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Take Control of Your Health

# The Hidden Key to Boundless Energy

Analysis by Dr. Joseph Mercola | November 14, 2026

## STORY AT-A-GLANCE

- Modern environmental factors including seed oils, endocrine disruptors, estrogens, and EMFs allow harmful gut bacteria to proliferate, producing endotoxins that can compromise mitochondrial function and reduce cellular energy production
- While ketogenic diets provide short-term benefits, long-term carbohydrate restriction can impair mitochondrial function and create reductive stress in cells, necessitating a more balanced approach
- Excessive consumption of omega-6-rich seed oils can damage mitochondrial function and make skin more susceptible to sun damage, making these processed oils one of the biggest threats to health
- A healthy gut environment requires proper cellular energy to maintain low oxygen levels, allowing beneficial bacteria to thrive and produce protective short-chain fatty acids that strengthen your intestinal barrier
- Restoring health requires systematically reducing exposure to environmental toxins while gradually reintroducing healthy carbohydrates to support mitochondrial function and maintain proper gut bacteria balance

**In my interview with Sean Kim of Growth Minds, we discussed the decades I've spent searching for the best ways to help you reclaim your health.[1] When you consider how different modern lifestyles are from our ancestors' days, it reveals many clues about why**

you might feel tired, run-down, or prone to illness. Those ancestors had their own health challenges, but they weren't swimming in artificial chemicals, electromagnetic fields, and processed seed oils that are linked to chronic diseases.

You face these threats every day, and your body is likely struggling as a result. I've devoted my life to understanding how food, environment, and daily habits affect you at the cellular level. That journey led me to study how your mitochondria produce the energy you need. Mitochondria are known as your cells' power stations.

They depend on proper fuel, stable hormone levels, and minimal toxic exposures to keep you thriving. If those factors are off balance, you'll feel it. The question is: How do you get them back on track?

While a ketogenic diet or intermittent fasting help you lose weight initially, they're a short-term fix with long-term consequences. As I explained to Kim, there's a deeper story about how your body responds to various fuels, especially when you've been under stress or exposed to toxic influences.

You have to look at your gut, your hormone systems, and your environment to fully understand what's going on and restore optimal health. When I first explored diets high in fat and extremely low in carbohydrates, I saw benefits for some people in specific circumstances. Over time, however, I discovered that your system needs more than a strict low-carb diet provides.

## Rethinking What It Means to Eat Well

In my interview with Kim, I made it clear that I used to be a leading advocate of **ketogenic diets**. I even wrote a bestselling book on the topic. Many people have used a ketogenic diet with good outcomes for weight loss and insulin control, and I believed that kind of diet could support you in turning your health around. The results people experienced weren't imaginary. Many of them had real successes.

Over time, however, more detailed research into mitochondrial function made me change my stance. It's not enough to measure your short-term results. You have to look at what happens over many years. If you keep forcing your body into a state of ultra-low carbohydrate intake, you risk backing up electron flow in your mitochondria. That jammed-up electron flow weakens your cells' ability to produce steady energy, a phenomenon otherwise known as **reductive stress**.

It also encourages shifts in your gut bacteria that harm you more than help you. You need healthy gut bacteria to make short-chain fatty acids, which keep your colon lining strong and keep harmful pathogens in check. A balanced intake of healthy carbohydrates is key once you've corrected the root concerns. Your brain needs glucose, and while you can survive on fewer carbs for a while, it's easy to slip into a stressful metabolic state if you don't consume enough healthy carbs.

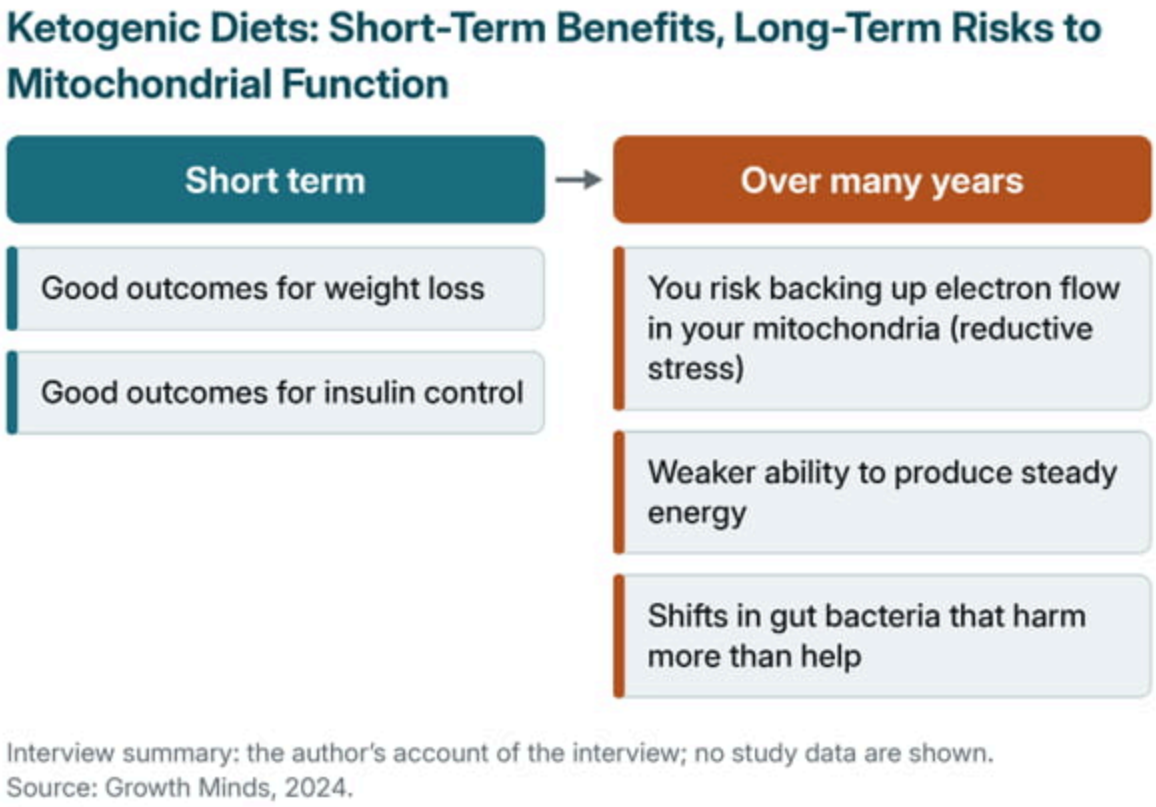



**Figure 1.** Short-term outcomes reported with ketogenic diets compared with the long-term risks the author describes.

## How Your Environment Shapes Your Health

Everyday toxins also affect you at the cellular level. Throughout our talk, I explained to Kim that I've identified four main stressors that diminish your mitochondrial energy production. These factors silently harm your gut health, disrupt your hormones, and trigger damaging oxidative stress.

First, you have the overconsumption of **omega-6 seed oils**, which are rich in **linoleic acid**. These highly processed cooking oils are one of the biggest nutritional dangers you face. You'll find them in countless packaged foods, snack items, and restaurant meals. The main reason why excess LA is linked to disease is that it prevents your mitochondria from working well. It also makes sun exposure more damaging due to the accumulation of these fats in your skin cells.

Second, you have excess endocrine-disrupting chemicals (EDCs) in your environment. These come from plastics, personal care products, and even certain pesticides and mimic hormones, like estrogen, in your body. Many of these endocrine-disrupting chemicals can reduce fertility and create hormonal imbalances. Xenoestrogens found in everyday items like plastic are one example of EDCs with widespread reach.

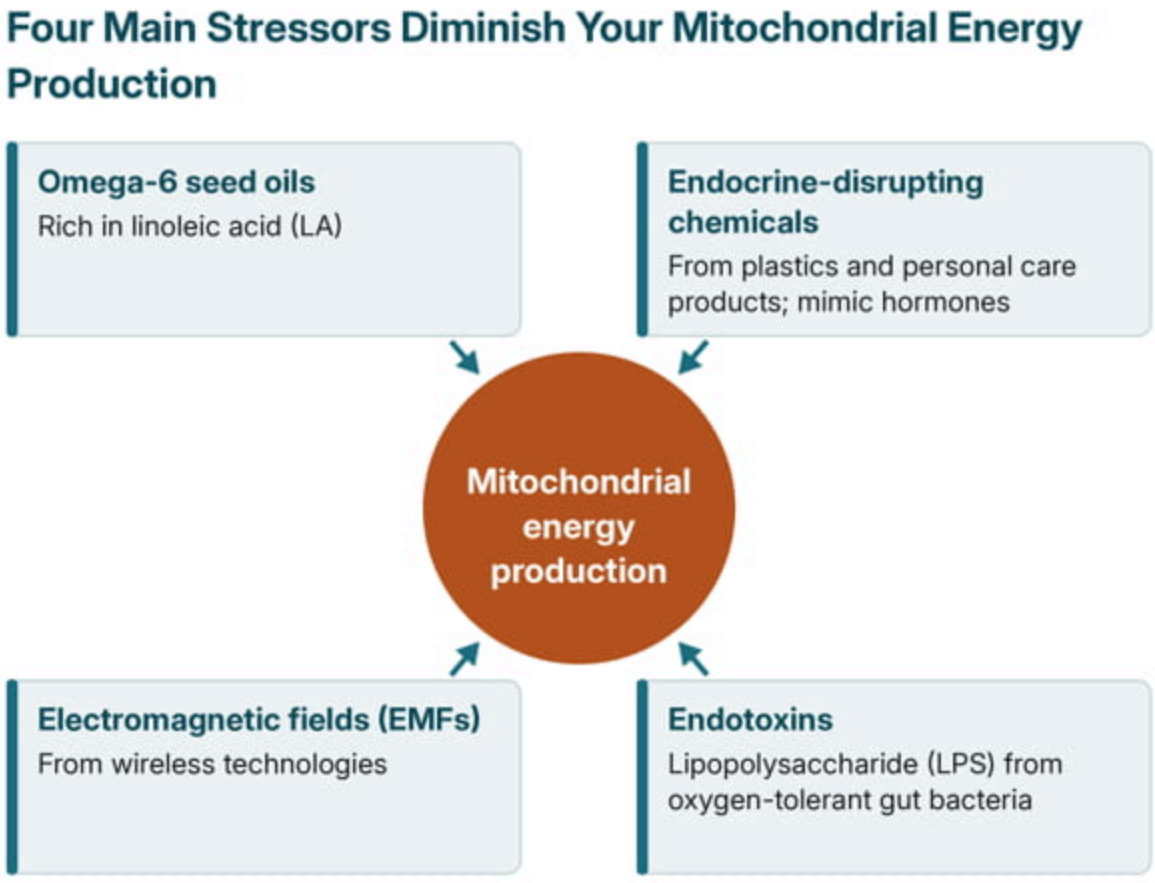
It's also important to minimize exposure to synthetic estrogens, such as those found in hormone replacement therapy and oral contraceptives. Estrogen increases intracellular calcium levels and decreases mitochondrial function. In fact, estrogen dominance is nearly as dangerous as excessive LA intake when it comes to impairing your mitochondrial function. If you currently use hormone replacement therapy or oral contraceptives, talk to your healthcare provider before making changes.

The third significant threat to cellular health comes from pervasive **exposure to electromagnetic fields (EMFs)** due to the proliferation of wireless technologies. EMFs increase calcium ion concentrations within cells, resulting in the production of harmful free radicals.

Together, widespread exposure to LA in seed oils, EDCs in plastics, and EMFs impair your cells' ability to generate energy efficiently. This energy deficit makes it challenging to sustain the oxygen-free gut environment necessary for beneficial bacteria to flourish.

As your gut barrier weakens, it allows harmful substances to breach your intestinal wall and enter your bloodstream. This intrusion triggers a systemic inflammatory response, with wide-ranging effects on your health. Of particular concern is the proliferation of oxygen-tolerant bacteria, which are not ideally suited for the gut environment.

These microorganisms produce a potent form of endotoxin — the fourth major threat to your cellular health — known as lipopolysaccharide (LPS). When LPS enters your bloodstream through a compromised gut barrier, it can lead to a severe condition known as endotoxemia, which can progress to septic shock — a state of systemic inflammation that's sometimes fatal.




Interview summary: the author's four-stressor framework; no study data are shown.
Source: Growth Minds, 2024.

**Figure 2.** Four main stressors diminish mitochondrial energy production: seed oils, endocrine-disrupting chemicals, electromagnetic fields, and endotoxins.

## Restoring Gut Health as Your Foundation

A healthy gut is pivotal to your well-being. In my interview with Kim, I explained that if your healthy gut bacteria can't thrive, your body faces one hurdle after another. An oxygen-free environment is necessary for beneficial bacteria that create short-chain fatty acids such as butyrate, propionate, and acetate to thrive. These compounds help keep your colon lining strong by nourishing the cells that line your gut wall.

Your body needs cellular energy to keep oxygen levels low in your colon. If your mitochondria aren't functioning properly and your cellular energy is low, you're likely to have excess oxygen in your colon that boosts harmful bacteria.

The end result is an upsurge in toxic byproducts, including more potent forms of endotoxin. That's why simply cutting carbohydrates might seem to help in the short term: if you starve harmful bacteria of their favorite fuels, they don't multiply so fast.

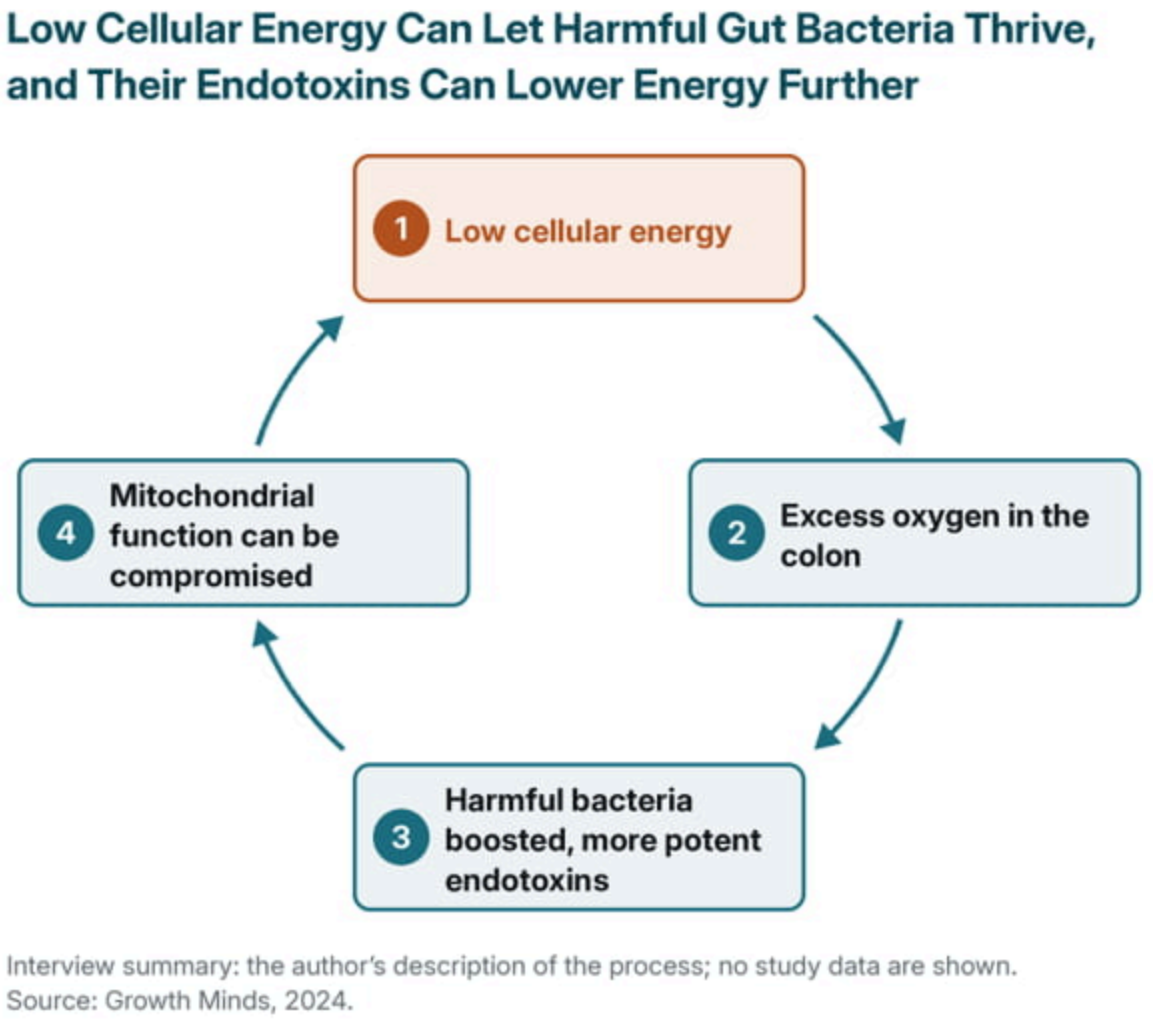



**Figure 3.** Low cellular energy can let harmful gut bacteria thrive, and their endotoxins can compromise mitochondrial function.

Yet you pay for it later by ultimately decreasing the cellular energy you need for robust digestion and a healthy metabolism. A diet that includes high-quality fiber from vegetables and other sources of healthy carbohydrates is key, but if you have a compromised gut, it's important to start with easier-to-digest options, like white rice and whole fruits.

You want to steer clear of a low-carb diet, especially long term. If you keep your body in a constant energy deficit, you're only compounding your mitochondrial problems. You're also setting yourself up for increased stress hormone release, which breaks down your lean muscle tissue to make emergency glucose.

By cutting out mitochondrial poisons and nourishing your gut with healthy carbohydrates, you give your body the chance to restore that protective mucus layer, keep oxygen levels low in your colon, and restore mitochondrial health for increased cellular energy.

When you remove the factors that diminish your cellular energy, you can then enjoy moderate to higher carbohydrate intake without wrecking your metabolic function. This might mean 250 grams of quality carbohydrates in a day, but the exact amount varies by your personal needs, activity level, and genetics. The key is to focus on real, whole-food sources instead of ultraprocessed carbs that contain seed oils and refined sugar.

Let me emphasize once more that you should clear out the elements causing harm before you increase your carbohydrate intake. That means cutting back on omega-6-rich seed oils, limiting endocrine-disrupting chemicals, reducing EMF exposure, and repairing your gut so it's able to handle more fiber.




**Figure 4.** The article's order of steps: clear out what causes harm, start with easier-to-digest carbohydrates if the gut is compromised, then add healthy carbohydrates.

## Practical Steps to Tame the Toxins

During my discussion with Kim, we touched on ways to reduce exposure to chemicals and stressors, so you enhance your health from the inside out. If you want to limit microplastics and hormone-disrupting substances, start by cutting down on plastic packaging.

Swap plastic containers for glass whenever possible, and avoid heating foods in plastic. Be mindful of personal care items with synthetic fragrances or complex chemical blends. Even so-called "organic" products often contain compounds that may destabilize your hormones, so read labels carefully.

You also want to be wary of your Wi-Fi router and the constant signals from your phone. If you keep your phone by your bed at night, you're exposing your body to nonstop EMFs. Turning off your wireless devices or switching to airplane mode gives your cells a break, but a better option is to turn off your Wi-Fi at night — or even shut off the power to your bedroom.

Also, try wired internet at home and see whether you notice improvements in your sleep or focus. As you move beyond eating well, also look into ways to speed up the removal of toxins. Sweating is one of the best methods. Traditional exercise does the job as you increase circulation, but an **infrared sauna** takes it further if you have access to one.

**Grounding**, or walking barefoot on natural surfaces like the ocean, also helps reduce extra electrical charges in your body. You still want to watch out for walking barefoot on unnaturally hard floors every day, which promotes the development of joint or foot issues. Even so, a dose of nature is calming, and you might find that grounding on natural surfaces like the ocean is a soothing method to connect with your environment.

During the interview, I also noted that sunlight is both beneficial and at times harmful, depending on your overall health. You absolutely need adequate sun exposure to help your body produce vitamin D and provide other benefits. However, if you're carrying an excessive amount of omega-6 seed oils in your skin cells, they're prone to oxidation when exposed to sunlight, increasing the risk of skin damage.

Too many of these oxidizable fats in your tissues magnifies any negative effects from UV rays. To maximize the benefits of sun exposure and minimize the risks, eliminate seed oils from your diet. I recommend avoiding sun during peak hours (from 10 a.m. to 4 p.m. in most U.S. regions) until you've been seed-oil-free for four to six months.

## The Promise of Future Health Innovations

As I told Kim, I believe technology itself becomes a friend if it's harnessed in the right way. Yes, you should reduce EMF exposure from your phone and your Wi-Fi. Still, advanced computer systems, including artificial intelligence, help you monitor your health in real time.

In the near future, you might use AI-driven software that tracks your daily habits, recognizes patterns in your hormone levels and reminds you to make adjustments to your diet or supplement routine. It's like having a health coach who's always there, offering personalized feedback based on data from wearable devices or blood tests.

Progress in the field of mitochondrial research is also advancing at a rapid pace. We've come a long way in understanding how molecules like **coenzyme Q10** help push electrons through your mitochondrial chain. Further investigations could pinpoint more specific strategies to optimize that electron flow, so you generate energy without building up damaging free radicals.

I'm particularly excited about new insights into gut therapies that aim to restore the colon's oxygen-free environment, such as an approach that combines targeted probiotics with supportive nutrients to support the cells lining your gut.

Doing so would let beneficial microbes flourish and block harmful bacteria from expanding. This holds the promise of turning gut health into a more precise science, where you measure shifts in your microbiome composition and match specific interventions for faster results.

As these approaches gain traction, I'm working to gather data and share it with you. I'm driven by a mission to show you that your body already has the blueprint for abundant energy and balanced hormones. The problem is interference. Environmental pollutants, seed oils, and stressors have created roadblocks. If you reduce them systematically, you'll give yourself a fresh start.

## Charting Your Path to Lasting Vitality

In my interview with Kim, I emphasized that your mitochondria lie at the heart of your health story. They influence whether you have the energy to thrive or whether you struggle with chronic fatigue and cellular stress. By addressing the four main stressors — seed oils, endocrine-disrupting chemicals, endotoxins, and EMFs — you can free up your mitochondria to run at full power. You stop feeding the processes that tear down your gut and your energy.

You also open the door for a truly balanced diet, one that includes not just healthy fats and proteins, but also the right kind of carbohydrates. You deserve to feel vibrant, and your cells are programmed to help you get there.

Clear away plastic toxins, turn off your Wi-Fi at night, choose glass bottles, and avoid consuming seed oils. As your gut health improves, introduce better fiber sources that feed your beneficial gut microbes and support mucin production, which may protect you from leaky gut.

If you take these steps, you'll likely see a positive ripple effect. Your thyroid might perk up, your hormones rebalance, and your gut wall becomes sturdier. In time, you might even be able to tolerate moderate sun exposure without burning as easily, since your cell membranes are no longer packed with unhealthy fats.

No matter where you are in your health journey, let this knowledge empower you — you can address the hidden obstacles that drain your energy and derail your gut, and feel confident in a plan that nourishes you from your cells outward, letting you enjoy a fuller life.

This is what I hope you'll take away from my conversation with Kim: you have more control over your well-being than you realize. When you align your habits with what your body needs, you unleash the boundless energy that's been waiting inside you all along.

*This article is for informational purposes only and does not constitute medical advice. Consult a qualified healthcare provider before making changes to your health regimen.*

## Sources and References


- [1] YouTube, Growth Minds, Sean Kim September 2024