



WOOD BUFFALO
2023
ARCTIC WINTER GAMES



PEI-ÎPÉ
2023
JEUX DU
CANADA
GAMES

Performance Nutrition *Fueling Excellence* **DURING COMPETITION**

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Fuelling Excellence

Nutrition During Competition

- **Review** - Fun Facts & Fundamentals
- Competition Nutrition Objectives
- Tips to Compete

How Each of You Can Prepare to Compete



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Know Your Macros



Carbohydrates: grains (corn, cereal, pasta, wild rice, bread), fruit, all vegetables, milk, yogurt, sport drinks, juices, legumes (kidney beans, white beans, etc.)



Proteins: eggs, fish, beef, game meat, chicken, turkey, grouse, whale, Greek yogurt, tofu, cheese* & nut butters* (PB, AB), protein powder



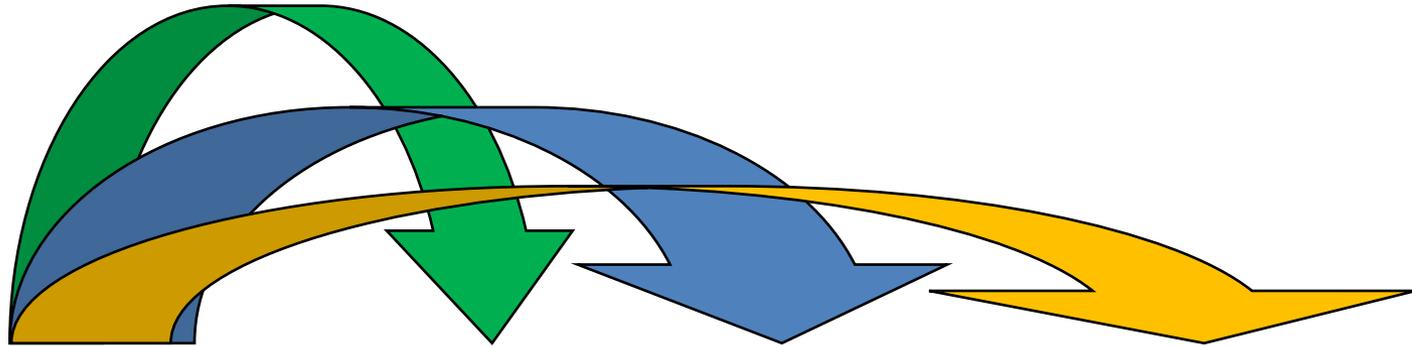
Fats: oils, butter, nuts, seeds, cheese* & nut butters* (PB, AB), avocado, chia seeds, hemp hearts

Rates of Digestion

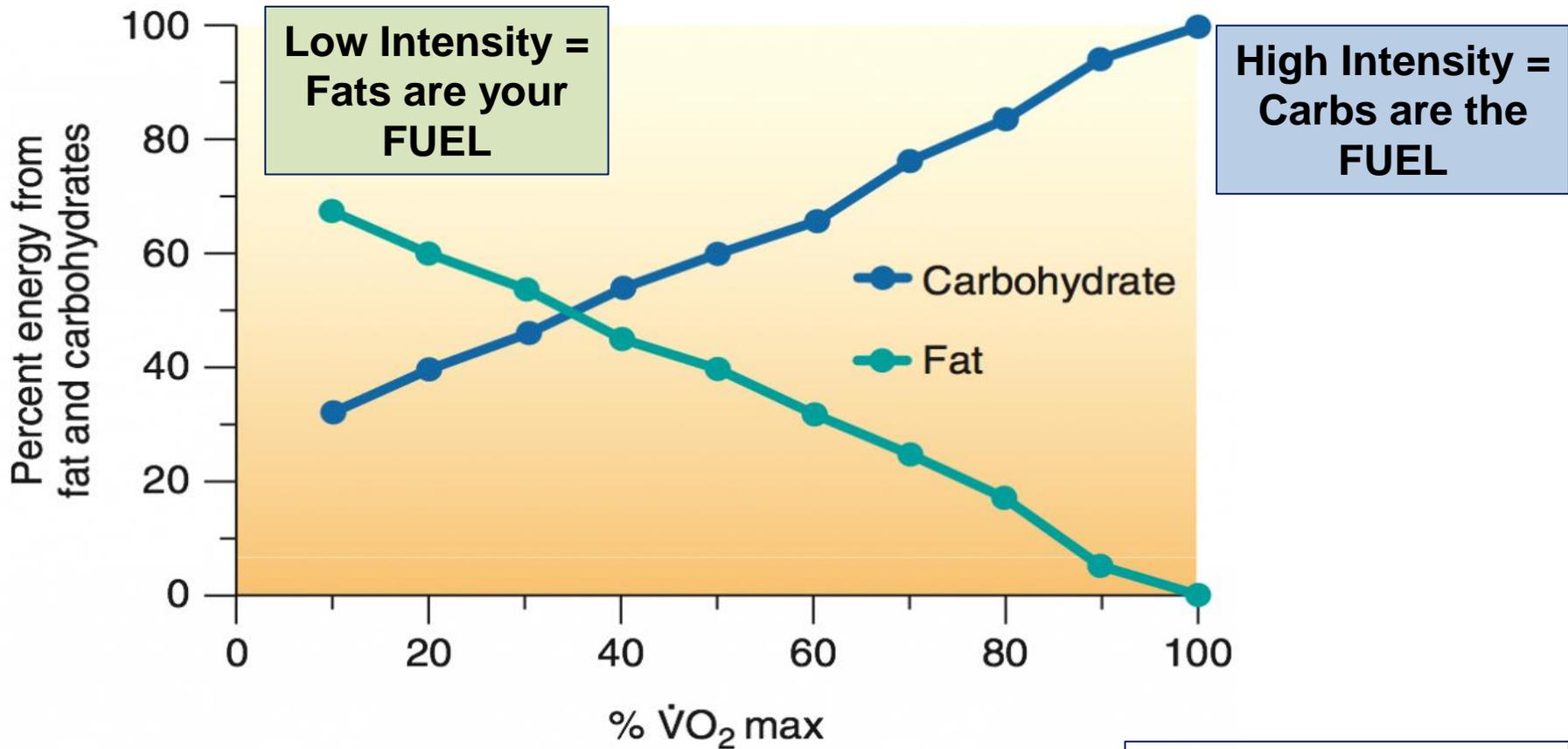
Carbs

Carbs & Protein

Fats

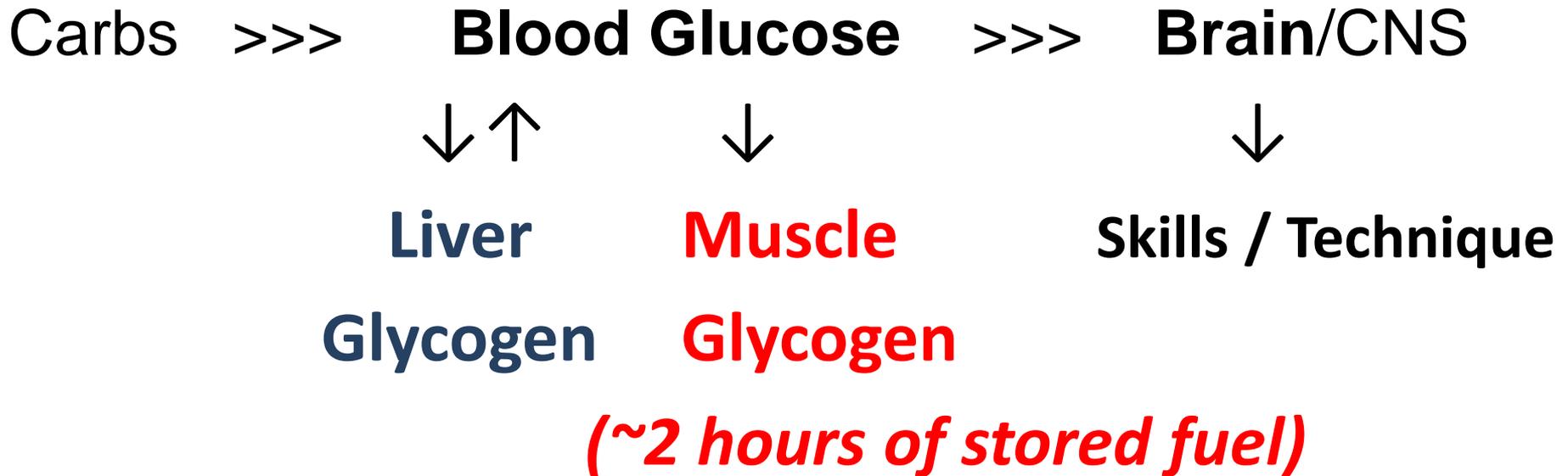


Exercise Fuels



Kelly Anne Erdman
Performance Dietitian

Carbohydrates – the **Main Fuel** for Exercise



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Nutrition During Competition

Competition Nutrition Objectives

- Energized to Perform Consistently
- Stay Hydrated (avoid dehydration)
- Able to Focus & Technically Execute



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Nutrition During Competition

Nutritional Needs During Competition:

- **Water**
- ***Maybe Electrolytes***
- ***Maybe Carbohydrates***



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**Which are signs of dehydration,
there are 7:**

X Dark Coloured Urine

Dizziness

X Low Energy

X Slow Reaction Time

Thirst

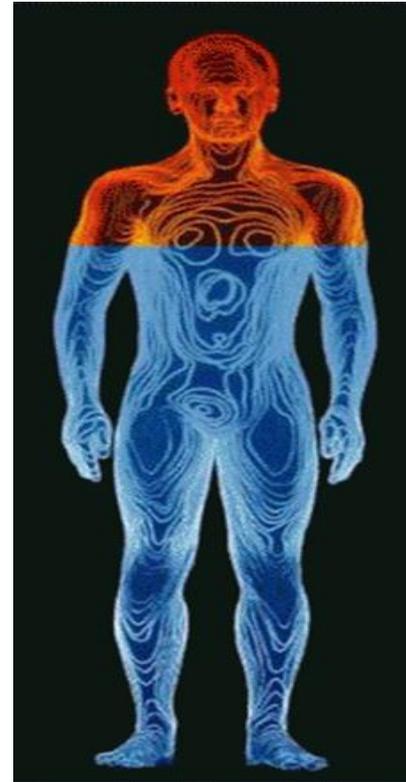
X Headache

X Muscle Cramps

X Elevated Heart Rate

X Over-Heating

Irritability



Brain, Muscle, Liver,
and Heart = Are Each
~ **75% Water by Weight**

***The More Muscle You Have
The Higher Your % Body Water
Your Body is at Least 60% Water***

You have 2 - 4 million sweat glands; their main purpose to keep you cool!

Why Do Athletes Sweat?



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Dehydration & Performance

↓ Speed & Acceleration
↓ Power
↓ Concentration/Focus
↓ Skills
↓ Slower Reaction
Time

↑ Premature
Fatigue

On Average an athlete loses ___ of sweat in an hour

- a. 0.5 L
- b. 1 L
- c. 1.2 L**
- d. 1.5 L
- e. 1.7 L



***Do You Know
The Size of
Your
Water Bottle?***

Stay Hydrated

- **1-2 cups Water upon Waking**
- **1.5-2 Litres throughout the day; sip vs chug**
- **½ Litre for every Hour of Exercise / Competition**
- **Rehydrate until urine is pale yellow**



During a 1 hour competition an athlete mostly needs?

- a. Carbohydrates (sport drink, fruit or granola bar)
- b. Protein (whey, protein bar)
- c. Fat (almonds, trail mix)
- d. Fluids (water, maybe electrolytes-sodium, potassium)**
- e. Sport drink (Gatorade, etc.)





Nutrition During Competition

Under 1 hr = Water + Maybe Electrolytes (NUUN, G2)

> 1 hr = Water, Electrolytes & Carbohydrate Energy (Gatorade, Fruit, Sport Bar, Granola Bar)



Energizers During Competition

Fruit, granola bar, crackers, bagel, dried fruit, oatmeal, Fruit Source Bar, sport bar (Clif), Fig Bars, juice, sports drink



Maybe Just “Bites” or Sips?



Foods for **In-Between** Competitions



Back to Back Events

Fuel for In-between Competitions

Shake & Muffin

Fruit & Chocolate Milk

Protein Bar & Juice

Sandwich & Fruit

*Enough Time
for a Meal?*

Pre- Competition Meal Ideas

- Chicken, Rice, Vegetables
- Pasta with Lean Meat Sauce
- Chicken Breast Sub Sandwich
- Salmon, Rice/Pasta/Quinoa, Vegetables
- Sandwiches & Pasta Salad OR Quinoa Salad
- Submarine Sandwich, Water

The most important meal of the day for athletes is:

- a. Breakfast
- b. Lunch
- c. Dinner
- d. Before Competition
- e. After Competition**

Recovery Nutrition

2 Parts to Recovery:

1 - Within 30 minutes After Competition

2 - A Meal within 2 hours

The 5 R's

- **R**estore Energy (**c**arbs)
- **R**epair Muscle (**p**rotein)
- **R**ehydrate (**f**luids)
- **R**eplenish Minerals (**e**lectrolytes – sodium & potassium)
- **R**eal Quickly!



Carbs & Recovery

2-3 Items



Immediate Recovery –
Bring to the Competition Venue





**Immediate Recovery –
Bring with You**

- Repairs muscle
- Enhances immunity
- 15-30 grams

Protein & Recovery

Fluids & Recovery

- Sodium rich = *retain more water*
- Sodium rich = *more tasty & quenches thirst*



Stage 2: Recovery Meal

2-3 Fists Cooked Starch,
Vegetables, 1+ Palm Protein,
Lower in Fats

HARD TRAINING / RACE DAY:

FATS

2 Tablespoons



Avocado
Oils
Nuts
Seeds
Cheese
Butter



Grains

Pasta
Rice
Potatoes
Cereals
Breads



Fresh Fruit
Stewed Fruit
Dried Fruit



Water
Dairy/Nondairy
Beverages
Diluted Juice
Flavored
Beverages



Coffee
Tea

Lean Protein

Poultry
Beef/Game/Lamb
Fish
Eggs
Low-Fat Dairy
Soy (e.g., Tofu,
Tempeh)
Legumes/Nuts



Cooked Veggies
Veggie Soups
Raw Veggies



Vegetables

FLAVORS

Salt/Pepper
Herbs
Spices
Vinegar
Salsa
Mustard
Ketchup



Recovery Meal Ideas

- WW Pasta, Meat Sauce, Salad, Water or Milk
- Chicken & Vegetable Stir Fry, Brown Rice, Water or Milk
- Baked Salmon, Quinoa, Roasted Vegetables, Water or Milk
- 12" Sub Sandwich loaded with Vegetables, Water or Milk
- Scrambled Eggs, Salsa, Grated Cheese, Tortilla, Fruit Salad
- Greek Yogurt, Fruit Salad, Granola
- Pasta or Quinoa Salad with Diced Vegetables & Chicken
- Protein Shake with Banana & Berries, Toasted Bagel w PB

Do You Compete the Next Day? (Recovery Nutrition is Priming to Compete Next Day)





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Thank you

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