

Insulin Reset Food Guide

A comprehensive nutrition approach to optimize insulin sensitivity, incretin response, and metabolic health through strategic food choices and meal timing.



Understanding Your Metabolic Messengers

Your body's insulin response and incretin hormones (GLP-1 and GIP) play crucial roles in blood sugar regulation, appetite control, and overall metabolic health. These hormones are directly influenced by what you eat and when you eat it.

Insulin

The primary hormone responsible for shuttling glucose from your bloodstream into cells. Chronically elevated insulin levels can lead to insulin resistance, weight gain, and metabolic dysfunction.

Incretins (GLP-1/GIP)

Gut hormones released in response to food that enhance insulin secretion, slow gastric emptying, increase satiety, and improve glucose control. They're now the basis for popular medications like Ozempic and Mounjaro.



The Insulin Reset Approach

01

Prioritize Incretin-Activating Foods

Foods that naturally stimulate GLP-1 and GIP production help regulate appetite and improve insulin sensitivity without medication.

02

Eliminate Insulin-Spiking Foods

Remove foods that cause rapid, excessive insulin release, which can lead to energy crashes, increased hunger, and metabolic dysfunction.

03

Optimize Meal Timing & Structure

Strategic meal timing and food combinations can dramatically improve your body's hormone response and metabolic efficiency.

This guide provides a practical framework for implementing these principles in your daily life, with specific food recommendations, meal plans, and shopping guides.



Why This Matters: The Metabolic Crisis

37.3M

Americans with Diabetes

Over 11% of the US population has diagnosed diabetes, with millions more undiagnosed.

96M

American Adults with Prediabetes

More than 1 in 3 adults have prediabetes, with 80% unaware of their condition.

88%

Metabolically Unhealthy

Only 12% of Americans are considered metabolically healthy based on key biomarkers.

Source: CDC National Diabetes Statistics Report, 2022; UNC/NHANES Research 2019

15 Power Foods That Activate GLP-1 & GIP

These foods naturally stimulate incretin hormone production, helping regulate blood sugar, increase satiety, and improve metabolic health without medication.

1

Fermented Foods

Yogurt, kefir, kimchi, and sauerkraut improve gut health and enhance incretin response. Studies show fermented dairy particularly effective at increasing GLP-1 production.

2

Fatty Fish

Salmon, mackerel, sardines, and herring provide omega-3 fatty acids that improve insulin sensitivity and optimize incretin function.

3

Leafy Greens

Spinach, kale, arugula, and other leafy greens deliver nutrients that support metabolic health while providing fiber that slows glucose absorption.

More GLP-1 & GIP Activating Foods



1

Nuts & Seeds

Walnuts, almonds, flaxseeds, and chia seeds contain beneficial fats, protein, and fiber that trigger incretin release while stabilizing blood sugar.

2

Berries

Blueberries, strawberries, raspberries, and blackberries are rich in polyphenols that enhance incretin secretion and improve insulin sensitivity.

3

Olive Oil

Extra virgin olive oil contains monounsaturated fats and polyphenols that boost GLP-1 levels and reduce post-meal glucose spikes.

Additional GLP-1 & GIP Activating Foods

1

Avocados

Rich in monounsaturated fats and fiber that slow digestion and stabilize blood sugar, avocados help maintain healthy incretin response.

2

Legumes

Lentils, chickpeas, and beans provide resistant starch and fiber that feed beneficial gut bacteria, enhancing GLP-1 production.

3

Cinnamon

Contains compounds that mimic insulin action and improve insulin sensitivity. Studies show 1-6g daily can significantly reduce fasting blood glucose.



Final GLP-1 & GIP Activating Foods

1

Turmeric

Contains curcumin which improves insulin sensitivity and has been shown to increase GLP-1 secretion. Pair with black pepper to enhance absorption.

2

Green Tea

Rich in catechins that improve insulin sensitivity and stimulate incretin production. Aim for 2-3 cups daily for maximum benefit.

3

Eggs

High-quality protein source that triggers incretin release and improves insulin response. The choline in egg yolks supports metabolic health.

1

Vinegar

Apple cider vinegar particularly enhances insulin sensitivity and GLP-1 production. 1-2 tbsp before meals can reduce post-meal glucose spikes by 20-30%.

1

Cocoa

Dark chocolate (85%+ cocoa) contains flavanols that improve insulin sensitivity and incretin response. Limit to 1-2 squares daily.

1

Bone Broth

Contains glycine and glutamine that support gut health and enhance the incretin response while providing essential amino acids.

10 Foods to Completely Avoid

These foods cause rapid, excessive insulin spikes, disrupt incretin function, and promote metabolic dysfunction. Removing them from your diet is a critical first step to resetting your insulin response.

1

Refined Sugar

Table sugar, high-fructose corn syrup, and other added sugars cause extreme insulin spikes and provide no nutritional value. They impair incretin function over time.

2

White Flour Products

White bread, pasta, and baked goods made with refined flour are rapidly digested into glucose, triggering massive insulin release.

3

Sugar-Sweetened Beverages

Soda, sweetened tea, sports drinks, and fruit juices deliver liquid sugar that causes rapid insulin spikes without activating normal satiety mechanisms.



reflect on
your choices

More Foods to Completely Avoid

1

Processed Breakfast Cereals

Even "healthy" options are typically high in refined carbs and sugars that disrupt metabolic function first thing in the morning.

2

Artificial Sweeteners

Aspartame, sucralose, and saccharin disrupt gut bacteria, trigger insulin release, and impair incretin function despite having zero calories.

3

Vegetable & Seed Oils

Soybean, corn, canola, and other industrial oils are high in inflammatory omega-6 fatty acids that impair insulin sensitivity and disrupt metabolism.

1

Fast Food

Combines refined carbs, poor-quality fats, and additives that dramatically impair metabolic function.

1

Processed Meats

Hot dogs, bacon, and deli meats contain preservatives that impair insulin signaling and promote inflammation.

Final Foods to Completely Avoid



1

Energy & Protein Bars

Most commercial bars contain added sugars, refined carbs, and artificial ingredients despite health-focused marketing.

2

Ultra-Processed "Diet" Foods

"Low-fat" and "sugar-free" products typically replace fat and sugar with ingredients that still spike insulin and disrupt metabolism.

Research shows ultra-processed foods cause people to consume approximately 500 more calories per day compared to whole food diets, likely due to their effects on insulin, incretin hormones, and appetite regulation.

Hidden Insulin-Spiking Foods People Think Are Healthy

Marketing tactics and outdated nutrition guidance have led many people to consume these supposedly "healthy" foods that actually disrupt insulin function and metabolic health.

Whole Wheat Bread

Despite being "whole grain," wheat bread often spikes blood sugar as much as white bread. The fine grinding process makes the carbohydrates rapidly available, and many commercial brands add sugar.

Low-Fat Yogurt

When manufacturers remove fat, they typically add sugar to improve taste. Some "healthy" yogurts contain more sugar than ice cream, causing significant insulin spikes.

Granola

Marketed as a health food but typically loaded with added sugars, honey, or maple syrup. A single serving can contain 15+ grams of sugar and trigger substantial insulin release.

More Hidden Insulin-Spiking "Health" Foods

Dried Fruit

Removing water concentrates the sugar content, making dried fruits like dates, raisins, and apricots extremely high in rapidly absorbed sugars that spike insulin.

Fruit Smoothies

Blending fruit destroys fiber structure and releases sugars, causing faster absorption and higher insulin response than eating whole fruit.

Rice Cakes

Despite being low-calorie, their refined carbs are rapidly converted to glucose, spiking blood sugar and insulin without providing satiety.

Gluten-Free Products

Often made with rice flour, potato starch, and tapioca, which can raise blood sugar even more than wheat-based equivalents.



The Glycemic Index & Insulin Index

Understanding how foods affect your blood sugar and insulin levels is critical for optimizing metabolic health. These indices help you make informed food choices.

Glycemic Index (GI)

Measures how quickly foods raise blood glucose levels on a scale of 0-100. High GI foods (>70) cause rapid blood sugar spikes, while low GI foods (<55) cause more gradual increases.

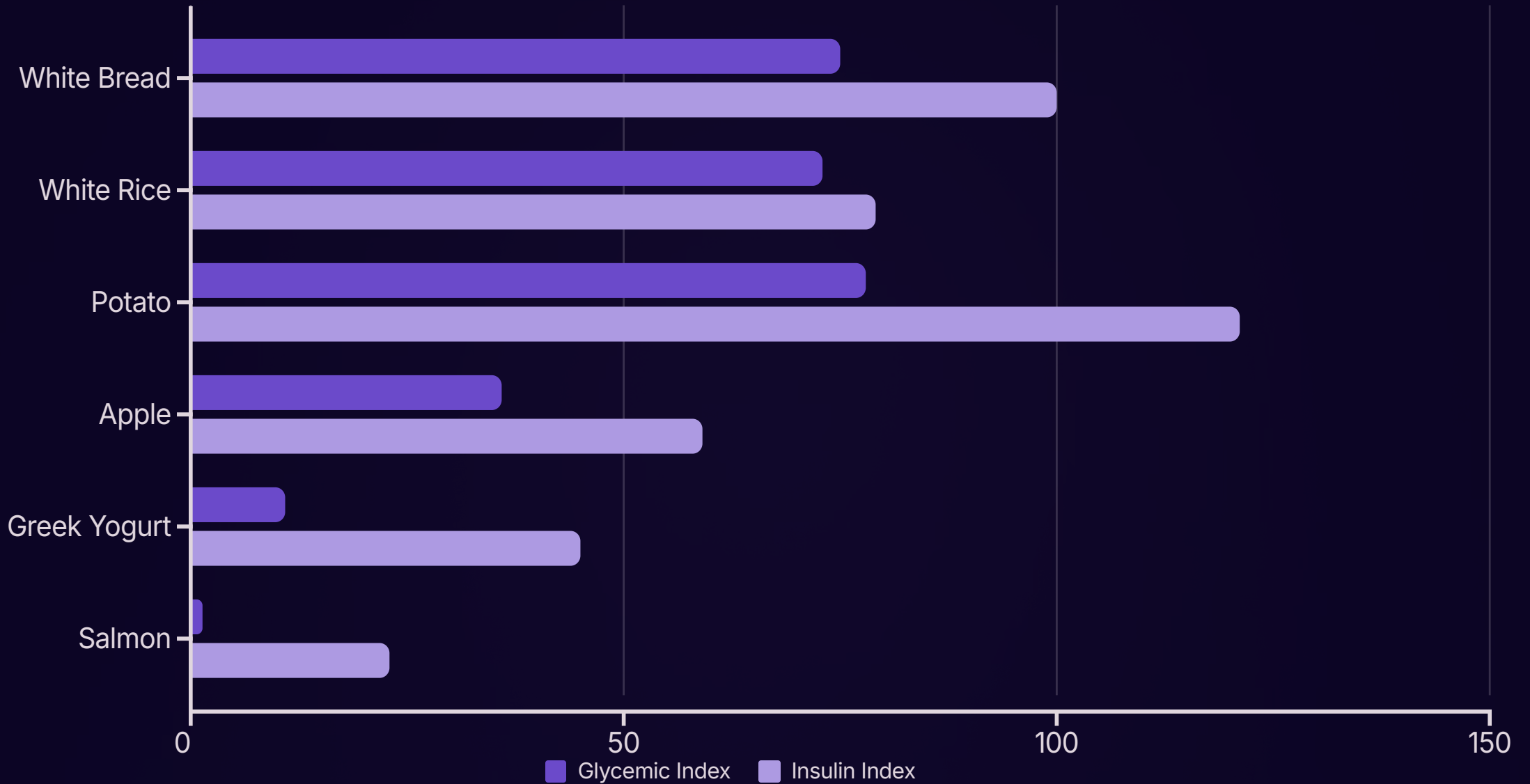
Limitation: GI doesn't account for typical portion sizes or the insulin response independent of blood sugar.

Insulin Index (II)

Measures the insulin response to foods regardless of their carbohydrate content. Some protein-rich and fat-rich foods can trigger significant insulin release despite minimal impact on blood sugar.

This explains why certain foods can cause weight gain or metabolic issues despite not raising blood glucose significantly.

Glycemic & Insulin Response Reference



Note: Values are relative, with white bread as the reference at 100. Lower numbers indicate better metabolic responses. Data from Sydney University's Glycemic Index Research Service and related insulin index studies.

Optimizing Food Combinations

How you combine foods significantly impacts your insulin and incretin response. Strategic combinations can dramatically improve metabolic outcomes.



Carbohydrates Alone

Rapid glucose absorption, high insulin spike, minimal incretin activation, quick hunger return



Add Protein & Fat First

Slows gastric emptying, moderates glucose release, enhances incretin production, improves satiety



Add Fiber & Vinegar

Further slows digestion, feeds gut bacteria, maximizes incretin response, extends satiety

The sequence of eating matters too: consuming vegetables, proteins, and fats before carbohydrates can reduce post-meal glucose spikes by up to 73% and enhance incretin function.



Meal Planning Template: Breakfast

Breakfast sets your metabolic tone for the day. A high-carb, high-sugar breakfast leads to energy crashes and hunger, while a protein-rich, low-carb breakfast stabilizes energy and reduces cravings.

Optimal Components

- 25-30g protein (essential for morning metabolic function)
- Healthy fats (avocado, olive oil, nuts)
- Fiber-rich vegetables
- Limited whole fruit (berries preferred)
- Minimal or no grains/starches

Sample Breakfast Ideas

- Eggs with sautéed greens and avocado
- Greek yogurt with berries, nuts, and cinnamon
- Protein smoothie with spinach, avocado, berries
- Salmon with leafy greens and olive oil
- Chia pudding with unsweetened coconut milk

Meal Planning Template: Lunch & Dinner

Optimal Components

Use this formula to build metabolically optimized meals:

- **Protein:** 4-6oz (palm-sized portion)
- **Non-starchy vegetables:** Fill 1/2 your plate
- **Healthy fats:** 1-2 thumb-sized portions
- **Optional carbs:** 1/2 cup max, preferably after protein and vegetables

Add fermented foods, herbs, spices, and vinegar to enhance incretin response.

Sample Meal Ideas

- Grilled salmon with roasted brussels sprouts and olive oil
- Grass-fed beef stir-fry with mixed vegetables
- Chicken salad with mixed greens, avocado, olive oil, and vinegar dressing
- Tofu and vegetable curry with turmeric and small portion of brown rice
- Shrimp with zucchini noodles and pesto



Grocery Shopping Guide

Optimize your shopping with this categorized guide to ensure your kitchen is stocked with metabolism-supporting foods.

Proteins

- Wild-caught fish (salmon, sardines, mackerel)
- Pastured eggs
- Grass-fed beef and lamb
- Pasture-raised poultry
- Plain Greek yogurt (full-fat)
- Cottage cheese (no additives)
- Tempeh and tofu (organic, non-GMO)

Healthy Fats

- Extra virgin olive oil
- Avocados and avocado oil
- Coconut oil (unrefined)
- Nuts (walnuts, almonds, macadamias)
- Seeds (chia, flax, pumpkin, hemp)
- Olives
- Ghee or grass-fed butter

Grocery Shopping Guide (Continued)

Non-Starchy Vegetables

- Leafy greens (spinach, kale, arugula)
- Cruciferous (broccoli, cauliflower, brussels sprouts)
- Bell peppers, zucchini, cucumber
- Asparagus, green beans, celery
- Mushrooms, onions, garlic
- Fresh herbs (cilantro, basil, parsley)

Limited Carbohydrates

- Berries (blueberries, strawberries, raspberries)
- Legumes (lentils, chickpeas, black beans)
- Sweet potatoes and winter squash
- Quinoa and wild rice
- Green apples and pears



Grocery Shopping Guide (Final)

Fermented Foods

- Sauerkraut (no added sugar)
- Kimchi
- Unsweetened kefir
- Kombucha (low sugar)
- Miso (organic, non-GMO)

Condiments & Flavorings

- Apple cider vinegar
- Coconut aminos (soy sauce alternative)
- Mustard (no added sugar)
- Herbs and spices (especially turmeric, cinnamon)
- Sea salt
- 85%+ dark chocolate

Shopping Tips

- Shop the perimeter of the store where fresh foods are located
- Read ingredient labels carefully (avoid added sugars, vegetable oils, and additives)
- Choose organic for the "dirty dozen" produce items most contaminated with pesticides
- Avoid products with health claims on the packaging - they're often marketing gimmicks

Recipe Modifications for Common Dishes

You don't have to give up your favorite meals. These strategic substitutions maintain flavor while dramatically improving the metabolic impact of common dishes.



Pasta Dishes

Replace wheat pasta with zucchini or spaghetti squash noodles. Use high-quality protein sources and olive oil-based sauces instead of cream. Add extra vegetables for volume and nutrition.



Sandwiches & Wraps

Use large lettuce leaves, collard greens, or nori sheets instead of bread. Focus on quality proteins, avocado, and vegetables. Add fermented vegetables like sauerkraut for probiotics.



Pizza

Create crusts from cauliflower, almond flour, or ground chicken. Use olive oil instead of processed cheese, and load with vegetables. A small amount of high-quality cheese is fine.



More Recipe Modifications

Baked Goods

Replace white flour with almond or coconut flour. Use monk fruit or allulose instead of sugar. Incorporate protein powder, nuts, and seeds for nutritional value and to reduce insulin response.

Stir-Fries

Double the vegetables and reduce rice portion to 1/4 cup. Use coconut aminos instead of soy sauce. Add fermented vegetables and plenty of spices, particularly turmeric and ginger.

Smoothies

Limit fruit to 1/2 cup berries. Include protein (powder or Greek yogurt), healthy fats (avocado, nut butter), and greens. Add cinnamon and a touch of apple cider vinegar to improve glucose response.

Final Recipe Modifications



Burgers

Use lettuce wraps instead of buns. Add avocado, fermented pickles, and mustard. Serve with side salad or non-starchy vegetables instead of fries.



Breakfast Cereals

Create grain-free granola from nuts, seeds, and unsweetened coconut. Serve with full-fat Greek yogurt and a few berries. Add cinnamon and vanilla extract for flavor without sugar.



Tacos

Use lettuce cups or cheese shells instead of corn tortillas. Double the vegetables and add avocado. Include fermented salsa and full-fat sour cream.

Remember: The goal isn't deprivation but optimization. These modifications maintain the essence of your favorite foods while dramatically improving their metabolic impact.

Optimal Meal Timing & Frequency

When you eat can be just as important as what you eat for optimizing insulin sensitivity and incretin function.

Morning Metabolism Window (6-10 AM)

Insulin sensitivity is typically highest in the morning. A protein-rich, low-carb breakfast supports optimal hormonal balance.

Consider 1 tbsp apple cider vinegar in water 15-30 minutes before eating to enhance insulin sensitivity.

Evening Metabolic Support (6-8 PM)

Insulin sensitivity decreases in the evening, so limit carbohydrates and focus on protein, non-starchy vegetables, and healthy fats. Try to finish eating at least 3 hours before bedtime to allow proper digestion.

1

2

3

Midday Fueling (12-2 PM)

Focus on protein, healthy fats, and fiber-rich vegetables. If including carbohydrates, this is often the optimal time metabolically. Always consume protein and fiber before any starchy foods.

Time-Restricted Eating Benefits

Consolidating your food intake within a specific daily window can dramatically improve insulin sensitivity, incretin function, and metabolic health independent of food choices.



Benefits of 10-12 Hour Daily Eating Window

- Improved insulin sensitivity
- Enhanced fat oxidation
- Optimized incretin function
- Reduced inflammation
- Better appetite regulation
- Improved sleep quality

Example: Eating all meals between 8 AM and 6 PM, with nothing but water, black coffee, or plain tea outside this window.

Research shows that even without changing food choices, simply shortening the daily eating window can reduce insulin levels and improve metabolic markers in as little as 10 days.



Special Considerations & Personalization

Athletes & Active Individuals

May need additional carbohydrates, particularly around training sessions. Focus on consuming carbs within 1-2 hours after exercise when insulin sensitivity is enhanced. Still prioritize protein, healthy fats, and fiber.

Vegetarians & Vegans

Need careful planning to get adequate protein without excessive carbs. Focus on tempeh, tofu, hemp seeds, and lupini beans for better protein-to-carb ratios. Monitor vitamin B12, iron, zinc, and omega-3 status.

Diagnosed Diabetes

Work with healthcare providers when making dietary changes, particularly if on medication. Monitor blood glucose closely as insulin sensitivity improves to avoid hypoglycemia. Medication adjustments may be necessary.

Key Supplements to Consider

While food should be your primary focus, certain supplements can enhance insulin sensitivity and incretin function, particularly for those with existing metabolic challenges.

Berberine

500mg 1-3 times daily with meals. Activates AMPK (same pathway as metformin) and improves insulin sensitivity. Studies show comparable effects to metformin for blood sugar control.

Magnesium

200-400mg daily, preferably magnesium glycinate or malate. Required for over 300 enzymatic reactions, including those involved in glucose metabolism and insulin function.

Omega-3 Fatty Acids

1-3g combined EPA/DHA daily. Reduces inflammation, improves cell membrane function, and enhances insulin sensitivity. Critical for those not regularly consuming fatty fish.

Alpha Lipoic Acid

600-1200mg daily. Powerful antioxidant that improves insulin sensitivity and glucose uptake in muscle cells. Also helps reduce diabetes-related neuropathy.

Tracking Your Progress

Monitor these key metrics to assess improvements in your metabolic health. Remember that lab values are more important than the number on the scale.

What to Track

- **Fasting glucose:** Target under 90 mg/dL
- **Post-meal glucose:** Under 140 mg/dL (1 hour) and under 120 mg/dL (2 hours)
- **Fasting insulin:** Target under 5 μ IU/mL
- **HbA1c:** Target under 5.4%
- **Triglyceride to HDL ratio:** Target under 1.0
- **Waist-to-height ratio:** Target under 0.5

Tracking Tools

- Continuous glucose monitor (Levels, Nutrisense)
- Glucose meter (affordable option)
- Regular lab work (every 3-6 months initially)
- Food/symptom journal
- Energy and hunger ratings
- Sleep quality measurements



Your Insulin Reset Action Plan

Implement these steps progressively for sustainable improvements in metabolic health, energy, and body composition.

01

Eliminate the "Big Offenders"

Remove sugar, refined flour, industrial seed oils, and ultra-processed foods. These cause the most metabolic damage and removing them provides immediate benefits.

03

Incorporate GLP-1 Activating Foods

Add fermented foods, berries, fatty fish, olive oil, vinegar, and spices to support optimal incretin function and insulin sensitivity.

02

Restructure Your Meals

Follow the protein + healthy fats + fiber-rich vegetables formula for all meals. Ensure adequate protein (30+ grams) at breakfast. Consume any carbohydrates after protein and vegetables.

04

Optimize Meal Timing

Establish a 10-12 hour daily eating window. Consider front-loading calories earlier in the day when insulin sensitivity is typically highest.

Remember that consistency matters more than perfection. Focus on progress over time rather than immediate transformation.