AIS SPORTS 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)



endurance & ultra-

endurance evenrs



high intensity

endurance events

Lower fibre bars may prevent gut upset in tolerated better in lower



intensity events or for

everyday use

Higher fibre bars may be 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

of energy

(600-1000kJ)

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]

- 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 | \otimes |
|--|---|-----------------------------------|
| 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.



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

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



1 Muesli bar 30g carbohydrate



400mL Orange juice 30g carbohydrate



Flat coke (375mL) 40g carbohydrate

2 Medjool dates

30g carbohydrate



Fruit bread (2 slices) 38g carbohydrate



2 Rice cakes + 2tsp honey Cordial (25mL) 25g carbohydrate

17g carbohydrate





2 Pikelets + 2tsp jam 28g 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.

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



Practice race fuelling in training to promote better tolerance.





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



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.







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