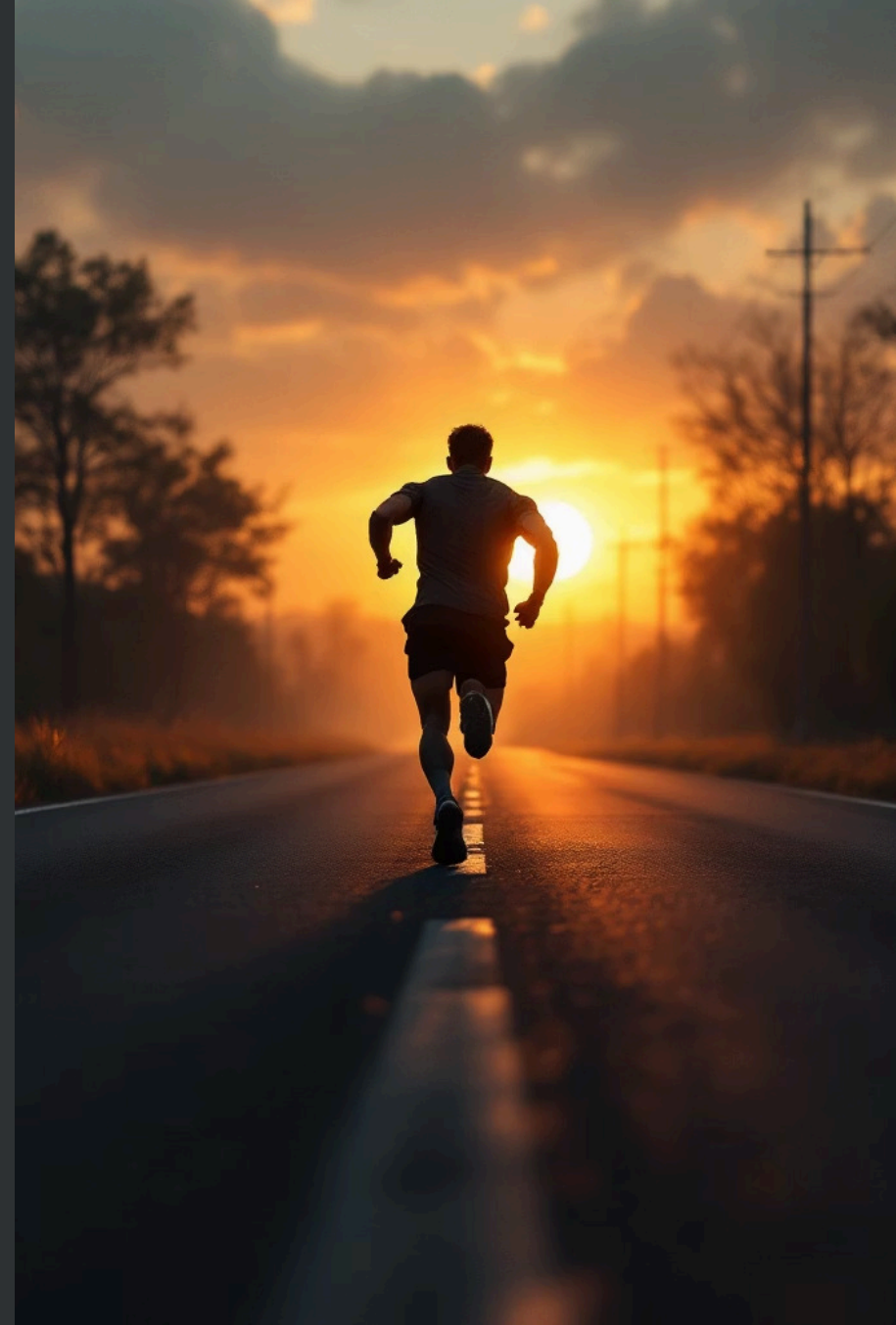




The Complete Fuelling Guide & Race Day System

Build strength. Run strong. Perform when it matters.

PREMIUM COACHING RESOURCE





The Philosophy of Fueling (The Bit Most Get Wrong)

Most runners don't underperform because they're unfit. They underperform because they're under-fuelled, under-recovered, or inconsistent.

Your body is not a machine you can starve into performance. It's a system that adapts when you:



Fuel it properly



Stress it intelligently



Recover it consistently

The Run Stark Philosophy:



Fuel for the work required

Your intake should match your training load, not stay static. (The calories used for training should not count towards your total daily intake).



Recover harder than you train

The hard work happens on the road or in the gym, the adaptation happens in recovery and rest.



Stay consistent over time

Small, sustainable choices compound into major performance gains.

If you get this right, everything else becomes easier. Most runners just go with the flow when they should be building systems.

Understanding Your Energy Systems

Your body has three distinct energy systems. Understanding which one you're using during each run determines how you fuel it.

1	System 1: Aerobic (Easy Running) Primary fuels: Fat + glycogen Intensity: Conversational pace Purpose: Builds your endurance base and aerobic capacity Fueling: Minimal during the run, focus on daily nutrition
2	System 2: Threshold Work Primary fuel: Carbohydrates (heavy reliance) Intensity: Sustainable discomfort, you can speak in short sentences Purpose: Raises your performance ceiling and lactate threshold Fuelling: Pre-fuel with carbs, optional gels or carb based drink if over 60 minutes
3	System 3: Speed & VO2 Max Primary fuel: Pure carbohydrate dependent Intensity: High output, short duration and intervals Purpose: Develops speed and aerobic power Fuelling: Carbs before the session; focus on quality output

The Critical Takeaway:

The harder you run, the more carbohydrates matter. Easy runs can be fuelled by your daily nutrition. Hard runs demand strategic carbohydrate intake before and during. This is why matching your fuelling to your session type is non-negotiable.





Your Daily Nutrition Foundation

Before you worry about race day or long run fuelling, get your daily nutrition right. This is where most runners fail, they chase fancy workouts while their base diet is broken.

Your Non-Negotiables:

Protein: 1.6–2.2g per kg of bodyweight Why: Muscle repair, recovery, injury prevention, satiety Example: 70kg runner = 112–154g daily	Carbohydrates: 3–7g per kg (adjust based on training load) Why: Fuel for running, recovery, central nervous system function • Easy day: 3–4g/kg • Moderate day: 5–6g/kg • Hard day: 6–7g/kg
Fats: 0.5–1.5g per kg Why: Hormonal health, energy balance, nutrient absorption Don't cut these too low, it tanks testosterone and recovery	

A Simple Daily Structure (Training Day):

This template matters because timing affects energy availability, recovery, and training quality. You want carbs available when you need them, protein spread through the day to support repair, and enough total food intake to avoid the low-energy trap that wrecks performance and consistency.

01 1. Breakfast: Protein + carbs Purpose: Start the day with steady energy, muscle repair, and appetite control. If you train early, keep this lighter and easier to digest. Portion guide: Aim for 20–30g protein plus 1–2 carb servings. Increase carbs on harder training days. Option 1: Oats with protein powder and banana Option 2: Eggs on toast with avocado Option 3: Greek yogurt with granola and berries	02 2. Mid-morning: Balanced snack Purpose: Prevent energy dips, keep protein intake frequent, and bridge the gap to lunch without arriving overly hungry. Portion guide: Use a small snack that gives 10–20g protein or a carb-focused option if you have a session later. Option 1: Carb-based energy bar or cereal bar Option 2: Greek yogurt with fruit Option 3: Apple with peanut butter and a handful of nuts
03 3. Pre-Training: Easy carbs (1–2 hours before) Purpose: Top up glycogen so you can start training with usable fuel in the tank. Keep fat and fibre low enough to avoid gut issues. Portion guide: Aim for 30–60g carbs, more if the session is long or hard. Keep the meal simple and familiar. Option 1: Rice cakes with honey and a banana Option 2: Bagel thin with jam or honey Option 3: White toast with peanut butter and sliced fruit	04 4. Post-Training: Protein + carbs (within 15–30 mins) Purpose: Kick-start recovery, reduce hunger later, and replenish glycogen when your muscles are most ready to absorb it. Portion guide: Aim for 20–40g protein plus a solid carb serving. If you have two sessions in a day, make this more carb-heavy. Option 1: Protein shake plus fruit Option 2: Chocolate milk and a banana Option 3: Chicken rice bowl or tuna sandwich
05 5. Lunch: Protein + carbs Purpose: Rebuild after training, restore energy, and keep your afternoon performance stable instead of crashing after a small lunch. Portion guide: Build the plate around a palm-sized protein source, a fist or two of carbs, and vegetables for micronutrients. Option 1: Chicken salad wrap with rice or potatoes on the side Option 2: Tuna pasta with mixed vegetables Option 3: Rice bowl with lean beef, vegetables, and sauce	06 6. Dinner: Protein + fats + vegetables Purpose: Support overnight recovery, hormone health, and overall nutrient intake while keeping the meal satisfying. Portion guide: Use a solid protein serving, include colourful vegetables, and add carbs if you trained hard or have another session tomorrow. Option 1: Salmon with sweet potato and broccoli Option 2: Chicken stir-fry with rice and mixed vegetables Option 3: Lean mince chilli with beans, rice, and salad
07 7. Evening snack: Recovery support Purpose: Top up protein before bed, reduce overnight hunger, and support recovery if your daily intake has been low. Portion guide: Keep it moderate: 15–25g protein is usually enough, with carbs if you still need more energy. Option 1: Greek yogurt with berries and honey Option 2: Cottage cheese on toast or with fruit Option 3: Milk and cereal or a small protein shake with a banana	

This structure keeps energy available when you need it most, improves training quality, and supports recovery between sessions. Use it as a repeatable template, then adjust portions up on hard or long days and slightly down on lighter days.

Hydration & Electrolytes (It's Not Just Water)

Hydration isn't just about drinking water. When you sweat, you lose sodium, potassium, and fluids. Replace only water and you'll dilute your blood sodium, leading to cramping, fatigue, and poor performance.

What You Lose When You Sweat:

- Sodium (primary electrolyte)
- Potassium (muscle function)
- Fluids (thermoregulation)
- Magnesium (muscle contraction)

General Hydration Guidelines:

- **Daily:** Drink to thirst, aim for pale yellow urine
- **During runs under 60 mins:** Water only
- **During runs 60+ mins:** water + electrolytes
- **Electrolyte intake:** 500–1000mg sodium per hour

Signs You're Under-Hydrated:

- Headaches during or after running
- Excessive fatigue
- Drop in performance mid-run
- Dark urine
- Muscle cramping

Signs You're Over-Hydrated:

- Bloating or sloshing stomach
- Nausea
- Swelling in hands/feet
- Hyponatremia (dangerously low sodium)

The Sweet Spot:

Drink enough to maintain performance, not so much that you gain weight during the run. A good target: lose no more than 2% of body weight during exercise.

Example: 70kg runner should not lose more than 1.4kg during a run. You can test this by weighing yourself before and after your runs

Race Day Hydration Strategy:

01

Start well-hydrated (pale urine before the race)

02

Drink to thirst at aid stations

03

Include electrolytes from the halfway point

04

Don't wait until you're thirsty, by then, you're already dehydrated

 **Pro Tip:** Practice your hydration strategy in training. Never introduce new drinks on race day.



Sleep & Recovery (The Real Performance Hack)

You don't get faster during your run. You get faster when you sleep. Sleep is where adaptation happens and is your best workout, it is where your body repairs muscle, consolidates training gains, and restores your nervous system. Your training could be won or lost with this one hack.

Most runners obsess over their training but neglect the one thing that makes training work.

The Non-Negotiable:

Minimum: 7–9 hours per night	Optimal for runners: 8–9 hours
Elite athletes: Often 9–10 hours	

Why Sleep Matters for Runners:

- Muscle repair and growth
- Glycogen restoration
- Hormonal balance (testosterone, cortisol)
- Immune function
- Mental recovery and focus
- Injury prevention

Sleep Quality Tips:

- Consistent sleep schedule: Go to bed and wake up at the same time daily (even weekends)
- Cool, dark room: 65–68°F (16–20°C) is ideal
- No screens 45 minutes before bed: Blue light suppresses melatonin
- Avoid caffeine after 1 PM: It has a 5–6 hour half-life
- Limit alcohol: It disrupts sleep architecture
- Light exposure: Get sunlight in the morning to regulate circadian rhythm

The Recovery Hierarchy:

01	02
Sleep (most important)	Nutrition (fuel and protein)
03	04
Hydration	Active recovery (easy movement)
05	
Stretching/mobility (least important)	

Post-Run Recovery Window (First 15–30 Minutes):

- Protein + carbs (within 15–30 mins)
- Rehydrate with electrolytes
- Begin sleep preparation early if possible

The Compounding Effect:

One night of poor sleep won't ruin you. But chronic sleep deprivation (6 hours or less) will:

- Increase injury risk by 60%
- Reduce performance by 10–15%
- Impair immune function
- Increase inflammation

Prioritise sleep like you prioritise your training. It's not optional.



Common Mistakes Runners Make (And How to Avoid Them)

These are the patterns I see repeatedly in runners who plateau or underperform. Most are fixable with one simple change.



1. Under-Fueling Long Runs

The Problem: Skipping fuel to 'save calories' or 'practice fasting.'

The Reality: You're training your body to run poorly. Race day will be a disaster.

The Fix: Fuel long runs the same way you plan to race. Your gut needs practice.



2. Trying New Nutrition on Race Day

The Problem: Testing a new gel or drink the week before the race.

The Reality: Your gut is unpredictable with new products. You'll likely bonk or get GI distress.

The Fix: Practice everything in training. Race day is not the time for experiments.



3. Cutting Carbohydrates

The Problem: Cutting carbs because you think they'll make you fat.

The Reality: You're destroying training quality and recovery. You'll get slower and hungrier.

The Fix: Carbs are fuel, not the enemy. Calories used for training should not be included in your daily allowance.



4. Ignoring Hydration

The Problem: Trying to 'tough it out' without drinking.

The Reality: Dehydration costs you 10–15% of performance. You're just making it harder.

The Fix: Drink to thirst. On hot days or runs over 60 mins, use electrolytes.



5. Overcomplicating Everything

The Problem: Tracking everything to the gram and obsessing over timing.

The Reality: You're missing the basics. Consistency beats perfection.

The Fix: Get the fundamentals right first: sleep, daily nutrition, hydration. Everything else is secondary.



6. Eating the Same on Hard and Easy Days

The Problem: Eating the same amount whether you ran 5km or 20km.

The Reality: You're under-fueling hard days and over-fueling easy days. Recovery suffers.

The Fix: Match intake to training load. Hard days need more fuel.



7. Skipping Post-Run Nutrition

The Problem: Finishing a run and not eating because you're not hungry.

The Reality: Your body needs protein and carbs to begin recovery. Waiting 3 hours costs you.

The Fix: Eat something within 30–60 minutes, even if it's small. A shake counts.



8. Starting a Race Too Fast

The Problem: Going out hard in the first 2km because you feel good.

The Reality: You blow up at km 30 and spend the last 10km suffering.

The Fix: Run the first third conservatively. You'll have energy to finish strong.

The Pattern:

Most mistakes come from either ignoring the basics or chasing perfection. Get the fundamentals right, stay consistent, and you'll outperform 90% of runners.

Why Hard Training Isn't Enough

Most runners train consistently, log the miles, and still fall short on race day. The missing variable is rarely fitness, it's the system surrounding your training. Under-fuelling, poor recovery nutrition, and a lack of structured race-day strategy quietly erode the performance gains you've worked hard to build.

This guide removes the guesswork. Whether you're targeting a 5K personal best or finishing your first marathon, the Run Stark system gives you a clear, evidence-based framework to fuel smarter and perform when it counts.

Under-Fuelling

Not eating enough to match training load leads to fatigue, poor adaptation, and increased injury risk.

Poor Recovery

Skipping post-run nutrition blunts muscle repair and leaves you underprepared for the next session.

No Structure

Without a race-day plan, even well-trained runners make avoidable mistakes under pressure.

Daily Fuelling for Runners



Match Intake to Training Load

Your nutritional needs shift with your training schedule. High-volume days demand significantly more fuel than rest days. Eating the same regardless of load is one of the most common and costly mistakes runners make.

Carbohydrates Are Non-Negotiable

Carbohydrates are the primary fuel source for running performance. Food like rice, oats and potatoes should form the foundation of your daily intake, not something to limit or fear.

Pre- & Post-Run Windows

Pre-run: A light, carbohydrate-rich meal 2–3 hours before.

Post-run: Within 30–60 minutes, combine protein and carbohydrates to begin recovery.

Hydration should be consistent throughout the day, not reactively consumed before a run.

Fuelling by Session Type

Your fuelling strategy should be as specific as your training plan. What you eat before, during, and after a session depends entirely on the intensity and duration of the work. The table below provides a practical framework to follow across your training week.

Session Type	Before	During	After
Easy Run (<60 min)	Light snack or fasted if well-fuelled	Water only	Balanced meal within 1–2 hours
Long Run (90 min+)	Full carbohydrate-rich meal 2–3 hrs prior	Gels or chews every 25–35 min, electrolytes	Recovery Protein Shake within 15 mins Protein + carbs within 30–60 min
Tempo / Threshold	Carbohydrate snack 60–90 min before	Gels/Carb/Electrolyte drink if over 60 min	Protein + carbs within 30–60 min
Intervals / VO2 Max	Carbohydrate-rich meal 2–3 hrs prior	Gels/Carb/Electrolyte drink if over 60 min	Protein + carbs immediately after

- 📌 Practise race-day fuelling: Gels, chews, and drinks, during long training runs. Never introduce new products on race day.



Race Day Fundamentals



Pre-Race Meal Timing

Eat a familiar, carbohydrate-rich meal 2.5–3 hours before your start time. Avoid anything high in fat or fibre that may cause GI distress.

For marathons include a carb based drink along with your meal



Fuel Early, Not Late

Begin taking on carbohydrates before you feel depleted. By the time you feel empty, performance has already declined — and it's very difficult to recover mid-race. (This is called front loading).



Hydration Strategy

Arrive well-hydrated. Drink to thirst during the race and include electrolytes on warmer days or in events over 90 minutes.



Consistency Over Perfection

Follow your plan even when it feels uncomfortable. Discipline in the early miles protects your performance in the final stretch, the more your practice in training the more your body will be adapted.

Race Plans: 5K & 10K

5K

Pacing & Fuelling

The 5K is a high-intensity event requiring minimal mid-race fuelling. Your energy demands are met almost entirely by pre-race preparation. Focus on arriving well-fuelled and well-hydrated.

- **Pre-race meal:** 2–3 hours before — oats, banana, or toast/bagel with honey or jam, avoid nut butters. a gel can be taken 10/15 minutes before if needed.
- **During:** No gels required; sip water at available stations if desired but not essential.
- **Pacing:** Go out controlled in the first kilometre, build through the middle and commit in the final 800m
- **Hydration:** 500ml of water in the 2 hours before the start

10K

Pacing & Fuelling

The 10K sits at the intersection of speed and endurance. Pre-race nutrition remains the priority, though a small gel at the 5K mark can benefit faster runners pushing hard across the full distance.

- **Pre-race meal:** 2.5–3 hours before, rice cakes, bagel, or oats.
- **During:** Optional gel at 5K mark.
- **Pacing:** Run the first 3K conservatively, target negative splits across the second half
- **Hydration:** Take water at every available station, small sips, not large gulps.

Race Plans: Half Marathon & Marathon

These distances demand a fully structured fuelling strategy. Precision in the early miles pays dividends when the race gets hard.

Distance	Pre-Race Meal	Gel Timing	Hydration	Key Watch-Out
Half Marathon	2.5–3 hrs prior: oats & banana, Bagel, Toast, Cereal, electrolyte & carb drinks	Gel every 35 mins	Sip at every station, electrolytes in warm conditions	Don't skip first gel, start fuelling before fatigue sets in.
Marathon	3 hrs prior: large carb-rich meal, rice, pasta, or oats	Every 20–30 mins.	Every aid station, water and sports drink. Electrolytes from halfway	Avoid going out too fast, hitting the in km 35–40 is nearly always a pacing error compounded by under-fuelling.

→

Practise Fuelling in Training

Train your gut to tolerate gels at race pace. Never use a new product on race day, your gut is predictable only when it's been prepared.

Train with what is on offer on the course and try and stick to the same foods each session.

→

Respect Pacing Discipline

The marathon is won or lost in the second half. Run the first 30km as though you have something to prove in the final 12km.

→

Don't Chase Lost Time

If you go through a rough patch, maintain your pace rather than surging.

Consistency across the full race distance beats heroic late race efforts that drain your remaining reserves.

Fuel Smart. Race Ready.

This shopping list is a practical guide to building a reliable running nutrition routine. Focus on consistency, structure, and choosing foods you already tolerate well in training.

Carbohydrates

Oats, bananas, white rice, bagels, white bread or toast, rice cakes, honey, jam, and sweet potato are dependable energy staples for topping up glycogen and fuelling steady training.

- **2–3 hours pre-run or pre-race:** choose low-fibre carbs like oats, white toast, a bagel, rice, or rice cakes to reduce gut stress and arrive with full glycogen stores.
- **Pre-race meals:** keep it simple with white rice, toast with honey/jam, bananas, or bagels so the meal is easy to digest and rapid to absorb.
- **Rapid glycogen replenishment:** white rice, bread, rice cakes, honey, and jam are quick carbs that refill muscle fuel without heavy digestion.
- **Best for long runs and race weekends:** these foods are low-fibre, easy on the stomach, and reliable when you need predictable energy.



Protein

Eggs, Greek yoghurt, chicken, turkey, salmon, whey protein, and plant-based options support muscle repair, satiety, and consistent training recovery.

- **Within 30–60 minutes post-run:** take in protein to kick-start recovery, especially after harder sessions or longer runs.
- **Evening meals and balanced everyday eating:** chicken, turkey, salmon, eggs, or plant-based proteins help repair tissue and maintain strength under load.
- **Whey protein:** a fast, practical option after training when you need a simple recovery hit without a full meal.
- **Salmon and oily fish:** provide protein plus omega-3 fats, which can support recovery and help reduce inflammation over time.
- **Plant-based options:** tofu, tempeh, soy yoghurt, lentils, and protein powders work well for vegan runners when combined consistently.
- Best at breakfast, post-run, between meals, and at dinner when recovery needs are highest.



Fats

Nut butters, avocado, olive oil, almonds, and walnuts add calories, support hormones, and help keep meals satisfying.

- **On easier days:** use fats when you are not racing or doing key sessions, so digestion stays comfortable and energy intake stays steady.
- **Away from race start:** keep higher-fat foods out of the immediate pre-race window because they digest more slowly.
- **Anti-inflammatory support:** walnuts, almonds, olive oil, and other quality fats can support long-term health and recovery.
- **Energy density:** useful when you need more calories without huge meal volumes, especially in heavy training blocks.



Hydration Support Foods

Electrolyte tablets, fruit, soup, yogurt, and coconut water help replace fluid, sodium, and recovery nutrients.

- **Runs over 60 minutes:** start paying attention to hydration and sodium before you feel thirsty.
- **Warm conditions:** electrolytes become more important when sweat loss increases and cramp risk rises.
- **Coconut water post-run:** a practical recovery option for fluid and potassium replacement after lighter to moderate sessions.
- **Cramp prevention support:** consistent fluid, sodium, and electrolyte intake can help reduce the risk of cramping, especially in heat.
- Best for rehydration after training and for lighter meals when plain water is not enough.



Race Fuel

Energy gels, energy chews, carbohydrate drinks, sports drink mix, and course products deliver fast carbohydrate when it matters most.

- **Energy chews as an alternative to gels:** useful if you prefer to chew rather than swallow gel during long efforts.
- **Carbohydrate drinks:** Maurten-style drink mixes can help you hit **60–90g carbohydrate per hour** when used correctly.
- **Gel timing:** aim for **every 20–30 minutes** in longer races or sustained efforts, adjusting to pace, conditions, and tolerance.
- **Practise in training:** test timing, flavour, texture, and total carb intake in long runs and race simulations.
- **Course fuel lowers risk:** using products you have already practised with builds confidence and reduces race-day surprises.



Supplements

Performance Supplements

Caffeine, beetroot juice or nitrates, and beta alanine can offer targeted performance benefits when used with purpose.

- **Caffeine:** **3–6mg per kg bodyweight**, taken **45–60 minutes before racing**, can improve alertness, perceived effort, and race-day sharpness.
- **Beetroot juice / nitrates:** **400–800mg nitrates**, taken **2–3 hours pre-race**; many runners also **preload for 3–5 days** before key events.
- **Beta alanine:** **3–6g daily** in split doses, loaded for **4–6 weeks**, can support repeated high-intensity efforts and is especially relevant for **5K–10K** racing.

Recovery & Health Supplements

Creatine, magnesium glycinate, omega-3, and vitamin D3 can support performance, recovery, and long-term health.

- **Creatine:** **3–5g daily**, taken consistently any time of day, supports strength, power, and training quality.
- **Magnesium glycinate:** commonly taken **in the evening** to support relaxation and recovery.
- **Omega-3:** taken daily with food to support recovery and general health.
- **Vitamin D3:** best taken with a meal containing fat, especially in darker months or when sun exposure is limited.
- Use supplements to fill gaps, not replace a strong diet.
- Best for runners who want extra support for recovery, resilience, and race-specific performance.
- Keep the focus on simple, repeatable nutrition first.



Coaching Note: You don't need everything. The real advantage comes from consistency and structure — choosing a small number of foods, practising them regularly, and making your fuelling routine repeatable.

Final Takeaways

- Build meals around dependable carbohydrates, quality protein, and supportive fats.
- Practise race fuel in training so your stomach and routine are ready on race day.
- Use hydration support and supplements only where they add real value.
- Keep it simple: a repeatable plan beats a complicated one.



RUN STARK

Build Strength! Run Strong!

The Run Stark Way: From Theory to Practice

You now have the framework. You understand the philosophy, the science, and the practical steps.

But here's the truth most runners miss:

Knowledge without application is just noise.

You don't need perfect. You need:

Structure
A clear system to follow

Consistency
Showing up day after day

Patience
Trusting the process over weeks and months

The Compound Effect:

Most runners overestimate what they can do in 12 weeks. Most runners underestimate what they can do in a year.

Small, consistent improvements compound into major performance gains. The runner who fuels properly, trains smart, and recovers well will outperform the runner chasing perfection.

Your Next Step:

This guide gives you the knowledge. But knowledge without accountability and practice often fades.

If you want this applied to YOUR training, YOUR goals, and YOUR lifestyle, not just a generic plan, the Run Stark coaching team is here to help.

We work with runners at every level:

**All Runners**
Building confidence

**First-time runners to marathoners**
Chasing personal bests

**Experienced & Elite runners**
Breaking through plateaus

What You Get With Run Stark Coaching:

- A customised 7 day running plan, matched to your current fitness and goals
- Smartwatch synced sessions, simple to follow, easy to execute
- Follow along strength workouts, built to support your running
- Warm up and cool down videos, placed into your calendar
- Daily access to your coach by message, get tips, tweaks, and accountability
- 24/7 direct messaging, review progress, plan next steps

How It Works:

Profile Questionnaire
Detailed intake covering history, goals, lifestyle, injuries, and nutrition.

Initial Coaching Call
45-minute video call to align on goals and set expectations.

Timeline
Tailored 3, 6, or 12-month training mapped to your races.

Weekly Delivery
Training published weekly into your running training calendar and watch.

Session Feedback
You submit feedback in-app; we monitor and adjust the coming days.

Support Calls
Support calls via booking link when you need extra guidance and check ins.

Weekly Review
Structured review of consistency, execution, and next steps for the week.

Coaching Packages & Pricing:

1

Rolling Monthly
£89/mo
Flexible commitment, full support.

2

6 Months
£475
Save £59 compared to monthly.

3

12 Months
£829
Save £239. The ultimate commitment to transforming your running.

Ready to Get Started?

[BOOK YOUR DISCOVERY CALL](#)

Begin your transformation. Your first step is just one click away.

[FREE 7 DAY PERSONALISED COACHING PLAN](#)

No card details required, complete an athlete profile and receive a tailored plan with structured coaching.

[EXPLORE COACHING HERE](#)

You've invested time in this guide. The next investment is in yourself. Let's build a plan that works for you.