

# The truefuels Protocol

*truefuels*



## INTRODUCTION

# Why Fuelling Matters in Training

For years, I tested nearly every product on the market and kept running into the same issue: some gels had too little salt, making fuelling fatty, many had overpowering flavours or difficult-to-take consistencies, and most didn't sit well. That led the team and me to build truefuels, a more straightforward, cleaner solution that lets you adjust what you need depending on the session, conditions, and your body.

I got fuelling wrong too many times in my career, I hit the dreaded wall in races, and had stomach problems from taking on too many additives that slowed me down. On one particular occasion I'd like to forget, I had to walk most of a marathon at IM Kona in the scorching heat. Eventually, I found that simplifying the product, using a 1:1 ratio, and making the fuelling process as straightforward as possible worked. Again and again. This was what drove me to create truefuels: to use my experience to help you achieve your sporting goals.

The goal of fuelling should never be to overcomplicate things; it's about simplicity and repeatability. truefuels delivers science-driven, evidence-based, athlete-tested fuels designed to help ambitious sportspeople push their limits.



## FUELLING FUNDAMENTALS

# The Non-Negotiables

Think of this as your framework. Get these five points right, and you're already ahead:

### /01

**Carbohydrates are essential for quality training:** Carbs are the body's preferred fuel during moderate to high-intensity exercise. Glucose is stored in your muscles and liver as glycogen. At high intensities, these glycogen stores can be depleted in under two hours, so maintaining availability delays fatigue and supports sustained power output.

### /02

**Electrolytes matter—especially indoors and in heat:** Electrolytes regulate fluid balance, nerve function, and muscle contraction. The most important one is sodium, which is essential for maintaining fluid balance and helps prevent cramps and fatigue. Recommended salt intake can range from ~200 mg/h in cool conditions to over 3 g/h in the heat, depending on sweat rate.



/03

**Fuel for the work you're doing:** Your fuelling needs depend on session length, intensity, heat, and your personal gut tolerance. Elite athletes training at high intensity now target 90–120+ g/hr of carbohydrate.

/04

**Practice fuelling in training, not just races:** Weekly sessions offer the perfect chance to adapt your gut and test your plan. truefuels gels will reduce the risk of GI distress with a minimalist, functional ingredient list. truefuels gels have no fluff (just carbohydrates and salt) and no additives like fibre, sweeteners, or emulsifiers, ensuring they are GI-friendly for consistent use, even under intensity.

/05

**Recovery starts immediately after the session:** Insufficient electrolyte replacement hampers muscle repair. Consuming carbohydrates post-exercise helps replenish glycogen stores, accelerating recovery. Use electrolyte-rich fluids to replace 100–150% of fluid loss with 1.2–1.5 L/kg body weight lost.



## FUELING ON DEMAND

# Long Endurance Sessions

Long endurance work, generally lasting **over 1.5 hours**, is when your strategy truly needs to be dialled in.

## Before

### GOAL & TIMING

30 minutes pre-activity.

### FUELLING STRATEGY

Drink 500 mL water with one truefuels 40/1.0 **gel** 30 minutes pre-activity. Before an important competition (+2h) try to maximise glycogen stores in the two days prior by targeting 10–12 g/kg/day of carbohydrate.

## During

### GOAL & TIMING

Every hour of effort.

### FUELLING STRATEGY

Aim for 60–100 g/h of carbohydrates for long efforts (depending on body size and how used to fuelling you are). Highly trained athletes can safely raise this intake up to 120 g/h. truefuels uses a 1:1 maltodextrin:fructose blend to engage both transporters and maximise carbohydrate absorption. But I recommend that you start at the low end and increase intake over weeks. first time using gels? Take 1 per hour and increase to 2 in a few weeks. Stack truefuels performance gels (40g carbs each) to hit your target. Depending on temperature - use low salt for those cold January days, but transition to high salt in March to prepare for a potentially hot day in April.



## Before

### GOAL & TIMING

Immediately post-session.

### FUELLING STRATEGY

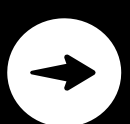
Focus on replacing fluid and electrolytes. Inadequate electrolyte replacement hampers muscle repair. truefuels Electro is designed for replacing lost electrolytes after an exercise bout.

## Short / High-Intensity

Even sessions under 1 hour may require 40 g/h of carbohydrate, especially if they are very intense and/or you are starting them underfuelled. For a hard effort lasting 1–2 hours, try building up to 120 g/h.

- ✓ truefuels recommends aiming for **40–120 g carbs/h** during exercise.
- ✓ If it's **hot** us the truefuels **40/1.0 gel** (delivering 1g salt).
- ✓ If it's **cool** the truefuels **40/0.25 gel** (delivering 0.25g salt) will work fine.

## Strength & Gym Sessions



### Fuelling and Recovery

Consuming carbohydrates helps you to perform at your best during the session and replenish glycogen stores afterwards.





## Electrolyte Replacement

Use electrolytes after the session to replace sodium lost through sweat. truefuels Electro is designed for post-exercise electrolyte replacement.

# Easy & Recovery Days



## Fluid Balance:

Electrolyte replacement post-exercise is vital, as insufficient replacement hampers muscle repair. Use truefuels electro to maintain plasma volume and osmotic pressure.

# Common Fuelling Mistakes You See



### Underfuelling (Glycogen Depletion):

A fall in blood glucose compromises both physical and cognitive performance. If your sessions are over two hours, you need 80–120 g/h to sustain quality work.



### Gut Compromise:

Choosing products with unnecessary flavourings, preservatives, or emulsifiers can increase osmotic load and GI distress risk. truefuels solved this issue by using no flavouring in the gel, and light natural flavours in the Electro product.



REFERENCE PAGE

# Matching Fuel to the Work

Use the truefuels performance gel —40g carbs, with two salt levels (40/0.25 and 40/1.0) — to build your hourly strategy.

Session Type / Duration	Carbs Target (g/h)	Salt Target (g/h)	truefuels Example Stack (per hour)
Short, Low Intensity (Z1/Z2)	40	Low (0.25)	1 × truefuels 40/0.25 gel
Endurance, Cool Temps (1–2h)	80	Moderate (0.5–0.75)	2 × truefuels 40/0.25 gel
Endurance, Warmer Temps (2h+)	80–120	High (1.25–2.0)	1 × tf 40/1.0 gel + 1 × tr 40/0.25 gel (80g/1.25g)
Max Effort / Race Pace in Heat	120	Extreme (3.0)	3 × truefuels 40/1.0 gel
Pre or Post Activity Electrolytes	0	0.4–1.0	1 × truefuels 40/1.0 gel

Fuelling is about providing your body with precisely what it needs, when it needs it. No fluff, just carbohydrates and salt.



No fluff, just carbohydrates and salt. I built truefuels to offer a simple, coherent, foolproof system that lets everyone perform at their best without worrying about nutrition. Get your basics right, practice your strategy during the long runs, and you'll find you can push further than you thought possible.

Good luck, and I'll see you out there!

## CHEAT SHEET

*truefuels*

# Run Fuelling

### Rule

One 40g gel every 30 minutes of running. Take the first gel before starting. Take a truefuels Electro 30 min before the start and immediately after finishing.

### Gel Choice

#### Cool conditions:

Low-salt gels (40g carb / 0.25g salt).

#### Warm/hot conditions:

High-salt gels 40g carb / 1g salt).



Run Length (Time)	Approx Distance (avg 5 min/km pace)	Gels Needed	Water Intake (approx)	Electro
30 min	~6 km	<sup>1</sup> (pre-start)	300–500 ml total	1 pre + 1 post
60 min	~12 km	<sup>2</sup> (pre + 30 min)	600–1,200 ml total	1 pre + 1 post
90 min	~18 km	<sup>3</sup> (pre + 30 + 60 min)	1,200–1,500 ml total	1 pre + 1 post
2 hours	~24 km	<sup>4</sup> (pre + 30 + 60 + 90 min)	1.5-1.8 L tota	1 pre + 1 post
2.5 hours	~30 km	5 (pre + 30 + 60 + 90 + 120 min)	2-2.5 L total	1 pre + 1 post
3 hours	~36 km	<sup>6</sup> (pre + every 30 min)	3-4 L total	1 pre + 1 post
Marathon (~4 hours)	~42 km	<sup>8</sup> (pre + every 30 min)	3-4 L total	1 pre + 1 post



## Gel Choice

- ✓ **Adjust for pace/heat:**  
Hotter = high-salt gels + extra Electro if needed.
- ✓ **Hydration:**  
Sip water with each gel. Drink plain water to replace water lost in sweat depending on conditions.
- ✓ **Practice in training – consistency wins.**

**Keep it simple – this plan works for most runs. Train fuelled.**





*truefuels*