

AISS SPORTS SUPPLEMENT FRAMEWORK

MIXED MACRONUTRIENT SUPPLEMENTS GROUP A



Mixed macronutrient supplements are energy-dense, compact sources of protein, carbohydrate and micronutrients for use when food is not practical, suitable, accessible or when appetite is suppressed around exercise. Mixed macronutrient supplements are available in a range of forms including powders, bars, balls and ready to drink (RTD) products.



CHECK THE NUTRITION PANEL

Mixed macronutrient supps vary hugely in their composition. e.g. high carb (for fuel), lower protein or vice versa



NUTRIENT BOOST

May be fortified with micronutrients and may contain 1/4 to 1/2 of your recommended daily intake



ERGOGENIC AIDS

May contain potential performance enhancing ingredients e.g. creatine, beta-alanine

BENEFITS

Can be used as a short term replacement for real food before, during or after exercise



FUELLING



SOURCE OF CARBOHYDRATE & ENERGY



SOURCE OF PROTEIN



COMPACT & PORTABLE

WHEN TO CONSIDER ITS USE

Most athletes meet their protein requirements quite easily with food, however a mixed macronutrient supplement might be useful:

- As a pre-event snack if you experience nervousness that impacts your appetite
- If you need to eat close to exercise e.g. early morning start or consecutive sessions
- During prolonged exercise e.g. ultra endurance over many hours/ days
- For post-exercise recovery when appetite is suppressed, or limited access to food
- To assist in boosting energy and protein intake when food not suitable/convenient
- When competing in a foreign country and food supply/safety is questionable
- To provide a compact, portable and less filling source of energy and protein between meals
- During growth spurts and heavy training loads or for extra fuel to assist lean mass gain
- To provide a low fibre source of fuel for low residue strategies for weight category sports

HOW TO CHOOSE A SUITABLE SUPPLEMENT

What are your individual needs for the session?

CONVENIENT SNACK when food not available	→		Meal/snack replacement bar	700 - 1200kJ < 40g Carbs 7-15g Protein
CARBOHYDRATE source for pre, during and post exercise FUELLING	→		High Carb powder or bar	800 - 1200kJ > 40g Carbs > 10g Protein
Convenient fuelling and recovery option when food not available. Protein and small amount of carbs.	→		High Protein, Lower Energy RTD, powder or bar	< 1200kJ < 30g Carbs 15-30g Protein
HIGH ENERGY NEEDS, therefore an energy dense source of FUEL	→		High Carb, High Energy powder or bar	> 1200kJ > 40g Carbs < 10g Protein
HIGH ENERGY NEEDS and looking to INCREASE MUSCLE MASS	→		High Protein, High Energy RTD, powder or bar	> 1200kJ 20-60g Carbs 20-30g Protein



MIXED MACRONUTRIENT SUPPLEMENTS

FOOD FIRST APPROACH SWAPS

> 'Food first' principles should apply to all supplements where possible. Can you swap for a food option that works for your training session/competition?

INSTEAD OF THIS:

Meal/ snack replacement bar



SWAP FOR THIS:



Flavoured milk popper

High carb powder or bar



Chobani yoghurt [original] + apple

High protein, lower energy RTD, powder or bar



Chobani FiT yoghurt + handful nuts

High carb, high energy powder or bar



Banana + muesli bar

High protein, high energy RTD, powder or bar



High energy smoothie: banana, milk, natural yoghurt, oats, nuts, honey, banana, date, egg

CONCERNS & CONSIDERATIONS



Unnecessary high cost vs. real food. Be strategic with use at suitable sessions.



Some athletes may experience gut issues and may need individualised protocols. Practise in training first.



Don't get caught up in advertised claims. The longer the ingredients list, the greater the doping risk.



May be lacking nutrients that are naturally present in real food. e.g. dairy derived protein supplements are often low in calcium.



Unnecessary use may impact your broader physique or nutrition goals. Can you use whole food instead?



May contain addition of nuts, milk, soy and other allergens that some athletes may need to avoid.



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.