






AISSPORTS SUPPLEMENT FRAMEWORK

SPORTS [ENERGY] BARS GROUP A



Sports [or energy] bars, provide a compact and portable source of fuel that can be easily consumed before, during or after exercise to help meet carbohydrate requirements. Compared to gels and sports drinks, they have the greatest variation in ingredients, protein, fat, fibre and micronutrients, so check labels carefully.

						
Compact source of carbohydrate (25g-45g)	Compact source of energy (600-1000kJ)	Suitable for endurance & ultra-endurance events	Lower fibre bars may prevent gut upset in high intensity endurance events	Higher fibre bars may be tolerated better in lower intensity events or for everyday use	Range of flavours to assist 'flavour fatigue'	Low fat (3-9g) & low-moderate protein (3-10g) to assist gut tolerance during exercise

BENEFITS & SITUATIONS FOR USE

Sports bars provides a portable, compact & convenient form of carbohydrate to support performance via two main ways :



FUEL SUPPLY FOR MUSCLE
(ingestion)



BRAIN & NERVOUS SYSTEM BOOST
(via mouth rinse)

Adequate CARBOHYDRATE intake around exercise may help protect IMMUNE FUNCTION & BONE HEALTH

- Pre-event fuelling when regular food/drink not tolerated
- Convenient and compact form of fuel for use around exercise
- Post exercise refuelling, particularly for athletes with high energy needs
- 'Gut training' with a mix of carbohydrate-rich foods & sports foods can enhance glucose uptake and reduce gut symptoms
- When multiple transportable carbs (eg. glucose + fructose) are required to maximise absorption and gut tolerance at higher carb intake targets (60-90g/hr)

CARBOHYDRATE INTAKE GUIDELINES

BRIEF EXERCISE (<45MINS)

- Not needed



SUSTAINED HIGH INTENSITY EXERCISE (45-75MINS)

- Small amounts of carbohydrate (swallowed) AND/ OR
- Frequent 'mouth sensing' with a significant duration of mouth contact (e.g. 10sec mouth rinse)



Gels



Sports drink



Bars



Chews

ENDURANCE EXERCISE & stop-start sports (1-2.5HRS)

- 30-60g/hr



Food



Gels



Sports drink



Bars



Chews

ULTRA-ENDURANCE EVENT (2.5-3+ HRS)

- up to 90g/hr*



Food



Gels



Sports drink



Bars



Chews

* Multiple transportable carbs (e.g. glucose & fructose) to be used when aiming for intakes >60g/hr.



SPORTS [ENERGY] BARS

FOOD FIRST PHILOSOPHY

Sports food supplements (e.g. bars, gels and sports drinks) are often the most practical way to meet carbohydrate targets during exercise at high intensity. But when the intensity is lower or when fuelling pre-or post-exercise, using food options is often cheaper, and can meet carbohydrate needs plus provide additional nutrients.



1 Banana (large)
30g carbohydrate



Box of sultanas (40g)
32g carbohydrate



1 Muesli bar
30g carbohydrate



400mL Orange juice
30g carbohydrate



Flat coke (375mL)
40g carbohydrate



Fruit bread (2 slices)
38g carbohydrate



2 Rice cakes + 2tsp honey
25g carbohydrate



Cordial (25mL)
17g carbohydrate



3 Lolly snakes (30g)
30g carbohydrate



2 Pikelets + 2tsp jam
28g carbohydrate



2 Medjool dates
30g carbohydrate



White bread (2 slices)
33g carbohydrate

CONCERNS & CONSIDERATIONS



To maintain dental health, use with a water chaser and include some calcium rich dairy post-exercise.



A glucose : fructose ratio of 2 : 1 may assist gut tolerance and absorption when aiming for higher carb intakes >60g/hr.



Occasional targeted sessions may benefit from planned low carb intake to enhance the adaptive response of training.



Is it a necessary expense? Could you tolerate a suitable food/ drink instead of an energy bar for the session?



Practice race fuelling in training to promote better tolerance.



Sport bars provide a rich source 'fuel', but other nutrients can vary considerably. Check the label, and use strategically.



All supplements have a doping risk of some kind. Some supplements are riskier than others. Athletes should only use batch-tested supplements. The Sport Integrity Australia app provides a list of more than 400 batch-tested products. (www.sportintegrity.gov.au/what-we-do/supplements-sport).

While batch-tested products have the lowest risk of a product containing prohibited substances, they cannot offer you a guarantee. Before engaging in supplement use, you should refer to the specific supplement policies of your sport or institute and seek professional advice from an accredited sports dietitian (www.sportsdietitians.com.au). Athletes are reminded that they are responsible for all substances that enter their body under the 'strict liability' rules of the World Anti-Doping Code.