



NUTRITION AND ATHLETIC PERFORMANCE

NUTRITION

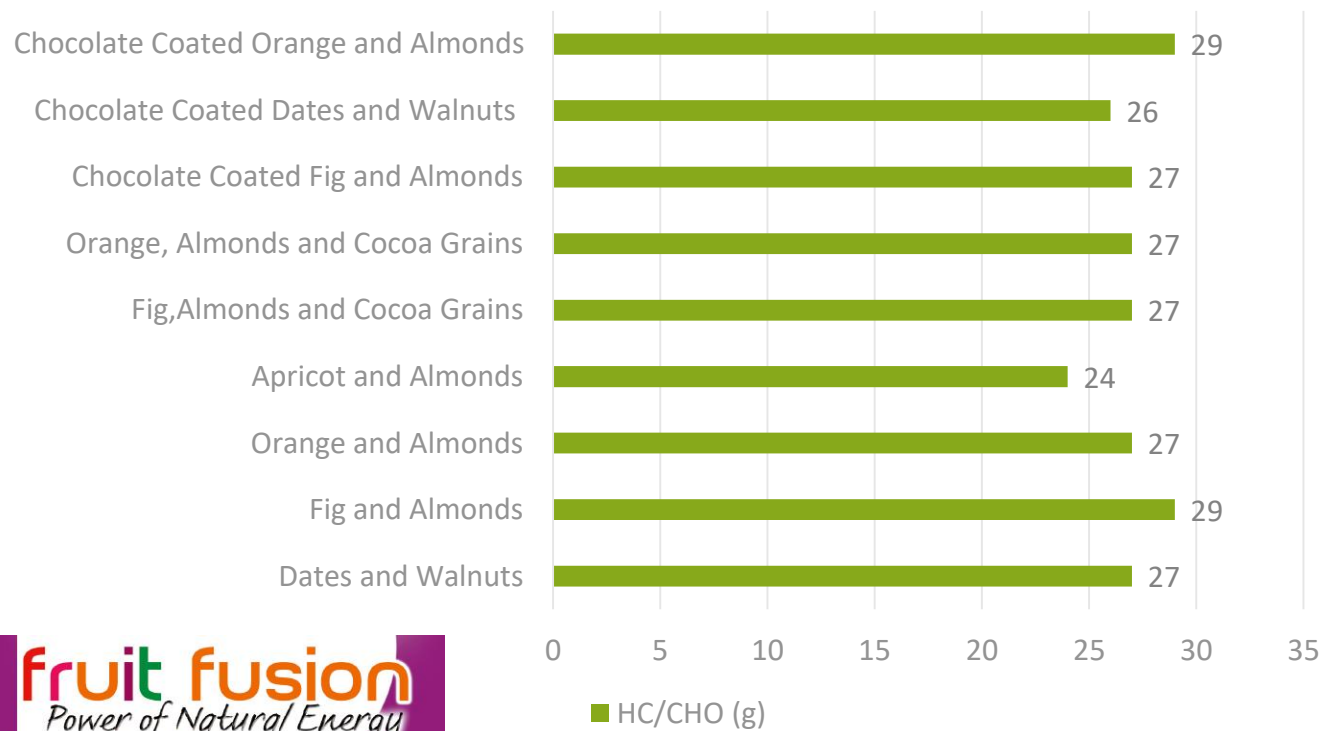
- Athletes or High effort workers need to consume adequate energy during periods of high-intensity and/or long-duration training or work to maintain body weight and health and maximize efficiency. Low energy intakes can result in:
 - Loss of muscle mass.
 - Loss of or failure to gain bone density.
 - An increased risk of fatigue, injury, and illness
 - A prolonged recovery process.





CARBOHYDRATES (CHO)

FRUIT FUSION BARS



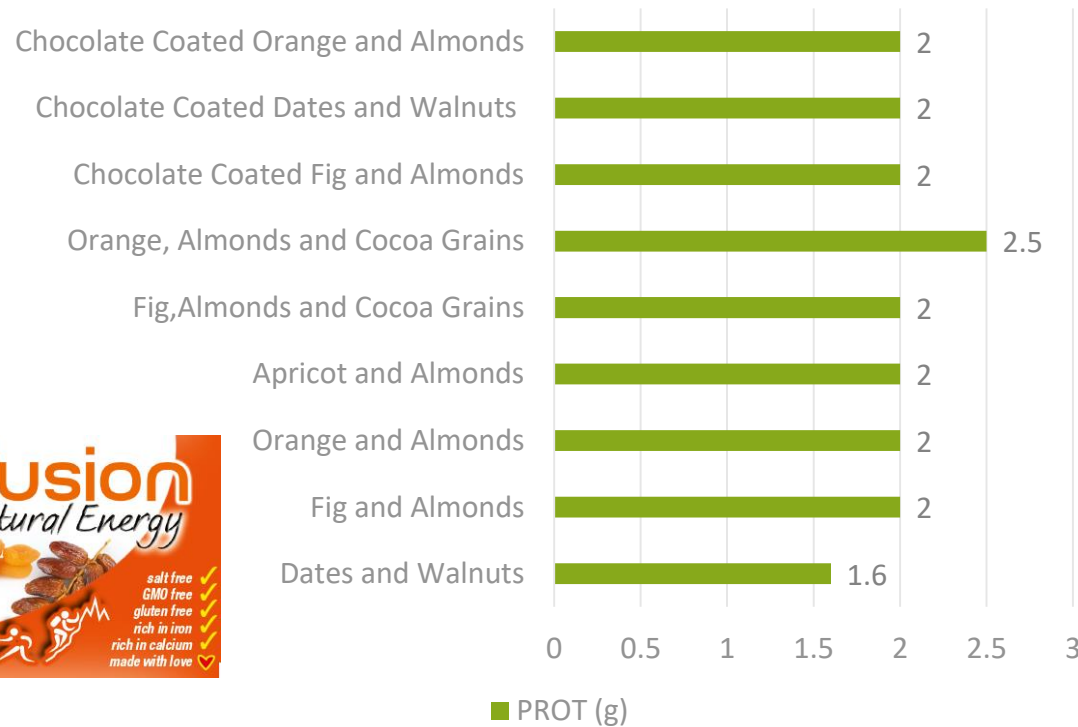
RECOMMENDATIONS

- Carbohydrate recommendations for people range from 6 to 10 g/kg body weight.
- Carbohydrates maintain blood glucose levels during exercise and replace muscle glycogen.
- The amount required depends on the people's total daily energy expenditure, type of sport, job, and environmental conditions.
- Ref.: A 70 kg. weight person requires between 420 & 700 grams of CHO daily.

PROTEIN



FRUIT FUSION BARS



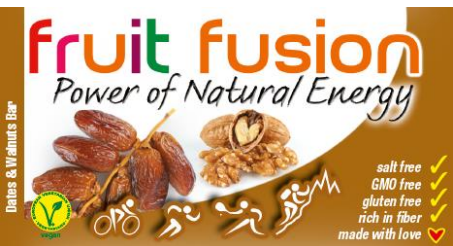
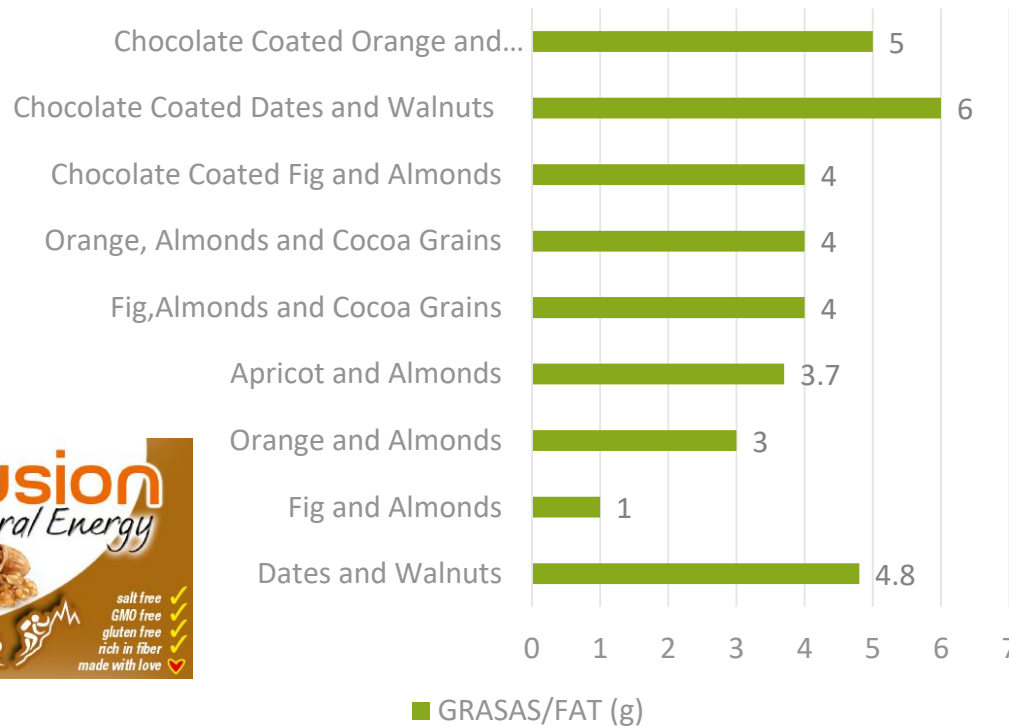
RECOMMENDATIONS

- Protein recommendations for endurance and strength workers range from 1,2 to 1,7 g/kg body weight.
- Ref.: A 70 kg. Person requires between 84 y 119g of proteins daily.

FAT



FRUIT FUSION BARS



RECOMMENDATIONS

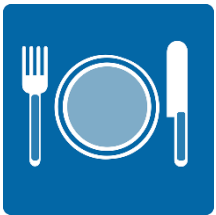
- Fat intake should range from 20% to 35% of total energy intake.
- Consuming $\leq 20\%$ of energy from fat does not benefit performance.
- Fat, which is a source of energy, fat-soluble vitamins, and essential fatty acids, is important in the diets of people. High-fat diets are not recommended.



¿WHEN?



- **BEFORE** exercise/work, a meal or snack should provide...
 - sufficient fluid to maintain hydration,
 - be relatively low in fat and fiber to facilitate gastric emptying and minimize gastrointestinal distress,
 - be relatively high in carbohydrate to maximize maintenance of blood glucose,
 - be moderate in protein,
 - be composed of familiar foods, and be well tolerated by the body.



CHO are highly important in an extreme ambient . (Hot,Cold, Altitude,...).

¿Work +1h?



24-29g HC

¿WHEN?

- **DURING** exercise/work, primary goals for nutrient consumption are to replace fluid losses and provide carbohydrates (approximately 30–60 g/h) for maintenance of blood glucose levels. These nutrition guidelines are especially important for endurance events lasting *longer than an hour* when the person has not consumed adequate food or fluid before exercise or when the exercise in an extreme environment (**heat, cold, or high altitude**). For longer events, consuming 0.7 g carbohydrates/kg body weight/h has been shown unequivocally to extend endurance performance.
- Consuming a given amount of carbohydrate as a bolus after 2 h of exercise is not as effective as consuming the same amount at 15- to 20-min intervals throughout the 2 h of activity

¿+2h?

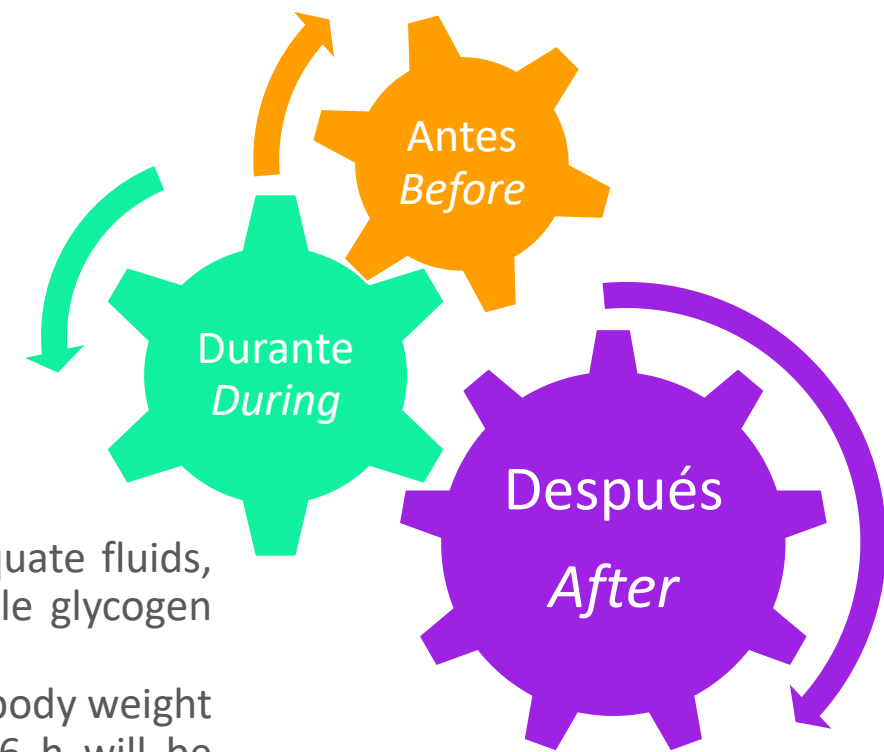


To take away!





¿WHEN?

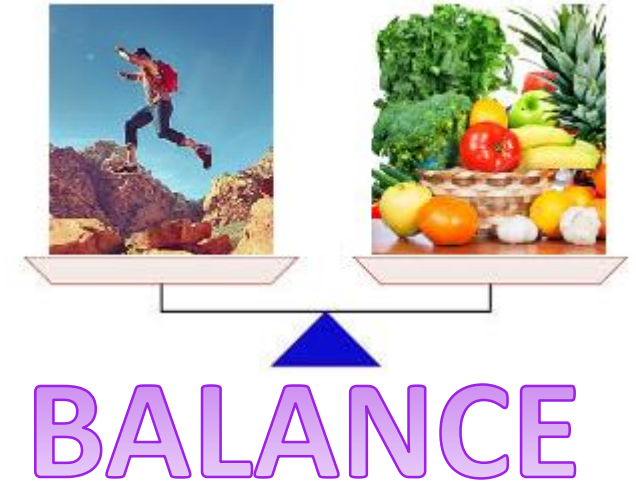


- **AFTER** work/exercise, dietary goals are to provide adequate fluids, electrolytes, energy, and carbohydrates to replace muscle glycogen and ensure rapid recovery.
 - A carbohydrate intake of approximately 1.0–1.5 g/kg body weight during the first 30 min and again every 2 h for 4–6 h will be adequate to replace glycogen stores.
 - Protein consumed after exercise will provide amino acids for building and repair of muscle tissue.
 - Consumption of carbohydrates within 30 min after exercise (1.0–1.5 g carbohydrate/kg at 2-h intervals up to 6 h is often recommended) results in higher glycogen levels after exercise than when ingestion is delayed for 2 h



To higher energy expenditure more calories
we need to consume.

ENERGY METABOLISM



- Energy expenditure must equal energy intake to achieve energy balance.
- Approximately 50%–60% of energy during 1–4 h of continuous exercise at 70% of maximal oxygen capacity is derived from carbohydrates and the rest from free fatty acid oxidation
- Energy expenditure for different types of exercise is dependent on the duration, frequency, and intensity of the exercise, the sex of the athlete, and prior nutritional status. Heredity, age, body size, and FFM also influence energy expenditure.
- The more energy used in activity, the more calories needed to achieve energy balance.

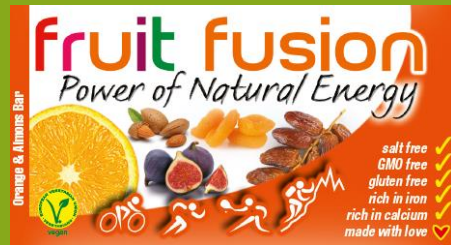
GMO free ✓
100% natural ✓
no sugar added ✓
gluten and salt free ✓
rich in fiber and calcium ✓
made with love ♥

What do you need for your work/excercise?

CHO + PROTEINS + WATER



YOU BRING WATER AND EFFORT, WE THE REST.



BE HEALTHY. BE NATURAL. BE

We adapt our bars for several purposes as food for NGOs, Army, Food Aid for Children, High-calorie food demands for jobs, Extreme work and environmental conditions, High sport level, Mountain missions,...

Ask for the best combination of Natural fruit and Nuts food for extreme conditions.

This document is based on the joint position statement authored by the American Dietetic Association (ADA), Dietitians of Canada (DC), and American College of Sports Medicine (ACSM).

