



WOOD BUFFALO
2023
ARCTIC WINTER GAMES



PEI-ÎPÉ
2023
JEUX DU
CANADA
GAMES

Performance Nutrition
Fueling Excellence
PRE-COMPETITION

Kelly Anne Erdman,
MSc, RD, CSSD
Registered Dietitian,
Kelowna BC
CSI Calgary Consultant
403-874-7816
KellyAnne.Erdman@gmail.com



PROUD MEMBER OF THE | FIER MEMBRE DU
SPORT INSTITUTE NETWORK
RÉSEAU DES INSTITUTS DU SPORT



Haley Wickenheiser

4 Time Olympic Gold Medalist, 5 Time Olympian

According to Wickenheiser Good Nutrition Accounts for "50% of Performance, with 40% Mental & 10% Physical"

Fuelling Excellence

Pre-Competition Nutrition

- Fun Facts & Fundamentals
- Pre-Comp Nutrition Objectives
- Easy as 1 – 2 – 3

How Each of You Can Prepare to Compete



PEI · ÎPÉ
2023
JEUX DU
CANADA
GAMES



WOOD BUFFALO
2023
ARCTIC WINTER GAMES

What Might You Eat Differently as You PREPARE to Compete?



Fuelling Excellence

Pre-Competition Nutrition

✓ **Fun Facts & Fundamentals**

Nutrition Foundation Starts with **FOOD!**



0-500 CALORIES

FUEL

**AMPLE
Energy**

NUTRIENTS



Some Signs of Insufficient Fueling

- Empty or Heavy Feeling Muscles when Exercising
- Light-Headed, Shaky or Dizzy at Times
- Inconsistent performances in Practices/Training/Comp
- Not Building Muscle or Getting Stronger as Expected
- Missing Menstrual Cycles
- Moody, Irritable, Not Always Feeling Happy
- Problems Sleeping
- Difficult to Study or Concentrate at Times
- Get Sick Easily and Frequently



Canada's Food Guide

***Food Groups based on
Similar nutrients***

***Sport Nutrition –
We Discuss "FUEL"
Options – Carbs,
Protein & Fats***

Have plenty of
vegetables and fruits

Eat protein foods

Make water
your drink
of choice



Choose
whole grain
foods

Know Your Macros

Your **Fuel** Sources



Carbohydrates: grains (cereal, pasta, wild rice), all fruit/berries, all vegetables (corn, squash, succotash), legumes (kidney beans, white beans), milk, yogurt



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



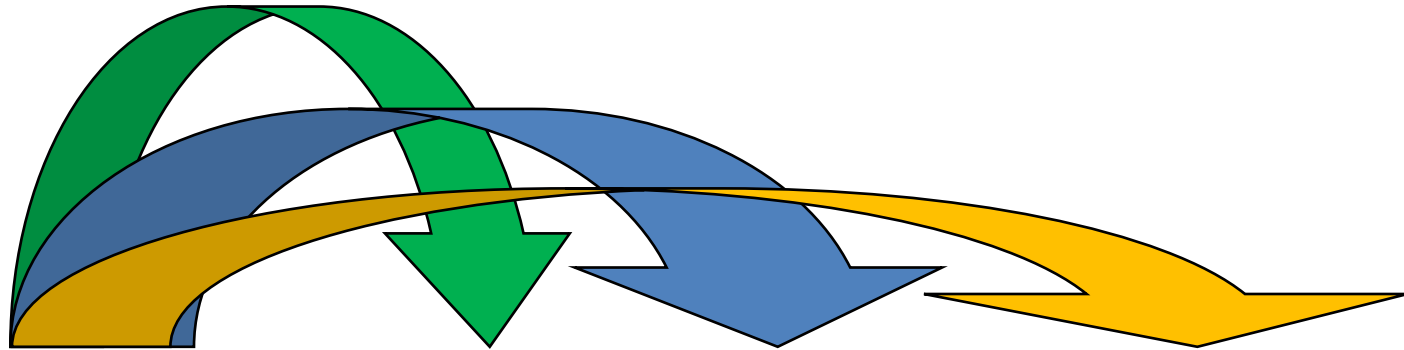
Fats: oils, butter, nuts, seeds, cheese* & nut butters* (PB, AB), avocado, chia seeds, hemp hearts

Rates of Digestion

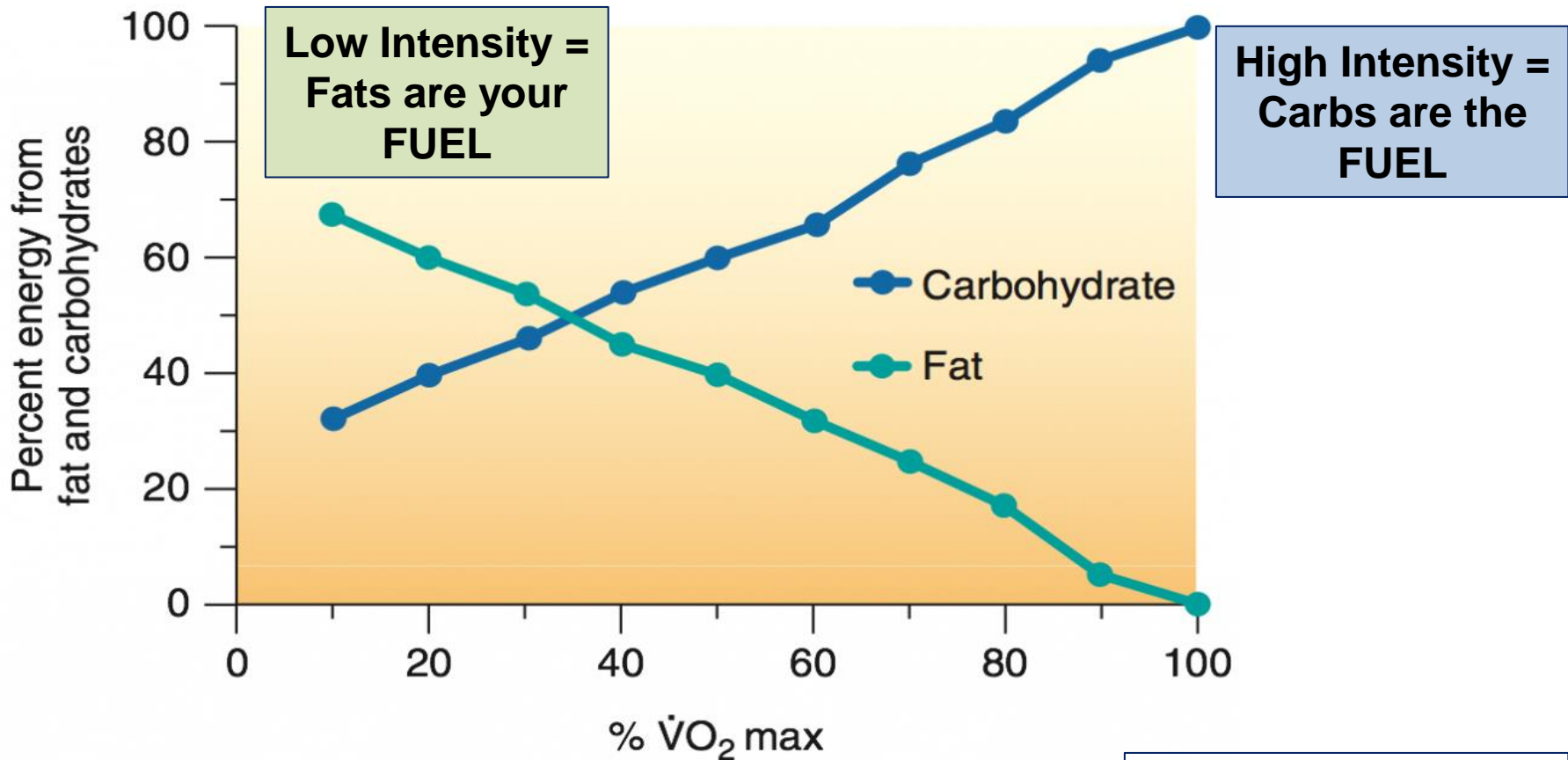
Carbs

Carbs & Protein

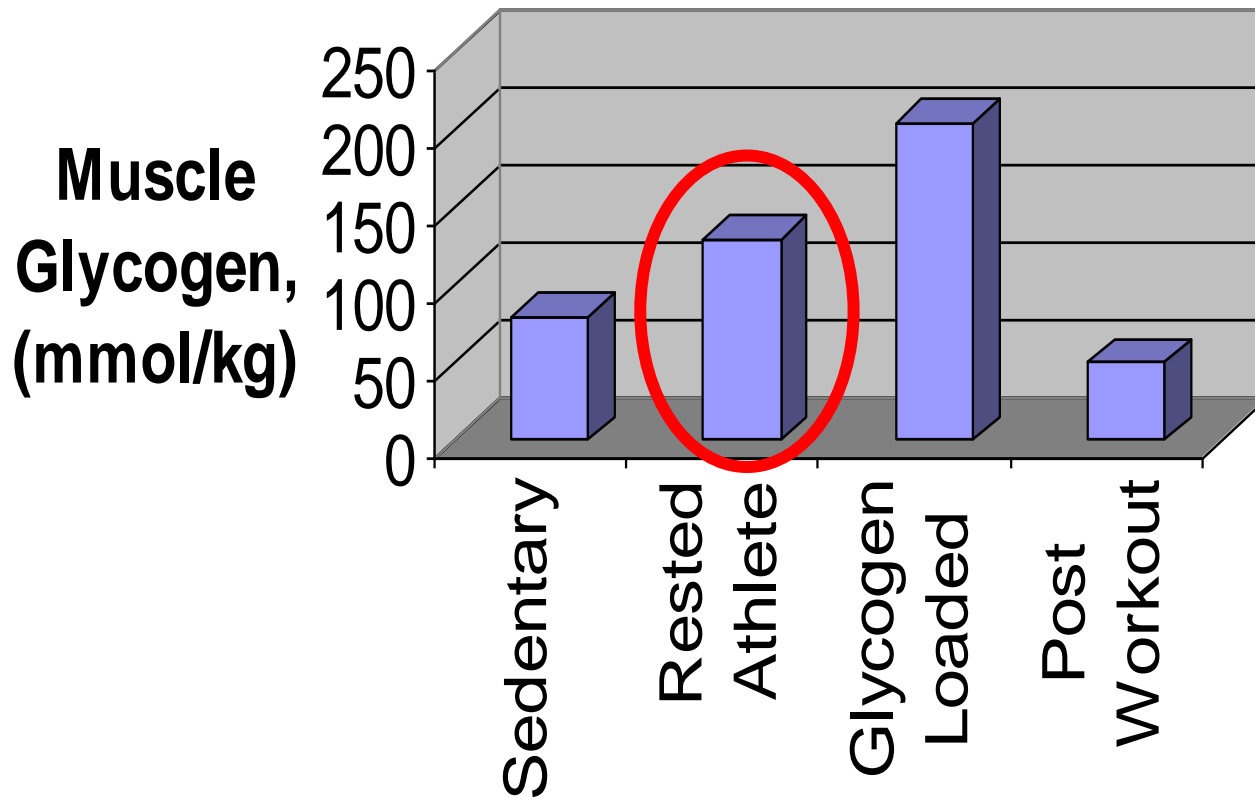
Fats



Exercise Fuels



LEVELS OF MUSCLE GLYCOGEN



Pre-Competition Nutrition Objectives

- **Fully Energized to Compete**
(Carbohydrates)
- **Well Hydrated**
(Fluids)
- **Foods Well Tolerated** (Digest Easily, no Tummy Upset)



Fuelling Excellence

Pre-Competition Nutrition

- ✓ Fun Facts & Fundamentals
- ✓ Pre-Comp Nutrition Objectives

Easy as 1 – 2 – 3



PEI · ÎPÉ
2023
JEUX DU
CANADA
GAMES



WOOD BUFFALO
2023
ARCTIC WINTER GAMES

Your Energy to Compete on Saturday Mainly Comes From what you Ate On:

a. Thursday

b. Friday

c. Saturday

Fuelling Excellence
Pre-Competition Nutrition
Easy as 1-2-3

1. PRIMING TO COMPETE

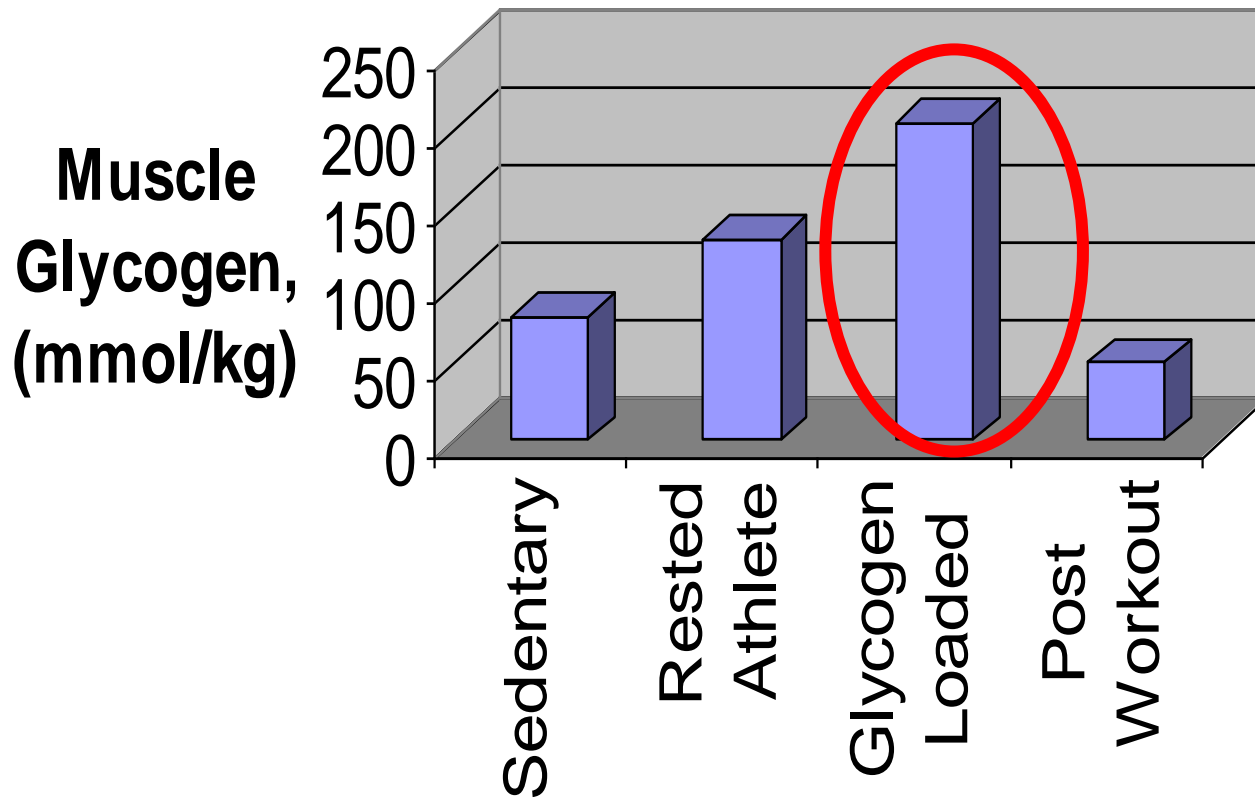


PEI · ÎPÉ
2023
JEUX DU
CANADA
GAMES



WOOD BUFFALO
2023
ARCTIC WINTER GAMES

LEVELS OF MUSCLE GLYCOGEN



Fuelling Excellence

Pre-Competition Nutrition

PRIMING TO COMPETE – Increase Carbohydrates

1, 2 & 3 days before competition eat larger servings of “starchy” foods (corn, wild rice, potatoes, pasta, kidney beans, bread, cereal)

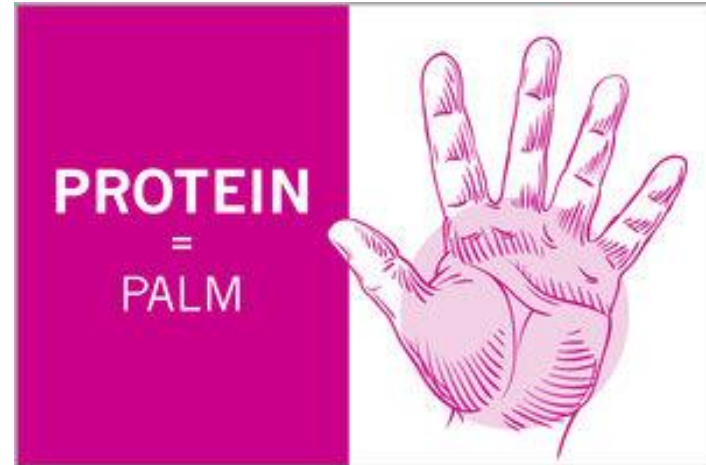


PEI · ÎPÉ
2023
JEUX DU
CANADA
GAMES



WOOD BUFFALO
2023
ARCTIC WINTER GAMES

Meal Planning



2-3 Clenched Fists **STARCH**
1 Palm of cooked **PROTEIN**
1-2 Cups **Veggies or Fruits**
+ Healthy Fats, Fluids



PRIMING TO COMPETE

FATS

2 Tablespoons



Avocado
Oils
Nuts
Seeds
Cheese
Butter



Grains

Pasta
Rice
Potatoes
Cereals
Breads



Fresh Fruit
Stewed Fruit
Dried Fruit



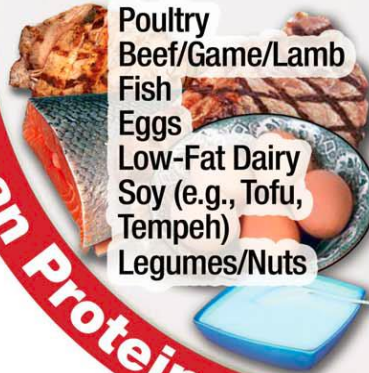
Water
Dairy/Nondairy
Beverages
Diluted Juice
Flavored
Beverages



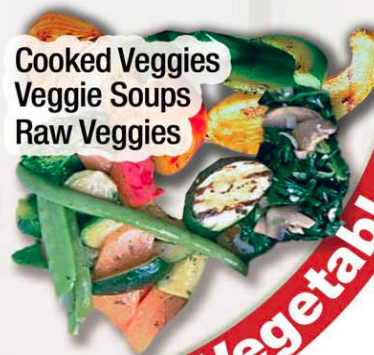
Coffee
Tea

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



Fuelling Excellence

Pre-Competition Nutrition

PRIMING TO COMPETE: Increase Carbohydrates

2-3 Fists Cooked Starch in Breakfast, Lunch & Dinner for the 1-3 Days Before Compete

Keep Eating Like This During TOURNAMENTS

Fuelling Excellence

Pre-Competition Nutrition

PRIMING TO COMPETE – Increase Carbohydrates

High Carb Bedtime Snack (cereal, fruit salad, yogurt, toast, crackers, granola bar, rice pudding, muffin, bagel, oatmeal)

Fuelling Excellence

Pre-Competition Nutrition

PRIMING TO COMPETE: Drink lots of Water

Sip on 1.5 – 2 Litres water each day for the 3 days before you start to compete (keep drinking lots during competition too!)

Fuelling Excellence
Pre-Competition Nutrition
Easy as 1-2-3

2. GAME DAY, GAME ON



PEI · ÎPÉ
2023
JEUX DU
CANADA
GAMES



WOOD BUFFALO
2023
ARCTIC WINTER GAMES

You compete at 10:00 am. When should you have your pre-competition meal?



- a. 6:00 am
- b. 7:00 am
- c. 8:00 am
- d. 9:00 am

Between 7:00 to 8:00 am is Best

Pre-Exercise Timing

Large Meal

2 to 3 Hours before Compete

Compete 11 am, Meal at 8-9 am

Small Meal

1.5 to 2 Hours

Compete 11 am, 9-9:30 am

Snack

1 to 1.5 Hours

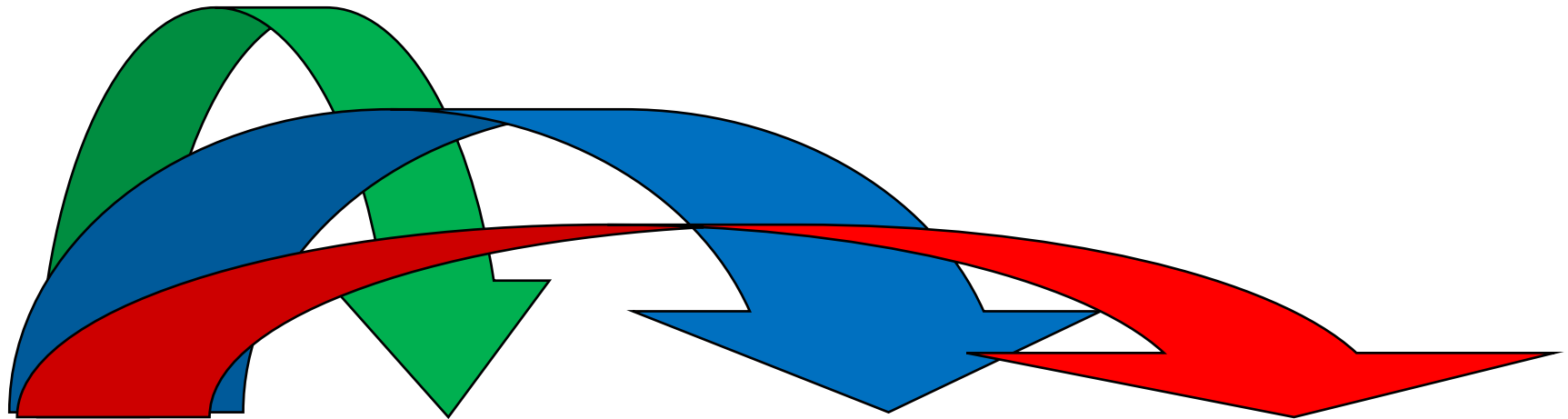
Compete 11 am, Snack at 9:30-10 am

Remember Timing of Digestion

Carbs

Carbs & Protein

Fats



Garbage In = Garbage Out

- *What Does This Mean?*

Less Healthy Foods

- Candy, slurpees/slurpees, pop, chips, doughnuts, pastries, chocolate bar, pizza, etc.

90% (healthy) & 10% (extras)



Which is the Best Pre-Competition Meal?



A. Spaghetti with Meat Sauce

B. Full order of Lasagna

C. Fettuccini Alfredo with Chicken

D. Spinach Salad with Chicken

Let's Plan Breakfast Before Competition



- Oatmeal, cold cereal
- Bread, bagel, English muffin
- pancake, muffin
- potato



- Eggs
- Meat
- Greek yogurt
- Cottage Cheese
- PB



- Berries
- Melon
- Orange, grapefruit
- Apple, pear, peach, plum

Other Pre-Comp Meal Ideas: *plus water!*

- Chicken, Rice, Veggies
- Pasta, Meat Sauce, Salad
- Sandwich, Fruit, Muffin
- Pasta or Quinoa Salad w Veggies & Protein
- Eggs, Potatoes, Toast, Fruit
- Egg Burrito, Fruit
- Oatmeal, Yogurt, Fruit, Toast & egg/PB



Which is NOT the best Pre-Competition Snack:

- a. Almonds & dried fruit
- b. Pepperoni stick
- c. Protein bar
- d. Cheese string & apple
- e. Toast with PB

Which is NOT the best choice as a Pre-Competition Snack?

- a. Almonds & dried fruit
- b. Pepperoni stick**
- c. Protein bar
- d. Cheese string & apple
- e. Toast with PB

Pre- Competition Snacks

Quick Fuel:

Fruit, sports bar, granola bar, Fig Newtons, bagel, dry cereal, oatmeal, dried fruit, muffin

Energy Sustaining: takes more time to digest

Cheese, protein bar, peanut butter, nuts, trail mix, Energy Balls, Protein – meat, chicken, fish, eggs



Fuelling Excellence
Pre-Competition Nutrition
Easy as 1-2-3

3. SHOW UP HYDRATED



PEI · ÎPÉ
2023
JEUX DU
CANADA
GAMES



WOOD BUFFALO
2023
ARCTIC WINTER GAMES

***You Can Work
Harder WHEN . . .***

**Show Up
Hydrated**

- **1-2 cups Water upon Waking**
- **1.5 Litres (6 cups) throughout the day; sip vs chug**
- **½ Litre for every Hour of competing**
- **Rehydrate until urine is pale yellow**



High Performance Fluids

Water
Milk
Almond Milk

Unsweetened Juices
Sport Drinks (at times)
Power Shakes

Low Performance Fluids

Pop
Iced Tea
Lemonade

Slurpee
Caramel Macchiato
Alcohol

Fuelling Excellence

Pre-Competition Nutrition

- ✓ Fun Facts & Fundamentals
- ✓ Pre-Comp Nutrition Objectives
- ✓ Easy as 1 – 2 – 3

How Each of You Can Prepare to Compete



PEI · ÎPÉ
2023
JEUX DU
CANADA
GAMES



WOOD BUFFALO
2023
ARCTIC WINTER GAMES



WOOD BUFFALO
2023
ARCTIC WINTER GAMES



PEI-ÎPÉ
2023
JEUX DU
CANADA
GAMES

Performance Nutrition
Fueling Excellence
PRE-COMPETITION

Kelly Anne Erdman,
MSc, RD, CSSD
Registered Dietitian,
Kelowna BC
CSI Calgary Consultant
403-874-7816
KellyAnne.Erdman@gmail.com



PROUD MEMBER OF THE | FIER MEMBRE DU
SPORT INSTITUTE NETWORK
RÉSEAU DES INSTITUTS DU SPORT