors have reported no problems with sublingual doses for depression.

Antidepressant, mood stabilizing and procognitive effects of very low dose sublingual ketamine in refractory unipolar and bipolar depression

Diogo R. Lara Luisa W. Bisol Luciano R. Munari

International Journal of Neuropsychopharmacology, Volume 16, Issue 9, 1 October 2013, Pages 2111–2117, https://doi.org/10.1017/S1461145713000485

Intramuscular

Intramuscular ketamine appears to work as an immediate antidepressant, but may have lower efficacy than IV infusion.

Cusin C Hilton GQ Nierenberg AA Fava M (2012) Long-term maintenance with intramuscular ketamine for treatment-resistant bipolar II depression. Am J Psychiatry 169:868–869. https://doi.org/10.1176/appi.ajp.2012.12020219

Intranasal

Intranasal ketamine appears effective as an antidepressant but with lower efficacy than IV infusion.

Lapidus KA, Levitch CF, Perez AM, et al. A randomized controlled trial of intranasal ketamine in major depressive disorder. Biol Psychiatry. 2014;76:970-976.

Oral

Oral ketamine appears to be effective but less efficacious against depression than IV infusion & takes longer to start working.

J Palliat Med. 2013 Aug; 16(8): 958–965.

doi: 10.1089/jpm.2012.0617

Daily Oral Ketamine for the Treatment of Depression and Anxiety in Patients Receiving Hospice Care: A 28-Day Open-Label Proof-of-Concept Trial

Scott A. Irwin et al.

J Palliat Med. 2010 Jul;13(7):903-8. doi: 10.1089/jpm.2010.9808.

Oral ketamine for the rapid treatment of depression and anxiety in patients receiving hospice care.

Irwin SA, Iglewicz A.

J Clin Psychopharmacol. 2017 Aug;37(4):464-467. doi: 10.1097/JCP.0000000000000717.

Oral Ketamine in Treatment-Resistant Depression: A Clinical Effectiveness Case Series.

Al Shirawi MI, Kennedy SH, Ho KT, Byrne R, Downar J.

Efficacy and safety of oral ketamine versus diclofenac to alleviate mild to moderate depression in chronic pain patients: A double-blind, randomized, controlled trial

Jafarinia, Morteza et al.

Journal of Affective Disorders , Volume 204 , 1 – 8

Ketamine for bipolar depression

Ketamine given by IV infusion, intramuscular injection, & sublingually has been used for people with bipolar disorder without apparently triggering manic episodes. The same percentage of people with bipolar depression (75%) found immediate relief with

ketamine infusions as unipolar depression, including from suicidal ideation.

Antidepressant, mood stabilizing and procognitive effects of very low dose sublingual ketamine in refractory unipolar and bipolar depression

Diogo R. Lara Luisa W. Bisol Luciano R. Munari

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Biol Psychiatry. 2012 Jun 1;71(11):939-46. doi: 10.1016/j.biopsych.2011.12.010. Epub 2012 Jan 31.

Replication of ketamine’s antidepressant efficacy in bipolar depression: a randomized controlled add-on trial.

Zarate CA Jr, Brutsche NE, Ibrahim L, Franco-Chaves J, Diazgranados N, Cravchik A, Selter J, Marquardt CA, Liberty V, Luckenbaugh DA.

A Randomized Add-on Trial of an N-methyl-D-aspartate Antagonist in Treatment-Resistant Bipolar Depression

Nancy Diazgranados et al.

Arch Gen Psychiatry. 2010;67(8):793-802. doi:10.1001/archgenpsychiatry.2010.90

Sarah E. Grady, Travis A. Marsh, Allison Tenhouse, and Kelsey Klein (2017) Ketamine for the treatment of major depressive

disorder and bipolar depression: A review of the literature. Mental Health Clinician: January 2017, Vol. 7, No. 1, pp. 16-23.

https://doi.org/10.9740/mhc.2017.01.016

https://www.medscape.com/viewarticle/768859

https://ktcpartnership.com/2016/10/bipolar-disorder-lithium-ketamine-need-know/

Cost

Each IV infusion can cost between $300 to $1500, and may not be covered by insurance. Intramuscular injection, oral, intranasal, or sublingual are usually much cheaper, but efficacy may be lower on average than with IV infusion. Oral & sublingual can be as low as $40 a month through a compound pharmacy.

Insurance

In some areas around 35% of people get some reimbursement by their insurance company for the treatment. In making an argument to the insurance company, the advantages are there is no waiting two months of daily usage (like the serotonin antidepressants) to see if it works- if it doesn't work after the first two infusions people don't usually get more. And after the initial four to six infusions in the first two weeks, many people find that each single booster infusion may start at 3-4 weeks but may eventually stretch as long as every six months, so yearly treatment may become cheaper over time. Ketamine IV infusion is far cheaper than hospitalization.

Clinics recommend engaging the insurance company before starting treatment so if they do eventually decide to cover it, it will be retroactive to the first. You can ask the clinic for a insurance friendly

full receipt you can forward to attempt getting reimbursement starting with the first treatment.

Here is a pain clinic willing to do a ketamine IV infusion for depression:

Center for Pain Management

533 E County Line Rd, Greenwood, IN 46143

8AM–4:30PM (317) 706-7246

$1k (minimum price if insurance doesn't pay) to $5k per infusion

For people who want much cheaper ($60 a month or less) treatment, sublingual or intranasal ketamine is prescribed by doctors around the country and fulfilled by compounding pharmacies. Here in Bloomington the compounding pharmacy Williams Brothers said if they got a ketamine prescription they would call their pharmacy research to get the information on how to prepare it. Controlled substance prescriptions may not be able to be mailed to customers in Indiana.

I've talked with Dr. Dave Miller about how doctors prescribe ketamine sublingually & nasally. He is a pharmacist at Keystone Pharmacy in Michigan. They aren't licensed to send prescriptions to Indiana, but he is willing to talk with any doctor or pharmacy. He says sublingual is often prescribed in liquid form, 50mg/ml, 0.2mg to 1ml once daily, with 30ml being one month supply. As a nasal spray it is often prescribed 125mg/ml, with one spray each nostril at bedtime, and up to 2 as needed if dosage needs to be increased.

Dr. Dave Miller

Keystone Pharmacy (Compounding)

4021 Cascade RD SE, Suite 50

Grand Rapids, MI 49546

616-974-9792

Therapeutic Evaluative Conditioning (TEC) app

The TEC app is used for a couple minutes at a time and works to condition users to self-injury and suicidal ideation. It appeared to reduce cutting and suicidal behaviors by at least a third.

J Consult Clin Psychol. 2016 Jun;84(6):544-57. doi: 10.1037/ccp0000093. Epub 2016 Mar 28.

A brief mobile app reduces nonsuicidal and suicidal self-injury: Evidence from three randomized controlled trials.

Franklin JC, Fox KR, Franklin CR, Kleiman EM, Ribeiro JD, Jaroszewski AC, Hooley JM, Nock MK

Brief cognitive therapy

Brief cognitive therapy in one study appeared to reduce suicide attempts by 2/3rds over traditional treatments.

Suicide Rates Are Rising. What Should We Do About It?

By Richard A. Friedman

What to ask if you suspect someone is depressed and/or suicidal?

I'm worried about you. Can we talk?

Ask if they are thinking about hurting themselves, committing suicide.

Do you have a plan to kill yourself?

Have you thought about what method you would use?

When are you thinking about doing this?

I'm glad you shared this with me. You don't have to go through this alone.

Who else have you talked with?

Lets call the NSPL 800-273-8255 right now.

Look up suicide warning signs together.

If not in imminent danger, help call to make an appointment to see a mental health professional & go to the appointment.

Call 911 if immediate need or take to emergency room/local mental health clinic, including if they refuse contact.

Firearms & pills are most deadly, take them away.

MAOI Inhibitors

MAOI inhibitors were the first antidepressants discovered, and the strongest. Some can raise serotonin, norepinephrine, epinephrine, and dopamine all together. Because of the combination effects people may see less serotonin side effects than when serotonin is given alone and used in higher activating doses (including passivity,

lowered empathy). MAOI inhibitors often work where no other prescription antidepressants are effective, as with anxious or atypical depression, and some can be 85% effective with a high enough dosage and after full inhibition is achieved and on a maintenance dose. MAOI inhibitors when taken orally (swallowed) can raise blood pressure dangerously high when taken with selective foods that have tyramine- like chocolate, cheese, wine & bananas and are rarely prescribed for oral use. Because the effect is found in the small intestine, taking MAOIs transdermally (skin) or sublingually (in mouth w/out swallowing) appears to prevent the food interaction effects & make MAOIs far safer than otherwise & the most effective antidepressive when given at sufficient dosages.

Selegiline

Selegiline (deprenyl) is given in pill form for Parkinson's because at low doses it is only a MAOI-B inhibitor that raises dopamine. At high doses it also is a MAOI-A inhibitor that also raises serotonin, norepinephrine, & epinephrine. As Emsam, a patch on the skin, selegiline is given transdermally () for depression and because it bypasses the small intestine it appears to have much lower or no interaction effects with foods with tyramine, even at high doses. It presently at mid 2018 costs $1100 per month before insurance.

When selegiline is in pill form (Eldepryl) it may also avoid the small intestine & the tyramine side effects when taken sublingually (under the tongue). It also may be more effective sublingually by reaching higher blood levels (up to 2-4x more bioavailable). It presently at mid 2018 costs $120-$300 a month before insurance, $43 with a coupon at goodrx.com.

Because selegiline and another selective MAOI-B inhibitor at low doses- rasagiline -both appear to lengthen life & physical ability & be

neuroprotective at low doses (10mg a week for selegiline & 7mg a week for rasagiline) and appear to increase mortalilty at high doses, other MAOIs should likely be used in high doses for depression alone or in combination with selegiline to minimize the side effects of each. Selegiline & rasagailine may be taken by people not on other MAOI inhibitors for life extension & better physical function during aging.

Neuropsychiatr Dis Treat. 2014; 10: 1911–1923.

Published online 2014 Oct 6. doi: 10.2147/NDT.S59107

PMCID: PMC4200016

EMSAM (deprenyl patch): how a promising antidepressant was underutilized

Gregory M Asnis and Margaret A Henderson

Selegiline and addiction

Selegiline has been used for over 40 years with no reported instances of abuse.

Clin Pharmacol Ther. 1994 Dec;56(6 Pt 2):768-73.

Amphetamine-like effect of l-deprenyl (selegiline) in drug discrimination studies.

Yasar S, Bergman J.

Clin Pharmacol Ther. 1994 Dec;56(6 Pt 2):757-67.

Evaluation of physical dependence liability of l-deprenyl (selegiline) in animals.

Nickel B, Szelenyi I, Schulze G.

The MAOIs usable at higher dosages for depression

Transcranial direct current stimulation (tDCS) for depression & anxiety.

`

tDCS is used by professional athletes to improve motor coordination (Golden State Warriors), pilots to improve learning, and patients to reduce pain. tDCS for depression & anxiety is usually done with a small 9 volt battery with a circuit and dial to regulate between 0.5-2milliamps and wires with clips to two small sponges & a headband. The sponges are soaked in salt water (1cup water 1/4 ts salt works) or better a 24-32 oz spray bottle of water with 3/4ts – 1 ts of baking soda mixed in. The baking soda keeps the sponges smelling fresh. One sponge is placed with one edge above the middle of the left eyebrow and the other edge closer to the ear and with the bottom of the sponge right at the hairline & the rest of the sponge extending up to an inch & a half above the hairline (positive red clip) at the F3 left dorsolateral prefrontal cortex and the other directly above the right eyebrow (negative black clip) starting at the eyebrow (not the hairline), or perhaps more effectively on the upper right arm. This placement appears to stimulate an area in the brain that is understimulated and understimulate an area that is overstimulated in depression.

(note that right electrode may work better on right arm/shoulder)

totaltdcs.com

diytdcs.com/tag/electrode-placement

People usually start at 0.5 milliamps and within the session or succeeding sessions ramp it up eventually to 2 milliamps, depending on comfort & side effects. I have only noticed a buzz if the sponges are very wet at 2 milliamps. People can use a lower amperage or frequency if they experience side effects. The buzz is useful to know the connections are working properly.

One kit off ebay for just under $25 is from Lithuania. It works ok but has thin wires & is good as a backup unit or for an inexpensive tryout. The $77 Omni kit direct from the maker or on ebay is warrantied for five years and uses better materials. If you know someone who has one you can ask them to meet you to try it out & see if it lifts your depression before buying it. Most people use it first thing in the morning. Some people start off using it more frequently, then eventually use it less & less & until they find their best maintainance schedule. If you own the kit you can use it whenever you feel you need it, if you aren't experiencing side effects. The clips last longer if rinsed thoroughly to get rid of the salt, and the battery replacement costs only three dollars for an alkaline.

People who are lefthanded may wish to try this on the other side of the head as well, if the F3 location doesn't work, start with a shorter term so the effects won't be as great if the normal spot doesn't work, and put the cathode (negative, black clamp) on the opposite arm or above the left eyebrow.

tDCS may be safe as tested up to 60 minutes and 4 mA, but the safe frequency of use has not been fully studied.

Contraindications/dangers appear to be if you have open wounds at the sponge placement, seizures, are pregnant, have metal/implants in your head, have an infection in/on the head, or have bipolar depression (may trigger mania). A normal itch & tingle may occur during the treatment. Rarer chances of a headache or skin problems may be reduced with a lower amperage and/or lower frequency.

Clinical Neurophysiology Practice Volume 2, 2017, Pages 19-25

Adverse events of tDCS and tACS: A review

Hideyuki Matsumotoa et al.

Safety aspects of transcranial direct current stimulation concerning healthy subjects and patients

CsabaPoreisz et al.

Brain Research Bulletin Volume 72, Issues 4–6, 30 May 2007, Pages 208-214

https://doi.org/10.1016/j.brainresbull.2007.01.004

Antal, A. et al. (June 2017). “Low intensity transcranial electric stimulation: Safety, ethical, legal regulatory and application guidelines”. Clinical Neurophysiology. doi:10.1016/j.clinph.2017.06.001.

Usefulness:

It works very fast, reliably, and is inexpensive per treatment. It can be used when needed and on a set schedule. Personally it worked stronger than any other treatment I’ve used for depression &

anxiety, by a large amount. It is like other treatments- if it works for you, add it to your treatments and use them in combination.

It also has research showing it helps addiction & ADHD among other disorders. I find it reduces impulsivity, increases calmness, & helps social understanding. It appears to help overall global functioning- it helps in many areas of life.

Because it doesn't take up to a month or two to work like some of the antidepressant drugs, having it available for immediate use for someone in deep depression &/or suicidal could help save a life if it works for them.

Transcranial direct current stimulation in severe, drug-resistant major depression

R.Ferruccia et al.

Journal of Affective Disorders Volume 118, Issues 1–3, November 2009, Pages 215-219

https://doi.org/10.1016/j.jad.2009.02.015

http://happierhuman.wpengine.netdna-cdn.com/wp-content/uploads/2014/07/Experimental-Neurology-219-2009-14%E2%80%9319-Treatment-of-depression-with-transcranial-direct-current-stimulation-tDCS-A-Review.pdf

Exp Neurol. 2009 Sep;219(1):14-9. doi: 10.1016/j.expneurol.2009.03.038. Epub 2009 Apr 5.

Treatment of depression with transcranial direct current stimulation (tDCS): a review.

Nitsche MA, Boggio PS, Fregni F, Pascual-Leone A.

Brain Stimulation Volume 1, Issue 3, July 2008, Pages 206-223

Transcranial direct current stimulation: State of the art 2008.

Michael A.Nitsche et al.

https://doi.org/10.1016/j.brs.2008.06.004

Transcranial direct current stimulation for depression: 3-week, randomised, sham-controlled trial

Colleen K. Loo, Angelo Alonzo, Donel Martin, Philip B. Mitchell, Veronica Galvez, Perminder Sachdev

The British Journal of Psychiatry Jan 2012, 200 (1) 52-59; DOI: 10.1192/bjp.bp.111.097634

Kalu, U., Sexton, C., Loo, C., & Ebmeier, K. (2012). Transcranial direct current stimulation in the treatment of major depression: A meta-analysis. Psychological Medicine, 42(9), 1791-1800. doi:10.1017/S0033291711003059

Transcranial direct current stimulation for major depression: an updated systematic review and meta-analysis

Pedro Shiozawa Felipe Fregni Isabela M. Benseñor Paulo A. Lotufo Marcelo T. Berlim Jeff Z. Daskalakis Quirino Cordeiro André. R. Brunoni

International Journal of Neuropsychopharmacology, Volume 17, Issue 9, 1 September 2014, Pages 1539, https://doi.org/10.1017/S1461145714000807

tDCS & bipolar depression

In a review of studies from 2002-2016, tDCS was effective for bipolar in relieving depression, but depression switched to mania in 13% of patients. They should make tDCS a rare option for treatment resistant bipolar depression. Perhaps starting at .5 milliamps for ten minutes & only increasing the time first & the amperage later if needed and only to the point the depression lifts would help prevent switching to mania.

Transcranial direct-current stimulation (tDCS) for bipolar depression: A systematic review and meta-analysis.

Dondé C et al.

Prog Neuropsychopharmacol Biol Psychiatry. 2017 Aug 1;78:123-131. doi: 10.1016/j.pnpbp.2017.05.021. Epub 2017 May 25.

Prog Neuropsychopharmacol Biol Psychiatry. 2017 Aug 1;78:123-131. doi: 10.1016/j.pnpbp.2017.05.021. Epub 2017 May 25.

Transcranial direct-current stimulation (tDCS) for bipolar depression: A systematic review and meta-analysis.

Dondé C1, Amad A2, Nieto I3, Brunoni AR4, Neufeld NH5, Bellivier F6, Poulet E7, Geoffroy PA8.

Transcranial direct current stimulation (tDCS) in unipolar vs. bipolar depressive disorder

A.R.Brunonia et al.

Progress in Neuro-Psychopharmacology and Biological Psychiatry Volume 35, Issue 1, 15 January 2011, Pages 96-101

https://doi.org/10.1016/j.pnpbp.2010.09.010

Hypomania Induction in a Patient With Bipolar II Disorder by Transcranial Direct Current Stimulation (tDCS)

Gálvez, Verònica et al.

Journal of ECT: September 2011 – Volume 27 – Issue 3 – pp 256-258

doi: 10.1097/YCT.0b013e3182012b89

A critical review of trials of transcranial direct current stimulation and trigeminal nerve stimulation for depression: the issue of treatment-emergent mania

Trends Psychiatry Psychother. vol.39 no.1 Porto Alegre Jan./Mar. 2017

Pedro Shiozawa et al.

http://dx.doi.org/10.1590/2237-6089-2016-0027

What placement may have quicker and stronger effects?

The F3 area an inch and a half above the hairline above the left eyebrow anode (positive, red clip) has also been paired with placing the cathode (negative, black clip) on the right shoulder (extracephalic-outside the head). There isn't as much research, but the effects may be faster & stronger than placing the cathode above the right eyebrow.

Fronto-extracephalic transcranial direct current stimulation as a treatment for major depression: an open-label pilot study.

J Affect Disord. 2011 Nov;134(1-3):459-63. doi: 10.1016/j.jad.2011.05.018.

Martin DM, Alonzo A, Mitchell PB, Sachdev P, Gálvez V, Loo CK.

IEEE Trans Biomed Eng. 2014 Sep;61(9):2488-98.

Comparison of cephalic and extracephalic montages for transcranial direct current stimulation–a numerical study.

Noetscher GM, Yanamadala J, Makarov SN, Pascual-Leone A.

How to buy & use

Here’s the least expensive kit I’ve bought- $24 & buy your own 9volt alkaline (not heavy duty or rechargeable) battery. It takes 2 weeks to ship from Europe. This kit is at 2amps and does not go down to 0.5 amps. Amperage can be lowered by using less salt or baking soda as well. There is another kit for $77 that has a 5yr warranty & goes from 0.5 to 2 milliamps.

https://www.ebay.com/itm/Transcranial-Direct-Current-Stimulation-TDCS-DIY-2mA-ELECTRODES-HEADBAND/292308817065?_trkparms=aid%3D111001%26algo%3DI
c3e3-11e7-bdc1-
74dbd1808e4e%257Cparentrq%253A97954a9515f0a86bc8fc1605fffb9

Includes sponges & headband.

https://www.ebay.com/itm/Transcranial-Direct-Current-Stimulation-TDCS-DIY-2mA-or-from-0-2mA-to-3mA/292202799470?_trkparms=aid%3D111001%26algo%3DREC.SE
c3e3-11e7-bdc1

74dbd1808e4e%257Cparentrq%253A97954a9515f0a86bc8fc1605fffb9

This one doesn’t include sponges & headband.

Most use salt to make the sponges conduct current better, I use baking soda instead to keep the sponges smelling good. It’s good to rinse the sponges occasionally & microwave them when wet if using salt. The first time I use the sponges after cleaning I sprinkle baking soda on the top before spraying the baking soda & water solution on them. I mix 1tb baking soda in a spray bottle and spray the sponges wet, put one on my right arm near my shoulder fastened with a rubber band for the negative/black electrode/clamp, and one starting at & above my hairline above my left eyebrow held by a headband and attack the positive/red electrode/clamp. I plug in the 9 volt battery for 40 minutes at 2 amps. I like the buzz/itch because it tells me it is working. Touching the sponge on the right arm with the toungue will tell its working with a metallic taste.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3339846/

https://thebraindriver.com/pages/tdcs-placement-montage-maps-studies

http://tdcsplacements.com/

TASC/CES

Transcranial alternating current stimulation

Cranial electrotherapy stimulation

TASC or CES has been used for seventy years to help insomnia, depression, anxiety, and addiction. Two electrodes or clips are placed on or above the ears, with a very low amount of alternating current is applied.

On one review of studies, apparently insomnia (18 studies, 648 people) was reduced by 62%, depression (18 studies, 853 people) by 47%, anxiety (38 studies, 1495 people) by 58%, cognitive dysfunction (13 studies, 648 people) by 44%, and drug abstinence (15 studies, 535 people) improved by 60%.

TACS/CES appears to target most of the symptoms of PTSD successfully.

Another review found it useful against fibromyalgia.

No one in these studies reportedly had any serious side effects, at most mild headache & irritation at the electrode site and no switching from depression to mania.

The CES/TASC devices can run from $300-$900. On ebay a Bumble Bee Cranial Electro Stimulation Device is available for as little as $54 or $74 for the pro version.

https://www.ebay.com/itm/Cranial-Electro-Stimulation-Device-The-Bumble-Bee-Delta-Theta-Alpha-Beta/182775541654?hash=item2a8e456f96:g:UZkAAOSwKQ9aJOJ7

https://www.ebay.com/itm/Cranial-Electro-Stimulation-Device-The-Bumble-Bee-PRO-Version/183024470523?hash=item2a9d1bc9fb:g:te4AAOSwn9VaYa6N

http://cdn.shopify.com/s/files/1/0315/7737/files/Cranial_Electrotherapy_

Cranial Electrotherapy Stimulation

It’s First Fifty Years, Plus Three

A Monograph by Ray B. Smith, Ph.D.

Cranial electrotherapy stimulation and fibromyalgia

Marshall F Gilula

Expert Review of Medical Devices Vol. 4, Iss. 4, 2007

Cranial Electrotherapy Stimulation Review: A Safer Alternative to Psychopharmaceuticals in the Treatment of Depression

Marshall F. Gilula MD & Daniel L. Kirsch PhD

Journal of Neurotherapy Vol. 9, Iss. 2, 2005

J Nerv Ment Dis. 2015 Nov; 203(11): 827–835. doi: 10.1097/NMD.0000000000000378

A Pilot Study of Safety and Efficacy of Cranial Electrotherapy Stimulation in Treatment of Bipolar II Depression Deimante McClure et al.

http://www.stress.org/wp-content/uploads/CES_Research/Lee%20article.pdf

More studies on TASC/CES:

fisherwallace.com/pages/published-research

c.ymcdn.com/sites/www.txosteo.org/resource/resmgr/imported/Kirsch%
%20The%20New%20Science%20of%20Neuromodulation.pdf

stress.org/education/ces-research

Near infrared therapy to reduce anxiety, improve mood & concentration

Near infrared therapy (NIR-A)

Near infrared therapy bulbs around 810-830nm wavelength (look for NIR-A label) appear to increase ATP energy production in tissue-reducing inflammation, speeding up healing times of injuries, wounds, & sore muscles by penetrating up to 9 inches (23cm). A 150W NIR-A infrared bulb can be bought for $10-$21 & used with a clampable lamp to target healing anywhere on the body 12 inches away for 15 minute applications every three hours. It should be pointed at bare skin as it doesn't appear to work through clothing. Doing it more frequently or longer than 15 minutes at a time or closer than 12 inches from the lamp appears to negate the benefits. Near infrared therapy has been used by doctors and trainers for years to increase metabolism, energy, circulation, mood, concentration, endurance, strength, recovery, flexibility and reduce eye injuries & diseases, body fat, inflammation, joint & muscle pain, anxiety, depression, Alzheimer's & Parkinson's symptoms.

A 150 watt infrared bulb used for mood & concentration may be best targeted on the front of the head & forehead. People wanting to avoid the eyes can use a visor. Aiming the infrared bulb on the forehead appears to improve mood & concentration for at least five hours. It has been used to decrease anxiety, improve mood & concentration & to treat Alzheimer's & Parkinson's.

Saltmarche Anita E., Naeser Margaret A., Ho Kai Fai, Hamblin Michael R, and Lim Lew. Photomedicine and Laser Surgery. February 2017, ahead of print. doi:10.1089/pho.2016.4227.

EFFECT OF 670-NM LIGHT-EMITTING DIODE LIGHTON NEURONAL CULTURES

Margaret T.T. Wong-Riley _ and Harry T. Whelan 2

_Department of Cell Biology, Neurobiology and Anatomy

2Department of Neurology,

Medical College of Wisconsin, Milwaukee, Wisconsin, USA

https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20030001600.pdf

Neuroreport. 2001 Oct 8;12(14):3033-7.

Light-emitting diode treatment reverses the effect of TTX on cytochrome oxidase in neurons.

Wong-Riley MT, Bai X, Buchmann E, Whelan HT.

Gratitude journal

When people journal the everyday events of their lives, they see a big boost in their mood & mental health. It isn't reviewing the big events that seems to make the difference, but the small everyday events that bring satisfaction.

The type of journaling that appears to make the biggest difference in mood & life satisfaction is keeping a gratitude journal. Reviewing these can help remind people of the good things in their lives, and seem to help people's mood significantly.

Behavioral activation journaling (BAJ)

Behavioral activation journaling holds that behaviors can play a key role in reinforcing depression, and in resolving depression. People are recommended to keep a journal of how they feel hourly (apps & alarms help) and what they did during that hour. This can help to identify which behaviors seem to help them feel happy & which may increase their depression/unhappiness (like using drugs & alcohol to cope). People are then encouraged to sort the happy behaviors by degree of difficulty. Then they are encouraged to go through the list & do the happy behaviors one by one & again journal how they feel hourly.

Behavioral activation has been found to be as effective as medication (without the side effects), and more effective than cognitive/behavioral therapy, the most effective psychotherapy for depression. It helps people get in touch with how their behavior affects their mood in the long term, like whether eating fast food leads to depression/unhappiness.

Going through the the past of a daily regular journal can help you realize what helped you be happy back then & give ideas to try out again to help build your BAJ.

Meditation

Meditation helps increase concentration, boosts mood/relieve depression, and reduces anxiety/increases calm.

In a double blind study, a meditation group had 76% fewer sick days, while an exercise group had 48% fewer sick days. Learning to meditate reduces prison recidivism by 50%.

Meditation has been shown to help anxiety, depression, ADHD, aggression, addiction, and stroke/TBI recovery and make the mind/brain more malleable & easier to change. I finally learned how to meditate easily despite my ADHD.

Sit at a table with a countertop at rib level or put your elbows on your legs while sitting & put your face in your hands. Rub your eyelids for a couple minutes. This is very physiologically refreshing. Then keep your hands under your eyelids & allow your head to rest while in staying in complete darkness. Most meditation practice is to concentrate on a focus word of your choosing or to just concentrate on your breathing, whichever you find easier. It is also finding your center in your mind, also called “chi” (pronounced chee), or essence. Being in complete darkness puts your brain waves into an alpha state, like concentration does. The refreshing eye rubbing & darkness make it far easier to meditate than even just closing your eyes normally.

Mindfulness meditation (with a focus on immediate sensations, emotions, & experience) in one study was almost three times more effective than sleep hygiene education in improving sleep quantity & quality and reducing fatigue & depression. The key is to concentrate on your breathing or your center (chi) and observe whatever flows through the mind without judgement, and let it pass on, bringing your focus back to your breathing or center or focus word.

I have also found that meditating (on my center/chi), relaxing, meditating, relaxing at the speed of the song “Stayin Alive” puts me to sleep as fast as I remember starting it. It literally puts me to sleep almost immediately.

Black DS, O’Reilly GA, Olmstead R, Breen EC, Irwin MR. “Mindfulness Meditation and Improvement in Sleep Quality and Daytime Impairment Among Older Adults With Sleep Disturbances: A Randomized Clinical Trial.” JAMA Intern Med. 2015 Feb 16.

http://www.worldhealth.net/news/simple-secret-sleep/

This type of restful meditation can recharge you for much longer than a traditional nap. Mediation is cumulative and 5 & 10 minutes a day adds up over the long term & makes your life much better in many ways. Using meditation when making decisions or in situations where you don’t know how to act can be very useful. It also helps when trying to sort through emotions. The more you do it the more it will help your life & help you feel peaceful.

The biggest benefit in napping/sleeping is that if you don't fall asleep but just meditate for an hour or two with eyes closed, you will get nearly as much rest as with sleep. And because meditation is cumulative you will have calmed your brain greatly in that hour or two of meditating.

Decision Meditation

Meditating when making decisions, like where to go and what to do and how to act can be very useful- it doesn't require a long committment and you use it when you need it. It helps me make decisions more in line with their long term happiness and less on impulse.

Social Meditation

When I use meditation in social situations, it reduces anxiety, I have a better time, & I am a better guest/friend.

Bright light therapy

30 minutes of bright light therapy upon awakening was 50% more effective than fluoxetine against nonseasonal major depression.

Efficacy of Bright Light Treatment, Fluoxetine, and the Combination in Patients With Nonseasonal Major Depressive DisorderA Randomized Clinical Trial

Raymond W. Lam et al.

JAMA Psychiatry. 2016;73(1):56-63.
doi:10.1001/jamapsychiatry.2015.2235

Supplements to help depression

Spirulina- the source of fish EPA & DHA fatty acids

Spirulina for concentration and a mood boost (helps depression & anxiety), schizophrenia, bipolar disorder, ADHD, autism, and violence

The EPA & DHA fatty acids in spirulina (what's in fish oil) increase concentration and mood, which increases "will power"-the ability to follow through on difficult tasks. For people who are recovering from addiction, spirulina helps increase self control.

If you want to get the EPA & DHA omega3 fatty acids that are great for the brain that are in some kinds of fish oil without the taste or worry about pesticides, mercury or radiation, you can get EPA & DHA from where fish get them- from taking the algae called spirulina (organic is best). At ovega.com is a good explanation of how EPA & DHA omega 3 fatty acids in fish come from eating the algae spirulina.

Spirulina needs to be taken with a meal with a vegetable. Vegetables may have the enzymes need to digest spirulina more fully. Only 1/4 teaspoons of the powder form (500mg capsule equivalent) 2-3X a day with a meal with a vegetable is needed to significantly improve mood and concentration.

A lot of baby formula is supplemented with DHA & EPA to help cognitive development.

https://www.verywell.com/dha-ara-supplements-2632235

Children from low income families who get the most DHA and the least omega6 fatty acids from corn & soybean oil had better academic achievement than even children of wealthy parents in one study.

www.anth.ucsb.edu/sites/secure.lsit.ucsb.edu.anth.d7/files/sitefiles/pec

Lassek, W. D. & S. J. C. Gaulin (in press) “Breast milk DHA content predicts cognitive performance in a sample of 28 nations.” Maternal & Child Nutrition:

Many of the disorders that EPA & DHA fatty acids treat appear to be from an inability to retain enough in the brain, making extra supplementation essential for people with mental illness.

www.biomedcentral.com/content/pdf/1475-2891-7-8.pdf

http://www.biomedcentral.com/content/pdf/1476-511X-3-25.pdfDoesYou

http://www.apa.org/news/press/releases/2009/12/dha-omega.aspx

Improves memory:

Alzheimers Dement. 2010 Nov;6(6):456-64. doi: 10.1016/j.jalz.2010.01.013.

Beneficial effects of docosahexaenoic acid on cognition in age-related cognitive decline.

Yurko-Mauro K, McCarthy D, Rom D, Nelson EB, Ryan AS, Blackwell A, Salem N Jr, Stedman M; MIDAS Investigators.

Depression

A meta-analysis of 15 different studies showed that EPA & DHA supplementaton reduces depression.

J Clin Psychiatry. 2011 Dec;72(12):1577-84. doi: 10.4088/JCP.10m06634. Epub 2011 Sep 6.

Meta-analysis of the effects of eicosapentaenoic acid (EPA) in clinical trials in depression.

Sublette ME, Ellis SP, Geant AL, Mann JJ.

Here's a great study showing EPA & DHA omega3 fatty acids improves mood:

http://www.lef.org/magazine/mag2007/oct2007_report_depression_01.

http://www.nutraingredients-usa.com/Research/EPA-stands-alone-as-a-depression-fighter

Omega-3 Fatty Acid Augmentation of Citalopram Treatment for Patients With Major Depressive Disorder

Gertsik, Lev et al.

Journal of Clinical Psychopharmacology:

February 2012 – Volume 32 – Issue 1 – p 61–64

doi: 10.1097/JCP.0b013e31823f3b5f

improves concentration & reduces ADHD:

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1971271/

http://articles.mercola.com/sites/articles/archive/2013/08/19/omega-3-fat-dha.aspx

Bipolar depression (and mania)

Spirulina appears to reduce bipolar symptoms of depression and mania and increased mood.

http://www.psycheducation.org/depression/meds/Omega-3.htm

http://www.mclean.harvard.edu/pdf/news/mitn/satevnpost.stoll0605.pdf

http://www.ncbi.nlm.nih.gov/pubmed/18072818

http://www.gmhcn.org/files/Wellness/Omega-3forDepressionandBipolarDisorder.html

http://www.blackdoginstitute.org.au/docs/Omega-3asaTreatmentforBipolarDisorder-PrintVersionofMainPresentation.pdf

http://itsnotmental.blogspot.com/2008/02/omega-3-fatty-acids-fish-oil-dha-epa.html

http://www.forbes.com/sites/daviddisalvo/2012/09/16/does-fish-oil-really-improve-mental-health/

Spirulina may have low/little/no side effects for most people. It has been used in almost every baby formula for years now. Spirulina contains iodine (like iodized salt). In the past some spirulina products could have traces of the toxins BMAA or microcystin. It may be best to buy only organic spirulina and from a trusted source

that has been tested by an independent lab and grown in stainless steel vats, to avoid contamination. You can call the manufacturer to find out their standards & independent lab that tests their products. Powder form is the cheapest, and a lot of people mix it into their smoothies.

http://www.webmd.com/vitamins-supplements/ingredientmono-923-spirulina%20%28blue-green%20algae%29.aspx?activeingredientid=923&activeingredientnar
green%20algae%29

http://www.consumerlab.com/answers/Is+Spirulina+safe%3F+I+heard-

vitamin B100 complex (methyl may be most effective, especially methylfolate B9)

carnitine (acetyl-L may be fastest)

vitamin D3 (with a meal)

kale (raw-raises SAM-e levels)

curcumin (cheaper is turmeric with a little black pepper)

probiotics (with bifidobacterium longum, lactobacillus helveticus, lactobacillus reuteri and lactobacillus rhamnosus)

Vitamin B9 (folate)

zinc & vitamin B6

lemon oil (a little rubbed under nose for smelling)

saffron

sarcosine

mineral deficiency

Mineral deficiency

Low magnesium, chromium, iron (especially in women), selenium, and zinc have been shown to increase depression.

Vitamin B9 (folate)

High homocysteine levels (perhaps above 8 µmol/L) appear to reduce serotonin in the brain & may lead to depression. Many people (60% of the population, and 90% of people with depression) can't use regular folate well which may contribute to high homocysteine levels. Taking methylfolate (methyl version of vitamin B9) may increase folate blood levels 700% higher than synthetic folate and may reduce homocysteine levels much lower. In one study methylfolate decreased depression in 42%, superior to serotonin reuptake inhibitor antidepressants but without the side effects. Lowering homocysteine may also reduce dementia, bipolar disorder, anxiety, schizophrenia, cardiovascular disease, congestive heart failure, stroke, migraines, age-related macular degeneration, and hearing loss.

What may also lower homocysteine-

vitamin B6, vitamin B12 (methylcobalamin may be best), betaine (TMG), vitamin B2, and magnesium

n-acetyl L-cysteine (NAC)

S-adenosylmethionine (SAMe)

taurine

green vegetables, especially dark green leafy vegetables

oranges

beans

exercise

What may increase homocysteine:

the prescription drugs cholestyramine, colestipol, fenofibrate, levodopa, metformin, methotrexate, niacin, nitrous oxide, pemetrexed, phenytoin, sulfasalazine

red meat and dairy products

smoking

coffee

alcohol consumption

advancing age

obesity

Reduced B Vitamin Therapy in MTHFR C677T/A1298C Patients with Major Depressive Disorder – Clinical Response Correlates with Homocysteine Reduction: A Double-Blind, Placebo-Controlled Study

Arnie Mech and Andrew Farah

http://enlyterx.com/wp-content/uploads/2015/11/EnLyte-Clinical-Study-Reprint.pdf

https://globenewswire.com/news-release/2015/07/29/756168/10143796/en/Breakthrough-Depression-Study-Shows-42-Remission-Rate-With-EnLyte.html

http://www.drweil.com/health-wellness/body-mind-spirit/heart/elevated-homocysteine/

Zinc & vitamin B6

Lab testing for low plasma zinc & subsequent zinc supplementation as well as eating a diet low in copper may normalize behavior in people prone to ADHD & postpartum depression. A transaminase stimulation blood test can be done, or first an inexpensive urine test for pyrroles may be preferrable.

High dose vitamin B6 supplementation (both PH & PLP together) may help people with clinical depression and with memory if levels are low to bring them up to normal. If levels are low high supplementation is often needed to bring levels up upon retesting.

William J. Walsh, Nutrient Power, 2012

An inexpensive urine test is available to detect the presence of elevated pyrroles which indicate low vitaminB6.

https://pyroluriatesting.com/shop/kryptopyrrole-pyrroleshpl-urine-test/

Zinc appears safe at 15mg a day taken orally. Taking zinc lozenges, which last a lot longer in the mouth, can temporarily lower the sense of smell. Zinc nasal sprays are not recommended as they can affect the sense of smell permanently.

http://www.webmd.com/vitamins-supplements/ingredientmono-982-zinc.aspx?activeingredientid=982&activeingredientname=zinc

Vitamins B6, B12, and B9

Vitamins B6, B12, and B9 taken together appear to help prevent future depressive episodes.

Almeida OP, Ford AH, Hirani V, Singh V, vanBockxmeer FM, McCaul K, Flicker L. "B vitamins to enhance treatment response to antidepressants in middle-aged and older adults: results from the B-VITAGE randomised, double-blind, placebo-controlled trial." Br J Psychiatry. 2014 Sep 25. pii: bjp.bp.114.145177.

http://www.worldhealth.net/news/beat-depression/

Vitamin B3 (niacin)

Antidepressants that raise serotonin extra high (SRIs) can lower levels of niacin. Supplementation may help get levels back to normal.

Vitamin B complex

Taking a vitamin B complex (methyl may be best) may increase mood, reduce anxiety, & improve concentration.

Saffron

Saffron has been found as effective as prescription antidepressants in multiple studies, without their adverse effects.

Akhondzadeh Basti, A., E. Moshiri, A.A. Noorbala, et al. 2007. Comparison of petal of Crocus sativus L. and fluoxetine in the treatment of depressed outpatients: a pilot double-blind randomized trial. Progress in Neuro-Psychopharmacology and Biological Psychiatry 31(2):439-42.

Akhondzadeh, S., N. Tahmacebi-Pour, A.A. Noorbala, et al. 2005. Crocus sativus L. in the treatment of mild to moderate depression: a double-blind, randomized and placebo-controlled trial. Phytotherapy Research 19(2):148-51.

Akhondzadeh, S., H. Fallah-Pour, K. Afkham, et al. 2004. Comparison of Crocus sativus L. and imipramine in the treatment of mild to moderate depression: a pilot double-blind randomized trial. BMC Complementary and Alternative Medicine 4:12.

Moshiri, E., A.A. Basti, A.A. Noorbala, et al. 2006. Crocus sativus L. (petal) in the treatment of mild-to-moderate depression: a double-blind, randomized and placebo-controlled trial. Phytomedicine 13(9-10):607-11.

Noorbala, A.A., S. Akhondzadeh, N. Tahmacebi-Pour, et al. 2005. Hydro-alcoholic extract of Crocus sativus L. versus fluoxetine in the treatment of mild to moderate depression: a double-blind, randomized pilot trial. Journal of Ethnopharmacology 97(2):281-4.

Grounding

Grounding is simply walking barefoot on earth. Skin to earth contract transfers negative electrons which significantly reduce inflammation, stress and relieves pain. Grounding may help lower cardiovascular disease and death. Grounding appears to relieve muscle soreness and improve mood and sleep and reduce electric field sensitivity.

http://articles.mercola.com/sites/articles/archive/2017/02/25/grounding-recharge-immune-system-slow-aging.aspx?utm_source=dnl&utm_medium=email&utm_content=ms1&

J Environ Public Health. 2012; 2012: 291541.

Published online 2012 Jan 12. doi: 10.1155/2012/291541

Earthing: Health Implications of Reconnecting the Human Body to the Earth’s Surface Electrons

Gaétan Chevalier et al.

J Inflamm Res. 2015 Mar 24;8:83-96. doi: 10.2147/JIR.S69656. eCollection 2015.

The effects of grounding (earthing) on inflammation, the immune response, wound healing, and prevention and treatment of chronic inflammatory and autoimmune diseases.

Oschman JL et al.

J Altern Complement Med. 2013 Feb;19(2):102-10. doi: 10.1089/acm.2011.0820. Epub 2012 Jul 3.

Earthing (grounding) the human body reduces blood viscosity-a major factor in cardiovascular disease.

Chevalier G, Sinatra ST, Oschman JL, Delany RM.

J Altern Complement Med. 2010 Mar; 16(3): 265–273.

doi: 10.1089/acm.2009.0399

Pilot Study on the Effect of Grounding on Delayed-Onset Muscle Soreness

Dick Brown, Gaétan Chevalier, and Michael Hill

Psychol Rep. 2015 Apr;116(2):534-42. doi: 10.2466/06.PR0.116k21w5. Epub 2015 Mar 6.

The effect of grounding the human body on mood.

Chevalier G.

J Altern Complement Med. 2007 Nov;13(9):955-67.

Can electrons act as antioxidants? A review and commentary.

Oschman JL

Applewhite R. “The effectiveness of a conductive patch and a

conductive bed pad in reducing induced human body voltage via the application of

earth ground.” European Biology and Bioelectromagnetics 2005; 1: 23–40

http://www.earthingoz.com.au/pdf/Applewhite_earthing_body_voltage_

Acetyl L- Carnitine

Acetyl L- Carnitine is an amino acid (its in many foods we eat) that increases concentration and boosts mood (relieves depression & anxiety). It has worked very well for me, I recommend Now Foods or Source Naturals. Its good to take multiple times a day as needed. As it is an amino acid found in many foods, the side effects are minimal.

http://ntp.niehs.nih.gov/ntp/htdocs/chem_background/exsumpdf/carnlip

http://www.webmd.com/vitamins-supplements/ingredientmono-834-ACETYL-L-CARNITINE.aspx?activeIngredientId=834&activeIngredientName=ACE L-CARNITINE

diystrengthtraining.com/workout-supplements-information/supplement-benefits-side-effects/acetyl-l-carnitine-benefits-side-effects

raysahelian.com/acetylcarnitine.html

J Psychiatr Res. 2014 Jun;53:30-7. doi: 10.1016/j.jpsychires.2014.02.005. Epub 2014 Feb 15.

A review of current evidence for acetyl-l-carnitine in the treatment of depression.

Wang SM, Han C, Lee SJ, Patkar AA, Masand PS, Pae CU

Acetyl-L-carnitine appears safe with low/little/no side effects for most people.

http://www.webmd.com/vitamins-supplements/ingredientmono-1026-l-carnitine.aspx?activeingredientid=1026&activeingredientname=l-carnitine

Vitamin D3/Cholecalciferol

4000 IU of vitamin D3 taken with a meal or vegetable oil (fat soluble) improves mood in the wintertime. The body makes vitamin D3 from the sun (less so as we age). It reduces/eliminates winter blues/seasonal affective disorder (SAD). At this dose it reduces viral infections by 90%, cancers 70% and heart disease 50%.

vitaminDcouncil.org

In our 20s we can make up to 30,000 IU from the sun before stopping. Taking 4000 IU (with a meal or vegetable oil) is only 1/6 as much. When we are 60, we can only make 30% the amount of vitamin D from the sun, so supplementation as we get older may be essential, especially in the winter.

A study conducted by VU University Medical Center in Amsterdam found people with vitamin D levels below 20 ng/mL had an 85 percent increased risk of depression compared to those with vitamin

D levels greater than 30 ng/mL.

American Journal of Psychiatry Volume 173, Issue 6, June 01, 2016, pp. 575-587

Adjunctive Nutraceuticals for Depression: A Systematic Review and Meta-Analyses

Jerome Sarris et al.

http://articles.mercola.com/sites/articles/archive/2016/07/14/depressior supplements-vitamins.aspx?utm_source=dnl&utm_medium=email&utm_content=art

Seasonal Affective Disorder (SAD)

SAD can manifest in the fall & winter months as less energy, productivity, appetite increase, and depression.

Water & SAD

Drinking 16-32oz of flouride filtered water (in glass or stainless steel) immediately upon waking and then no food for 45 minutes appears to increase energy and mood, increase flexibility & reduce infections. A touch of real lemon or lime can help for taste.

Vitamin D3 & SAD

SAD appears to be affected by low vitamin D3 levels in the winter (below 50ng/ml). Supplementing with at least 4000 IU (100 mcg) per day with a meal or vegetable oil (fat soluble) appears to raise winter mood & lower SAD. When I started taking 2-4000IU of vitamin D3 per day I immediately saw my winter mood lighten, & I no longer craved going out into the sunlight in the morning all year round.

Light therapy & SAD

12x18in surface 10,000lux

Randomized comparison of the effects of the vitamin D3 adequate intake versus 100 mcg (4000 IU) per day on biochemical responses and the wellbeing of patients

Reinhold Vieth, Samantha Kimball, Amanda Hu, Paul G Walfish

Nutrition Journal 2004, 3:8 doi:10.1186/1475-2891-3-8

Vitamin D deficiency and depression in adults: systematic review and meta-analysis

Rebecca E. S. Anglin, Zainab Samaan, Stephen D. Walter, Sarah D. McDonald

The British Journal of Psychiatry Feb 2013, 202 (2) 100-107; DOI: 10.1192/bjp.bp.111.106666

Psychiatry Research Volume 227, Issue 1, Pages 46–51

Associations between vitamin D levels and depressive symptoms in healthy young adult women

David C.R. Kerr et al.

DOI: http://dx.doi.org/10.1016/j.psychres.2015.02.016

Mucuna pruriens

The herb Mucuna pruriens contains L-dopa. One very small study reportedly found evidence that use of the herb as an L-dopa source offers advantages over purified L-dopa given as a medication itself

Katzenschlager R, Evans A, Manson A, et al. Mucuna pruriens in Parkinson's disease: a double blind clinical and pharmacological study. J Neurol Neurosurg Psychiatry. 2004;75:1672-1677.

http://www.med.nyu.edu/content?ChunkIID=21799#ref23

In India the drug made from MP is Zandopa, apparently is effective against Parkinson's & is much cheaper than L-dopa.

http://forum.parkinson.org/index.php?/topic/19169-mucuna-pruriens-as-a-natural-l-dopa-alternative/

Mucuna pruriens & depression

Mucuna pruriens increases dopamine which may improve mood & concentration temporarily, but may have a minor or moderate withdrawal effect upon discontinuation.

Kale/folate

Eating 1/4 cup of raw organic kale boosts folate (vitamin B9) and SAM-e levels, a prescription antidepressant in Europe. I've noticed eating raw kale boosts my mood for 8-10 hours. Cooked kale boosts mood for four to five hours. It has to be organic because conventional kale is doused with high pesticides. SAM-e also cushions joints & both stops the pain & prevents some arthritis. In pill form it is more expensive but can be bought at any health food store. It works much faster than serotonin antidepressants in raising serotonin, norepinephrine, and dopamine. Kale also has lots of vitamins & minerals, including magnesium and zine. SAM-e has low/little/or no side effects in most people, but like many

antidepressants people with bipolar depression should talk with their doctors before taking to avoid triggering a manic episode.

Mischoulon D. Update and critique of natural remedies as antidepressant treatments. Obstet Gynecol Clin North Am. 2009 Dec;36(4):789-807.

Papakostas GI. Evidence for S-adenosyl-L-methionine (SAM-e) for treatment of major depressive disorder. J Clin Psychiatry 2009;70(Suppl 5):18-22.

Howland RH. Dietary supplement drug therapies for depression. J Psychosoc Nurs Ment Health Serv. 2012 Jun;50(6):13-6.

Bottiglieri T, Godfrey P, Flynn T, et al. Cerebrospinal fluid S-adenosylmethionine in depression and dementia: effects of treatment with parenteral and oral S-adenosylmethionine. J Neurol Neurosurg Psychiatry 1990;53(12):1096-8.

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Delle Chiaie R, Pancheri P, Scapicchio P. Efficacy and tolerability or oral and intra-muscular S-adenosyl-L-methionine 1,4-butanedisulfonate(SAMe) in the treatment of major depression: comparison with imipramine in 2 multicenter studies. Am J Clin Nutr 2002;76(Suppl):1172S-6S.

Alpert J. Oral S-Adenosyl Methionine (SAMe) for Antidepressant Augmentation: Open-label Trial. Presented at the American Psychiatric Association Annual Meeting, New York City. May 5, 2004.

Papakostas GI, Mischoulon D, et al. S-adenosyl methionine (SAMe) augmentation of serotonin reuptake inhibitors for antidepressant

nonresponders with major depressive disorder: a double-blind, randomized clinical trial. Am J Psychiatry. 2010 Aug;167(8):942-8.

Papakostas GI, Cassiello CF, Iovieno N. Folates and s-adenosylmethionine for major depressive disorder. Can J Psychiatry. 2012 Jul;57(7):406-13.

http://universityhealthnews.com/daily/depression/studies-show-beating-depression-naturally-with-sam-e-is-superior-to-antidepressant-drugs/.

http://www.sciencedirect.com/science/article/pii/002239567690008X

http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0404.1994.tb05403.x/abstract

http://www.sciencedirect.com/science/article/pii/S0011393X05804242

http://altmedicine.about.com/od/treatmentsfromatod/a/SAMe.htm

http://www.wholehealth.com/vitamins-and-supplements/sam-e.html

http://www.mayoclinic.org/drugs-supplements/same/background/hrb-20059935

http://ajcn.nutrition.org/content/76/5/1158S.short

American Journal of Psychiatry Volume 173, Issue 6, June 01, 2016, pp. 575-587

Adjunctive Nutraceuticals for Depression: A Systematic Review and Meta-Analyses

Jerome Sarris et al.

SAM-e & methionine

People who respond strongly to serotonin antidepressants like SSRIs may get the same benefits from the amino acid methionine or

the antidepressant SAM-e. The inexpensive way to boost SAM-e levels is to eat a 1/4 cup of organic kale (nonorganic is drenched in pesticides) every eight hours. It boosts SAM-e levels for 10 hours, and is much cheaper than SAM-e in pill form.

William J. Walsh, Nutrient Power, 2012

Turmeric/curcumin and depression

Turmeric is a spice that is a major antiinflammatory & painkiller, as well as a preventer of cancer and Alzheimers. Turmeric's effects on the MAOI system makes it as strong an antidepressant as the SSRI's but without their side effects. People can take much more turmeric than NSAIDS for pain or SSRI's for depression because of its lack of side effects. Turmeric needs a little black pepper to unlock all the benefits of the curcumin in it, or can be bought as a curcumin extract. Its cheapest to buy it organic & in bulk and buy empty capsules and stuff them yourself by taking the long end & pressing it down into the bowl filled with tumeric 2 or 3 times until its full then putting the ends together. You can make a months worth in five minutes.

Research shows that inflammatory cytokines are significantly elevated in both mania & depression in people with bipolar mood disorder, as well as postpartum & melancholic depression. Taking the spice turmeric (with a little black pepper) or curcumin extract, ginger, or astaxanthin- all anti-inflammatories- can help lift the depression & make the depression responsive to antidepressants. Turmeric/curcumin appears to work as an antidepressant independent of its anti-inflammatory benefits in a number of people, as well.

Multiple antidepressant potential modes of action of curcumin: a review of its anti-inflammatory, monoaminergic, antioxidant, immune-

modulating and neuroprotective effects

Adrian L Lopresti, Sean D Hood, Peter D Drummond

J Psychopharmacol December 2012 vol. 26 no. 12 1512-1524

doi: 10.1177/0269881112458732

TAKING ROOT

Marano, Daniel A.

Psychology Today;Sep/Oct2015, Vol. 48 Issue 5, p37

Is there a role for curcumin in the treatment of bipolar disorder?

Elisa Brietzke et al.

Medical Hypotheses

May 2013Volume 80, Issue 5, Pages 606–612

DOI: http://dx.doi.org/10.1016/j.mehy.2013.02.001

Comparison of cytokine levels in depressed, manic and euthymic patients with bipolar disorder

Elisa Brietzke et al.

Journal of Affective Disorders

August 2009Volume 116, Issue 3, Pages 214–217

Inflammatory activation is associated with a reduced glucocorticoid receptor alpha/beta expression ratio in monocytes of inpatients with melancholic major depressive disorder

L A Carvalho et al.

Translational Psychiatry (2014) 4, e344; doi:10.1038/tp.2013.118

Inflammatory conditions may precipitate or perpetuate depression, but the precise relationship is unclear

Maria Almond

Current Psychiatry 2013 June;12(6):24-32.

Dowlati Y, Herrmann N, Swardfager W, et al. A meta-analysis of cytokines in major depression. Biol Psychiatry. 2010;67(5):446-457.

Maes M, Bosmans E, De Jongh R, et al. Increased serum IL-6 and IL-1 receptor antagonist concentrations in major depression and treatment resistant depression. Cytokine. 1997;9(11):853-858.

Raison CL, Borisov AS, Broadwell SD, et al. Depression during pegylated interferon-alpha plus ribavirin therapy: prevalence and prediction. J Clin Psychiatry. 2005;66(1):41-48.

Capuron L, Raison CL, Musselman DL, et al. Association of exaggerated HPA axis response to the initial injection of interferon-alpha with development of depression during interferon-alpha therapy. Am J Psychiatry. 2003;160(7):1342-1345.

Eisenberger NI, Berkman ET, Inagaki TK, et al. Inflammation-induced anhedonia: endotoxin reduces ventral striatum responses to reward. Biol Psychiatry. 2010;68(8):748-754.

Pasco JA, Nicholson GC, Williams LJ, et al. Association of high-sensitivity C-reactive protein with de novo major depression. Br J Psychiatry. 2010;197(5):372-377.

Raison CL, Rutherford RE, Woolwine BJ, et al. A randomized controlled trial of the tumor necrosis factor antagonist infliximab for treatment-resistant depression: the role of baseline inflammatory biomarkers. JAMA Psychiatry. 2013;70(1):31-41.

Martinez JM, Garakani A, Yehuda R, et al. Proinflammatory and “resiliency” proteins in the CSF of patients with major depression. Depress Anxiety. 2012;29(1):32-38.

Psychopharmacology (Berl). 2014 May;231(10):2171-87. doi: 10.1007/s00213-013-3368-2. Epub 2013 Dec 3.

Chronic curcumin treatment normalizes depression-like behaviors in mice with mononeuropathy: involvement of supraspinal serotonergic system and GABAA receptor.

Zhao X, Wang C, Zhang JF, Liu L, Liu AM, Ma Q, Zhou WH, Xu Y.

J Clin Psychopharmacol. 2015 Aug;35(4):406-10. doi: 10.1097/JCP.0000000000000352.

Chronic Supplementation of Curcumin Enhances the Efficacy of Antidepressants in Major Depressive Disorder: A Randomized, Double-Blind, Placebo-Controlled Pilot Study.

Yu JJ, Pei LB, Zhang Y, Wen ZY, Yang JL.

Phytother Res. 2016 Feb;30(2):175-83. doi: 10.1002/ptr.5524. Epub 2015 Nov 27.

The Role of Curcumin Administration in Patients with Major Depressive Disorder: Mini Meta-Analysis of Clinical Trials.

Al-Karawi D, Al Mamoori DA, Tayyar Y.

http://www.highexistence.com/boost-brain-harnessing-neurogenesis/

http://www.collective-evolution.com/2013/07/31/study-finds-turmeric-is-effective-as-prozac-for-treating-depression/

http://www.power-of-turmeric.com/curcumin-and-depression.html

http://www.newsmaxhealth.com/Health-News/curcumin-tumeric-spice-antidepressant/2013/10/18/id/531801/

http://health.yahoo.net/experts/dayinhealth/golden-spice-life-brings-health-and-happiness

http://www.turmericforhealth.com/turmeric-benefits/can-turmeric-help-in-depression

Turmeric appears safe. It mildly thins the blood and can cause nausea. It prevents blod clots as well as aspirin & coumadin but causes 75% less bleeding. It should be stopped before surgery, with astaxanthin a good substitute. Caution is recommended for use during pregnancy, GERD, gallstones, or bile duct obstruction.

http://www.webmd.com/vitamins-supplements/ingredientmono-662-turmeric.aspx?activeingredientid=662&activeingredientname=turmeric

Probiotics

Fewer types of gut bacteria have been associated with higher rates of depression, anxiety, and anorexia. Supplementing with multiple strains of probiotics may help mood. The probiotics bifidobacterium longum, lactobacillus helveticus, lactobacillus reuteri and lactobacillus rhamnosus reduce anxiety, stress, and depression and improve cognition in animal and human studies, as well as having very beneficial health effects.

Psychosom Med. 2015 Nov-Dec;77(9):969-81. doi: 10.1097/PSY.0000000000000247.

The Intestinal Microbiota in Acute Anorexia Nervosa and During Renourishment: Relationship to Depression, Anxiety, and Eating Disorder Psychopathology.

Kleiman SC1, Watson HJ, Bulik-Sullivan EC, Huh EY, Tarantino LM, Bulik CM, Carroll IM.

Neurogastroenterol Motil. 2011 Dec;23(12):1132-9. doi: 10.1111/j.1365-2982.2011.01796.x. Epub 2011 Oct 11.

The anxiolytic effect of Bifidobacterium longum NCC3001 involves vagal pathways for gut-brain communication.

Bercik P. et al.

Michaël Messaoudi, Robert Lalonde, Nicolas Violle, Hervé Javelot, Didier Desor, Amine Nejdi, Jean-François Bisson, Catherine Rougeot, Matthieu Pichelin, Murielle Cazaubiel and Jean-Marc Cazaubiel (2011).

Assessment of psychotropic-like properties of a probiotic formulation (Lactobacillus helveticus R0052 and Bifidobacterium longum R0175) in rats and human subjects.

British Journal of Nutrition, 105, pp 755-764. doi:10.1017/S0007114510004319.

Jessica Arseneault-Bréard, Isabelle Rondeau, Kim Gilbert, Stéphanie-Anne Girard, Thomas A. Tompkins, Roger Godbout and Guy Rousseau (2012).

Combination of Lactobacillus helveticus R0052 and Bifidobacterium longum R0175 reduces post-myocardial infarction depression symptoms and restores intestinal permeability in a rat model.

British Journal of Nutrition, 107, pp 1793-1799. doi:10.1017/S0007114511005137.

A comprehensive post-market review of studies on a probiotic product containing Lactobacillus helveticus R0052 and Lactobacillus rhamnosus R0011

L. Foster et al.

Beneficial Microbes, 2011, 2(4) Pages: 319 – 334

DOI: http://dx.doi.org/10.3920/BM2011.0032

Science China Life Sciences

March 2014, Volume 57, Issue 3, pp 327-335

Ingestion of Lactobacillus strain reduces anxiety and improves cognitive function in the hyperammonemia rat

Jia Luo, Tao Wang, Shan Liang, Xu Hu, Wei Li, Feng Jin

Neurogastroenterol Motil. 2013 Jul;25(7):e478-84. doi: 10.1111/nmo.12147. Epub 2013 May 12.

Bifidobacterium longum NCC3001 inhibits AH neuron excitability.

Khoshdel A, Verdu EF, Kunze W, McLean P, Bergonzelli G, Huizinga JD.

Gut Microbes

Volume 2, Issue 4, 2011

Beneficial psychological effects of a probiotic formulation (Lactobacillus helveticus R0052 and Bifidobacterium longum R0175) in healthy human volunteers

DOI: 10.4161/gmic.2.4.16108

The microbiome-gut-brain axis: from bowel to behavior

J. F. Cryan and S. M. O’Mahony

DOI: 10.1111/j.1365-2982.2010.01664.x

Neurogastroenterology & Motility Volume 23, Issue 3, pages 187–192, March 2011

Microbes and the gut-brain axis

P. BERCIK et al.

Neurogastroenterol Motil (2012) 24, 405–413 doi: 10.1111/j.1365-2982.2012.01906.x

Melancholic microbes: a link between gut microbiota and depression?

T. G. Dinan and J. F. Cryan

DOI: 10.1111/nmo.12198

Neurogastroenterology & Motility Volume 25, Issue 9, pages 713–719, September 2013

Probiotics in the Treatment of Depression: Science or Science Fiction?

Timothy G. Dinan and Eamonn M. Quigley

doi: 10.3109/00048674.2011.613766

Aust N Z J Psychiatry December 2011 vol. 45 no. 12 1023-1025

Essential oils

CR 4/2016

Lavender under the nose didn’t raise mood, but lemon oil did in one study.

In dementia patients, lavender with acupressure as well as lemon oil reduced anxiety & demonstrable agitation.

Organic may be safest.

http://www.consumerreports.org/conditions-treatments/does-aromatherapy-using-essential-oils-work/?EXTKEY=NH64N00H&utm_source=acxiom&utm_medium=ema

Sceletium tortuosum (Zembrin)

Sceletium is a plant used for thousands of years for its beneficial effects. It improves mood very quickly & can cause a mild euphoric state with little side effects for most.

Acute Effects of Sceletium tortuosum (Zembrin), a Dual 5-HT Reuptake and PDE4 Inhibitor, in the Human Amygdala and its Connection to the Hypothalamus

Open

David Terburg et al.

Neuropsychopharmacology (2013) 38, 2708–2716; doi:10.1038/npp.2013.183; published online 21 August 2013

Schell, Rebecca, “Sceletium tortuosum and Mesembrine: A Potential Alternative Treatment for Depression” (2014). Scripps Senior Theses. Paper 375.

http

Haylene Nell, Mirna Siebert, Pashini Chellan, and Nigel Gericke. The Journal of Alternative and Complementary Medicine. November 2013, 19(11): 898-904. doi:10.1089/acm.2012.0185.

http://www.supplemetrics.com/sceletium-tortuosum/

Saffron

Saffron appears to help boost mood in many studies as well as fluoxetine (Prozac).

Mathias Schmidt, Georges Betti, Andreas Hensel Saffron in phytotherapy: Pharmacology and clinical uses Wiener Medizinische Wochenschrift July 2007, Volume 157, Issue 13-14, pp 315-319

Akhondzadeh, S., Tahmacebi-Pour, N., Noorbala, A.A., Amini, H., Fallah-Pour, H., Jamshidi, A.H. et al. Crocus sativus L. in the treatment of mild to moderate depression: a double-blind, randomized and placebo-controlled trial. Phytother Res. 2005; 19: 148–151

Progress in Neuro-Psychopharmacology and Biological Psychiatry

Afshin Akhondzadeh Bastia, Esmail Moshirib, Ahamad-Ali Noorbalac, Amir-Hossein Jamshidid, Seyed Hesameddin Abbasie, Shahin Akhondzadehc, Comparison of petal of Crocus sativus L. and fluoxetine in the treatment of depressed outpatients: A pilot double-blind randomized trial Volume 31, Issue 2, 30 March 2007, Pages 439–442

Nazila Shahmansouri, Mehdi Farokhnia, Seyed-Hesammeddin Abbasi, Seyed Ebrahim Kassaian, Ahmad-Ali Noorbala Tafti, Amirhossein Gougol, Habibeh Yekehtaz, Saeedeh Forghani, Mehran Mahmoodian, Sepideh Saroukhani, Akram Arjmandi-Beglar, Shahin Akhondzadeh, A randomized, double-blind, clinical trial comparing the efficacy and safety of Crocus sativus L. with fluoxetine for improving mild to moderate depression in post percutaneous coronary intervention patients, Journal of Affective Disorders, 2014, 155, 216

Dwyer AV, Whitten DL, Hawrelak JA Herbal medicines, other than St. John’s Wort, in the treatment of depression: a systematic review. Alternative Medicine Review : a Journal of Clinical Therapeutic

[2011, 16(1):40-49]

Saffron appears safe. It may cause nausea. It is not recommended during pregnancy, nor for people who have bipolar disorder/mania.

http://www.webmd.com/vitamins-supplements/ingredientmono-844-saffron.aspx?activeingredientid=844&activeingredientname=saffron

Sarcosine

Sarcosine is in a lot of foods and relieves depression in people with schizophrenia so well it has been studied for use for depression independent of schizophrenia. In concentrated form sarcosine works faster & with less side effects and is substantially more effective in relieving depression than the SRI antidepressant citalopram (Celexa).

http://www.ncbi.nlm.nih.gov/pubmed/23562005

Sarcosine appears to have low/little/no side effects for most people.

http://en.wikipedia.org/wiki/Sarcosine

Transcranial magnetic stimulation (TMS)

Transcranial magnetic stimulation (TMS) uses a wand over parts of the head to slow neural activity in the area and can be effective for depression with low or no side effects, but it may be hard to find a practitioner with the equipment. Its low side effect profile makes it better than prescription antidepressants.

Psilocybin Mushrooms (if become available by prescription)

In the 1950s and early 1960s psychiatrists used psilocybin & LSD-25 manufactured by Sandoz labs in thousands of studies to see if it was useful against mental illness. They found that if a person has a family history of schizophrenia, taking hallucinogens (including cannabis) can trigger schizophrenic episodes. For people who don't have a genetic vulnerability to schizophrenia, taking prescription hallucinogens appeared to significantly & permananently reduce depression & anxiety in a majority of patients who took them under doctor's supervision during the "trip".

Two new studies have shown that taking psilocybin mushrooms just one time reduced depression & anxiety in around 80% of patients for as long as they were followed. 36% of the people had a fearful emotion at least once during the "trip", with 13% reporting it lasting most or all of the session, but without any reported lasting negative effect on well being.

Ross S, Bossis A, Guss J . Rapid and sustained symptom reduction following psilocybin treatment for anxiety and depression in patients with life-threatening cancer: a randomized controlled trial. J Psychopharmacol 2016;30:1165-1180.

Griffiths RR, Johnson MW, Carducci MA. Psilocybin produces substantial and sustained decrease in depression and anxiety in patients with life-threatening cancer: a randomized double-blind trial. J Psychopharmacol 2016;30:1181-1197.

http://doctormurray.com/are-psilocybin-mushrooms-a-game-changer-for-severe-anxietydepression/

Serotonin reuptake inhibitors SRIs & SSRIs

Selective serotonin reuptake inhibitors (SSRIs) are antidepressant drugs that raise serotonin artificially high in the brain, much higher than found in people not on the drugs. Some drugs raise other neurotransmitters as well, like serotonin and norepinephrine reuptake inhibitors (SNRIs). They are all serotonin reuptake inhibitors (SRIs) and have much of the same side effects in part.

SSRIs (SRIs)

Citalopram (Celexa)

Escitalopram (Lexapro)

Fluoxetine (Prozac)

Paroxetine (Paxil, Pexeva)

Sertraline (Zoloft)

Vilazodone (Viibryd)

Fluvoxamine (Luvox)

http://www.mayoclinic.org/diseases-conditions/depression/in-depth/ssris/art-20044825

SNRIs (SRIs)

Desvenlafaxine (Pristiq, Khedezla)

Duloxetine (Cymbalta) ? also approved to treat anxiety and certain types of chronic pain.

Levomilnacipran (Fetzima)

Venlafaxine (Effexor XR)

http://www.mayoclinic.org/diseases-conditions/depression/in-depth/antidepressants/art-20044970

SRIs & suicide

SRIs may increase risk of suicide attempts by 15 to 30 times, and completed suicides by 200%.

http://health.usnews.com/health-news/patient-advice/articles/2015/06/11/what-are-the-long-term-effects-of-taking-antidepressants?int=a57b09

Drug companies hid data showing a doubling of suicide in children & teens from SRIs

SRIs are no more effective than placebo against depression & significantly increase suicidal thoughts & injurious behaviors in children. Drug company researchers from GlaxoSmithKline originally declared paroxetine (Paxil) effective & safe for children, but because so many studies were later found to be ineffective or dangerous, researchers demanded the original data and found SRIs like Paxil to be unsafe & ineffective for children.

Restoring Study 329: efficacy and harms of paroxetine and imipramine in treatment of major depression in adolescence

Joanna Le Noury et al.

BMJ 2015; 351 BMJ 2015;351:h4320

doi: http://dx.doi.org/10.1136/bmj.h4320

How did the drug companies hide the data that they were making children & teens suicidal?

The were:

Using an idiosyncratic coding system

Failing to transcribe all adverse events (AE) from clinical record to AE database

Filtering data on AE's through statistical techniques

Restricting reporting to events that occurred above a given frequency in one group

Coding events under different headings for different patients

Grouping events together

Insufficient consideration of severity

Coding of relatedness to study medication

Masking effects of concomitant drugs

Ignoring effects of drug withdrawal

Until the raw data came out they could say anything about the effectiveness of their drug & be believed by the FDA

.

SRIs and heart attacks

Citalopram (Celexa) & escitalopram (Lexapro) appear to increase the QT interval, which may increase heart attacks.

QT interval and antidepressant use: a cross sectional study of electronic health records

BMJ 2013; 346 doi: https://doi.org/10.1136/bmj.f288

SRIs & vitamins

Serotonin antidepressants can lower niacin (vitamin B3) levels, causing neuropsychiatric problems.

Medical Hypotheses March 2015 Volume 84, Issue 3, Pages 178–182

Antidepressants may lead to a decrease in niacin and NAD in patients with poor dietary intake

Margaretha Viljoen, Annie Swanepoel, Priyesh Bipath

DOI: http://dx.doi.org/10.1016/j.mehy.2014.12.017

SSRIs & pregnancy

Taking serotonin antidepressants when a mother is pregnant increases obesity, type 2 diabetes, liver inflammation & mental illness in her children, and increases miscarriage by 68%.

When all the published & unpublished studies on antidepressants effectivenes were examined, serotonin antidepressants showed no benefit against depression.

“Irving Kirsh, an Associate Director of the Program in Placebo Studies and a lecturer in medicine at the Harvard Medical School

and Beth Israel Deaconess Medical Center reviewed unpublished studies that clearly showed positive antidepressant results were the same as placebos.”

For drugs that work no more often than placebo’s, they have serious side effects- dizziness, impotence, insomnia, gastrointestinal bleeding, weight gain, sexual dysfunction, thickening of the arteries, permanent brain damage, increased suicide risk and violent behavior in both children and adults.

The side effects, including to the child after birth to a mother taking SSRIs, are heart defects, pulmonary hypertension, serotonin syndrome, epileptic seizures, hyper/hypoglycemia, strokes, tardive dyskinesia, Parkinsonism, akathisia, mania, cleft palate, respiratory distress, anencephaly, craniosynostosis, omphalocele. Fluoxetine (Prozac) & paroxetine (Paxil) have been shown as especially problematic in one study, increasing birth defects by 200-350%.

The two most popular antidepressants, paroxetine (Paxil) & sertraline (Zoloft) have been associated with a 200% increase in autism in one study, and all SSRIs 87% in another study. In yet another study boys with autism were found to have been three times more likely to have been exposed to an SSRI in utero

Obstetrics & Gynecology: July 2011 – Volume 118 – Issue 1 – pp 111-120

doi: 10.1097/AOG.0b013e318220edcc

Specific SSRIs and birth defects: bayesian analysis to interpret new data in the context of previous reports

BMJ 2015; 351 doi: http://dx.doi.org/10.1136/bmj.h3190 (Published 08 July 2015)

Cite this as: BMJ 2015;351:h3190

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U.S. Food and Drug Administration. (2011, December 14). Selective serotonin reuptake inhibitor (SSRI) antidepressant use during

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GlaxoSmithKline. (2011, July 4). Use of Paxil CR Tablets or Paxil Tablets During Pregnancy. [Press release]. Retrieved from http://www.gsk.com/media/paroxetine/mi_letter_paroxetine_pregnancy

Levinson-Castiel, R., et al. (2006, February). Neonatal Abstinence Syndrome After In Utero Exposure to Selective Serotonin Reuptake Inhibitors in Term Infants. Archives of Pediatric & Adolescent Medicine. Retrieved from http://archpedi.jamanetwork.com/article.aspx?articleid=204468

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Antidepressant Use During Pregnancy and the Risk of Autism Spectrum Disorder in Children

Takoua Boukhris et al.

JAMA Pediatr. 2016;170(2):117-124. doi:10.1001/jamapediatrics.2015.3356

unsafeproducts.com/dangerous-drugs/zoloft-many-dangers-associated/

http://www.antidepressantsfacts.com/LongTermSSRI.htm

http://www.medscape.com/viewarticle/847955

http://www.medscape.com/viewarticle/856334

https://www.drugwatch.com/2016/01/13/antidepressants-during-pregnancy-and-autism-risk/

https://www.drugwatch.com/ssri/pregnancy/

Serotonin and relationships

Serotonin antidepressants frequently blunt the emotions of long time users & reduce their loving feelings & sexual attraction to their partner.

http://www.livescience.com/47262-antidepressants-affect-feelings-of-love-for-partner.html

http://www.medscape.com/viewarticle/833484

NSAIDs like aspirin, ibuprofen, & naproxen can block the antidepressant effects of serotonin antidepressants.

http://health.usnews.com/health-news/family-health/pain/articles/2011/04/25/common-painkillers-may-blunt-antidepressants

Changing the brain

The problem with antidepressants that inhibit serotonin reuptake (SRIs) is that artificially increasing serotonin to very high levels changes every person who takes it's morality & makes people more passive and accepting of injustice in one study.

http://arstechnica.com/science/2010/09/common-antidepressants-can-send-our-moral-compasses-spinning.

Serotonin selectively influences moral judgment and behavior through effects on harm aversion

Molly J. Crockett et al.

PNAS October 5, 2010 vol. 107 no. 40 17433-17438

doi: 10.1073/pnas.1009396107

This type of artificial emotion state is sometimes called "hollow happiness" where people are willing to live with undesired situations rather than changing things for the better, and seems to be specific to artificially high increased levels of serotonin.

Artificial Happiness

The Dark Side of the New Happy Class

by Ronald W. Dworkin

Sometimes people's whole personalities will change and they will leave loved ones, or make decisions in business that are detrimental to the lives & health of others. Lowering empathy increases sociopathy, both in individuals and in society when millions of people are taking these drugs. So taking drugs that increase serotonin artificially very high like the SSRI's do, as well as some of the SNRI's (serotonin & norepinephrine reuptake inhibitors (Effexor/venlafaxin, Cymbalta/duloxetine), has lifelong repercussions. People lose years of their lives to these drugs effects on their personalities, and often until circumstances force them to stop & their caring for their loved ones returns they don't recognize the effects of these drugs on their personalities. It can be as hard as convincing someone with paranoid schizophrenia of their condition. The SRIs make people passive & less caring to the effects of the SRIs on themselves & their relationships.

Can our society survive with millions of people more sociopathic and more passive in the face of injustice? More willing to do and accept actions that put all of our lives and health in jeopardy?

Serotonin antidepressants create such an artificial brain state that often after they stop working & stop future antidepressants from working, and can block even the natural recovery from the depression, causing a artificially induced permanently depressed state.

People on a serotonin antidepressant for 5yrs:

80% found serotonin antidepressants caused other psychological problems as a complication

62% reported sexual difficulties

60% reported feeling emotionally numb

55% overall reported drug withdrawal symptoms when they missed a dose or ran out of medication

52% reported feeling not like themselves

50%+ of the study subjects ages 18 to 25 reported they were plagued by suicidal feelings while on antidepressants

42% reported a reduction in positive feelings

39% reported caring less about others

Common side effects were headaches, weight gain or loss, insomnia, general sense of detachment from reality. Suicide is also been linked antidepressants especially in adolescents and young adults.

(Doctor Richard L. Becker, “Your Health” Host)

http://breggin.com/from-prozac-to-ecstasy-the-implication-of-new-evidence-for-drug-induced-brain-damage/

http://breggin.com/observations-on-ssri-induced-behavioral-and-mental-abnormalities-in-children-and-adults/

http://breggin.com/psychiatric-drug-induced-chronic-brain-impairment-cbi-3/

http://breggin.com/wp-content/uploads/2012/01/Breggin2011_ChronicBrainImpairment.pdf

Psychiatry Research

Volume 216, Issue 1, 30 April 2014, Pages 67–73

Adverse emotional and interpersonal effects reported by 1829 New Zealanders while taking antidepressants

John Read, Claire Cartwright, Kerry Gibson

`Aggression and SRIs

A number of people who take SRIs start to feel extreme aggression, often starting in dreams before spilling over into waking life as homicidal aggression towards self & others. I know at least five people who started feeling this way when taking serotonin antidepressants. Fortunately most people have the insight to realize the drug is causing the aggressive feelings & stop taking it before they commit acts of violence. Children & people with mental illnesses in addition to depression and/or developmental disabilities too often don't have the self insight to realize the feelings are a result of the drug & are far more likely than the average person with depression to commit aggressive acts under the influence of a serotonin reuptake inhibitor. That's why mass school shootings started to become frequent when doctors began giving serotonin antidepressants to children & teens.

In a recent study of people reporting the causes of homicidal violence to the FDA, serotonin reuptake inhibitors made up 5 of the top 10, and 15 of the top 31 drugs suspected of causing the extreme aggression- reportedly increasing homicidal aggression (with intent

to kill) up to 11 times more likely.

http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pon

Moore TJ, Glenmullen J, Furberg CD (2010)

Prescription Drugs Associated with Reports of Violence Towards Others.

PLoS ONE 5(12): e15337. doi:10.1371/journal.pone.0015337

Doctors Peter Breggin & David Healy have documented that the vast majority of mass shootings were perpetrated by people who just started, just got an increased dosage, or just stopped a serotonin reuptake inhibiting antidepressant. (Medication Madness, PB & Let Them Eat Prozac DH).

This includes Columbine High School shootings as well as those at Virginia Tech (34 people dead) & the Navy Yard.

http://www.naturalnews.com/049137_Germanwings_depression_antid

http://breggin.com/antidepressant-induced-suicidality-and-violence-more-about-deception-than-science-3/

SRIs are ineffective

And once the drug companies who make SRIs were made to reveal ALL of their studies, not just the very few they selected to send to the FDA to get the original approval, it was revealed there was no statistical evidence they were better than placebo, as there were around six failed studies for every one that showed even a small benefit.

https://blogs.scientificamerican.com/cross-check/are-antidepressants-just-placebos-with-side-effects/

Trazodone can cause dementia symptoms, accidents & priapism

Many drugs used for sleep like antihystamines (Benadryl, Chlortabs, Dramamine) & others (Desyrel/trazodone) are anticholinergics which reduce the concentration chemical in the brain, causing difficulty thinking for hours after waking up & also cause a significantly increased death rates as they spur people to make impulsive decisions like with their eating & driving. Trazodone usage increases accidents the next day by 91%. Trazodone can cause priapism in one in 1800 men and similar tissue dysfunction in women, which sometimes results in amputation of the penis. One treatment that works sometimes for a priapism crisis is pseudoephedrine.

Penile Amputation After Trazodone-Induced Priapism: A Case Report

Paul Hoffmann et al.

Prim Care Companion J Clin Psychiatry. 2010; 12(2): PCC.09l00816.

doi: 10.4088/PCC.09l00816gry

SSRIs and loss of libido

SSRIs can lower sexual interest, excitement & orgasm.
Cabergoline (Dostinex) is a dopamine receptor agonist that may improve the ability to orgasm for people who lose it due to SSRIs as well as decrease the refractory period for men.

How to be safe upon withdrawal

There are natural supplements available (see above) that don't cause deadly side effects like suicidality or homicidal aggression, as well as other antidepressants like MAOI inhibitors (the patch version avoids the severe food interactions (patch). If you decide to try the SRIs, be clear that if you feel any increase in aggressive or suicidal feelings, including in dreams, stop taking the SRI immediately. Plan ahead for how to stop by reading the sites below. Be aware that they may change your personality and your behavior in negative ways.

Know ahead of time that if you take Paxil (paroxetine) or Effexor (venlafaxine) especially or any of the SRIs you may develop severe withdrawal symptoms that may be unbearable. And Paxil is a level 3 anticholinergic, which means it makes it very hard for people to concentrate and because it causes people to make worse decisions (like when eating) & drive impulsively, Paxil like all level three anticholinergics increases the chances of dying early by 78% & increases cognitive impairment by 46%. Anticholinergic symptoms often mimic dementia.

https://www.uea.ac.uk/mac/comm/media/press/2011/June/Anticholiner

http://www.indydiscoverynetwork.org/resources/antichol_burden_scale

Relieving withdrawal symptoms from SRIs-especially Paxil (paroxetine) or Effexor (venlafaxine)

People trying to withdraw from SRIs, especially Paxil or Effexor, can find it difficult or impossible to endure the intense emotional, neurological, & physiological side effects they experience. People can get intense suicidal and/or homicidal ideation during withdrawal as well.

Prozac (fluoxetine) as a temporary substitute

People appear to most often find immediate relief by having their doctor switch them first to fluoxetine (Prozac). This allows them to then taper off of fluoxetine (Prozac), which reportedly has very little side effects with tapered discontinuation.

Some people who just get off of Paxil or Effexor without switching find immediate relief from just taking a fluoxetine (Prozac) capsule when withdrawal effects get too strong. It may be important to have a month prescription for fluoxetine (Prozac) ready BEFORE stopping the Paxil or Effexor for safety.

https://www.drugs.com/answers/what-are-the-symptoms-of-effexor-withdrawal-4082.html

http://www.medicalnewstoday.com/opinions/20689

Cherries

Cherries or cherry extract helped insomnia and headache side effects of Effexor withdrawal in one person. Dark cherries have melatonin which helps sleep, and cherries are Cox2 inhibiting anti-inflammatory/painkills as well.

http://www.prozactruth.com/effexor.htm

Serotonin raising supplements as an SRI substitute

Over the counter, supplements like St. John’s wort, tryptophan, or 5-HTP also increase serotonin and taken individually may relieve withdrawal symptoms. As with any prescription drug or nonprescription supplement that increases serotonin, taking two substances that raise serotonin together at the same time can cause serotonin syndrome, which can be deadly.

St. John's Wort may interact with drugs or herbs. On this link click on the drug to learn if its a large, medium, or small effect. It helps if the St. John's wort is taken alone & only taken occasionally.

https://www.drugs.com/drug-interactions/st-john-s-wort-index.html

St. John's wort is so effective against depression & anxiety that it is prescribed by doctors in the Czech Republic, France, Poland, Romania, Russia, Germany. The German E commission has also approved it for painful or hesitant urination as well.

Your Health by Dr. Richard Becker with Cindy Becker #1574, St. John's Wort for a Healthy Mood.

Effexor withdrawal testimonials- start within hour of just one missed dose, may last up to a year upon full withdrawal

Agitation, severe

Aggression, severe

Anger

Anxiety

Body aches

Body temperature changes

Chills

Confusion

Crying

Delirium

Depersonalization (zombielike, feel like an actor in a play)

Depression

Diarrhea

Dizziness

Electric shocks, “popping” in brain

Fatigue

Flulike symptoms

Headaches

Insomnia

Irritability

Loss of appetite

“Madness”, feeling crazy

Mania

Mental confusion

Mood swings, severe

Motor skill impairment, severe

Nausea

Nightmares

Pain

Panic attacks

Personality change

Shaking

Skin itch, severe

Speech slurring

Suicidal ideation

Vomiting

http://www.medscape.com/viewarticle/506427

http://mentalhealthdaily.com/2014/03/12/effexor-xr-withdrawal-symptoms-how-long-will-they-last/

https://www.drugs.com/answers/what-are-the-symptoms-of-effexor-withdrawal-4082.html

http://www.prozactruth.com/effexor.htm

http://patient.info/forums/discuss/venlafaxine-withdrawal-please-help–35826

discoveryrehab.com/a-guide-to-getting-off-of-effexor-xr-addiction-withdrawal-symptoms-detox-timeline/

The biggest question people ask: Why would my doctor do this to me?

Supplements that may help depression

People have used spirulina (with a meal with a vegetable), carnitine (an amino acid), and vitamin B complex (coenzyme may be best) to help withdraw from Paxil (paroxetine) or Effexor (venlafaxine) and to help treat their underlying depression & anxiety. The reason all three have helped may be that they all increase mood, reduce anxiety, and increase concentration. This combination appears to help people feel more in control of their behavior & emotions.

Pain control, SSRI withdrawal, & depression

Taking turmeric (with a little black pepper) or curcumin may improve mood & reduce anxiety in a percentage of people who take it. Turmeric or curcumin, ginger, astaxanthin, boswellia (frankencense) are all major anti-inflammatories, reduce physical &

possibly emotional pain, & may reduce the symptoms of Paxil (paroxetine) or Effexor (venlafaxine) withdrawal.

Seasonal affective disorder (SAD)

Taking 4000 IU of vitamin D3 with a meal (fat soluble) may relieve seasonal affective disorder/winter moodiness.

N-acetylcysteine (NAC)

NAC helps to reduce cocaine addiction and cravings, nicotine addiction, as well as bipolar depression/mania symptoms, schizophrenia, respiratory disorders, liver problems, and grooming disorders-hair pulling, skin picking, and nail biting. It may help to normalize brain activity during withdrawal.

Antianxiety & anti-insomnia

Antianxiety supplements and strategies may help symptoms when taken during the day- Meditation, delta binaural beats, lavender oil, lemon oil, magnesium, valerian, theanine, gaba, magnolia bark, chamomille, glycine, lemon balm, passionflower may all help anxiety during the day and with melatonin & honey they all may help sleep at night.

Antistress

The antistress supplements may help withdrawal symptoms as well- American ginseng, Siberian ginseng (Eleuthero), Asian/Chinese/Korean ginseng (Panax), rhodiola, ashwaganda, schisandra, rhaponticum, jiaogulan, aralia mandshurica/elata spikenard root, Holy Basil (Tulsi).

https://seroxatsecrets.files.wordpress.com/2009/07/healy_withdrawal_j

http://www.medicalnewstoday.com/opinions/20689

http://effexorcheck.com/withdrawal/

depressionintrospection.wordpress.com/2007/01/10/patient-responsibility/

http://www.wikihow.com/Get-off-Paxil

Starting on SRIs

One of the reasons they weren't able to find that SRIs are better than placebo is the way doctors prescribe antidepressants. Drug companies suggest that it takes one to two months to see if a drug works, coincidentally also how long it takes for 50% of people's depression to resolve naturally. Doctors then often think it was the drug that lifted the depression & they prescribe it for years unnecessarily, often not realizing it had nothing to do with the remission until the person has a relapse while taking the drug that supposedly cured the first one.

One major reason that SRIs appear often to cause a "hollow" happiness is because they both decrease and increase serotonin. They affect serotonin on the main serotonin receptor (5HT) in a way that usually helps depression, but they can affect serotonin on some secondary sites (5HT2a,b,c) in a way that can blunt the effectiveness of that main antidepressive effect, as well as cause insomnia.

Sertraline (Zoloft) or escitalopram (Lexapro) in combination with mirtazepine (Remeron) may be the fastest & most effective antidepressant combination.

Combining SRIs

Mirtazapine (Remeron)

Something that often boosts the efficacy of serotonin antidepressants and can reduce the amount of SRI needed is to add other antidepressants that effect a different neurotransmitter, usually norepinephrine, and/or a different serotonin site than the most common site. Mirtazapine (Remeron) affects both norepinephrine & alternate serotonin sites & is often an effective complement to serotonin reuptake inhibitors (SRIs) like Prozac (fluoxetine). SRIs lower the activation of a couple of secondary serotonin sites, causing insomnia, lowering sexual desire, & reducing SRIs antidepressive effect. Mirtazapine reverses this affect on the secondary serotonin sites, deepening & lengthening sleep, bringing back normal levels of sex drive, and sometimes significantly increasing the antidepressant effects of SRIs to far greater than an SRI or mirtazapine alone. A few of the negative side effects of mirtazapine are weight gain, withdrawal symptoms, & mild blood pressure increase. Some people deal with this by getting a very low dosage (below 5mg), as mirtazapine is reported to improve sleep more in lower doses and the lower dosage makes withdrawal easier. Mirtazapine may help tremor & movement disorders as well, and in one case study helped Parkinson's induced visual hallucinations without hurting motor symptoms.

Ann Clin Psychiatry. 2012 Aug;24(3):215-24.

The effects of mirtazapine on sleep in patients with major depressive disorder.

Dolder CR, Nelson MH, Iler CA.

Psychiatry Investig. 2011 Mar; 8(1): 55–57.

Published online 2010 Nov 20. doi: 10.4306/pi.2011.8.1.55

Mirtazapine Augmentation for Selective Serotonin Reuptake Inhibitor-Induced Sexual Dysfunction: A Retropective Investigation

Murad Atmaca, Sevda Korkmaz, Mehtap Topuz, and Osman Mermi

Pact V, Giduz T. Mirtazapine treats resting tremor, essential tremor, and levodopa-induced dyskinesias. Neurology. 1999;53:1154.

Psychogeriatrics. 2013 Jun;13(2):103-7. doi: 10.1111/j.1479-8301.2012.00432.x.

Mirtazapine improves visual hallucinations in Parkinson’s disease: a case report.

Tagai K1, Nagata T, Shinagawa S, Tsuno N, Ozone M, Nakayama K.

Mianserin

Mianserin works as an antidepressant on one of the secondary serotonin sites to reverse the negative effects of SRIs on sleep &

mood in this receptor. It appears to also help antiparkinson drug induced psychosis in one study. It is not available in the US.

Eur Arch Psychiatry Clin Neurosci. 1995;244(6):320-4.

Mianserin treatment of patients with psychosis induced by antiparkinsonian drugs.

Ikeguchi K, Kuroda A.

Agomelatine

Agomelatine is a secondary serotonin antidepressant that helps sleep, but can affect the liver.

Antidepressant efficacy of agomelatine: meta-analysis of published and unpublished studies

BMJ 2014; 348 doi: http://dx.doi.org/10.1136/bmj.g1888

David Taylor et al.

Drugs Today (Barc). 2009 Aug;45(8):599-608. doi: 1396673/dot.2009.45.8.1396673.

Agomelatine: a novel pharmacological approach to treating depression.

Owen RT

Serotonin syndrome

Using too high a dosage of SRIs, alone or in combination with another SRI or secondary serotonin drugs, triptans for migraines, MAOIs or any drug that raises serotonin, can cause serotonin syndrome. Serotonin syndrome is a possibly fatal syndrome that may include agitation; confusion; hallucinations; coma; irritability; fever; fast or irregular heartbeat; tremor; excessive sweating; rigid muscles; and nausea, vomiting, or diarrhea.

How to determine if antidepressants work in a week

There are good questionnaires that can help a doctor predict within the week if an antidepressant is going to work in the future even though the person may not consciously realize yet they are getting better. Every doctor can give those surveys a week after a person starts. If both the survey & the client hasn't noticed a change, the doctor can add an augmenting antidepressant or increase the initial antidepressant's dose for a week if there aren't bad side effects to the lower dosage. If no positive effects are measured and felt after two weeks the doctor can go on to another antidepressant, vs having the client stay on an ineffective (for them) antidepressant for another two to six weeks. If there was a slight change, a doctor can then add on another antidepressant to get a combination effect as long as the side effects aren't too much.

This helps the client as it makes it more likely an effective antidepressant or combination will be found much more quickly and won't be as likely mistaken for efficacy if the depression resolves naturally after two months.

Withdrawing from SRIs

One of the ways people are able to get off of venlafaxine (Effexor) or paroxetine (Paxil) is to switch to slow acting Prozac (fluoxetine) under their doctor's supervision then slowly taper down. Prozac and its metabolites take two months to get out of people's system vs the very quick action of Paxil or Effexor. That quick action seems to cause some of the severe withdrawal symptoms.

Norepinephrine reuptake inhibitor antidepressants (NRIs)

NRIs have been limited by their side effect of increasing blood pressure, but have not been found to affect personality in the negative way as the serotonin antidepressants. Wellbutrin/Zyban (bupropion) is an mild anticholinergic, which cause cognitive confusion, physical incoordination, and early death.

Tricyclics

The older antidepressants, the tricyclics, appear to all be severe anticholinergics, which means they mimick dementia and cause early death on top of their numerous negative other side effects. Perhaps only in people with Parkinsons, where there is often too much acetylcholine, may these be of benefit as they can improve motor function. If cognitive confusion sets in the dosage is too high. They may also benefit people with migraines that don't respond to other treatments.

amoxapine (Asendin)

desipramine (Norpramin)

doxepin (Sinequan)

clomipramine (Anafranil)

trimipramine (Surmontil)

amitriptyline (Elavil)

imipramine (Tofranil)

doxepin (Silenor)

nortriptyline (Pamelor)

protriptyline (Vivactil)

amitriptyline (Vanatrip)

nortriptyline (Aventyl Hydrochloride)

imipramine (Tofranil-PM)

http://www.health.harvard.edu/newsletters/Harvard_Womens_Health_W

http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pon

Liu J, Dong J, Wang L, Su Y, Yan P, et al. (2013) Comparative Efficacy and Acceptability of Antidepressants in Parkinson's Disease: A Network Meta-Analysis. PLoS ONE 8(10): e76651. doi:10.1371/journal.pone.0076651

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1989731/

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Antidepressant Studies in Parkinson’s Disease

A Review and Meta-Analysis

Mov Disord. Sep 2005; 20(9): 1161–1169.

doi: 10.1002/mds.20555

Tricyclics and heart attacks

Amitriptyline (Elavil) appears to increase the QT interval, which may increase heart attacks.

QT interval and antidepressant use: a cross sectional study of electronic health records

BMJ 2013; 346 doi: https://doi.org/10.1136/bmj.f288

What to do?

I would (& do) take the mood boosting medications/supplements that have the best research & outcomes & least side effects first, in

combination as needed, & save the ones with greater side effects for last, and be aware in case of experiencing negative side effects. By using the safest ones first, I may never have to worry about a drug causing suicidality or hyperaggression, or one changing my personality for the worst.

Category

1. Uncategorized

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