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Take Control of Your Health

Eating Fake Meat Is Linked to Depression and Inflammation

Analysis by Dr. Joseph Mercola | November 18, 2026

STORY AT-A-GLANCE

- An observational study found that vegetarians who ate plant-based fake meat are 42% more likely to experience depression than those who don't, even when factors like age, body mass index (BMI), and lifestyle are taken into account
- Eating fake meat was associated with higher levels of C-reactive protein (CRP), a marker of systemic inflammation linked to chronic diseases like heart disease, diabetes, and autoimmune disorders
- Triglycerides were elevated and HDL cholesterol was lower in those eating fake meat, markers associated with long-term risk for cardiovascular disease
- The body may react to fake meat not because of its nutrients, but because of ultraprocessed ingredients and additives that disrupt immune signaling and metabolic function
- Even when blood nutrient levels appear normal, the deeper immune system activity suggests that fake meat is pushing your body toward inflammation and oxidative stress

Marketed as a "health food," lab-grown, plant-based meat's popularity hinges on the many promises from its manufacturers — this product is promoted to end world hunger, safeguard animal welfare, and protect the planet from environmental destruction.

But these promises are yet to come true, and as the product's novelty starts to slip away, its possibly damaging effects are now slowly but surely coming to light. One notable example — An observational study[1] showed that vegetarians who ate plant-based meats

had a significantly higher risk of depression compared to those who did not eat this fake food.

Fake Meat Is Linked to Higher Depression Risk in Vegetarians

A first-of-its-kind study published in the journal Food Frontiers explored whether eating plant-based meat alternatives — like soy burgers and faux sausages — impacts long-term health outcomes for vegetarians.[2]

Researchers from the University of Surrey used data from the UK Biobank, a massive public health resource that tracks biological and lifestyle information across more than 500,000 participants. They narrowed their focus to 3,342 vegetarians and split them into two groups — those who regularly ate "plant-based meat alternatives" (PBMAs) and those who didn't.

- **Fake meat consumers had worse mental health —** Vegetarians who consumed PBMAs had significantly higher rates of depression — specifically, a 42% increase in risk compared to those who didn't eat these products.

- **Depression risk stayed high even after accounting for lifestyle —** The study authors found that even after adjusting for things like age, BMI, income, smoking, and physical activity, those consuming PBMAs still had a higher relative risk for depression. This suggests that these lifestyle differences did not fully explain the link.

- **Depression is not just a mental health concern —** It carries major physical consequences as well. This serious mood disorder, characterized by persistent sadness, fatigue, changes in appetite or sleep, and a loss of interest in activities, increases your risk for cardiovascular disease, metabolic dysfunction, and early death.

Consuming Fake Meat Is Also Linked to Inflammation and Heart Disease Risk Markers

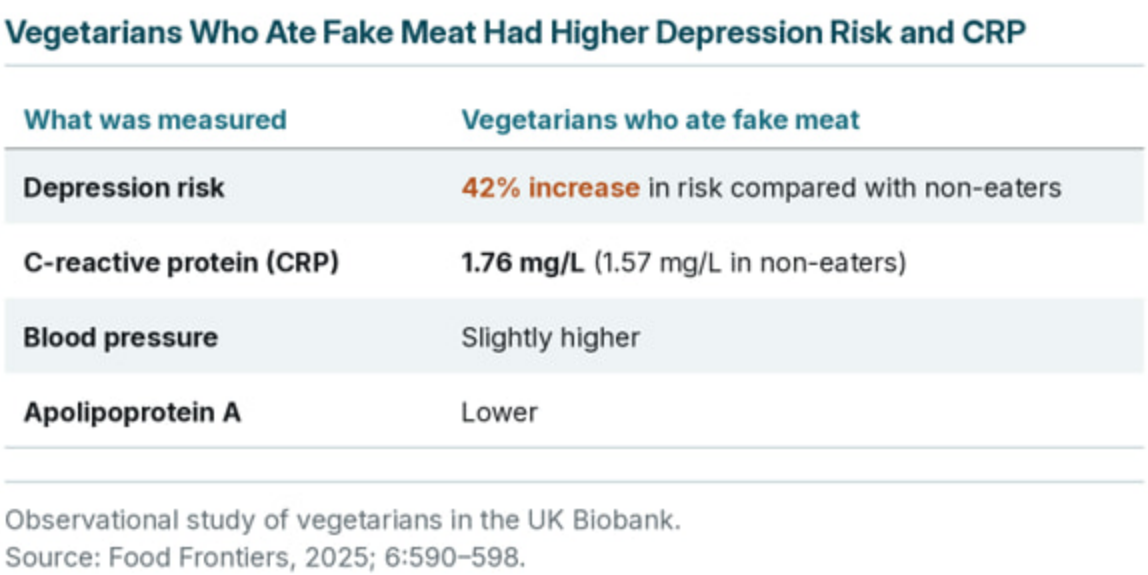
The featured study also found that participants who eat fake meat had blood markers linked to higher cardiovascular disease risk. Not only did they have higher levels of triglycerides and C-reactive protein (CRP), which are markers associated with systemic inflammation, but they also had lower levels of apolipoprotein A, a building block of protective high-density lipoprotein (HDL) cholesterol.[3]

- **Several blood markers showed signs of stress in fake meat eaters —** The researchers measured 30 different blood markers, and several showed statistically significant changes in the PBMA consumers. CRP levels were 1.76 mg/L versus 1.57 mg/L in the nonconsumers.

- **Even slight increases may matter —** When CRP increases, even in small amounts, they are linked to chronic diseases like heart disease, diabetes, and autoimmune conditions — especially if the increase is sustained over time. Triglycerides, another red flag, were 1.57 mmol/L in the PBMA group versus 1.48 mmol/L in the others. On top of that, HDL levels were 1.49 mmol/L in the PBMA group versus 1.55 mmol/L in the others, while total cholesterol was also lower.

- **Fake meat eaters also had higher body mass index (BMI) and blood pressure —** Notably, the BMI of those who ate PBMAs was higher too, and they also had slightly elevated blood pressure. These weren't huge spikes, but even subtle shifts in these markers suggest that the body is under stress.

When CRP, triglycerides, and blood pressure all climb together — even modestly — it suggests a systemic response that's heading in the wrong direction.



Vegetarians Who Ate Fake Meat Had Higher Depression Risk and CRP

What was measured	Vegetarians who ate fake meat
Depression risk	42% increase in risk compared with non-eaters
C-reactive protein (CRP)	1.76 mg/L (1.57 mg/L in non-eaters)
Blood pressure	Slightly higher
Apolipoprotein A	Lower

Observational study of vegetarians in the UK Biobank.
Source: Food Frontiers, 2025; 6:590–598.

Figure 1. Vegetarians who ate fake meat had a 42% increase in depression risk and a CRP of 1.76 mg/L versus 1.57 mg/L in non-eaters.

So Why Is Fake Meat Linked to These Changes?

To shed more light on why these effects are occurring, the researchers investigated possible mechanisms using proteomics and metabolomics — Basically, they analyzed proteins and metabolites in the blood to see which biological pathways are being activated.

- **Immune signaling pathways were activated —** What stood out was that pathways related to immune signaling, especially cytokine signaling and the JAK/STAT pathway, were more active in those who eat PBMAs. Cytokines are chemical messengers your immune system uses, and when they're constantly triggered, inflammation goes up. This may explain the higher CRP levels in the PBMA group.
- **The nutrient profile wasn't the problem; it was how the body reacted —** Even though both groups had similar intakes of salt, sugar, and saturated fat, only the PBMA eaters had these unfavorable shifts in metabolic markers. What changed wasn't the basic nutrition profile — it may have been the body's biological response to the ultraprocessed nature of the food.

These meat alternatives are designed to mimic meat, but their processing methods introduce industrial compounds and foreign proteins that may disrupt your immune system and blood chemistry in unexpected ways.

- **Industrial additives could be irritating your immune system, too —** There's also a good chance the additives and industrial proteins in fake meat are acting like mild irritants to your immune system. The body doesn't always recognize these food-like products the same way it does whole foods.

  Over time, repeated low-grade activation of immune pathways like cytokine-cytokine receptor interactions may wear down your internal defenses. It's like your immune system is constantly having to double-check whether what you just ate is friend or foe.

- **Even when protein and vitamin levels looked normal, deeper immune changes were detected —** Interestingly, even though metabolite and protein levels didn't show dramatic differences between the two groups, the pathway analysis still suggested these immune-related activations.

- **The effect of fake meat might not show up in one single protein or vitamin level —** It's more about how the entire system responds. And that response may include inflammation, oxidative stress, and changes in lipid metabolism, which are all warning signs of long-term metabolic dysfunction.

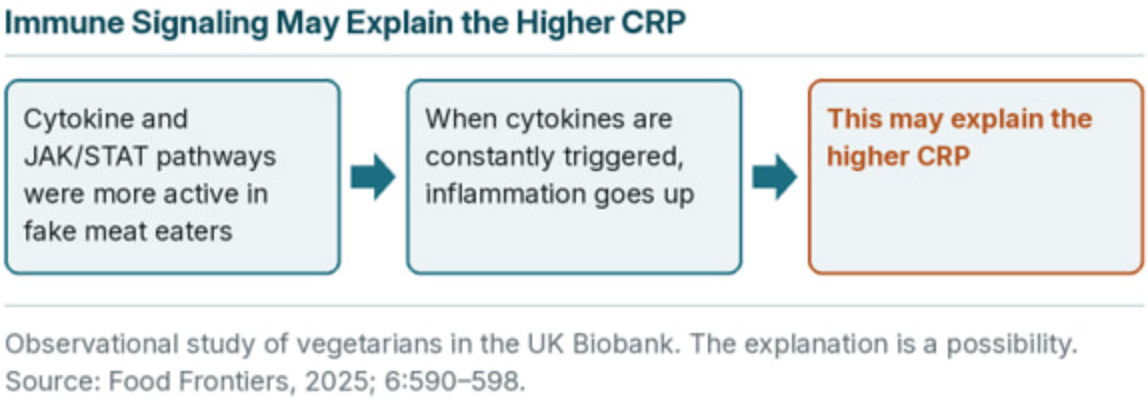


Figure 2. Immune signaling pathways were more active in fake meat eaters, which may explain the higher CRP.

While the researchers say that plant-based meat alternatives may be "safe" when added to an overall balanced diet, they mentioned that their links to depression and inflammation still need to be studied further. According to Prof. Nophar Geifman, the study's senior author, "[T]he potential link between these types of food, inflammation and depression warrants further investigation."[4]

If you've been swapping out real meat for fake meat to protect your health, this study suggests that these ultraprocessed substitutes don't just fail to deliver meaningful benefits — they are also pushing your system toward inflammation and mood instability instead. If you're trying to improve your metabolic health or mental well-being, you'd be wise to rethink what's really on your plate.

What Is Fake Meat Made Of?

Despite being called a "plant-based," fake meat products like Beyond Burgers and Impossible Burgers are actually an ultraprocessed conglomeration of chemicals. It's made by pulling protein from soy and a few other processed concentrates, and then using high-tech genetic engineering to create a "Frankenmeat" of sorts.

- **The starting materials are plants, but that's where it ends —** In fact, the main ingredients are all highly processed concentrates, oils, and flavoring. For example, Impossible Foods inserts the DNA from soy plants into yeast, creating GE yeast with the gene for soy leghemoglobin.[5] Impossible Foods refers to this compound as "heme," but technically plants produce non-heme iron, and this is GE yeast-derived soy leghemoglobin. Heme iron only occurs in meat and seafood.[6]

  Impossible Foods' GE heme is used in their fake meat burgers as a color additive that makes the product appear to "bleed" like real meat. To learn more about how this GE blood is made, read "**Fake Meat Is Junk Food**."

- **Beyond Burger patties contain a whopping 22 ingredients —** Among them are expeller-pressed canola oil, pea protein isolate, cellulose from bamboo, modified food starch, and methylcellulose[7] — these are hardly "health" foods. What's more, to morph these ingredients into a patty that resembles meat requires further processing.

- **Plant-based meats are not nutritionally superior —** One of the main selling points of both Impossible Burger and Beyond Burger is that they're "healthier" than real meat products. In reality, they have nearly the same amount of total fat and calories as real beef burgers. What's more, these products also have much more processed sodium added.[8]

- **Fake meats also contain some of the worst types of fats —** They're loaded with polyunsaturated fats (PUFs) that are high in **linoleic acid (LA)**. For example, a half-pound serving of organic grass fed beef will provide less than half a gram of linoleic acid (500 mg). Compare this to a serving of an Impossible Burger or Beyond Meat burger, which can have 10 to 20 times the amount of linoleic acid.[9]

- **Some fake meats incorporate "healthier" oils like olive oil, but these are just as problematic —** These oils are actually monounsaturated fats (MUFs) high in oleic acid. MUFs are nearly as bad as PUFs and, when consumed in excess, may increase insulin resistance, promote fat storage, and decrease your metabolic rate. Read more here "**Beyond Impossible — The Truth Behind the Fake Meat Industry**."

So while fake meats are able to replicate the appearance, texture, and flavor of real meat, when it comes to nutrition and health, it's unlikely that these imitation meats will be better — or even equal — to the real thing.

Fake Meat Was Made to Control the Food Supply

Some time ago, I was invited by Children's Health Defense on their program "Tea Time" to talk about fake meat products. During our discussion, I shared important information about the damaging effects of fake meats and what it means for our health and the

future of our food supply.

- **Fake food is the globalists' latest attempt to control the food supply —** All these latest "innovations" like lab-grown meat and animal-free dairy are paving the way for private companies to effectively control the entire food supply. As Former U.S. Secretary of State and national security adviser Henry Kissinger once said, "Control oil and you control nations; control food and you control people."[10] Controlling people is their whole agenda.

- **These fake foods will ultimately jeopardize the environment —** Although confined animal feeding operations (CAFOs) are inherently bad — feeding livestock an unnatural diet of GM grains and raising them inhumanely in crowded conditions where disease easily spreads — I believe this fake food era is going to be even worse.

  And while the globalists continue to insist that animal foods are destroying the planet, when applying the principles of regenerative farming, this is absolutely far from the truth.

- **Fake meat products can contain the herbicide glyphosate —** Many ingredients in fake meat products are made from GE soy; hence, they may also be contaminated with glyphosate. An independent test commissioned by the consumer advocacy group Moms Across America (MAA) in 2019 found that the total result of glyphosate and AMPA (the main metabolite of glyphosate) in the Impossible Burger was 11.3 parts per billion (ppb); in the Beyond Burger, it was 1 ppb.[11]



Figure 3. A 2019 laboratory test found 11.3 ppb of glyphosate and AMPA in the Impossible Burger and 1 ppb in the Beyond Burger.

If you have not seen my interview yet, I encourage you to watch it here — "**Fake Meat Dangers with Dr. Joseph Mercola**."

Avoid Fake Meat with Your Mental Health in Mind

If you've been adding fake meat to your meals thinking it's a healthy swap, you're not alone — but you're also not getting the benefits you were promised. The latest research suggests that these ultraprocessed meat substitutes are actively harming your mood, metabolism, and immune system. Here are four strategies I recommend you take right now:

- **Eliminate all fake meats and meat substitutes from your diet —** If you're eating Beyond Meat, Impossible Burger, or any other "plant-based meat," the smartest move is to stop. These are industrial products, not food. Focus on whole food sources of protein your body actually understands and needs, like pasture-raised eggs, grass fed beef, wild-caught fish, or properly prepared legumes and dairy from trusted sources.

- **Use animal-based fats instead of seed oils or vegan spreads —** Fake meats are loaded with harmful polyunsaturated fats (PUFs) like linoleic acid, which can inflame your gut and gum up your mitochondria. Get rid of the canola, soy, sunflower, and safflower oils. If you need fat for cooking or flavor, choose tallow, ghee, or grass fed butter. These are stable, natural fats that your body converts into usable energy while being less likely to cause oxidative stress.

- **Add collagen-rich protein sources daily —** If you're coming off plant-based meat, your body may have been short on the amino acids it needs to repair tissue, build neurotransmitters, and balance blood sugar.

  Make sure one-third of your daily protein comes from collagen. That means bone broth, gelatin, or collagen peptides. The rest of your protein should come from high-quality animal sources that are low in linoleic acid — like ruminant meats (beef, lamb, and bison), low-fat wild fish, or eggs. These give your body what it needs to rebuild from the inside out.

- **Track your mood, digestion, and energy after removal —** Start paying attention to how you feel without fake meat in your system. Keep a simple daily tracker — write down your sleep, digestion, mood, and energy levels. You'll likely notice less bloating, more stable energy, and a more positive outlook within a week or two. This feedback loop boosts your self-efficacy. Once you see for yourself how your body responds to real food, you may stop craving fake food.

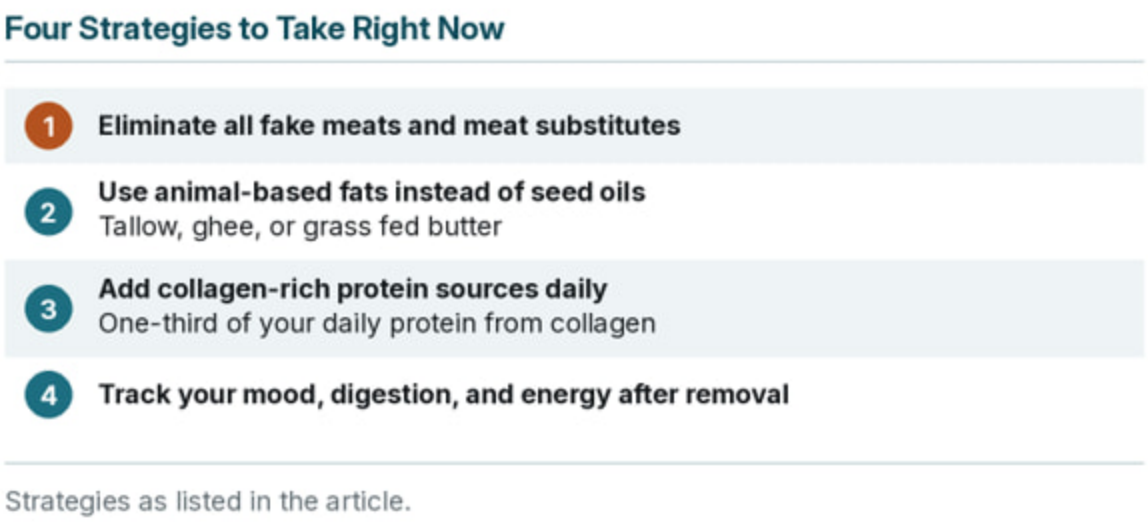


Figure 4. Four steps to cut ultraprocessed meat substitutes from your diet.

If you're eating fake meat to feel healthier, it's time to stop letting the label lie to you. You deserve real food, real energy, and a real shot at mental clarity. And that starts with what's on your plate today.

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.

Frequently Asked Questions (FAQs) About the Dangers of Fake Meat

Q: Does eating plant-based fake meat really increase your risk of depression?

A: Research suggests a link. A observational study published in Food Frontiers found that vegetarians who consumed plant-based meat alternatives had a 42% higher risk of depression compared to those who did not eat fake meat. This risk remained elevated even after accounting for other factors like age, weight, lifestyle, and income.

Q: What are the main health problems linked to fake meat?

A: Fake meat consumption has been linked to higher levels of C-reactive protein (CRP), elevated triglycerides, lower HDL (good) cholesterol, and increased blood pressure and BMI. These are all markers associated with systemic inflammation and greater risk for cardiovascular disease, metabolic dysfunction, and long-term immune system strain.

Q: Why does the body react so negatively to fake meat if it has similar nutrient levels?

A: The problem isn't the basic nutrition profile — it may be the industrial additives and ultraprocessing. Fake meat consumption was associated with more active immune pathways like cytokine signaling and the JAK/STAT pathway, which can trigger inflammation and oxidative stress. Your body may see these engineered proteins and foreign compounds as threats.

Q: How is fake meat made, and why is it considered ultraprocessed?

A: Fake meats like Beyond Burger and Impossible Burger are made from protein isolates (like pea or soy), processed oils, chemical binders, and genetically engineered additives such as soy leghemoglobin. These are far from whole foods. Some patties contain over 20 ingredients, many of which are synthetic or refined.

Q: What should I eat instead of fake meat to protect my health?

A: Ditch fake meats and replace them with whole, nutrient-dense animal foods. Choose pasture-raised eggs, grass fed meats, wild-caught fish, and include collagen-rich options like bone broth. Use healthy animal fats like tallow and ghee

instead of seed oils. This supports your metabolism, mood, and inflammatory balance.

Sources and References

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