SPECIAL REPORT

Depression - GO TO HELL

A Holistic Approach to the most common causes of Depression and How to easily treat them

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Depression can be a primary problem or it can be a result of other problems. For example, if you are wiped out all the time, cannot get a good night’s sleep, or if you are in constant pain, chances are you are going to be blue. So the question is, do you wake up in the morning depressed from the get-go? Does it build up as the day goes on? Is it episodic and occur during a full moon? Just in the winter months? Let’s go through some common causes of depression that in many cases are easy to resolve.

1. A total cholesterol level less than 150 can cause depression… You have got to be kidding me? Last week I went to my doctor and my cholesterol was the lowest it’s ever been and he gave me a gold star on my forehead! And you’re trying to tell me that low cholesterol is bad?
Yes I am. Just like cardiologists have their own set of studies on heart disease, psychiatrists have their own studies that show that a total cholesterol level less than 150 is associated with an increase in anxiety, depression, and violent suicide.

Wow! The reasons are as follows: First of all your sex hormones are made from cholesterol. Cholesterol is the raw material needed to make testosterone, estrogen, progesterone, DHEA, Pregnenolone, etc. So, low cholesterol equals low hormones. Low hormone levels are associated with depression. The rest is obvious. The second reason is that psychiatrists feel that the serotonin receptors throughout your body do not function well without adequate cholesterol. Therefore, if you are depressed and you have low cholesterol, you need to get your level up at least to 165.

How to get your cholesterol up:

1. Not with fast foods!

2. Eat healthy foods with cholesterol: eggs, nuts, shrimp, sardines, butter (I recommend using goat butter if you can find it at your local health food store.

3. If you are on a cholesterol lowering medication, ask your doctor if you can lower the dose and tell them why. Consider replacing with OmegaGenics EPA-DHA 2400 fish oil, one teaspoon per day, or OmegaGenics EPA-DHA 720, two capsules twice per day. If you are vegan you can use OmegaGenics EPA-DHA 300 Algae and take two caps twice per day. Besides taking one of the above fish oil products I would recommend adding Ultrameal Cardio 360 two scoops per day. These two
products work very well to lower cholesterol naturally and you may be able to stay off your medication.

These products can be purchased at a discount from: ktopouzian.metagenics.com

Remember, consult with your physician! Then, most importantly, ask your doctor to run a “Cardio IQ” through Quest Diagnostics (test code: 332188) for your next cholesterol test. It measures your cholesterol particle size. In this case, size is important. If you have large buoyant cholesterol particles (beach balls) bouncing around in your blood stream, it’s really difficult for them to penetrate the walls of your arteries and cause atherosclerosis. However, if you have small dense cholesterol particles (buckshot), that’s bad and they can penetrate into the walls of your arteries and cause damage. Again, if you have high cholesterol but you have large particles, you may not need to be on medication. Ask your doctor.

4. Improve the absorption of your cholesterol. Many people for a number of reasons are not able to absorb the nutrients in their food. So if you are unable to get your cholesterol levels up, you may have to take a supplement with ox bile and the enzyme, lipase in it. These are usually called digestive enzymes and can also be found at: ktopouzian.metagenics.com

My favorite digestive enzyme is SpectraZyme Complete: one to two with each cholesterol containing meal.

Now, let’s go on to other causes of depression.
2. Low Vitamin D levels. I don’t know about you, but I am a sun worshiper and when I’m stuck in the grey winters of Michigan, I get to the point where I will wake up depressed. I remember one day saying to myself that this is ridiculous and took 20,000 iu (international units) of Vitamin D for 3 days and I actually surprised myself because the depression just disappeared. Therefore, if you live north of the Mason-Dixon Line and suffer from depression especially in the wintertime, I would recommend you take 10,000 IU of Vitamin D3 per day, and have your doctor check your levels after a month. It is possible to overdose on Vitamin D because it is a fat-soluble vitamin. BTW, that means for optimal absorption you should take it with a fatty meal, like those cholesterol raising foods we just talked about. My favorite way to take Vitamin D3 is in the liquid form where one drop equals 1,000 IU.

Try D3 Liquid, 5-10 drops per day. ktopouzian.metagenics.com

You might be saying to yourself, Well, I live in Florida or I live in Texas and I get plenty of sun. That is not always true. If you use sunscreen or if you are just getting your arms in the sun a little bit every day, you probably still have low vitamin D levels. Total body exposure for twenty minutes per day is what it takes to get your levels up. Have your doctor check your levels the next time you have a checkup or if you are having any depression at all.

3. Low Magnesium levels. Most people seem to have low magnesium levels. It’s just not in our diet. In addition, if you are on a medication for heartburn/GERD (whether it is
OTC or prescription) it will stop your body from absorbing magnesium. Just watch the end of the drug commercials on TV. They specifically tell you this. If you exercise a lot and sweat, you will also deplete your magnesium.

Ever have a little twitch under your eye or a muscle that cramps up on you at night? Charley horses? Restless leg syndrome? Do you shake a little bit or have a tremor? Does coffee make you shake more than it does with others? Do you get migraines? Anxious? Are you DEPRESSED? Take some magnesium!

How to replace magnesium:

1. Foods that contain magnesium are: spinach, pumpkin seeds, soybeans, Brazil nuts, artichokes, dates, brown rice.
2. Epson salts baths (aka Magnesium Sulfate). It absorbs through your skin. Two cups in the bath water and relax for a half hour before bedtime.
3. Magnesium glycinate is one of the best absorbed forms of magnesium and can be found at ktopouzian.metagenics.com. The dose can be anywhere from 300 to 1200 mg per day but if you take too much it can cause diarrhea.
4. Magnesium can also be given intravenously but this is something that is done at a physician’s office or in a hospital setting.

4. Low Vitamin B12 Levels. “Oh I already take a B complex…” Well, listen up. Not all B vitamins are created equal. First of all, the dose of B12 that you will usually get from your B-Complex vitamin is not going to prevent depression. Ask your doctor to order a B12
level from Quest Diagnostics Laboratory - the largest lab in the country, and if your level comes back below 400 (which is really common), Quest Laboratories puts a warning on the results stating “…low levels of B12 can cause hematologic and neuropsychiatric abnormalities…” Translation: Low B12 levels can cause any condition you would go see a psychologist for. So before you get put on an anti-psychotic or anti-depressant drug, maybe you should get your B12 level checked or just take a good dose of B12 and see how you feel after a couple of weeks? And BTW, a normal level for B12 should be above 600. Many times, if your B12 level is low, you will most likely have lower levels of other vitamins and minerals as well. Spectracell Laboratories, (http://www.spectracell.com) has an excellent micronutrient blood test that measures levels of 35 different essential vitamins, minerals and nutrients. Have your doctor consider this test also if you are suffering from depression.

So, what causes low levels of B12?

1. **Your Diet.** Foods that are high in B12 are shellfish, seafood, red meat, eggs, and caviar.
2. **Certain medications will stop you from absorbing Vitamin B12.** The most common are the GERD/Heartburn medications, whether they are OTC or prescription. The reason is you need stomach acid to absorb B12 into your body.
3. **The wrong type of bacteria in your gut.** Did you know that probiotics (the good bacteria in your gut) actually manufacture B Vitamins? And if you have been on
antibiotics frequently in the past you have been slowly killing off the assembly line in your gut for B vitamin production.

More pearls on Vitamin B12:

- The best type of B12 you should be taking is called Methylcobalamin and you should be taking about 1,000 mcg per day. A good source is Intrinsi B12-Folate from Metagenics. Two per day. ktopouzian.metagenics.com

- You could also ask your doctor to write you a prescription for subcutaneous methyl B12 injections. Compounding pharmacies throughout the country can fill these types of prescriptions. The usual dose that I use is 64mg per kilogram of body weight. So a 70 kilogram person (150 pounds) would get a little over 4 milligrams every three days. These are given with a 31 gauge insulin syringe and are practically painless for those of you who are needle-phobic. To find a compounding pharmacy in your area, go to http://www.pccarx.com/ or http://www.iacprx.org/

- Note: when you start taking higher doses of B12 and your doctor checks your levels and they are sky high, don’t freak out! You cannot overdose on this stuff. Your body takes what it needs and gets rid of the rest. Everyone that is on a hefty dose of B12 has high blood levels. Don’t worry about it, especially if you are feeling better!
• B vitamins can also be given intravenously for a myriad of conditions. Go to:
  http://www.altmedrev.com/publications/7/5/389.pdf and read a great article called “Intravenous Nutrient Therapy: the “Myers’ Cocktail” by Alan Gaby, M.D.

5. Elevated Homocysteine levels. This is a blood test that any doctor can order on you. It’s a risk factor for depression, memory loss, Alzheimer’s, heart disease and thick blood. And it’s easy to treat; B vitamins. Specifically a product called Vessel Care is designed specifically to lower homocysteine levels. The dose is two per day, forever. If you have depression, have your doctor check your homocysteine levels.

A story to tell: Mary Jane, an 85 year young women is brought in by her daughter for having worsening memory, forgetfulness and depression. Her daughter is worried about leaving her mom at home alone and does not want to put her in a nursing facility. She also brings her in because she is frustrated with the medications that her mom was put on. They are not helping at all and have side effects. They also brought in lab work that had been done over the last few years for review. Her daughter also relayed to me that her mother had a history of using marijuana but stayed away from cigarettes or alcohol.

After reviewing the labs they brought in, reviewing her medications, I decided to order other specific lab tests related to her symptoms. I was looking for common, easy to fix items. After getting her labs back, it turned out that she had an elevated homocysteine level, a positive MTHFR gene mutation (this is something you are born with and is a risk
factor for high homocysteine levels), low magnesium, low thyroid hormone levels, low vitamin D, and low B12 levels. OMG. After treating and correcting all these abnormalities, guess what happened? Her depression improved by 80% and her memory improved by 50% Later, we checked growth hormone levels, they were also low so we naturally attempted to increase her growth hormone levels with an additional 10% gain in improvement. Well folks, that’s not perfect but I’ll take it any day of the week. Imagine a friend or relative that when you try to talk to them, they don’t look you in the eye and you can tell there mind is wandering or confused and they can’t stay on track with a conversation. Then the next time you see them, they are looking you in the eye and responding to your voice, answering your questions and making sense of it all. A sound mind and body is the goal of old age. Without that, what’s the point?

6. Low Thyroid Function (Hypothyroidism). A complete discussion of low thyroid is in the chapter, Causes of Fatigue, but briefly, low thyroid is a very common cause of depression. And one of the problems is that the standard of care in the medical field is to only perform a screening test called TSH (Thyroid Stimulating Hormone). This is a hormone made in your pituitary gland that will increase if your thyroid gland is not making enough thyroid hormone. Unfortunately, this test is not that accurate and there are situations where it will not react the way it is supposed to. In my experience, you need to perform the following tests to uncover a poorly functioning thyroid gland:
- TSH
- Free T3 (actual hormone level)
- Reverse T3 (hormone of “hibernation”)
- Free T4 (actual hormone level)
- TPO - Thyroid Peroxidase Antibody (looking for Hashimotos or Graves)
- TBAB - Thyroglobulin Antibody (looking for Hashimotos or Graves)
- Vitamin D3 (low Vitamin D levels will effect your thyroid)
- Ferritin (low iron will effect your thyroid)
- SHBG - Sex Hormone Binding Globulin (will bind up or shackle your thyroid hormones)
- Cortisol (low cortisol will mimic low thyroid)

Let’s tell another story: Once upon a time in a land not so far away, there was a young princess of 17 years of age that was having problems with the trilogy of HAP (Heavy painful periods, Acne, PMS). Her doctor, being “old and wise” put her on birth control pills from a pharmaceutical company that routinely brought breakfast for the entire office staff. After starting “The Pill”, her acne began to clear, her PMS and heavy periods also improved. But, within a year, she finds herself suffering from a new ailment called depression, and returns to see the wise old doc. Now for her depression, she is placed on an antidepressant - antipsychotic medication and her depression improves, a little. However, something just is not right and in the back of her mind, she wonders why she
is gaining weight for no reason, why she has no libido or sexual desires, and why on occasion she has these wicked thoughts of suicide that she has to throw out of her head.

Folks, here’s the scoop on the princess: First, birth control pills should be used for “birth control” and antipsychotics should be saved for “psychotics”, not a teenager with what you will see is a hormone imbalance. Unfortunately, this is the standard of care in North America. From my experience, the best way to treat this young woman is to treat the underlying cause of her problem. In this case what she had was an underactive thyroid gland. Low thyroid function can cause acne, heavy periods and PMS. Birth Control Pills (BCP) will hide the underlying problem by stopping your body from producing any of your sex hormones including testosterone. So your body does not ovulate even though you are having periods. In addition, BCPs will also increase a binding protein that is made in your liver. This protein will knock out your thyroid gland. So the princess had a poor functioning thyroid from the get-go and when the BCPs were added to the mix, they wiped it out and the depression set in. I should also mention that BCPs will also decrease testosterone levels and two of the properties of testosterone are a libido and sense of well-being.

1. Acne, PMS, Heavy Periods: Think low thyroid.

2. Depression while on birth control pills: Worsening of low thyroid and loss of testosterone.

3. Weight gain, loss of libido, suicidal ideations: Common side effects from antidepressants - antipsychotics.
So then, how do we treat the princess?

1. Check her hormone levels; thyroid, progesterone, testosterone, estradiol, DHEA and cortisol. Replace what is low with bio-identical hormones (discussed later) or stimulate production with specific supplements.

2. Check for food sensitivities including gluten (wheat) and dairy and remove from diet is tests are positive.

3. Check blood levels of magnesium, iron, and candida (a form of yeast).

4. Consider treating her PMS empirically (shooting from the hip) with OmegaGenics Mega 10 two to four gel caps and magnesium glycinate 300-600 milligrams every day, doubling it to tolerance the week before her period.

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Again, for a detailed discussion, go to the low thyroid section under fatigue.

7. **Low Sex Hormone Levels:** This is another very common and easily treatable cause of depression. For men, one of the biggest culprits is low testosterone levels. Testosterone levels in men drop slowly to where by the time you are 70 years old your testosterone levels are 10% of what they were when you were 25 years of age. There are several other hormone levels that need to be tested along with Testosterone (more on this under the Hormone Imbalance chapter).
In women, the top three sex hormones levels to test for depression are Estrogen, Progesterone, and Testosterone.

Check levels and replace what is low with the guidance of your doctor.

Again, see a more detailed description under “Hormone Imbalance”.

8. **Gluten Sensitivity**: AKA wheat sensitivity, wheat allergy, celiac disease or silent celiac disease can cause depression. The best way to test for this is to go online to [www.enterolab.com](http://www.enterolab.com) and order one of their stool tests. Enterolab have the most sensitive tests that I have found for this. Or if the idea of collecting a stool sample and sending it in to a lab grosses you out, you can try going 100% gluten free for 2-4 weeks. If your depression improves, well then, you know what to do, don’t you? There are also blood tests that will screen for this but are not as sensitive but can be helpful. Given that, they are called Gliadin Antibodies IgG and IgA, and Transglutaminase Antibodies (TTG) IgG and IgA. Any physician can order these. Since it is not (from my experience) a very sensitive test, if it comes back even a little elevated I consider it significant. What I mean is that if the levels come back from 0-4 its probably a normal test but if it comes back higher than that, for example an 8 or 10 where the normal range is up to 20, I still consider this a semi-positive test and would recommend a trial of going gluten free.

See Appendix A for how to go gluten free.
9. **Heavy Metals.** Such as Mercury, Arsenic, Lead can cause depression by effecting your hormone secreting glands (adrenals, thyroid, pituitary, and ovaries). They can also lower your metabolism causing depression and directly affect the tissues in your brain. As an extreme example, back before the days of penicillin, mercury was used to treat syphilis. Some say that the great composer, Mozart was treated for syphilis with mercury during the time when he wrote his last symphony. If you are familiar with this work, this symphony was very dark compared to his other works.

Where are metals found?

1. **Mercury:** Fish (the larger the fish, the higher the mercury count), silver amalgams, vaccinations, the air (from coal burning electrical power plants), Thimerosal which was used in contact lens solution in the past.

2. **Aluminum:** Pots and pans (throw out those aluminum pans that you inherited from your grandmother!), underarm deodorant.

3. **Arsenic:** Your city water supply, chicken (some farms place arsenic in the feed to increase the water weight of the bird, and rice (arsenic is used to kill the rodents scurrying in the rice patties), and lastly if can be found in some wines.

4. **Lead:** Lipstick, old homes with lead-based paint, hair coloring, and it’s also widespread in our environment from its use for the past two hundred years.

5. **Antimony:** Pajamas and bedding because it is used as a fire retardant.
How to find out if you have high levels of heavy metals: One of the easiest ways is to have a hair analysis performed. If the test shows high levels of one of these metals then its time to treat. But take warning, if you perform a hair analysis and it shows there are zero levels of mercury, etc. then you may be in even deeper trouble. Think of it this way. **Everyone** is exposed to heavy metals, so if you have a hair analysis, it should show at least some mercury and lead coming out in your hair. If it comes back with no metals, it may mean that your body is not detoxifying (getting rid of) and you are holding it all in!

At this point I would recommend that you have your doctor perform a urine provocation test for heavy metals. This is where you are given a chelating agent (chelate is Greek for claw) that will “grab” heavy metals out of your system and dump them into your urine. The urine is collected and the results will show what metals are hiding in your body. See my heavy metal provocation protocol in Appendix C.

Genova Diagnostics has a kit to perform this test.

If either of these tests show that you are high in heavy metals there is an exhaustive list of ways to treat. Here are just a few.

1. Chlorella. This is a supplement (or you could call it a superfood) that has the highest concentration of chlorophyll of any plant on the planet. Chlorophyll rids your body of environmental toxins like heavy metals. My favorite brand is Sun Chlorella. Take 10-15 tabs per day and can be purchased from [askdrt.weebly.com](http://askdrt.weebly.com)

2. Intravenous chelation to pull the metals out of your body using chemical agents like Phosphatidylcholine (PS), DMPS, or EDTA. Obviously, this is something you
would have done at a physician’s office that specializes in chelation. To find a
doctor near you, go to www.acamnet.org and click on “Find a physician in your area”, or go to:  http://www.a4m.com/directory.html and search for a physician near you.

3. Another method of chelation that any physician can prescribe if they do not perform intravenous chelation is through the use of Detoxamin EDTA rectal suppositories. Not the most fun thing in the world but honestly this is a very effective way to get heavy metals out of your body. How do they work? The EDTA is absorbed through your intestinal tract and into your blood circulation. It then grabs any available heavy metals and dumps them out of your body either via your bowels or kidneys. I recommend patients use one suppository 3 days in a row and then take 7 days off. During the 7 day break you should take mineral supplementation because chelating agents will pull out good metals (like magnesium, calcium, zinc, etc.) as well as the bad heavy metals. “Multi-Min Chelate by Metagenics is a great product and I recommend taking 3 per day when not on the suppositories. ktopouzian.metagenics.com

4. Last but not least, another avenue for detoxification is with the products Metallo-Clear 3 tablets per day and Ultra Clear Renew two scoops twice per day by Metagenics. This should be performed for ten days, three months in a row then repeat testing for heavy metals. ktopouzian.metagenics.com
10. **Low L-Carnitine** levels can cause depression. Carnitine is found in red meats so if you are vegan, you may need to supplement. L-Carnitine with Chromium by Metagenics is a good product for this. One per day. [ktopouzian.metagenics.com](http://ktopouzian.metagenics.com)

Your doctor can also perform a blood test to check your carnitine levels. Specifically, through Quest Diagnostics Laboratory, test code 70107 and also through Spectracell Laboratories. Ask your doctor to test this nutrient.

11. **Omega 3 Fatty Acids** deficiency can cause depression. Either have your doctor check your levels or just start taking fish oil to see if you start feeling better. One of my favorite products is OmegaGenics EPA-DHA. Take two twice per day. [ktopouzian.metagenics.com](http://ktopouzian.metagenics.com)

12. **Concussion**: If you have had a concussion in the past or been diagnosed with post concussive syndrome, these can cause depression. So if your kids play sports like soccer, football, hockey etc. and they get hit in the head, and a few days or weeks later they are down in the dumps, its time to go see a neurologist.

13. **Post Partum Depression (PPD)**: First of all, you must remember that during pregnancy, the baby is literally sucking all the vitamins and nutrients out of you. So to treat PPD you need to check for all of the aforementioned causes of depression first and
treat them. PPD may be a combination of nutrient deficiencies and hormone imbalances so check levels with your doctor.

14. **Insomnia** can cause depression. If you are not sleeping, you are fatigued all the time and you can obviously get depressed because of this. So fix the insomnia and the depression may go away.

15. **Lack of exercise** can cause depression. Exercise can increase certain neurotransmitters in your brain and endorphins. So if you are depressed try working out.

16. **Poor Diet & Food Sensitivities** have been associated with depression. Have your doctor check you for food sensitivities and change your diet!

17. **Melatonin** can cause morning depression. If you wake up depressed but are able to shake it off later on and you take melatonin at night for sleep, it may be causing your morning depression. Cut down on your dose.

18. **Medications**. Below are nine medications that can cause depression. Talk to your doctor if you are on any of these and experiencing depression.
1. Beta Blockers: Propranolol, Metoprolol, Tenormin, Coreg, Timoptic, etc.

2. Corticosteroids: Prednisone, Dexamethasone, etc.

3. Benzodiazepines: Valium, Ativan, Xanax, etc.

4. Parkinson’s drugs


8. GERD Medications: Protonix, Nexium, Prilosec,Prevacid

9. Cholesterol lowering Statin Drugs.
If you enjoyed this Special Report you’ll love the Sequel!
Available at askdrt.weebly.com

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