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Common Heart Drug Taken by Millions Found Useless and Possibly Dangerous

Analysis by Dr. Joseph Mercola | August 06, 2026

STORY AT-A-GLANCE

- A landmark trial involving more than 8,400 heart attack survivors found that beta blockers did not reduce the risk of death, repeat heart attack, or hospitalization for heart failure in patients whose hearts maintained relatively normal pumping function
- Death rates, repeat heart attacks, and heart-failure admissions were nearly identical between patients who took beta blockers and those who did not, challenging a treatment practice that has been standard for nearly 40 years
- A follow-up analysis found that women taking beta blockers faced a 45% higher risk of death, repeat heart attack, or hospitalization for heart failure compared to women who did not receive the drugs, while men saw no meaningful difference
- Common beta-blocker side effects include fatigue, cold hands and feet, dizziness, depression, weight gain, sexual dysfunction, and low blood pressure; Older non-selective types like atenolol also reduce insulin sensitivity, which increases the risk of Type 2 diabetes
- Long-term heart protection may depend on addressing the underlying factors of cardiovascular disease by supporting cellular energy production, reducing seed-oil intake, supporting metabolic health, walking daily, getting regular sunlight exposure, and monitoring insulin resistance with the HOMA-IR test

For nearly 40 years, beta blockers have been a standard prescription after a heart attack. Today, more than 80% of patients who survive an uncomplicated myocardial infarction leave the hospital with one of these drugs.[1] A myocardial infarction, better known as a heart attack, occurs when blood flow to part of the heart becomes blocked, causing damage to heart muscle. Symptoms often include chest pain, pressure, shortness of breath, nausea, dizziness, and pain that spreads into the arm, jaw, or back.

Left untreated, a heart attack leads to permanent heart damage, heart failure, or death. But what if that reflexive prescription, written millions of times a year, may be doing little for many of the people who receive it?

A major international study published in The New England Journal of Medicine set out to test whether beta blockers still earn their place now that heart attacks are treated very differently than they were when the practice began.[2] The answer is forcing cardiologists to reconsider a habit four decades in the making.

More unsettling still is what surfaced when researchers separated women from men. A drug that looked merely unnecessary for one group behaved very differently in the other — a divergence sharp enough that the investigators are now urging doctors to drop the assumption that the same therapy serves everyone equally.

Landmark Trial Challenges Routine Beta-Blocker Use

The New England Journal of Medicine study, known as the REBOOT trial, enrolled 8,505 patients from 109 hospitals in Spain and Italy who recovered from a **heart attack** with relatively normal heart function.[3]

Participants were randomly assigned to receive either **beta-blocker therapy** or no beta-blocker therapy while all received contemporary standard cardiac treatment. Beta blockers work by blocking adrenaline from reaching the heart, which slows the heart rate and eases the force of each beat — the same action that explains both their intended effect and many of their side effects.

- **Patients with preserved heart function saw no meaningful improvement —** Researchers followed participants for a median of 3.7 years and found that the combined rate of death, repeat heart attack, and hospitalization for heart failure was virtually identical between the two groups — 22.5 events per 1,000 patient-years among beta-blocker users versus 21.7 events per 1,000 patient-years among nonusers.

- **Beta blockers did not reduce the risk of death —** During follow-up, 161 patients taking beta blockers died compared to 153 patients who did not receive the drugs. Researchers found no meaningful reduction in mortality despite the long-standing practice of routinely prescribing beta blockers after heart attacks.

- **The drugs also failed to prevent additional heart attacks —** Researchers recorded 143 repeat heart attacks in the beta-blocker group and 143 in the group that did not receive beta blockers. These identical numbers suggest the medication offered no measurable protection against future cardiac events in this patient population.

- **Hospitalizations for heart failure remained largely unchanged —** Researchers documented 39 heart-failure admissions among beta-blocker users and 44 among nonusers, a difference that was not statistically significant. In practical terms, beta blockers did not reduce the likelihood of returning to the hospital for heart failure after recovery.

- **Advances in modern treatment appear to have reduced the need for routine beta-blocker use —** Most participants received additional care, including procedures to restore blood flow, statin therapy, and antiplatelet medications. The findings suggest that a treatment once considered indispensable after a heart attack no longer provides added benefit for many patients whose heart function remains preserved after modern treatment.

Women Saw Higher Risks Instead of Higher Protection

A REBOOT substudy published in the European Heart Journal took a closer look at whether women and men responded differently to beta blockers after a heart attack.[4] Researchers analyzed data from 8,438 participants in the REBOOT trial, including 1,627 women and 6,811 men, to determine whether beta blockers affect **women and men differently** after a heart attack.

Earlier beta-blocker trials included too few women to provide clear answers, making this one of the most comprehensive analyses to date conducted on female heart attack survivors.

- **Women taking beta blockers experienced significantly worse outcomes —** Women assigned to beta-blocker therapy experienced 30.4 primary outcome events per 1,000 patient-years compared with 21 events per 1,000 patient-years among women who did not receive the drugs. Overall, beta-blocker use was associated with a 45% higher risk of death, repeat heart attack, or hospitalization for heart failure in women.

- **The difference in death rates was notable —** Researchers recorded 46 deaths among women receiving beta blockers compared with 24 deaths among women who were not prescribed them. The death rate reached 16.3 per 1,000 patient-years in the beta-blocker group versus 8.6 per 1,000 patient-years in the control group, representing nearly double the mortality risk among women taking the medication.

- **The risk became more apparent as follow-up continued —** Participants were monitored at three, 15, 36, and 48 months after enrollment. Over time, researchers observed a growing separation between women who received beta blockers and those who did not, showing that the negative effects were not limited to the immediate recovery period after a heart attack.

- **Higher doses and better heart function were linked to the worst outcomes —** The harmful effects were most evident among women whose hearts maintained stronger pumping function after their heart attack and among those receiving

higher beta-blocker doses. Rather than creating greater protection, larger doses were associated with poorer outcomes in these women.

- **Men did not experience the same pattern, highlighting important biological differences —** Researchers found no meaningful differences between treatment groups in men. The study notes that women and men process and respond to medications differently due to differences in pharmacokinetics and pharmacodynamics, terms that describe how drugs move through the body and how the body responds to them.

  These findings support a more individualized approach to treatment rather than assuming the same therapy benefits everyone equally.

Focus on What May Support Your Heart

Beta blockers are not harmless drugs. They slow the heart and reduce how forcefully it pumps. This effect helps many people with heart failure, but it also creates a long list of side effects that many patients struggle with every day. Beta blockers commonly constrict peripheral arteries, which reduces blood flow to your hands and feet. As a result, many users report cold hands and feet, fatigue, dizziness, light-headedness, and reduced exercise tolerance.

Many people also experience mood swings, depression, trouble sleeping, nausea, weight gain, sexual dysfunction, shortness of breath, low blood pressure, and an excessively slow heart rate. Some patients describe feeling like they have lost their energy and motivation. Some beta blockers — particularly older, non-selective types like atenolol — also reduce insulin sensitivity, which has been linked to an increased risk of **Type 2 diabetes**.[5]

If you've been told beta blockers are the answer after a heart attack, the research tells a different story for many patients with preserved heart function. Your long-term protection may depend on addressing the underlying factors that contribute to heart damage in the first place.

When your mitochondria — the tiny energy-producing structures inside every cell — become dysfunctional, your entire cardiovascular system suffers. The goal is to help restore cellular energy production, support metabolic health, and strengthen the systems that keep your heart functioning properly. If you're currently taking a beta blocker, don't stop on your own — talk to your prescriber first.

1. **Eliminate linoleic acid (LA) from your diet —** Seed oils like soybean, corn, canola, cottonseed, sunflower, and safflower oils are one of the biggest threats to mitochondrial function. They're found throughout the food supply, including chips, salad dressings, sauces, fried foods, restaurant meals, and many packaged products. These oils are the primary source of **LA, a polyunsaturated fat** that accumulates in your tissues and contributes to mitochondrial dysfunction.

   Replace seed oils with more stable fats such as grass fed tallow, ghee, or butter. Keep your LA intake below 5 grams per day. If you're able to reduce it below 2 grams daily, that's even better.

   Removing excess LA may help address one of several factors that contribute to cardiovascular disease and impaired cellular energy production. The Pax health platform includes Food Buddy and the Seed Oil Sleuth. This is a special feature designed to help identify hidden sources of LA in your diet as well as estimate your total daily intake.

2. **Fuel your cells with the right carbohydrates —** Your heart requires a tremendous amount of energy every day. That energy is produced most efficiently when your cells have access to adequate glucose. If you follow a **low-carb diet**, your mitochondria often operate under unnecessary stress.

   Aim for roughly 250 grams of carbohydrates daily from whole fruits, white rice, root vegetables, and other well-tolerated carbohydrate sources. If you struggle with bloating, digestive symptoms, or gut dysfunction, begin with easier-to-digest foods

such as fruit and white rice before gradually expanding your choices. Supporting energy production at the cellular level gives your heart the fuel it needs to function efficiently.

3. **Walk daily to support your heart —** Research suggests walking is one of the most effective cardiovascular habits available. It supports healthy circulation, blood pressure, oxygen delivery, and mitochondrial energy production. Every step may support your body's ability to generate more adenosine triphosphate (ATP), the energy currency that powers every cell.

   Work toward one hour of walking each day. If that feels overwhelming, begin with 10- to 15-minute walks after meals. Consistency matters far more than intensity. Over time, daily movement may become one of the most valuable tools for supporting cardiovascular resilience.

4. **Use sunlight to strengthen cellular energy —** Sunlight supports mitochondrial function. Exposure to natural light may stimulate nitric oxide release, supports your circadian rhythm, and supports the production of protective mitochondrial melatonin inside your cells. These effects may support energy production throughout the body, including in your heart.

   But be aware that if your body is loaded with LA from seed oils, your skin burns faster. Until you've been off LA for six months, avoid peak sun hours between 10 a.m. and 4 p.m. Instead, aim for early morning or late afternoon light, which is still highly beneficial.

5. **Measure insulin resistance with the HOMA-IR test —** Insulin resistance is considered one of the strongest risk factors for cardiovascular disease. Long before blood sugar reaches diabetic levels, insulin resistance has been linked to blood vessel damage, inflammation, and impaired energy production.

   The HOMA-IR (Homeostatic Model Assessment of Insulin Resistance) test is a widely used diagnostic tool that can help assess insulin resistance through a simple blood test, so you can spot issues early and make necessary lifestyle changes.

Created in 1985, it calculates the relationship between your fasting glucose and insulin levels to evaluate how effectively your body uses insulin. Unlike other more complex tests, HOMA-IR requires just one fasting blood sample, making it both practical and accessible. The HOMA-IR formula is as follows:

HOMA-IR = (Fasting Glucose x Fasting Insulin) / 405, where

- Fasting glucose is measured in mg/dL
- Fasting insulin is measured in μIU/mL (microinternational units per milliliter)
- 405 is a constant that normalizes the values

If you're using mmol/L for glucose instead of mg/dL, the formula changes slightly:

HOMA-IR = (Fasting Glucose x Fasting Insulin) / 22.5, where

- Fasting glucose is measured in mmol/L
- Fasting insulin is measured in μIU/mL
- 22.5 is the normalizing factor for this unit of measurement

Anything below 1.0 is generally considered a healthy HOMA-IR score. If you're above that, you're considered insulin resistant. The higher your values, the greater your insulin resistance. Conversely, the lower your HOMA-IR score, the less insulin resistance you have, assuming you are not a Type 1 diabetic who makes no insulin.

Interestingly, my personal HOMA-IR score stands at a low 0.2. I attribute this, in part, to my body's efficiency in burning fuel, which may reflect increased glucose availability from my diet. By incorporating additional carbohydrates into my diet, I aimed to provide my cells with more readily available energy. My personal experience suggests that strategic dietary adjustments may support better insulin sensitivity and metabolic performance, though individual results can vary.

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.

FAQs About Health Risks of Beta Blockers

Q: Do beta blockers still help after a heart attack?

A: A large international study found that beta blockers did not reduce the risk of death, repeat heart attack, or hospitalization for heart failure in patients who recovered from a heart attack with preserved heart function. Researchers followed more than 8,400 patients for nearly four years and found virtually identical outcomes between those who took beta blockers and those who did not.

Q: Why were beta blockers prescribed after heart attacks for so many years?

A: Beta blockers became standard treatment decades ago, before modern heart attack care included rapid artery-opening procedures, complete revascularization, and advanced antiplatelet medications. Researchers believe many of the benefits seen in older studies have been replaced by these newer treatments.

Q: Did the research find any differences between women and men?

A: Yes. A follow-up analysis of the REBOOT trial found that women taking beta blockers experienced a 45% higher risk of death, repeat heart attack, or hospitalization for heart failure compared to women who did not receive the drugs. Men did not experience the same pattern, suggesting that women and men respond differently to these medications.

Q: What are some common side effects of beta blockers?

A: Common side effects include fatigue, cold hands and feet, dizziness, low blood pressure, depression, mood changes, trouble sleeping, sexual dysfunction, weight gain, shortness of breath, and a slow heart rate. Some beta blockers — particularly older, non-selective types like atenolol — also reduce insulin sensitivity, which has been linked to an increased risk of Type 2 diabetes and can worsen low blood sugar episodes in people who use insulin.

Q: If beta blockers aren't the answer, what should I focus on instead?

A: The research points to the importance of addressing several factors linked to cardiovascular disease. Key strategies include eliminating seed oils rich in LA, supporting insulin sensitivity, eating enough carbohydrates to support cellular energy production, walking daily, getting regular sunlight exposure, and monitoring metabolic health with tools such as the HOMA-IR test.

Sources and References

- [1, 3] Science Daily May 25, 2026
- [2] The New England Journal of Medicine August 30, 2025;393:1889-1900
- [4] European Heart Journal August 30, 2025
- [5] Journal of Endocrinology and Diabetes May 5, 2017