SPORTS NUTRITION

CANADIAN SPORT CENTRE MANITOBA — CENTRE CANADIEN DU SPORT

TO SUPPLEMENT OR NOT TO SUPPLEMENT

Nutrition can make a valuable contribution to performance in elite athletes, and supplements can be a factor in an impactful nutrition programme. With so many supplement options marketed towards athletes at all levels of sport, it can be super confusing to know which products are safe, effective, and appropriate to use.

WHEN YOU MIGHT SUPPLEMENT:

- Research has proven the product to be safe and performance enhancing for your particular sport
- If a supplement has been trialled in training or simulated competition, and had positive results
- A short-term strategy when nutrient intake is challenged or dietary changes are not possible
- When a convenient form of a known amount of energy and macronutrients is needed
- In some cases, to provide direct benefits to performance
- To enhance performance indirectly by supporting intense training regimens

remember response to a supplement depends on the exercise model used, therefore not all athletes will need a dietary supplement to achieve these benefits

WHEN NOT TO SUPPLEMENT:

- If the supplement is intended to compensate for poor food choices, poor hydration practices, and inadequate rest and recovery
- If you are under 18 years of age
- Before completing a risk-benefit analysis involving a decision tree to identify the products that may be effective, safe, and risk free

  see example "Supplement Decision Tree"
- When a product does not have a logo from Informed-Choice, Informed-Sport, or NFS Certified for Sport

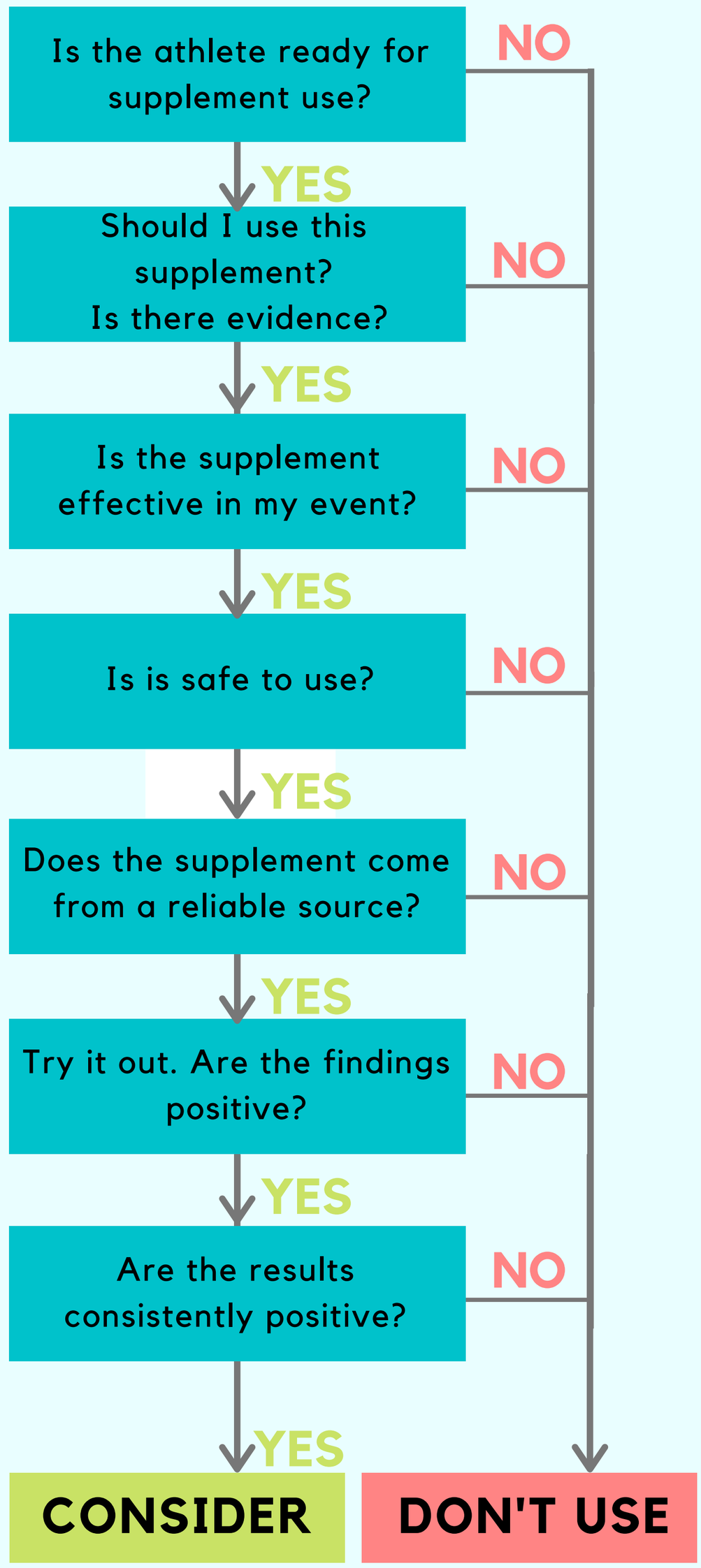
INFORMED CHOICE — WE TEST · YOU TRUST

INFORMED SPORT — WE TEST · YOU TRUST

NSF CERTIFIED SPORT

if the athlete matches the above criteria they may be ready for supplement use

SUPPLEMENT DECISION TREE



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HOW TO CHOOSE A SUPPLEMENT TO TARGET A SPECIFIC GOAL

GOAL 1: Convenient Supply of Energy and Micronutrients

Sports Foods and Their Functions:

1. **Sports drinks** = deliver fluid and carbohydrate during exercise, post exercise refuelling and rehydration
2. **Energy drinks** = pre-exercise caffeine supplement, carbohydrate and caffeine intake during exercise
3. **Sports gel or sports confectionary** = carbohydrate intake during exercise
4. **Electrolyte replacement supplements** = rapid rehydration, replace sodium deficits
5. **Protein supplement** = post-exercise recovery, portable nutrition for busy schedule
6. **Liquid meal supplement** = supplement a high energy diet, low bulk meal replacement, post exercise recovery, portable nutrition
7. **Sports bar** = carbohydrate source during exercise, post exercise recovery, portable nutrition

GOAL 2: To Provide Direct Benefits to Performance

Supplements and Their Perceived Performance Impact:

1. **Caffeine** = improved endurance capacity (such as exercise time to fatigue), gains in task completion time, improved mean power output during anaerobic activities and intermittent team game activity
2. **Creatine** = increased creatine muscle stores can enhance isometric strength and the acute performance of single and repeated bouts of high intensity exercise, as well as enable chronic training adaptations such as lean muscle mass gains and improvements to muscular strength and power
3. **Nitrate** = improved exercise time to exhaustion, improved high intensity intermittent team-sport exercise
4. **Sodium Bicarbonate** = causes a flux of acid from the exercising muscle, enhancing performance of short-term high intensity sprints
5. **Beta-Alanine** = reduce Lactic Acid accumulation in muscles providing benefits during continuous and intermittent exercise tasks

GOAL 3: To Provide Indirect Benefits such as Supporting Intense Training Regimens

Performance can be enhanced indirectly by supporting the athlete's health, body composition, and ability to train hard, recover quickly, adapt optimally, avoid or recover from injury, and tolerate pain or soreness.

Potentially immune supportive supplements include:

- Zinc
- Glutamine
- Probiotics
- Echinacea
- Omega-3 PUFA's
- Vitamin E
- Beta-Glucans
- Vitamin D
- Carbohydrate drinks and gels
- Bovine colostrum
- Polyphenols (eg. Quercetin)
- Vitamin C

NO BAKE PROTEIN BALLS 3 WAYS

Prep Time: 10 Minutes ***Yield: 24***

Protein isolate powder can help an athlete gain lean body muscle mass when combined with a progressive resistance training program, if you fit that criteria this recipe is a sweet little addition to meals! This recipe is also a healthy snack that can be incorporated post exercise for recovery for many different types of training, and a little ball of portable nutrition to fit into a busy training schedule.

Nutrition: Serving Size (1 ball) Calories (104) Carbohydrates (10g) Sugar (3g) Fibre (5g) Protein (5g) Fat (5g)

Chocolate Peanut Butter

INGREDIENTS:

- 1 1/2 cups old fashioned rolled oats
- 1 cup natural peanut butter
- 1/4 cup honey
- 2 scoops (about 50-60 grams) chocolate protein powder
- 2 Tablespoons chocolate chips

Almond Joy

INGREDIENTS:

- 1 1/2 cups old fashioned rolled oats
- 1 cup natural almond butter
- 1/4 cup honey
- 2 scoops (about 50-60 grams) chocolate protein powder
- 2 Tablespoons unsweetened shredded coconut

Cinnamon Raisin Cookie

INGREDIENTS:

- 1 1/2 cups old fashioned rolled oats
- 1 cup cashew butter
- 1/4 cup honey
- 2 scoops (about 50-60 grams) vanilla protein powder
- 2 Tablespoons raisins
- 1/2 teaspoon cinnamon

INSTRUCTIONS

1. Place all ingredients in a large mixing bowl
2. Getting the mixture to combine takes muscle! Use your hands to knead the mixture if need be.
3. Once combined, use a small cookie scoop to scoop and form the dough into balls
4. Store in covered container in the fridge or freezer.

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