



Swim Fuel

Eliza Kelly

Accredited Practicing Dietitian
Accredited Sports Dietitian

2026 South32 Rottnest Channel Swim





What's on the agenda

-  Why Fuel?
-  Signs of under-fueling
-  Carb Loading
-  Pre/During/Post Training
-  Race Day Prep
-  Barriers – Tips and Tricks



WHY?

Eating to support your everyday and training requirements will...

- 泳姿 icon Boosts performance → provides fuel so you can train harder, longer, and with more intensity
- 泳姿 icon Supports muscles → aids repair, recovery, and growth; reduces muscle breakdown and preserves lean mass.
- 泳姿 icon Improves concentration, focus, coordination, and reaction time.
- 泳姿 icon Reduces fatigue & dizziness → prevents energy dips and lowers perceived effort during training.
- 泳姿 icon Improves recovery → sets you up for faster, more effective recovery post-session, reduces fatigue, and curbs excessive hunger later in the day.
- 泳姿 icon Supports overall health → maintains energy availability, crucial for healthy hormones, menstrual function, and immune health.



EVERYDAY FUEL

Training doesn't work without fuel.
Eating enough now gets you to the start
line ready

Over the day

- Try to be prepared – meal prep, frozen meals, cook in bulk and freeze, buffer with convenience options
- Eat regular meals and snacks over the day
- Stay hydrated
- Monitor for signs of under fueling



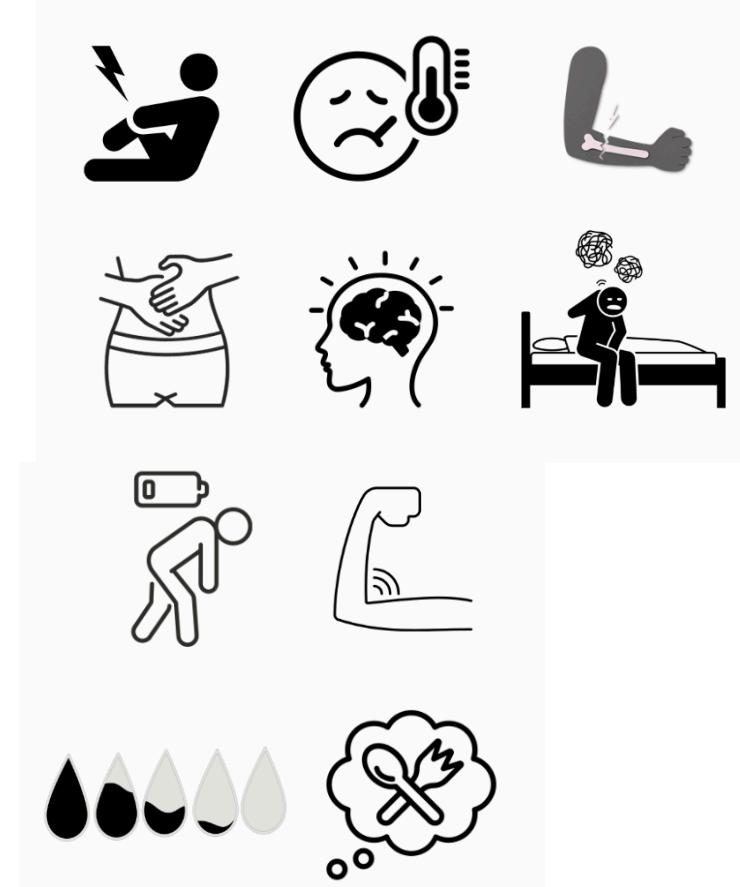


Signs of Under-fueling

- _LOWER energy over the day, changes in mood and sleep issues
- Increased injuries, trouble building muscle, slower recovery
- Getting sick frequently
- Digestive Issues, thinking about food ALL of the time
- Changes to the menstrual cycle in females, low testosterone in males
- Declining performance and enjoyment in sport

Have regular check-ins with yourself!

Get support if needed as we all have individual requirements



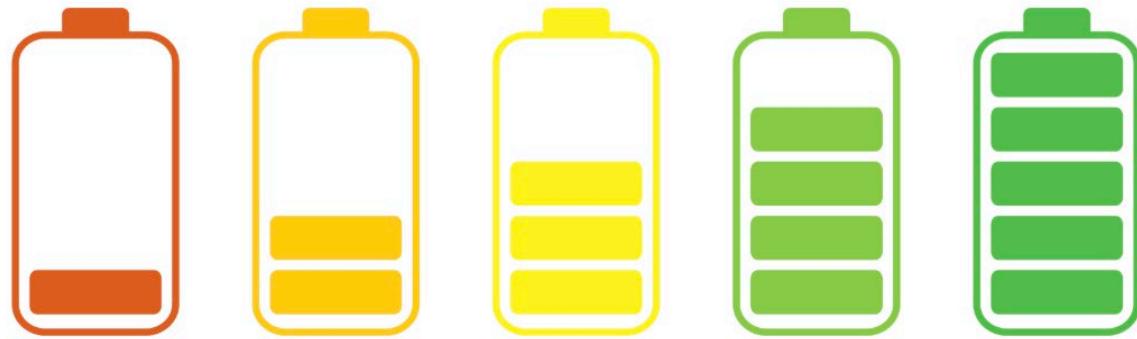


Fuel your training first

Pre Training

During Training

Post-Training



Optimize training readiness, performance and recovery

Finding what works for you!

Perfect opportunities to practice for race day

2026 South32 Rottnest Channel Swim





Carbohydrate Loading

WHY? To maximize muscle glycogen stores before endurance events

Helps **delay fatigue, enhance performance, and improve recovery.**

3-4% increase in performance vs 6g/kg!



How & TOP TOPS

- 8-12g/kg bw of carbohydrates 1-3 days before and the day after an event. (along with rest/taper!)
- Focus on **low-fibre**
- Spread intake evenly** over the
- Include **Liquid-based carbs** eg. Juice, sports drink etc.
- Trial during training** – at least 1-2 times before the event (so your body knows what to do) never try something new on race day!
- Common Carbohydrate-Loading Foods:** white bread, crumpets, English muffins, white rice or pasta, juice, sports drink, low-fat yoghurt, milk, custard, canned or stewed fruit, jam, honey, simple cereals



Carbohydrate Loading

EXAMPLE DAY – 80kg athlete = 800g of carbohydrates

- **BREAKFAST:** 4 crumpets + jam/honey + banana
- **MORNING TEA:** Simple smoothie (banana, low fat milk, oats, honey), $\frac{1}{2}$ packet of natural confectionary lollies
- **LUNCH:** Meal with 3 cups rice
- **AFTERNOON TEA:** Jam sandwich + $\frac{1}{2}$ packet of lollies
- **DINNER:** Meal with 3 cups rice
- **SUPPER:** 1 cup ice cream or low fat yoghurt or cereal
- **+ 3L of Fluid over the day!**



Carbohydrate Loading

EXAMPLE DAY – 80kg athlete = 800g of carbohydrates
= **21.5 cups of cooked white pasta**





Pre-Training/ Event

- 泳 Carbohydrates + Hydration = Energy for your working muscles
- 泳 2-4hrs before = pre-training meal (Carbohydrate focused, lean protein and minimal fats and fibre)
- 泳 1-2hrs before training - always include a low-fat, high-carbohydrate snack and aim to begin hydrated.
- 泳 Liquids may be consumed immediately before training.
- 泳 Choose 1-2 option if you have less than 30mins if you can tolerate, otherwise choose 2 options
 - 泳 Banana or 2-3 dates
 - 泳 ½-1 cup cereal with milk
 - 泳 Up and Go or BOM
 - 泳 1-2 slice raisin toast/toast/bagel with jam/honey
 - 泳 Puree fruit pouch or fruit juice box
 - 泳 Muesli or oats-based bar



Your Gut Can Be Trained!





Pre-Training/ Event



~2Hrs Before = Familiar meal



1 hr



mer (final)



During

- Carbohydrates + Hydration
- Train your gut, find what works for you – timing and quantity
- Start small and build
- Training is a great opportunity to trial race day



Training/Event Time	Carbohydrate Suggestion	Carbohydrate type
1-2hrs	30-60g/hr	Any form carbohydrates
2-4hrs	40-90g/hr	Multiple transportable carbohydrates
>4hrs +	60g, up to 90-110g/hr	Glucose + Fructose

2026 South32 Rottnest Channel Swim





Hydration

- Monitor hydration status
- 500-750ml/hr – you can train this also!!
- Pre/post weighing
- Race conditions
- Sodium replacement
- Practice with warm drinks if you get cold





Feed Options

What to decide

- Carb Goal/hour - 80-90g/hr
- Fluid Goal/hour – 500-1L
- Feed timing – 15, 20, 30mins max
- Feed Technique – pole, cup on a string/leash, pop tops etc

FOR EXAMPLE

- Carb Goal/Hour = 90mins
- Fluid Goal/Hour = 600ml/hr
- Feed timing = every 20mins
- Feed Technique = paddler will pass pop tops

- Therefore each feed must contain ~30g carbs and be made up to 200ml



Feed Options



2026 South32 Rottnest Channel Swim

Warm Feeds?





Feed Options



15-30secs?



2026 South32 Rottnest Channel Swim



Recovery

Repair (Protein) + Refuel (Carbohydrates) + Rehydrate (Fluid)

Snack within the first hour

Meal within 3-4hrs

You can recover well and celebrate!

Carb Load the day after?



Overnight oats +
water/electrolytes



Chicken or tofu salad wrap +
water/electrolytes



Caffeine

Guidelines

- 泳姿 icon Plasma levels peak ~30-90mins
- 泳姿 icon 1hr pre-event and every 3hrs
- 泳姿 icon AIS: 1-3mg/kg bw

Sources

- 泳姿 icon NoDoz 100mg
- 泳姿 icon Red Bull 80mg
- 泳姿 icon Coke 70mg
- 泳姿 icon Caffeinated gel (varies) 70-100mg





Race Day Prep

GET ORGANISED!

- ✓ Label everything in the order that you will consume
- ✓ Have a few different flavour/feed options
- ✓ Brief your support crew and give them a fuel log – practice with your paddler beforehand
- ✓ Finish all food stops
- ✓ Warm liquids if necessary





Barriers

Nausea and Vomiting

- 泳姿 icon Train your gut during training and in different open water conditions
- 泳姿 icon Discuss anti-nausea prescription medication with your doctor
- 泳姿 icon Try multiple options to find what works for you
- 泳姿 icon Have a back-up plan!

Challenging Conditions

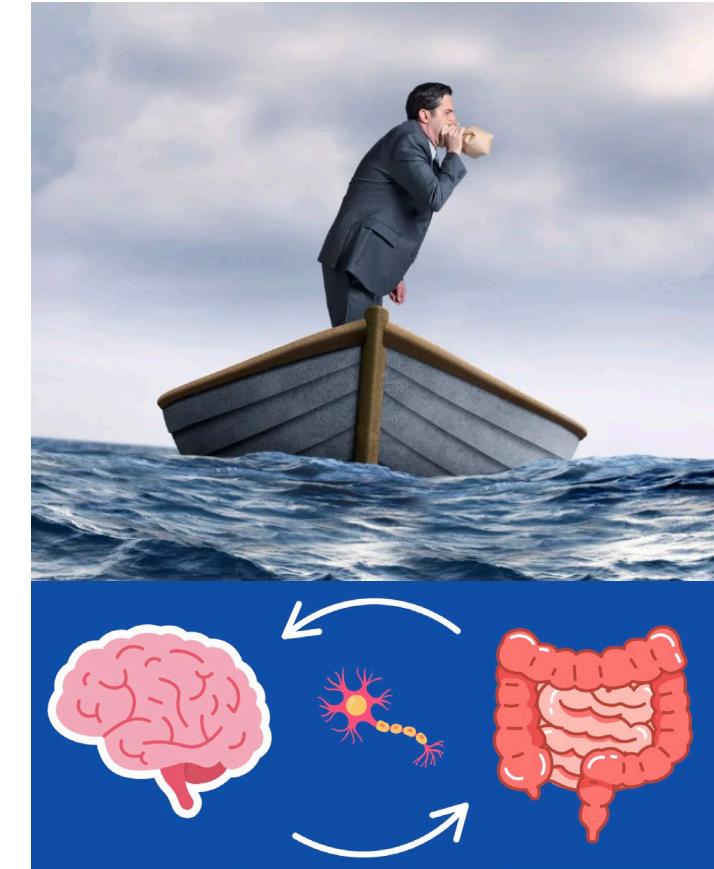
- 泳姿 icon Think when choosing feeds, “could I consume this if the weather turns to sh**”

Getting Cold

- 泳姿 icon Frequency of feeds
- 泳姿 icon Warm feeds
- 泳姿 icon Body Fat %

Clumsy Paddler Hands

- 泳姿 icon Practice practice practice
- 泳姿 icon Have extra feeds
- 泳姿 icon Adapt and overcome





Thankyou!

Fuel Your Training

Practice what feels best for you

Be organised

Have Fun!

2026 South32 Rottnest Channel Swim





If you need a hand!

Nutrition Works

(Mt Claremont – Midland - Lathlain)

WA Sports Med (Bulwer St)

Send me an email - elizamaynutrition@gmail.com

Follow On Instagram!

fluid_performancenutrition

nutritionwrks

2026 South32 Rottnest Channel Swim

