



When Sugar Becomes a Problem

Your Practical Guide to Blood Sugar, Insulin & Everyday Choices

Understand the pattern. Notice your own signals. Start with one useful change.

The full picture

Blood sugar is not only about sweets — and one food is never the whole story.

This episode starts with sugar, but the useful question is bigger: how does your body handle the glucose arriving from food and drink, and what patterns keep asking insulin to work harder?

The system

Glucose is a major fuel. Insulin helps move it from the bloodstream into cells. When cells respond less effectively, the pancreas may compensate by producing more insulin.

The inputs

Carbohydrates, drinks, eating patterns, sleep, activity, stress, medicines, and individual biology can all influence glucose. A single meal or reading cannot explain the whole system.

The goal

Not fear. Not perfection. Awareness: notice repeat patterns, make one simpler choice, and bring concerns or conflicting results to a qualified clinician.

KEEP THIS DISTINCTION

A personal glucose response is useful information about one person under one set of conditions. It is not a universal ranking of foods.

Insulin and glucose

The simple system behind the conversation.

1. The mechanism

AFTER YOU EAT

- Digestible carbohydrate is broken down into glucose.
- Glucose enters the bloodstream.
- The pancreas releases insulin.
- Insulin helps muscle, fat, and liver cells take up or store energy.

WHEN THE SIGNAL MEETS RESISTANCE

Insulin resistance means cells do not respond to insulin as well as they should. The pancreas may compensate by making more insulin, sometimes while glucose results still look normal.

WHY IT MATTERS

- ✓ Insulin resistance and prediabetes often have no obvious symptoms.
- ✓ Prediabetes raises future risk, but progression is not inevitable.
- ✓ Healthy food, activity, sleep, weight management, and—when appropriate—medicine can help prevent or delay type 2 diabetes.

Think of insulin as a signal, not a villain. The problem is not that insulin exists; it is when the body needs more of that signal to do the same job.

It is not only table sugar

The label on the front is less useful than the form, amount, and whole meal.

2. Food and drink

Starch in bread, pasta, rice, oats, and potatoes is also broken down into glucose. That does not make every carbohydrate 'bad.' The amount, preparation, fibre, protein, fat, and the person eating it all change the response.

USEFUL DISTINCTIONS

- Whole fruit and fruit juice are not metabolically identical; juice removes much of the intact structure and is easier to consume quickly.
- A sweetened coffee or energy drink can deliver carbohydrate without the fullness of a meal.
- A mixed meal may produce a different curve from the same carbohydrate eaten alone.
- Cooking, cooling, ripeness, and portion size can change the result.

A BETTER QUESTION

Instead of asking 'Is this food good or bad?', ask: 'What is the whole meal, how much am I having, and what pattern does it create for me?'

One food, different responses

What Kim's sweet-potato experiment can—and cannot—tell us.

3. Personal patterns

KIM'S RESULT

Kim expected a sweet potato to produce a gentler glucose response than a regular white potato. On her continuous glucose monitor, the sweet potato produced the larger rise.

THE STRONG TAKEAWAY

- ✓ Population averages do not predict every individual response.
- ✓ A repeatable personal pattern can challenge a food label or assumption.
- ✓ Comparisons are more useful when portion, preparation, meal context, activity, sleep, and timing are similar.

THE BOUNDARY

This does not prove that sweet potatoes spike everyone more than white potatoes. A CGM estimates glucose every few minutes and can reveal trends, but it is not a diagnosis and readings can differ from blood-glucose measurements.

PATTERN, NOT VERDICT

If a surprising response repeats, record the context and discuss it with a clinician—especially if you have symptoms, diabetes, take glucose-lowering medicine, or are changing how often you eat.

Look at the whole day

Frequency, hunger, and drinks can hide between the meals you remember.

4. Beyond the plate

The episode asks viewers to notice how often eating or drinking delivers energy—not to follow a rigid meal schedule. Hunger, medical needs, training, pregnancy, medications, and recovery can all change what is appropriate.

WHAT TO NOTICE FOR THREE DAYS

- Meals, snacks, sweetened drinks, juice, alcohol, and ‘small bites.’
- Whether hunger arrives gradually or as a sudden crash.
- Energy, concentration, sleep, movement, and stress around the same time.
- Whether a drink is being counted as hydration when it is also delivering substantial sugar or calories.

USE THE OBSERVATION

- ✓ Replace one routine sweetened drink with water or an unsweetened option.
- ✓ Build meals that are satisfying enough for you rather than automatically grazing.
- ✓ Do not skip or delay meals if that conflicts with your medical plan or medication safety.

Meal timing is not a moral score. The useful target is a pattern that supports stable energy, adequate nutrition, and your actual health needs.

The ultra-processed loop

Why 'just eat less' can feel harder in a food environment built for repeat eating.

5. Food environment

Ultra-processed is not a synonym for every packaged food, and an ingredient count alone is not a reliable definition. The practical concern is a pattern dominated by products engineered for convenience, rapid eating, and high reward.

WHAT CONTROLLED RESEARCH FOUND

In a short inpatient randomized trial, people offered an ultra-processed diet ate more calories and gained weight compared with an unprocessed diet. The study shows that the food environment can influence intake; it does not prove that every processed item has the same effect.

A WORKABLE SWAP

- Pick one food you buy on autopilot.
- Name the job it does: fast breakfast, crunchy snack, easy dinner, or comfort.
- Choose a simpler replacement that does the same job and is realistic for your time and budget.
- Repeat the swap before trying to overhaul the kitchen.

Processing exists on a spectrum. Frozen vegetables, canned beans, plain yoghurt, and other useful convenience foods do not belong in the same mental bucket as every highly formulated snack.

Progression and testing

A test is a view of the system—not the entire system.

6. The clinical picture

HOW THE PATTERN CAN PROGRESS

- Cells respond less effectively to insulin.
- The pancreas may produce more insulin to compensate.
- Glucose may eventually rise into the prediabetes range.
- If compensation is no longer enough, glucose can reach diagnostic thresholds for type 2 diabetes.

WHAT COMMON TESTS SHOW

- Fasting plasma glucose: one fasted point in time.
- A1C: an estimate of average glucose over roughly three months.
- Oral glucose tolerance test: the response to a measured glucose load over time.
- CGM: frequent estimates that show day-and-night patterns, primarily used in diabetes care.

WHERE NUANCE MATTERS

A1C is useful, but certain conditions can make it falsely high or low, and different tests do not always identify the same people. Diagnosis normally relies on validated blood tests and clinical interpretation—not symptoms, a consumer CGM experiment, or one isolated reading.

If A1C and direct glucose results do not match, ask what could explain the difference and whether another validated test is appropriate.

Your awareness audit

Start with one pattern, one change, and one better question.

7. Put it into practice

THIS WEEK

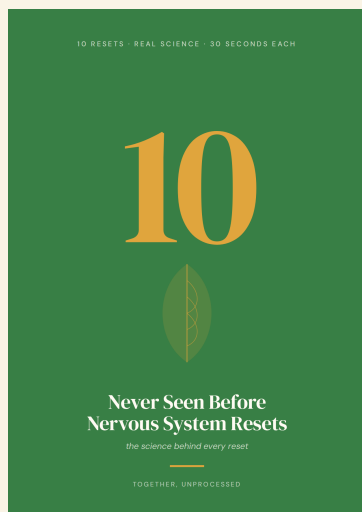
- ✓ Track three ordinary days without judging them.
- ✓ Circle the most automatic source of refined carbohydrate or liquid sugar.
- ✓ Make one realistic swap and repeat it.
- ✓ If you compare foods, keep the conditions as similar as practical.
- ✓ Bring repeat patterns, symptoms, and conflicting results to a qualified clinician.

EVIDENCE AND FURTHER READING

- NIDDK — Insulin Resistance & Prediabetes:
www.niddk.nih.gov/health-information/diabetes/overview/what-is-diabetes/prediabetes-insulin-resistance
- NIDDK — The A1C Test & Diabetes: www.niddk.nih.gov/health-information/diagnostic-tests/a1c-test
- NIDDK — Continuous Glucose Monitoring:
www.niddk.nih.gov/health-information/diabetes/overview/managing-diabetes/continuous-glucose-monitoring
- Zeevi et al., Cell (2015), PMID 26590418: pubmed.ncbi.nlm.nih.gov/26590418
- Hall et al., Cell Metabolism (2019), PMID 31105044: pubmed.ncbi.nlm.nih.gov/31105044

This guide is educational. It cannot diagnose insulin resistance, prediabetes, or diabetes, and it should not be used to change medication or a clinician-directed eating plan.

When you're ready for the next layer



10 Nervous System Resets

Sugar is easier to put down when your nervous system isn't running hot. Ten resets you can use anywhere — at your desk, in the car, or in the middle of the night.

Get all 10

togetherunprocessed.com/guides/30-second-resets



You don't need to fix this today.

You just need to know you're not alone.

[@togetherunprocessed](#)

Everything we share comes from our own journeys and experiences.

We're not doctors, and nothing here is meant as medical advice.

Always make decisions about your health with a trusted professional.