

**Fueling for Podium Power**

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Why is nutrition important

•  Preparing & fueling your body

•  Recovering & repairing your body

•  Reducing injury & illness

•  Maintaining a body composition

•  Achieving peak performance

•  Power, strength, speed, agility

•  Mental concentration & focus

•  Endurance & energy

•  Safety



Today…

1.  Nutrition Condition

2.  Best Bites Macronutrients

3.  Fueling for Training



Sport Nutrition Basics

The 4 main nutrients essential for athletes are:

a)  Meat, dairy, juice, sugar

b)  Carbohydrate, protein, fat, water

c)  Bread, fruit, meat, nuts

B



Sport Nutrition Basics

What are the best “types of foods “ to consume for energy during training?

a)  Protein

b)  Carbohydrates

c)  Fat & Carbohydrate B

d)  Glucose

**HIGH PERFORMANCE**

**NUTRITION**

**Protein**

Growth, repair and maintenance of body tissues

**Carbs**

Energy and

Glycogen



**Fats**

**Fluids**

Fuel source and fat tissue

Circulate energy to muscles and brain

Gold level Carbohydrates for

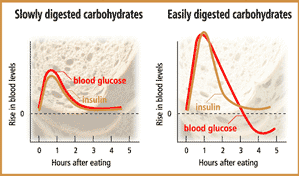


Energy

Best Bites ✔

Cereal, & granola bar, crackers and bread

Not all carbohydrates created equal



Knowledge Check

Protein is important for growth, maintenance and repair of muscles and tissue. Athletes need to make sure they get enough protein from

these sources:

a)  Skippy peanut butter

b)  Cheese & hamburgers

c)  Fish, chicken, soy, milk

C

Gold level Protein for Growth



& Repair



How much protein do I need?

 Increased needs for growth, recovery, training, adaptation.

 Exact needs for young athletes unknown.

 Varies depending on phase of training.

✔ Do you have protein in each meal?

**1.0–1.8 g/kg/day**



Knowledge Check

Fats are important for energy and keeping parts of our bodies healthy. The best sources of fats are:

a)  Plant fats like olive, nuts, vegetable

b)  Fried chicken

c)  Bacon

A

Healthy Fats



✔1 healthy fat lunch and dinner.



Nutrition: Core Meals

**CARBS PROTEIN**





Balance

|  |  |  |
| --- | --- | --- |
|  | Core Meals(B,L,D)= Canadian Food Guide - FV, BC, MA |  |
|  | Snacks = Same Ratios? |  |

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | serving | of | carbs = 1-2 fists |
| 1 | serving | of | protein = palm |
| 1 | serving | of | fat = tsp or thumb |



Nutrition Timing

Small and frequent meals =

  More ideal body composition

  Higher metabolic rates

  Improved nutrient intakes

  Better maintenance of muscle

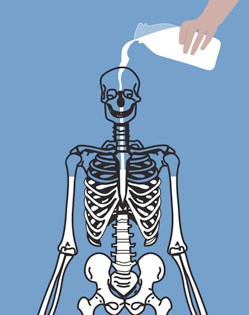


Healthy Weight Management

  Go for nutrient dense foods

  Go for fiber

  Work with RD



Calcium

  Low calcium intake may be associated with poor bone development and higher stress fracture risk.

  How many servings do you have?

Best Bites ✔

Yogurt and Dairy



Iron Needs

Iron needed to:

•  Transport oxygen

•  Produce energy

•  Maintain immune system

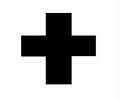
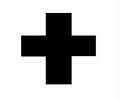
Higher losses in athletes:

•  Inadequate dietary supply

•  Increased demands

•  Blood loss, foot strike injury

•  Heavy sweating



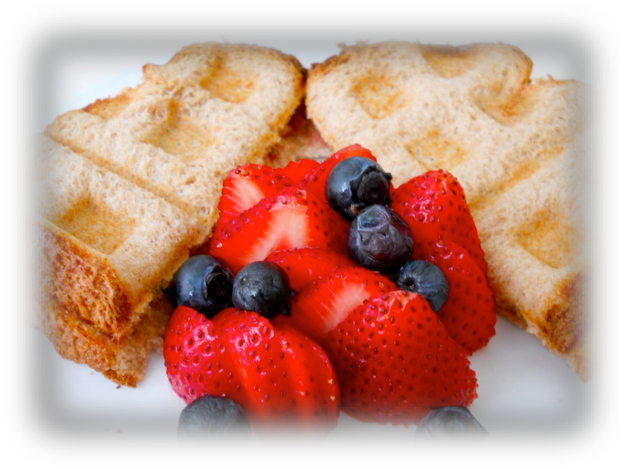
Iron Intake Looks Like…

  Female athletes need more

  Not enough iron: fatigue and weakness, pale skin , rapid heartbeat, irritability, decreased appetite



Training Fuels



Pre-Exercise

When: 1–4 hours before

What:

•  High carbohydrate

•  Moderate protein

•  Fluids (250-500 ml)

•  Low fat

•  Low fiber

•  Easy to digest



…Keep fueling

Back to back race/comp/training

< 30 min between – liquid CHO

30–2 hrs – easy digest CHO

>2 hrs CHO + Pro (meal or snack)

If race time variable, weather dependant keep sipping sport drink every 15 min.



During Exercise

**When:** during exercise

< 90 min

> 90 min CHO

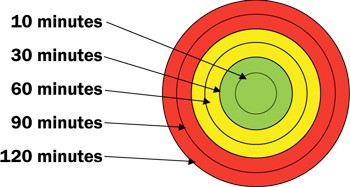
**What:** Easy to digest CHO, liquid or solid

Examples:

  Sport drink

  Energy bar

  Banana



Recovery

When: < 30 min. What:

•  High carbohydrate

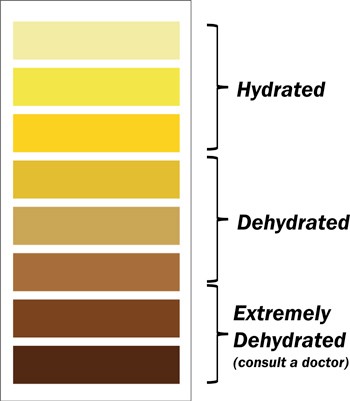
•  Moderate protein (0.25–3 g/kg BW

protein, ~ 15–25 g)

•  Fluids

•  Low fat

•  Easy to digest



Hydration

  Dehydration decreases performance, especially in hot climates.

  Drink before you are thrisy.

  Water bottle with you all day and drink it.

  Check nutrition record?



Timing is Key

**T.N.T. Training + Nutrition Timeline**

**TRAINING:**

**When to fuel up for optimal performance and recovery**

7:20- 8:20

12:30 – 2:30

**6am 8:30 am 11am 12pm 1pm 2pm 3pm 4pm 5pm 6pm 7pm 8pm**

**Fluids**

**Breakfast**

Recovery Snack/ Breakfast#2

Lunch

**Fluids +**

**carbs**

Recovery Snack (30 min)

**Dinner**

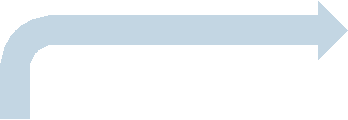
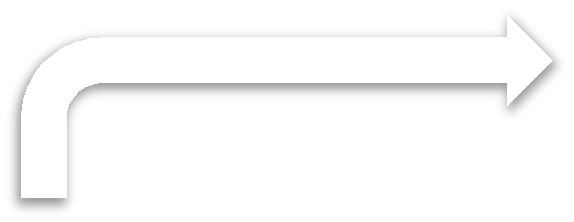
Evening

Snack



•  Eat every 2-3 hours

•  Have a high CHO evening snack before bed if training in morning



Plan Pack Perform

•  Do not rely on fast-food

•  Stock your training bag with high CHO foods

& drinks

•  Make a list for & go shopping as a family.

**Planning: What do you need?**



•  **Before morning training?**

–  Cereal and juice

–  Yogurt and banana

–  Crackers and milk

•  **After morning training?**

–  Water

–  Bagel and peanut butter

–  Bag of cereal, milk

•  **At lunch?**

–  Bread, meat, veggies, fruit & milk

•  **After school?**

–  Baby Carrots/hummus

–  Fruit bar or raisins

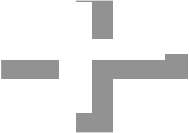
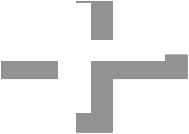
•  **After practice?**

–  Water

–  Yogurt or bar, fruit

•  **Dinner (a real one)**

•  **Bedtime carb snack**



Design Your Post Exercise

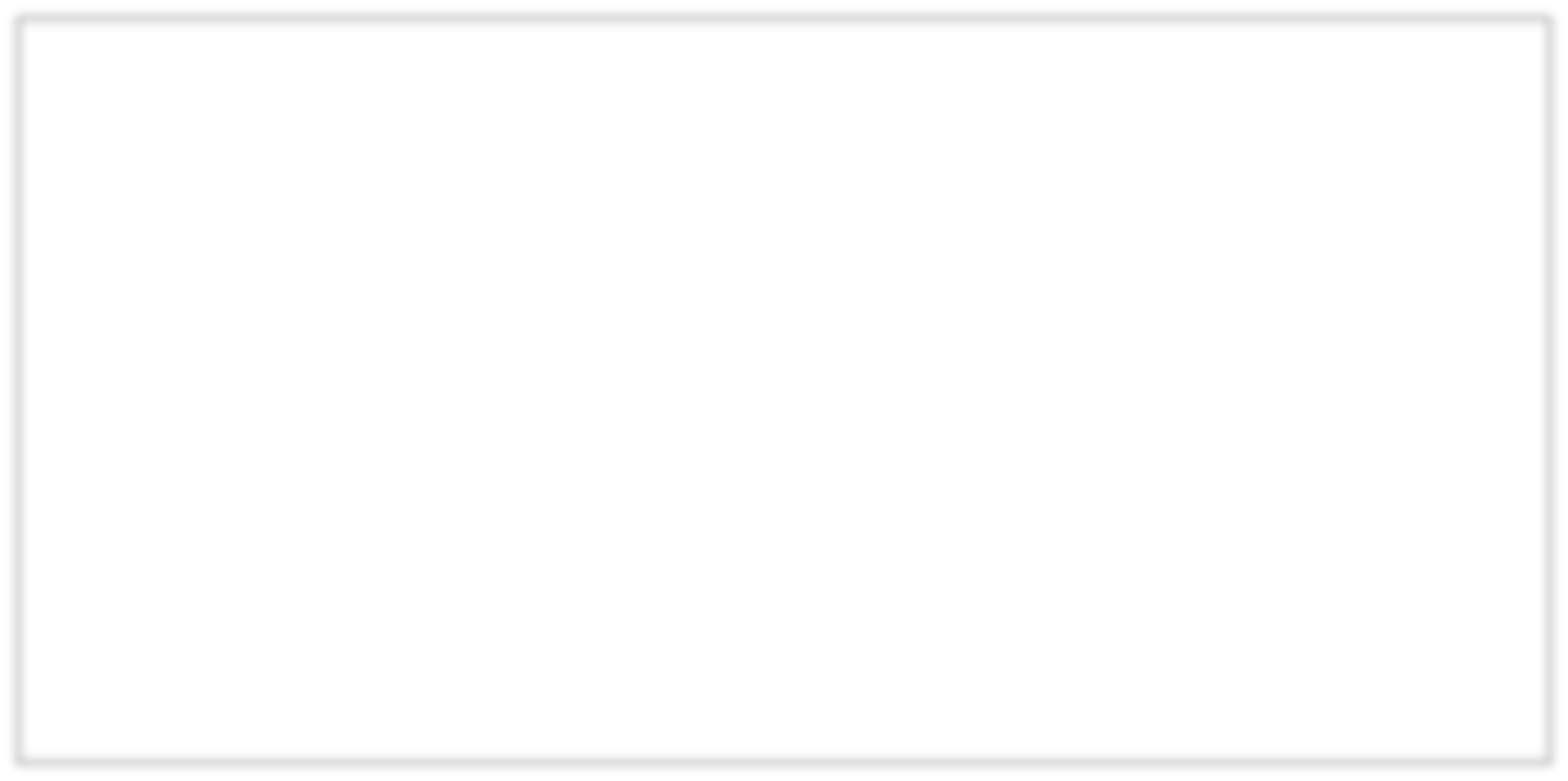
Nutrition

  Using list of carb & protein foods in handout

  Design 2 new recovery snacks or meals to meet your individual needs



90/10 Rule



Questions?

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