



The 30-Day Autophagy Protocol

A Science-Backed Guide to Cellular Renewal

From Someone Who Needed It to Survive

SIX YEARS OF REAL RESULTS

HbA1c
35 mmol/mol

Cholesterol
3.3 mmol/L

LDL
1.6 mmol/L

Triglycerides
1.0 mmol/L

Trig/HDL
0.77

Weight Lost
27 lbs

WHAT'S INSIDE

- ✓ 3-phase protocol • Days 1–30 structured daily
- ✓ 11 autophagy signs synced throughout
- ✓ Nutrition framework, recipes & supplement guide
- ✓ Tracking tools & 30-day transformation summary

A Note Before We Begin

In 2019, I had a cardiac event at 54. Two stents. An 80% blockage in my LAD artery — the one cardiologists call *the widow maker*.

I was not given a death sentence. But I was handed something almost as heavy: a future defined by medication, monitoring, and managed decline. The system had a plan for me. I was not sure it was a plan I could accept.

So I went looking for another way. What I found — buried in Nobel Prize-winning research and metabolic science journals — was **autophagy**: your body's built-in cellular repair system. Six years later, here are my GP-monitored results:

HbA1c	35 mmol/mol	Total Cholesterol	3.3 mmol/L
LDL	1.6 mmol/L	Triglycerides	1.0 mmol/L
Trig/HDL Ratio	0.77	Blood Pressure	130/78 mmHg
Weight Lost	27 lbs	Years on protocol	6 years

These are not the numbers of someone in managed decline. They are the numbers of someone who has been running a different metabolic programme for six years. This protocol is built on that experience and designed specifically for people managing metabolic disease, insulin resistance, Type 2 diabetes, or elevated cardiovascular risk.

Medical Disclaimer

This guide is for educational purposes based on personal experience and published research. It is not medical advice. Always consult your healthcare provider before starting any fasting protocol, especially if you have existing health conditions or take medications.

PART ONE

The Science Your Doctor Probably Skipped

What Is Autophagy?

Autophagy — from the Greek for *self-eating* — is the process by which your cells identify, dismantle, and recycle damaged or dysfunctional components. When it works, your cells are clean, efficient, and metabolically healthy. When it is chronically suppressed — the default state for most people eating a modern diet with frequent meals — damaged proteins, dysfunctional mitochondria, and inflammatory debris accumulate. That accumulation is a core driver of insulin resistance, metabolic syndrome, Type 2 diabetes, and cardiovascular disease.

In 2016, Yoshinori Ohsumi was awarded the **Nobel Prize in Physiology or Medicine** specifically for his work on autophagy mechanisms. The science is not fringe. It is foundational.

Why Modern Life Suppresses It

Autophagy is primarily regulated by two cellular sensors: **mTOR** (mechanistic target of rapamycin) and **AMPK** (AMP-activated protein kinase).

mTOR is activated by nutrients — particularly protein and glucose. When active, it suppresses autophagy. Eating frequently, especially high-carbohydrate meals, keeps mTOR chronically elevated. The result: autophagy never gets a chance to run.

AMPK works in the opposite direction. It is activated by energy depletion — fasting, exercise, and caloric restriction. When AMPK rises, autophagy is upregulated. This is why **strategic fasting is the most powerful and accessible autophagy trigger available**.

For people with insulin resistance or Type 2 diabetes, there is an additional layer: chronically elevated insulin directly suppresses autophagy. This creates a damaging cycle — metabolic dysfunction suppresses the very repair mechanism that could address it.

What Autophagy Does for Metabolic Health

Improved insulin sensitivity. Autophagy clears damaged mitochondria and removes inflammatory lipid deposits in liver cells that directly impair insulin signalling. This is why people following this protocol often see fasting glucose improvements within two to three weeks.

Reduced systemic inflammation. The NLRP3 inflammasome — a key driver of chronic low-grade inflammation in metabolic disease — is directly regulated by autophagy. When autophagy is functioning, inflammasome activation is kept in check.

Cardiovascular protection. In cardiovascular tissue, autophagy plays a specific role in clearing the damaged proteins and lipid deposits that contribute to atherosclerotic plaque formation. My Trig/HDL ratio of 0.77 — one of the strongest predictors of cardiovascular risk — reflects years of consistent

autophagy activation.

Cellular energy efficiency. By recycling damaged mitochondria and replacing them with functional ones, autophagy directly improves how efficiently your cells produce and use energy. The sustained energy people report during this protocol is not psychological — it is mitochondrial.

The Autophagy Window

Duration	Level	What Happens
12–14 hours	Beginner zone	Mild autophagy initiation. Achievable by skipping breakfast.
16–18 hours	Sweet spot ■	Meaningful autophagy. Where most benefits begin. Daily 16:8 fasting hits this range.
20–24 hours	Deep autophagy	Significant cellular recycling. Once or twice weekly for experienced fasters.
24–48 hours	Extended fast	Maximum autophagy activation. Monthly, with electrolytes and preparation.
48–72 hours	Advanced	Deep systemic autophagy. Medical supervision required. Not in this protocol.

PART TWO

Before You Start

Who Should Consult Their Doctor First

This protocol involves intermittent fasting. Most healthy adults can follow it safely. Speak with your GP before starting if any of the following apply:

- Type 2 diabetes managed with insulin or sulfonylureas (medications that can cause hypoglycaemia)
- Blood pressure medications (fasting can lower blood pressure; medication doses may need review)
- Any history of cardiac arrhythmia
- Chronic kidney disease or thyroid conditions
- Any current or historical eating disorder

Do not follow this protocol if you are: pregnant or breastfeeding, under 18, or have Type 1 diabetes.

Your Starting Baselines

Before Day 1, record the following. You will repeat this at Day 30. Request a full metabolic panel from your GP at the start and a repeat at Day 30.

Measurement	Day 0	Day 30	Change
Weight	_____	_____	_____
Waist circumference (at navel)	_____	_____	_____
Blood pressure	_____	_____	_____
Daily energy (1–10)	_____	_____	_____
Sleep quality (1–10)	_____	_____	_____
Mental clarity (1–10)	_____	_____	_____
Fasting glucose	_____	_____	_____
HbA1c	_____	_____	_____
Triglycerides	_____	_____	_____

PART THREE

What Breaks Autophagy

Before the protocol, understand this table. It will save you weeks of confusion. The most common autophagy mistake is not the fasting window itself — it is what people consume *during* it.

STATUS	WHAT IT INCLUDES
Breaks Autophagy	Any food or drink containing calories. Protein supplements and BCAAs. Most sweeteners — including "zero calorie" ones like sucralose and aspartame, which trigger an insulin response. Milk or cream in coffee. Flavoured water. Bulletproof coffee (fat breaks a fast).
Safe During Fast	Water (still or sparkling, plain). Black coffee (no additives whatsoever). Plain green tea. Plain herbal tea. Electrolytes without sweeteners or calories.
Grey Area	Apple cider vinegar (small amounts, well diluted). Sea salt in water. Some plain electrolyte powders — read every label.

The golden rule: when in doubt about whether something breaks your fast, it almost certainly does. Stick to water, black coffee, and plain tea.

PART FOUR

The Three-Phase Protocol

Phase	Days	Daily Fast	Primary Goal
Foundation	1–10	16 hours	Adapt, stabilise, begin
Deepening	11–20	18 hours + one 24-hr fast	Deeper activation, first extended fast
Optimisation	21–30	18–20 hours	Integrate, personalise, sustain

PHASE 1: FOUNDATION — Days 1–10

Daily Fast: 16 Hours

The goal of Phase 1 is not perfection. It is adaptation. Your body has almost certainly not operated in a 16-hour fasting state regularly. The first ten days establish the conditions that make everything else possible.

Your Daily Structure

TIME	ACTIVITY
6:00 AM	Fasting • 500ml water with pinch of sea salt
7:00 AM	Fasting • Black coffee or plain green tea (optional)
8:00 AM	Fasting • 20-minute walk or light movement
10:00 AM	Fasting • Herbal tea if needed
11:00 AM	EATING WINDOW OPENS • First meal: protein + fats + vegetables. Start with water, wait 10 minutes.
3:00 PM	Eating • Second meal: balanced, nutrient-dense
6:30 PM	Eating • Final meal: lighter, complete by 7 PM sharp
7:00 PM	FAST BEGINS

The 11AM Break-Fast: Getting It Right

Your first meal after a 16-hour fast matters more than any other. Spike blood sugar with processed carbohydrates and you will undo the metabolic benefit. Ideal first meals:

- 3–4 oz wild salmon with half an avocado and leafy greens
- 2–3 pasture-raised eggs scrambled in butter with sauteed spinach and mushrooms

- Organic chicken breast with olive oil, roasted broccoli, and a handful of walnuts

Phase 1 Autophagy Signs to Track

By Days 5–7, most people report the first signs of meaningful autophagy activation:

- ✓ **Sign 2:** Mental clarity arriving between hours 14–18
- ✓ **Sign 4:** Hunger shifting — you feel capable and functional despite not eating
- ✓ **Sign 6:** Consuming only water, black coffee, plain tea, or plain electrolytes during your fast

Phase 1 Troubleshooting

Symptom	Solution
Extreme hunger	Increase water and electrolytes. Hunger comes in 15–20 minute waves — it passes.
Headaches	Almost always electrolyte depletion. Add ¼ tsp sea salt to morning water. Increase magnesium.
Low energy	Check sleep and ensure you are eating enough in your eating window. Add B vitamins if persistent.
Lightheadedness	Add sea salt to water immediately. Break your fast if severe. If on blood pressure medication, monitor closely.

PHASE 2: DEEPENING — Days 11–20

Daily Fast: 18 Hours + One 24-Hour Fast

Phase 2 is where the cellular work accelerates. Extending from 16 to 18 hours takes you from the "sweet spot" of autophagy into what the research calls significant cellular recycling. You have adapted. Now we push deeper.

Transition Schedule

Days	Fast	Action
11–13	18:6	Shift eating window from 11AM–7PM to 1PM–7PM
14–16	18:6	Maintain 1PM–7PM consistently
17–18	20:4 option	Extend to 3PM–7PM if your body is ready — listen carefully
Day 19	24 hours	Your first 24-hour fast (see protocol below)
Day 20	18:6	Recovery day — return to standard eating window

Your First 24-Hour Fast (Day 19)

A 24-hour fast is the most significant autophagy event in this protocol. Plan it, do not improvise.

DAY 18 — PREPARE	DAY 19 — FAST	BREAK FAST (6PM)
Final meal by 6PM Make it substantial: quality protein, healthy fats, vegetables Sleep 8 hours	Morning: water + electrolytes. Black coffee. Light walk only. Midday: herbal tea. Stay engaged. Afternoon: peak autophagy. Continue water. Rest if needed.	6PM: 250ml water. Wait 10 mins. 6:10PM: Herbal tea. Wait 15 mins. 6:25PM: Light meal — 3oz protein + cooked vegetables + healthy fat. Eat slowly. Stop at satisfaction, not fullness.

Phase 2 Signs to Track

- ✓ **Sign 1:** 18+ hours fasting tracked consistently
- ✓ **Sign 3:** Reduced morning stiffness and improved joint comfort
- ✓ **Sign 7:** Caffeine supporting your fast, not replacing it — sharper alertness without glucose-driven jitteriness
- ✓ **Sign 8:** Your eating window is consistent and defended daily

PHASE 3: OPTIMISATION — Days 21–30

Daily Fast: 18–20 Hours + Personalisation

Phase 3 is where the protocol becomes yours. You have ten days of data. You know how your body responds. Now you integrate this into a sustainable structure.

Choose Your Path Forward

Option	Protocol	Best For
A — Consistent 18:6	1PM–7PM daily + one 24-hr fast per week	Most people. Steady energy, reliable routine, sustainable long-term. This is what I have followed for six years.
B — Flexible 18:6	Weekdays 18:6, weekends 16:8	Variable schedules and social lives. Good entry to long-term sustainability.
C — 20:4 / OMAD	3PM–7PM or one meal daily	Experienced fasters only. Do not attempt in Phases 1 or 2.

Advanced Strategies

Foods that enhance autophagy during your eating window:

- Cruciferous vegetables (broccoli, Brussels sprouts, cauliflower) — sulforaphane activates autophagy pathways
- Green tea (EGCG) — stimulates autophagy independently of fasting
- Olive oil (oleic acid), turmeric (curcumin), fatty fish (omega-3s), mushrooms, coffee

Exercise integration:

- Fasted morning walks (30–60 minutes) enhance autophagy and fat oxidation simultaneously
- Strength training and high-intensity work should sit in your eating window
- Avoid intense fasted exercise — it spikes cortisol and can undermine the protocol

Sleep for autophagy:

Sleep triggers autophagy in the brain. Your fasting window should align with sleep. Target 7–8 hours in a cool, dark room with 400mg magnesium glycinate 60 minutes before sleep.

Phase 3 Signs to Track — All 11

This phase, track all 11 signs. The compound picture matters more than any single sign.

- ✓ **Sign 5:** Skin clarity and reduced puffiness (cumulative over 2–3 weeks)
- ✓ **Sign 9:** You confidently know what breaks and does not break your fast
- ✓ **Sign 10:** Multiple signs appearing simultaneously — this is the indicator of genuine autophagy
- ✓ **Sign 11:** Metabolic markers improving (glucose, ketones, HbA1c if tested)

PART FIVE

Nutrition Framework

This is not a caloric restriction plan. You are applying three principles:

- **Quality over quantity.** Wild fish, pasture-raised eggs, grass-fed meat, organic poultry, diverse vegetables, olive oil, nuts. Not processed foods, seed oils, or refined carbohydrates.
- **Protein anchors every meal.** Adequate protein is essential during a fasting protocol. Aim for a protein source (4–6 oz) at every meal.
- **Break your fast gently.** The first meal sets the metabolic tone for the day. Prioritise protein and fat. Avoid anything that spikes blood sugar rapidly.

Three Recipes Worth Mastering

Recipe 1: The Standard Break-Fast Bowl

Ingredients: 4 oz wild salmon · ½ avocado · 2 cups mixed greens · 1 cup roasted broccoli · 2 tbsp olive oil · lemon juice · sea salt

Method: Cook salmon. Arrange greens. Top with warm salmon and broccoli. Add avocado. Drizzle olive oil and lemon. Season.

~450 kcal | 35g protein | 30g fat | 12g carbs

Recipe 2: The Morning Eggs

Ingredients: 3 pasture-raised eggs · 1 tbsp grass-fed butter · ½ cup mushrooms · 1 cup spinach · sea salt · black pepper

Method: Melt butter. Saute mushrooms until golden. Add spinach. Pour in whisked eggs. Scramble gently. Season.

~350 kcal | 24g protein | 27g fat | 4g carbs

Recipe 3: Metabolic Chicken Bowl

Ingredients: 6 oz organic chicken breast · 1 cup cauliflower rice · ½ cup roasted Brussels sprouts · ¼ cup sauerkraut · 2 tbsp olive oil

Method: Season and grill chicken. Saute cauliflower rice. Roast Brussels sprouts. Assemble. Add fermented vegetables. Drizzle olive oil.

~500 kcal | 45g protein | 28g fat | 15g carbs

PART SIX

Supplements

Use supplements to support the protocol — not replace it. The foundation is the fast itself.

Non-Negotiable: Electrolytes

The majority of fasting side effects — headaches, fatigue, weakness, irritability — are **electrolyte depletion, not hunger**.

- **Sodium:** ¼ tsp sea salt in morning water, every day
- **Magnesium:** 400–600mg magnesium glycinate, before bed
- **Potassium:** from food (avocado, leafy greens) or a plain electrolyte powder (no sweeteners)

Recommended

Supplement	Dose	Purpose	Note
Berberine	500mg with meals	Activates AMPK; improves insulin sensitivity and blood glucose	Consult GP if on metformin or diabetes medications
Omega-3 fish oil	2–3g daily	Reduces systemic inflammation; supports cellular membrane health	—
Vitamin D3 + K2	Per GP guidance	Most people with metabolic disease are deficient; deficiency impairs insulin signalling	Test first

For Advanced Phases

- **Green tea extract / EGCG (400–500mg)** — stimulates autophagy independently of fasting. Can take during your fasting window (caffeine-free version if sensitive).
- **Resveratrol (200–500mg with meals)** — activates sirtuins, the longevity-associated proteins upregulated during fasting.

PART SEVEN

Tracking Your 30 Days

Use the daily tracker below each day. The data compounds. A filled tracker at Day 30 is also concrete evidence of your commitment.

Daily Tracker

METRIC	RESULT
Day # and Phase (1 / 2 / 3)	
Fast start time	
Fast end time	
Total hours fasted	
Energy level (1–10)	
Mental clarity (1–10)	
Hunger management (1–10)	
Sleep quality last night (1–10)	
Fast maintained cleanly? Y / N	
Movement completed? Y / N	

Autophagy Signs Observed Today

Sign 1: Fasting duration hit	Sign 2: Mental clarity	Sign 3: Joint comfort
Sign 4: Hunger shifted	Sign 5: Skin clarity	Sign 6: No disruptors consumed
Sign 7: Caffeine supporting fast	Sign 8: Timing strategic	Sign 9: Know the rules
Sign 10: Multiple signs present	Sign 11: Markers improving	

Day 30 Transformation Summary

Metric	Day 0	Day 30	Change
Weight	_____	_____	_____

Waist circumference	_____	_____	_____
Daily energy (1–10)	_____	_____	_____
Mental clarity (1–10)	_____	_____	_____
Sleep quality (1–10)	_____	_____	_____
Joint comfort (1–10)	_____	_____	_____
Fasting glucose	_____	_____	_____
HbA1c (if tested)	_____	_____	_____

PART EIGHT

Beyond Day 30

Thirty days is the minimum effective dose. What you have built — fasting adaptation, improved insulin sensitivity, reduced inflammation, a functioning autophagy practice — compounds with time.

My own markers did not look like they do today after 30 days. They look like this after six years. But the trajectory was set in the first 30.

What to Sustain

- Your fasting window — at minimum 16:8, ideally 18:6, most days
- One 24-hour fast monthly
- The eating quality principles from Part Five
- Electrolytes every day, regardless of whether you feel you need them

What to Track Long-Term

- Annual HbA1c and full lipid panel with your GP
- Quarterly: weight trend, waist measurement, energy and clarity self-scores
- The 11 signs from your Autophagy Activation Checklist — use them monthly as your ongoing feedback system

A Final Word

I wrote this protocol because I needed it. Because the system I was handed after two stents at 54 was not enough, and because the research pointed clearly toward a different approach — one that addressed the underlying cellular dysfunction rather than managing its surface effects.

The blood markers that my GP monitors today are not a miracle. They are the outcome of consistency. Sixteen to eighteen hours, most days. The right food in the window. Electrolytes. Sleep. And six years of understanding that the goal is not to fast — it is to give your cells the conditions they need to repair themselves.

Give it 30 days. Then give it more.

— Mark Nadin, MetabolicNews.net

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