

GUIDE TO ENDURANCE NUTRITION



Winners

WE EAT FOOD TO PRODUCE **ENERGY**, STIMULATE **GROWTH**, AND PROTECT OUR **HEALTH**.

Food contains the following key nutrients:

ENERGY

CARBOHYDRATES are in high quantity in bread, pasta, cereals, fruit, sweets and soft drinks.

HOW IT HELPS YOUR BODY: Our body transforms these carbohydrates into glucose (blood sugar). Your body uses this sugar as fuel for your cells, tissues and organs. It stores excess glucose in your muscles and liver as glycogen for when it is needed.



GROW

PROTEINS are high in poultry, beef, fish and dairy foods.

HOW IT HELPS YOUR BODY: Protein assists the body in repairing and growing muscle tissue.



BALANCE - PROTECT

FATS are high in nuts, fish, avocados, olive oil.

HOW IT HELPS YOUR BODY: Good fats protect your body's cells and heart. They also keep your body temperature stable and maintain healthy skin and hair.



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An endurance athletes diet needs to be a balance of

01 **CARBOHYDRATES**

FOR ENERGY

02 **PROTEIN**

FOR MUSCLE REPAIR AND GROWTH

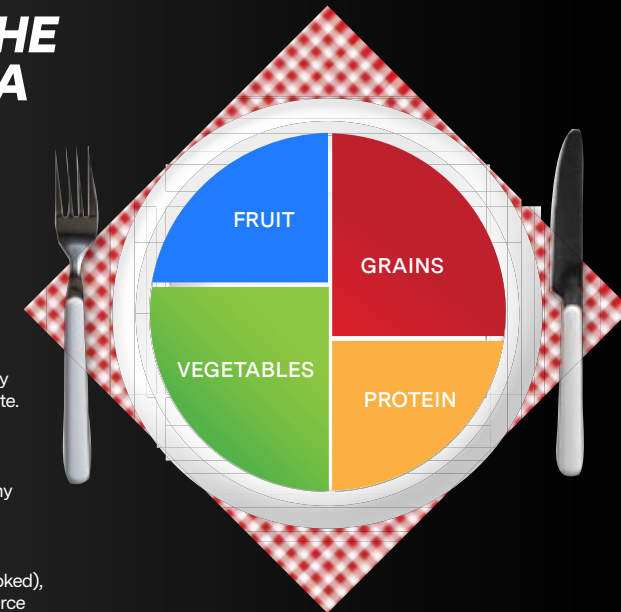
03 **GOOD FATS**

TO PROVIDE BALANCE AND PROTECTION TO THE BODY

LOOK AT THE PLATE TO SEE THE RIGHT MIX FOR A HEALTHY DIET

FOR A BALANCED MEAL:

- Make half your plate fruit and vegetables.
- Lean protein in the form of beef, poultry, fish, dairy or legumes should make up about a ¼ of your plate. For instance, a piece of meat should be about the size of your fist.
- Grains in the form of rice, pasta, bread and starchy vegetables such as potatoes should make up the rest of your plate.
- Try to add good fats in the form of olive oil (uncooked), avocado and nuts to your plate. Fish is a great source of both protein and good fats.



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PRE-EXERCISE NUTRITION

WHY ARE CARBOHYDRATES SO IMPORTANT?

Glycogen (a form of glucose) is the main source of energy for your body during moderate to intense exercise.

It is derived from carbohydrates - which are converted to glycogen and stored in your muscles and liver for future use.



Muscle glycogen makes up around 80% of the glycogen stores in the body and is the primary fuel during moderate to intense exercise. It is processed in the muscle to enable contractions required for movement.



Glycogen stored in the liver is dispersed into the blood stream as glucose. This glucose provides fuel to body and in particular brain function. A lack of blood glucose can lead to lethargy, impaired mental function, weakness and even loss of consciousness.

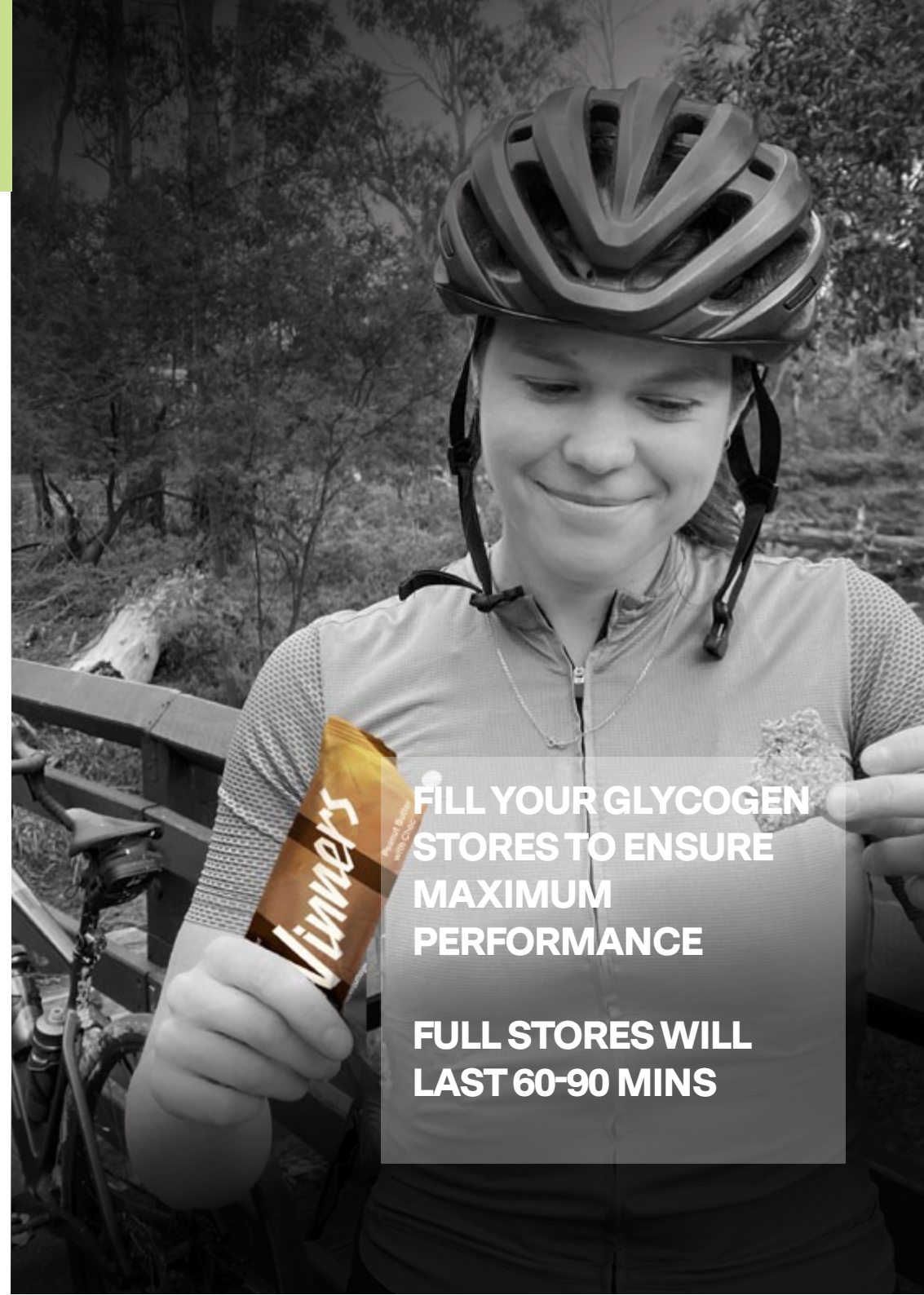


START WITH A FULL TANK

Given the importance of glycogen for performance in endurance efforts, alongside general wellbeing, it is vital to ensure both muscle and liver glycogen stores are full prior to beginning exercise. To do this eat carbohydrate rich foods in the days leading up to exercise and immediately post any training.

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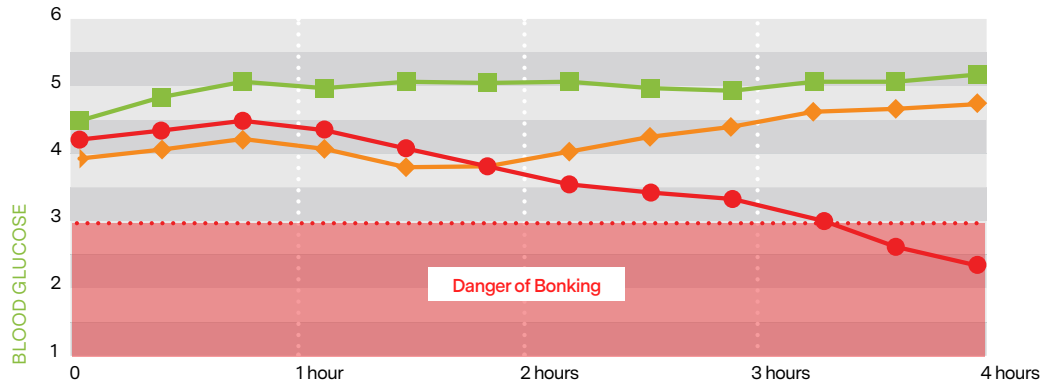
FILL YOUR GLYCOGEN STORES TO ENSURE MAXIMUM PERFORMANCE

FULL STORES WILL LAST 60-90 MINS

FUEL FOR ENDURANCE

WHY DO YOU NEED TO CONSUME CARBOHYDRATES DURING EXERCISE?

Glycogen stores will run out after 60-90 mins and if you don't top up during exercise fatigue will soon set in. Consuming carbohydrates every 20mins from the beginning of your session will keep your glycogen stores at the same level - helping you to stave off fatigue and maintain performance beyond 1 hour.



NO CARB INTAKE

- Glycogen stores depleted.
- Feelings of extreme fatigue & poor performance.
- Risk of Bonking

BEGIN CARB INTAKE AFTER 60MINS

- ◆ Glycogen stores partially depleted.
- ◆ Feelings of lethargy during exercise.

REGULAR CARB INTAKE FROM START OF EXERCISE

- Glycogen stores remain full.
- Able to maintain maximum performance for duration.

BONKING

The greatest fear of endurance athletes is to "Hit the Wall" or "Bonk" - a condition of overwhelming fatigue caused by the depletion of glycogen stores in the liver and muscles.

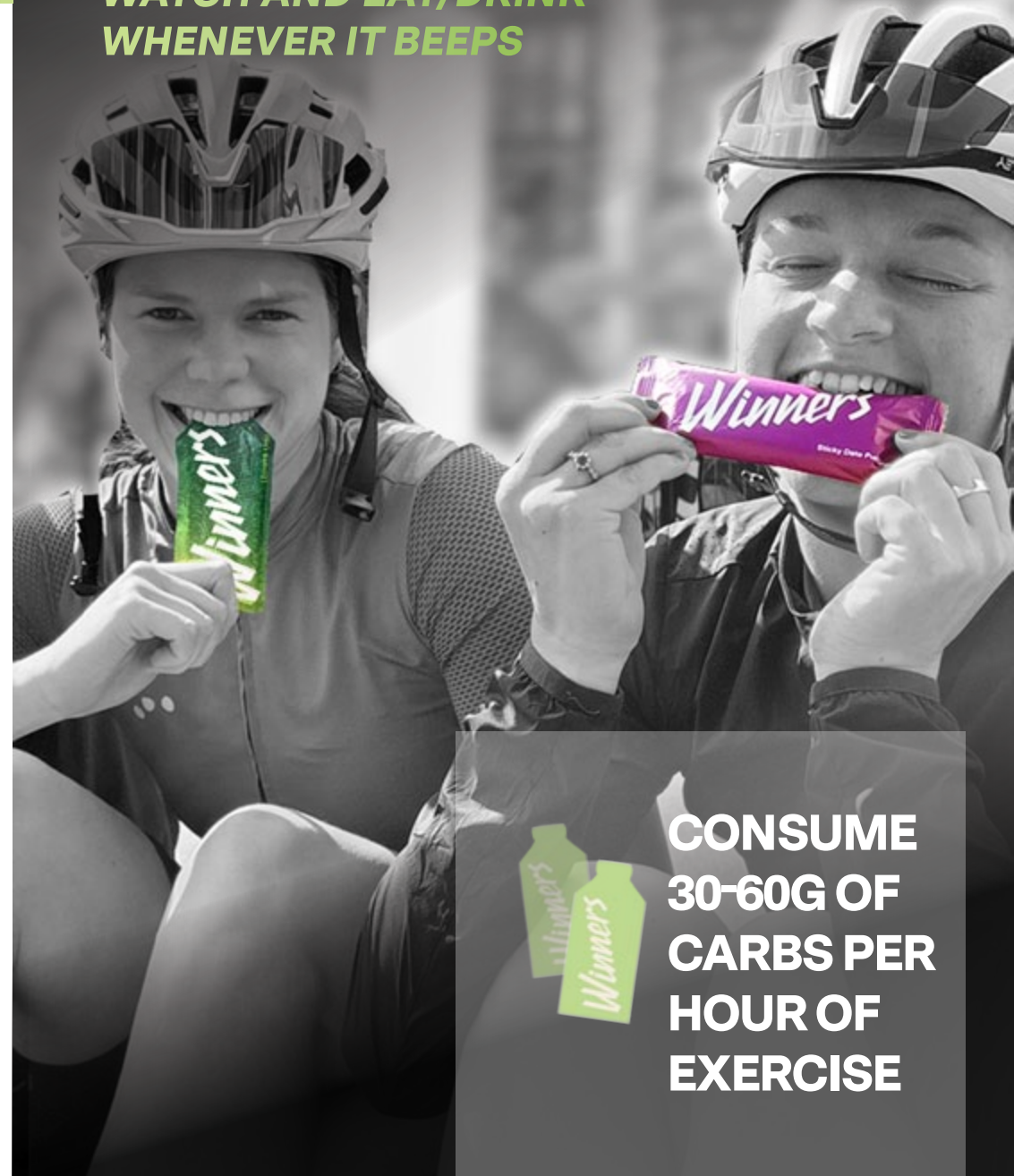
Without glycogen the body must use fat to produce energy, slowing the athlete to a snail's pace and causing reduced cognitive ability. Bonking is easily avoided by having an exercise nutrition plan.



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SET A TIMER ON YOUR WATCH AND EAT/DRINK WHENEVER IT BEEPS



CONSUME 30-60G OF CARBS PER HOUR OF EXERCISE

ENERGY BARS

ENERGY BARS FOR PERFORMANCE

Winners Sustained Energy Bars are a great source of slow release energy to help you perform at your peak for longer. Made from a mixture of natural ingredients - including cereals, nuts, seeds, currants and berries - they are the ideal source of nutrition for any endurance activity.

WHY ARE THEY NECESSARY?

The body's glycogen stores will run out after 60-90 mins of exercise and fatigue will set in. Consuming carbohydrates from the beginning of exercise will help keep your glycogen stores at the same level and help you to stave off fatigue.

Winners Sustained Energy Bars are specially formulated for endurance activity and contain high amounts of carbohydrate in a form which allows your body to digest during exercise without gastrointestinal issues.

Energy Bars release their energy more slowly into the bloodstream allowing for a longer more consistent supply of energy than when compared to other energy foods, such as Gels or Chews.

WHEN TO USE:

Eat as a pre ride exercise snack or early in moderate endurance exercise (such as cycling).

WHAT ARE LOW GI FOODS?

The Glycaemic Index (GI) provides an indication of how quickly foods raise the glucose level of the blood.

Low GI foods (Such as Energy Bars) consumed before and at the start of endurance exercise can improve exercise capacity, as they provide energy for a number of hours after they have been eaten.



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ENERGY BARS ARE A GREAT HEALTHY SNACK TO FUEL AN ACTIVE LIFESTYLE



DIRECTIONS FOR BEST USE

- **1 hr prior to exercise:**
Consume one energy bar.
- **During moderate exercise:**
Consume one bar every 45-60 mins with fluid early in exercise.
- Consume as a healthy snack to fuel an active lifestyle

ENERGY GELS

ENERGY GELS FOR PERFORMANCE

Winners Energy Gels are an easily digestible carbohydrate that can be used during training and races.

Specially developed for endurance athletes, they deliver the right mix of nutrients and electrolytes in one convenient package.

They are easily broken down by the body and provide a quick way to top up energy stores and maintain electrolyte levels.

WHY ARE THEY NECESSARY?

As our body fatigues it becomes harder to process food into the fuel we need to maintain function and performance.

A **Winners Energy Gel** provides carbohydrate in the simplest form - enabling the body to process the nutrients quickly with the least stress on digestion.

WHEN TO USE:

- Perfect for use during intense exercise (such as running) and in the mid/end sections of prolonged endurance efforts when fatigued.
- Great alternative to solid food.

CAFFEINE AND PERFORMANCE

Some **Winners Energy Gels** contain Caffeine. Caffeine is a supplement that has been shown to reduce perception of fatigue, allowing athletes to maintain greater output for longer.

Carbohydrate replacement is still required - so be mindful to continue to eat and drink consistently to avoid "bonking".



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CONSUME AN ENERGY GEL JUST PRIOR TO A HILL TO GIVE YOURSELF A PHYSICAL AND PSYCHOLOGICAL BOOST



DIRECTIONS FOR BEST USE

- **10-15 mins prior to exercise:**
Consume one gel sachet.
- **During exercise:**
Consume one gel every 30-45 mins with fluid.

ENERGY CHEWS

ENERGY CHEWS FOR PERFORMANCE

Winners Energy Chews combine a mix of simple carbohydrates, electrolytes and vitamins to provide an instant energy boost to counter the effects of sports fatigue and maintain body function.

They are easily broken down by the body and provide a quick way to top up energy stores and maintain electrolyte levels.

WHY ARE THEY NECESSARY?

As our body fatigues it becomes harder to process food into the fuel we need to maintain function and performance.

Winners Energy Chews provides carbohydrate in a simple form - enabling the body to process the nutrients efficiently and receive energy quickly.

The chew form allows you to space out your energy intake in small amounts, as opposed to Energy Gels which tend to be consumed all at once.

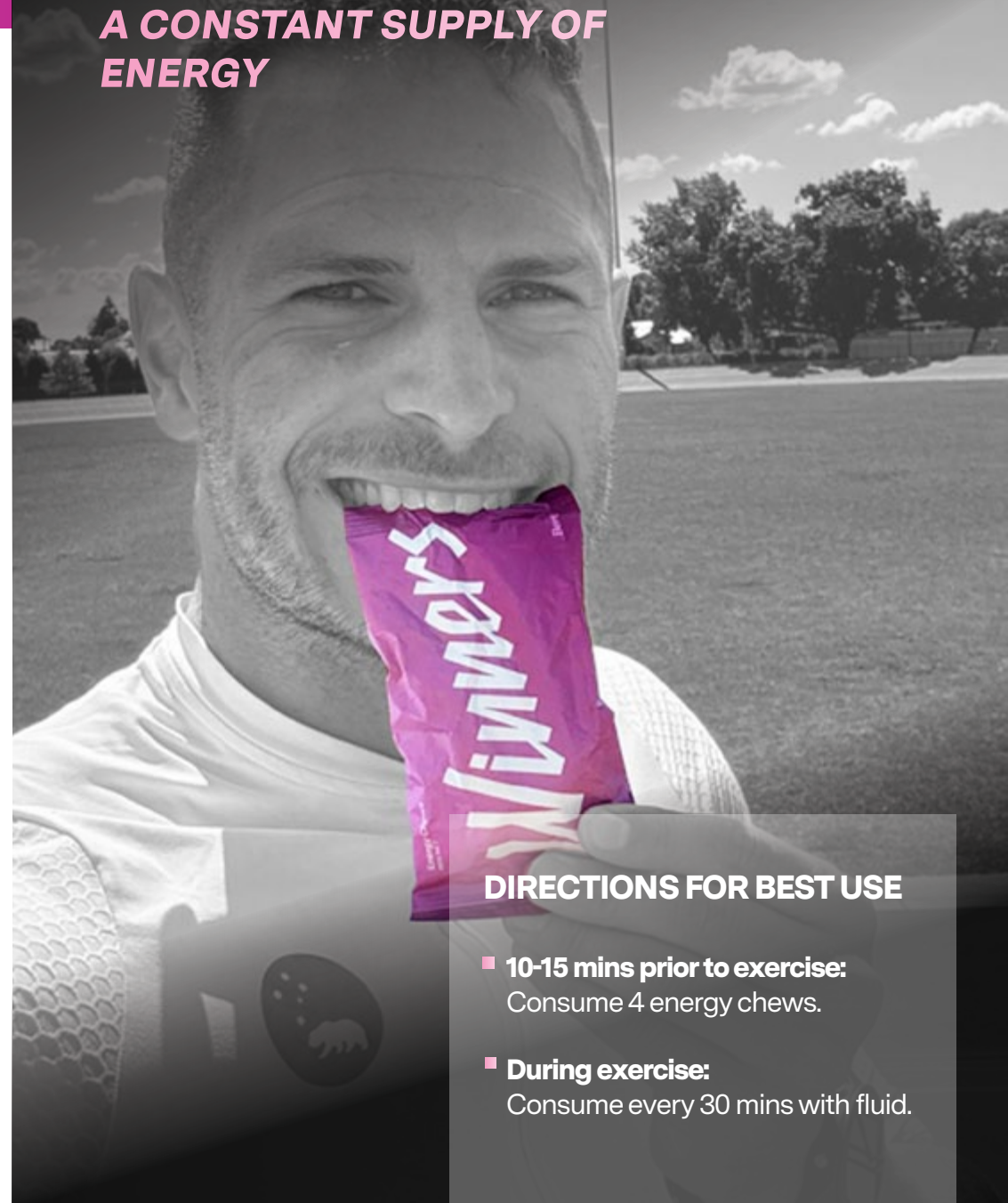
WHEN TO USE:

- Ideal for consumption in the mid/end sections of prolonged endurance efforts when fatigued.
- Good option immediately before or during intense exercise.
- Great intermediate fuel source between an Energy Gel and solid food options (e.g. an Energy Bar).

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**EAT 2-3 CHEWS EVERY KM
ON YOUR RUN TO ENSURE
A CONSTANT SUPPLY OF
ENERGY**



DIRECTIONS FOR BEST USE

- **10-15 mins prior to exercise:**
Consume 4 energy chews.
- **During exercise:**
Consume every 30 mins with fluid.

ELECTROLYTE DRINK MIX

REHYDRATION FOR PERFORMANCE

It is vital to keep fluid loss from sweating to a minimum in order to prevent declines in physical well-being and performance when exercising.

Winners Electrolyte Drink Mix has been specially formulated to replace the electrolytes you lose from sweat.

HOW DO YOU MAXIMISE REHYDRATION?

Rapid rehydration is best achieved with a hydration mix containing a low amount of carbohydrate and a high amount of electrolytes. **Winners Electrolyte Drink Mix** reflects this ratio - matching the electrolytes you lose in sweat.

WHY ARE ELECTROLYTES IMPORTANT?

Electrolytes play an essential role throughout the body. Their loss (via sweat) leads to dehydration and fatigue - causing significant decline in performance if not replaced.

WHEN TO USE:

Provides rapid hydration for strenuous exercise lasting 60 minutes or more.

THE KEY ELECTROLYTES
IN YOUR BODY ARE:

**SODIUM,
POTASSIUM,
MAGNESIUM,
& CALCIUM**

**IF YOU SWEAT HEAVILY,
ADD MORE ELECTROLYTE
POWDER.**

**IF YOU ARE A
LIGHTER
SWEATER,
REDUCE THE
SCOOP SIZE.**



DIRECTIONS FOR BEST USE

- Add a scoop (15g) of Winners Electrolyte Drink Mix to 600ml of water.
- Drink 1-2 serves per hour of exercise.

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NUTRITION FOR RECOVERY

During endurance exercise you damage your muscles, deplete energy stores and place strain on all the body's functions. To recover properly requires carbohydrates to restore energy and protein for growth and repair of muscles.

POST EXERCISE RECOVERY

IMMEDIATELY



To speed your recovery process have a snack containing carbohydrates and protein ready to eat immediately after your ride. A chocolate milk is a good option.

15-30 mins after a ride the body can replace lost glycogen at 150% the normal rate.

DINNER



A large carbohydrate and protein rich meal, along with plenty of fluids, should be consumed for dinner. Homemade pizza, pasta with meat sauce or lean beef burgers are good options.

Aim for 3:1 carbohydrates to protein ratio for muscle growth and repair.

1-2 HOURS



Continue to replenish your glycogen stores and supply protein. Suitable foods include yoghurt, fruit, protein shakes, Winners Bars and rolls.

You should eat 50-100g of carbs within 2 hours of exercise.



STOPPING AT A CAFE?

Look for coffees containing low fat milk, as the protein helps repair muscles. Caffeine after exercise can also reduce muscle soreness and improve uptake of glycogen.



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