

Eating the Right Foods Can Give Your Mood a Boost

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STORY AT-A-GLANCE

- › Research confirms your diet can have a pronounced effect on your mental health
- › Foods that promote good mental health do so by optimizing your gut microbiome, quelling inflammation, reversing insulin resistance and optimizing mitochondrial function
- › Sugar, wheat (gluten) and processed foods have been linked to a greater risk for depression and anxiety. Diets low in animal-based omega-3 fats and folate also raise your risk
- › Key dietary recommendations for the prevention of depression include following a “traditional” dietary pattern such as the Mediterranean diet and avoiding processed foods, fast food, commercial baked goods and sweets
- › Another foundational strategy to prevent or treat depression and anxiety is to limit exposure to electromagnetic fields (EMFs). Studies have linked EMF exposure to an increased risk of both depression and suicide

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The connection between your food and mood has come under increasing scientific scrutiny in the past couple of decades. William Dufty brought early attention to this link with his book, "Sugar Blues." Written over 30 years ago, it has become a classic. Another classic is "The Omega-3 Connection," written by Dr. Andrew Stoll, published in 2001. This was one of the first books to bring attention to and support the use of omega-3 fats for depression.

A third early pioneer that brought attention to the nutritional underpinnings of psychiatric disturbances was Dr. Abram Hoffer, co-author of "Niacin: The Real Story." Niacin, Hoffer found, may in fact be a "secret" treatment for a number of psychological disorders, including schizophrenia, which can be notoriously difficult to address.

It's really unfortunate that so few people consider how their diet may be influencing their mood, seeing how it can indeed have a pronounced effect on your mental health. For example, research has shown that unprocessed foods, especially fermented foods, help optimize your gut microbiome, thereby supporting optimal mental health.

Dark chocolate, coffee, animal-based omega-3 fats and the anti-inflammatory spice turmeric (curcumin) also tend to boost your mood, whereas sugar, wheat (gluten) and processed foods have been linked to a greater risk for depression and anxiety.

Mental Health Is Worsening Around the World

According to the World Health Organization, depression is now the leading cause of ill health and disability worldwide,^{1,2} affecting an estimated 322 million people globally, including more than 16 million Americans, 6 million of whom are seniors.³ Statistics also reveal we're not being particularly effective when it comes to prevention and treatment. Worldwide, rates of depression increased by 18% between 2005 and 2015.⁴

According to the U.S. National Institute of Mental Health, 11% of Americans over the age of 12 are on antidepressant drugs. Among women in their 40 and 50s, 1 in 4 is on antidepressants.⁵ While these drugs are prescribed for conditions other than depression, their widespread use suggests mental health problems are indeed pervasive.

In the U.S., suicide rates have also steadily risen since 2000^{6,7,8} — a trend blamed on the effects of social isolation, economic pressures, opioid addiction and limited access to mental health care. Considering these facts, it would make sense to be proactive about your mental health, and this includes taking a cold, hard look at your diet. Are you eating foods that increase your chances of feeling calm and content, or is your diet a recipe for doom and gloom?

Key Dietary Recommendations for a Sunny Disposition

A paper⁹ published in Nutritional Neuroscience in April 2017 looked at evidence from laboratory, population research and clinical trials to create "a set of practical dietary recommendations for the prevention of depression, based on the best available current evidence."

This is sorely needed, as psychiatrists do not currently have any established dietary guidelines to follow in the treatment of depression. Chances are, many patients might never resort to medication were they to receive proper dietary guidance. According to this paper, the published evidence reveals five key dietary recommendations for the prevention of depression:

1. Following a "traditional" dietary pattern such as the Mediterranean, Norwegian or Japanese diet
2. Increasing consumption of antioxidant-rich fruits, vegetables, legumes, wholegrain cereals, nuts and seeds
3. Eating plenty of omega-3-rich foods
4. Replacing unhealthy processed foods with real, wholesome nutritious foods
5. Avoiding processed foods, fast food, commercial baked goods and sweets

What You Don't Eat May Be More Important Than What You Do Eat

Indeed, while there are many "superfoods" known to lower inflammation, improve mitochondrial function and lower your risk of insulin resistance – all of which are factors implicated in depression – what you don't eat may actually be more important than what you do eat. Adding a few superfoods to an otherwise poor diet is unlikely to yield any significant results. So, it's important to realize that unless you get the foundation right, it's going to be a continuous uphill battle.

The simplest, most basic foundation here would simply be to eat real food. This means ditching all processed, prepackaged food items and replacing them with whole foods

that you cook from scratch – including condiments and snacks.

Your beverage choices may also need an overhaul, as most people drink very little pure water, relying on sugary beverages like sodas, fruit juices, sports drinks, energy drinks and flavored water for their hydration needs. None of those alternatives will do your mental health any good.

Three brain- and mood-wrecking culprits you'll automatically avoid when avoiding processed foods are added sugars, artificial sweeteners¹⁰ and processed vegetable oils – harmful fats known to clog your arteries and cause mitochondrial dysfunction. Gluten also appears to be particularly problematic for many. If you're struggling with depression or anxiety, you'd be well-advised to experiment with a gluten-free diet.

Certain types of lectins, especially wheat germ agglutinin (WGA), are also known for their psychiatric side effects. WGA can cross your blood brain barrier¹¹ through a process called "adsorptive endocytosis," pulling other substances with it. WGA may attach to your myelin sheath¹² and is capable of inhibiting nerve growth factor,¹³ which is important for the growth, maintenance and survival of certain target neurons.

Substantial Amounts of Glyphosate Found in Many Foods

HRI Labs has investigated a number of other foods as well, including grains, legumes and beans. Most if not all of these types of crops need to dry in the field before being harvested, and to speed that process, the fields are doused with glyphosate a couple weeks before harvest. As a result of this practice, called desiccation, grain-based products, legumes and beans contain rather substantial amounts of glyphosate.

Wine also contains surprising amounts of glyphosate. As it turns out, weeds in vineyards are managed by spraying glyphosate, which ends up in the grapes as the roots of the grape vines pick it up through the soil.

If you drink wine, I recommend you choose one that is high-quality and either organic or biodynamic. There are even ones available that won't kick you out of ketosis. All of the wines provided by [Dry Farm Wines](#) are either organic or biodynamic, and every wine they

source comes from small vineyards, mostly from Europe, and none from the U.S. All of their wines:

- **Are dry farmed** – produces more resilient, healthier plants
- **Have low alcohol** – helps minimize adverse effects of alcohol
- **Are low sugar** – only source wines with sugar levels under 1 g/L

Eating real, unprocessed food is the key to sustaining good health, but even when it comes to whole food, its quality is largely determined by how it was grown. Certified organic food is recommended to avoid toxic contaminants such as pesticides. But even organic foods may be lacking in important nutrients if grown in nutrient-poor soils. To truly build good topsoil, you have to implement regenerative farming methods, many of which are not automatically required by organic standards.

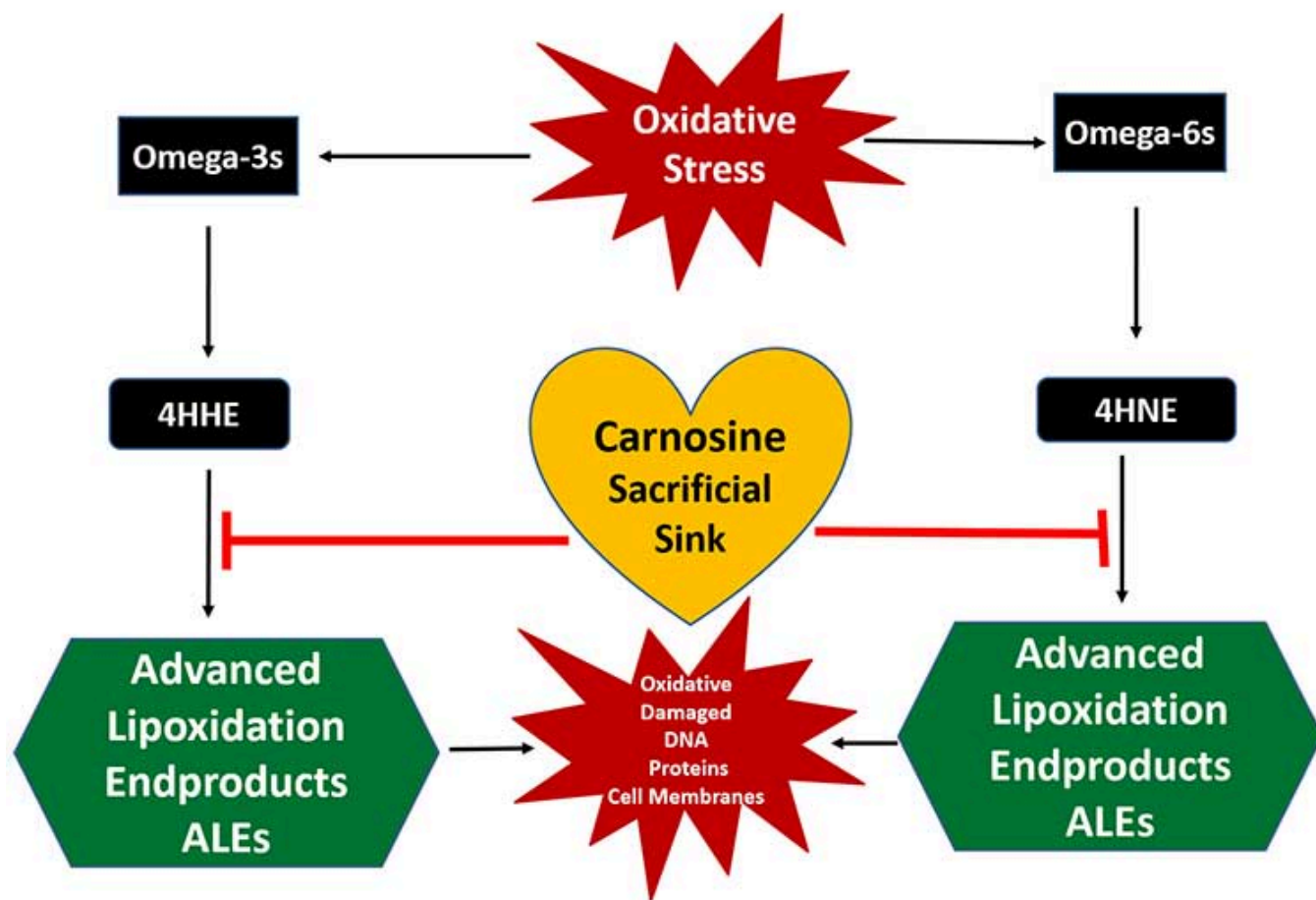
Three Powerful Dietary Interventions

Next, if you're serious about your physical and mental health, consider taking things a step or two further by:

- **Maintaining a healthy ratio of omega-6 to omega-3** – Is important for optimal health. Ideally, you want to maintain a 4-to-1 ratio of omega-6 and omega-3 fats or less
- **Controlling the amount of omega-6 fat in your body** – LA is highly susceptible to oxidation, and as the fat oxidizes it breaks down into harmful sub-components such as ALEs and oxidized LA metabolites (OXLAMs). These ALEs and OXLAMs are what cause most of the damage.

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Carnosine binds to ALEs like a magnet and acts as a sacrificial sink. It's basically a substitute target for these profoundly damaging molecules. In this way, carnosine allows your body to excrete the ALEs from your body before they damage your mitochondria, DNA or proteins. (Another molecule that protects against LA-induced damage is [carbon dioxide](#)). The illustration below shows how carnosine works in this regard



- **Supplement with ubiquinol** – There are loads of studies showing that ubiquinol works well; that is not in question. There are no studies that demonstrate what the actual working molecule is in the mitochondria. It appears that it is ubiquinone that is likely oxidized ubiquinol from NAD+. I have been in discussion with the manufacturers of ubiquinol to explore research studying this question

Five Superfoods for Mental Health

Once you're eating healthy in general, there are a number of different superfoods you can focus on that are known for their beneficial impact on mood and psychological well-being. While this list could be quite long, here are five suggestions sure to please most people's palate. For even more suggestions, check out the articles listed in the references:^{14,15}

- **Wild Alaskan salmon** and other small, fatty fish such as anchovies and sardines are a great source of animal-based omega-3 fats necessary for mental health and optimal brain function (DHA and EPA are actually structural elements that make up your cells).

These fats also play a role in the regulation of brain chemicals such as dopamine, released in response to pleasurable experiences. Studies have also confirmed Stoll's early claims that omega-3s reduce the risk of depression. More recently, researchers concluded omega-3 deficiency may contribute to the development of mood disorders, and that supplementation "may provide a new treatment option."¹⁶

- **Foods high in tryptophan** — Egg whites (should not be eaten without the yolks) contain the greatest amounts. Please [see this chart for more information](#).
- **Spinach and other folate-rich foods** — B vitamins in general are important for psychological well-being, and a deficiency in either B6, folate (B9) or B12 are all capable of triggering psychiatric side effects, including depression. Most organic leafy greens are a good source of folate. Aside from spinach, other top sources include broccoli, asparagus and turnip greens.
- **Organic dark chocolate** — According to a 2009 study¹⁷ conducted at the Nestle Research Center in Switzerland, eating 40 grams (1.4 ounces) of dark chocolate per day for 14 days, divided into three daily servings (morning, afternoon and night), reduced levels of stress-related hormones in all participants — even in those who did not report feeling stressed at the outset of the study.

A systematic review¹⁸ published in 2013 also found that dark chocolate may be a helpful mood booster. Milk chocolate will not have the same effect though. To work,

opt for dark chocolate with at least 70% cacao or greater, and limit your portions.

- **Organic coffee** also has its benefits – and its drawbacks. In fact, findings are mixed when it comes to its effect on depression,¹⁹ so you'll have to gauge its effects from personal experience.

One meta-analysis²⁰ published in 2015, which looked at a population of nearly 347,000 individuals, concluded caffeine helped protect against depression. Other medical experts warn it might worsen anxiety, which often goes hand-in-hand with depression. A 2014 study²¹ came to the following conclusion:

"[W]e observed a biphasic profile in caffeine psychostimulant effect: low to moderate doses may correlate with a reduction in depressive risk in healthy subjects and an improvement of many clinical symptoms (attention, arousal, psychomotor performance) in depressed patients, whereas the assumption of high doses may result in thymic dysregulation, favor mixed affective states and worsen circadian profiles and anxiety symptoms."

Depressed? Pay Careful Attention to Electromagnetic Field Exposures

Another foundational strategy to prevent or treat depression and anxiety is to limit exposure to electromagnetic fields (EMFs). Studies have linked excessive EMF exposure to an increased risk of both depression and suicide.²² Power lines and high-voltage cables appear to be particularly troublesome. Addiction to or "high engagement" with mobile devices can also trigger depression and anxiety, according to research from the University of Illinois.²³

Research²⁴ by Martin Pall, Ph.D., reveals a previously unknown mechanism of biological harm from microwaves emitted by cellphones and other wireless technologies, which helps explain why these technologies can have such a potent impact on your mental health.

Embedded in your cell membranes are voltage gated calcium channels (VGCCs), which are activated by microwaves. When that happens, about 1 million calcium ions per second are released, which stimulates the release of nitric oxide (NO) inside your cell and mitochondria. The NO then combines with superoxide to form peroxynitrite, which in turn creates hydroxyl free radicals – some of the most destructive free radicals known to man.

Hydroxyl free radicals decimate mitochondrial and nuclear DNA, their membranes and proteins. The end result is mitochondrial dysfunction, which we now know is at the heart of most chronic disease. The tissues with the highest density of VGCCs are your brain, the pacemaker in your heart and male testes. Hence, health problems such as Alzheimer's, anxiety, depression, autism, cardiac arrhythmias and infertility can be directly linked to excessive microwave exposure.

So, if you struggle with anxiety or depression, be sure to limit your exposure to wireless technologies. Simple measures include turning your Wi-Fi off at night, not carrying your cellphone on your body and not keeping portable phones, cellphones and other electric devices in your bedroom.

The electric wiring inside your bedroom walls is probably the most important source to address. Your best bet here is to turn off the power to your bedroom at night. This will work if there are no adjacent rooms. If there are, you may need to shut those rooms off also. The only way to know would be to measure the electric fields.

Embrace an Antidepressive Lifestyle

Depression is multifactorial. It may take some sleuthing to identify specific triggers. That said, an all-around healthy lifestyle will take care of the most common underlying problems. Addressing your diet and experimenting with nutritional ketosis, intermittent fasting, longer fasts or all three will set you on the right track.

Avoiding EMFs, getting sensible sun exposure, exercise and plenty of sleep rounds out the list of the basic components for an antidepressive lifestyle. For more tips and

guidance, use the search feature on my site. I've written many in-depth articles on depression, covering a wide range of angles, over the years.

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