

Sports Nutrition

**WHY
ACT
NOW**

Things You Need To Know





**WHY
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Sports Nutrition

Who are we?



UNIVERSITY OF ALBERTA
FACULTY OF MEDICINE & DENTISTRY

Indigenous & Global Health
Research Group

Nutrition and health researchers



Sports Nutrition

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Centennial Professor

Endowed Chair in Indigenous Health

Professor in Indigenous and Global Health

Department of Medicine

Faculty of Medicine & Dentistry

University of Alberta





Sports Nutrition

What will you learn:

- What does food do for our bodies
- Importance of drinking water
- Proper sports nutrition (before, during & after)
- Living the best life



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Food consumed provides either macro- or micro-nutrients

Macronutrients = nutrients that give us calories (energy)

“Macro” means big, so we need these in large amounts





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Macronutrients

Fat, carbohydrates, protein





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Why do we need Fat?

- Gives energy (has the most calories per gram)
- Helps absorb certain vitamins
- Gives food good taste, consistency & stability

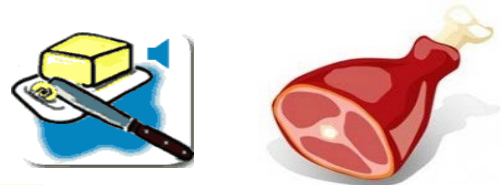




Macronutrients

Three main types of fat:

Saturated fat:



Trans fat:



Unsaturated fat :

Monounsaturated fats

Polyunsaturated fats

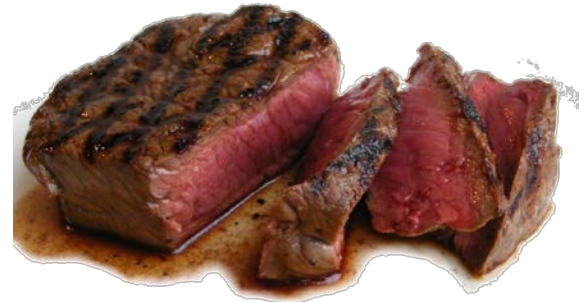




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Why do we need Protein?

- Preserving muscle in the body
- Energy, when carbs have been used up in the body
- Feeling full longer





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Protein Powder

Ever heard *“eat more protein to gain more muscle”...*

Is this true??





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Protein Powder

NOT AT ALL. This is the real truth...

More protein does NOT always mean more muscle



Too much protein will be converted & stored as FAT in the body



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Protein

If an athlete needs more protein, it's very easy to get it by consuming **extra servings** of Meat & Alternatives like lean beef, fish, eggs, and chicken!

Foods are cheaper and healthier than protein powder!

Protein powders are highly processed and don't deliver the additional nutrients you get from a whole food like meat and nuts



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There are great food sources of protein

Complete Proteins:

6 oz Lean Flank Steak	= 36 grams of protein
1 Can Tuna	= 32 grams of protein
1 Slice Cheddar Cheese	= 7 grams of protein
2 Large Eggs	= 12 grams of protein

These foods are unique nutrient packages!

Beef comes with lots of iron.
Tuna gives you healthy omega-3 fats.
Cheese is packed with calcium.
Eggs contain vitamin B12.

Make sure you
eat a variety of
these nutrient
packages!

Think you know beef?

Here's how beef stacks up¹



1 serving = 75 g **Cooked Beef**²

26 g Protein



Almonds

Approx 3.5 servings

2.5 mg Iron



Salmon

Approx 6.5 servings

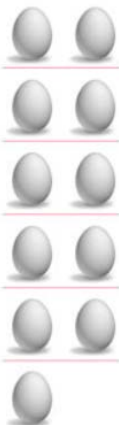
1.83 µg Vitamin B₁₂



Boneless Chicken Breast

Approx 7 servings

6.5 mg Zinc



Eggs

Approx 5.5 servings

Compared to other protein sources, lean beef packs protein, vitamin B12, as well as Iron and Zinc!

Image modified from: <http://thinkbeef.ca/wp-content/uploads/2017/02/Think-you-know-Beef-Poster-663x1024.jpg>

Beef is a great nutritional food!

**RETHINK
BEEF**
thinkbeef.ca



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Plant-based Proteins:

1 handful pumpkin seeds	= 9 grams of protein
1 cup long grain brown rice	= 5 grams of protein
1 cup canned black beans	= 15 grams of protein
0.5 cup peas	= 5 grams of protein
½ package of spinach	= 4.5 grams of protein

Animal proteins (meat, poultry, eggs and fish) are more nutrient dense than plant proteins.

To get the same protein as in 3 oz. beef,
You need 6.5 tablespoons of peanut butter!!!

Nuts and legumes have an extra benefit of fibre.

Seeking Protein?

Here's what 26 g of protein looks like



1 serving = 75 g **Cooked Beef**¹

Peanut Butter
Approx 3.5 servings



1 serving = 2 tbsp

Hummus
Approx 2 servings



1 serving = 3/4 cup

Black Beans
Approx 2.5 servings



1 serving = 3/4 cup

Compared to other vegetable based protein sources, Beef packs protein!!

Image modified from: <http://thinkbeef.ca/wp-content/uploads/2017/02/Seeking-Protein-Poster-663x1024.jpg>

What does protein look like?





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What does
your **protein**
look like?

↑ Let's watch!



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Why do we need carbs?

- The body's main source of fuel
- Stored in the muscle and liver and later used for energy





Carbohydrates

Sources





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Micronutrients

Vitamins & Minerals

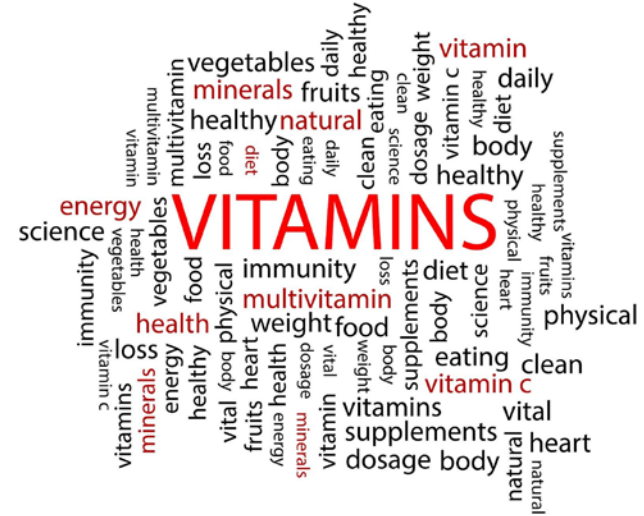
Vitamins...

maintain your body functions
and protect you from disease



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- essential to maintain normal function and health of your body





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Different vitamins play different roles

Vitamins A, C & E: Build immune system

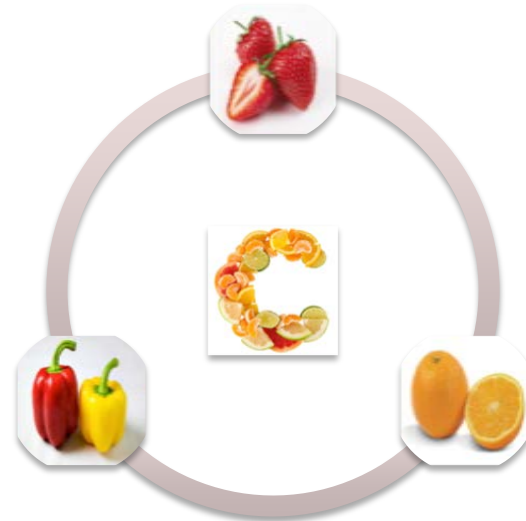
Vitamin A & D: Growth & repair





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Food sources of vitamins:

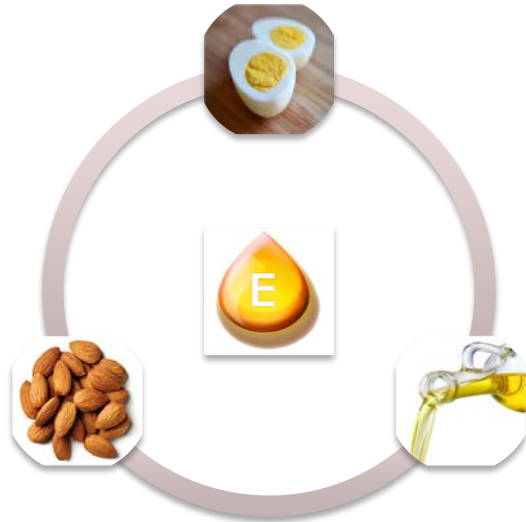




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Food sources of vitamins:





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Vitamin



- helps release energy from foods

Food sources: Instant Oatmeal (B3) Tuna (B6) Cottage Cheese (B2)



Beef has all these B vitamins *plus* B12



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Minerals...

- needed in small amounts
- body cannot make
must obtain through healthy, balanced diet





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Common Minerals:

Calcium

Iron

Magnesium

Potassium

Zinc

Phosphorus

Selenium





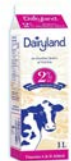
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Calcium

- builds bones & teeth, helps keep them strong
- slows down bone loss as you get older
- helps muscles work properly (like your heart)

Food sources:

Milk



Cheese



Yogurt





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Lactose Intolerant?

In addition to milk, there are other sources of calcium.

Food sources:

Salmon

Spinach

Tofu





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Iron

- carries oxygen in your blood to all parts of the body
- prevents you from feeling tired



Iron is especially important for:

- **children:** period of growth and development (Iron deficiency in childhood may cause irreversible developmental delays)
- **women:** prone to iron deficiency due to menstruation





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Iron Food Sources

Beef



Fish



Chickpeas



Nuts/Seeds



Some tips:

- Dark meats (lamb, beef, pork) contain more iron than white meat (chicken). Dark chicken meats (legs and thighs) contain more iron than chicken breast.
- The iron in plant sources is called “non-heme” iron and is not well absorbed by the body. Eating non-heme iron foods with meat or vitamin C-rich foods help the absorption. A great example is chili – it has beans, beef, and tomato!



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Magnesium

- keeps nerves & muscles strong
- Important for heart health

Food sources: Spinach



Black beans



Sunflower seeds





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Potassium

- keeps fluids balanced in nerves & tissues
- allows nerves and muscles to work together

Food sources: Banana



Orange Juice



Avocado





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Zinc

- helps the body use other nutrients
- maintains healthy immune system, muscle repair

Food sources:

Beef



Cheese



Eggs





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Phosphorus

- makes up parts of every cell
- helps the body use stored energy

Food sources: Bran Flakes



Milk



Beef





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Selenium

- keeps cells healthy
- keeps immune system healthy and prevents disease

Food sources: Cottage Cheese



Nuts



Beef





**WHY
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- Hydration
 - Water





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Why is Water so important???

- Water makes up 60-70% of our body weight
- Some foods we eat also contain water

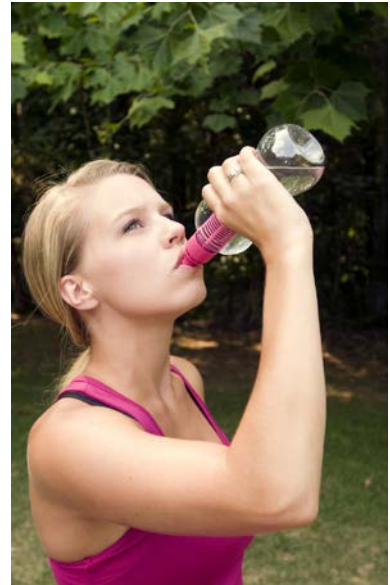




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What does water do in our body?

- carries nutrients
- cools the body (sweat)
- cushion for organs/joints

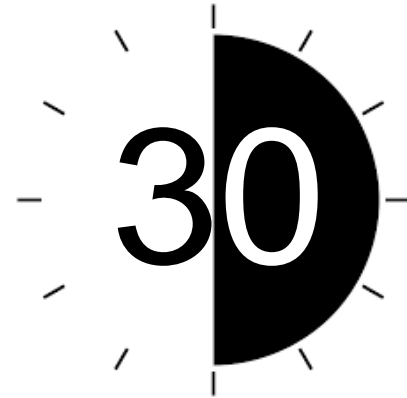




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Water is the best choice of fluid during sports!
You need 1 cup of water every 30 minutes during
activity



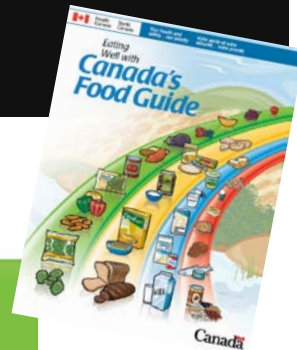


Sports Nutrition

- Proper Sports Nutrition
 - Daily
 - Before sport
 - During sport
 - After sport

























Sports Nutrition



Recommended Number of Food Guide Servings per Day

Age in Years Sex	Children			Teens		Adults			
	2-3	4-8	9-13	14-18	19-50	51+			
	Girls and Boys	Girls and Boys	Girls and Boys	Females	Males	Females	Males	Females	Males
Vegetables and Fruit	4	5	6	7	8	7-8	8-10	7	7
Grain Products	3	4	6	6	7	6-7	8	6	7
Milk and Alternatives	2	2	3-4	3-4	3-4	2	2	3	3
Meat and Alternatives	1	1	1-2	2	3	2	3	2	3

What is One Food Guide Serving? Look at the examples below.

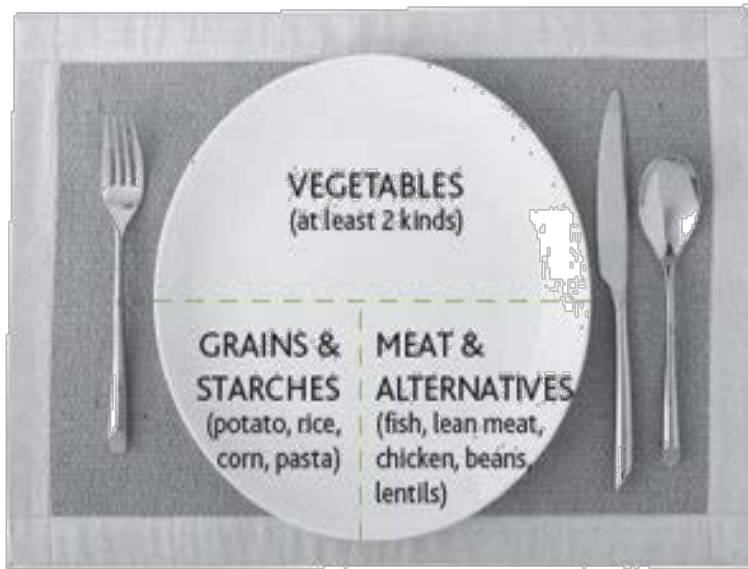
 Fresh, frozen or canned vegetables 125 mL (½ cup)	 Leafy vegetables Cooked: 125 mL (½ cup) Raw: 250 mL (1 cup)	 Fresh, frozen or canned fruits 1 fruit or 125 mL (½ cup)	 100% Juice 125 mL (½ cup)		
 Bread 1 slice (35g)	 Bagel ½ bagel (45 g)	 Flat breads ½ pita or ½ tortilla (35 g)	 Cooked rice, bulgur or quinoa 125 mL (½ cup)	 Cereal Cold: 30 g Hot: 175 mL (¾ cup)	 Cooked pasta or couscous 125 mL (½ cup)
 Milk or powdered milk (reconstituted) 250 mL (1 cup)	 Canned milk (evaporated) 125 mL (½ cup)	 Fortified soy beverage 250 mL (1 cup)	 Yogurt 175 g (¾ cup)	 Kefir 175 g (¾ cup)	 Cheese 50 g (1 ½ oz.)
 Cooked fish, shellfish, poultry, lean meat 75 g (2 ½ oz.)/125 mL (½ cup)	 Cooked legumes 175 mL (¾ cup)	 Tofu 150 g or 175 mL (¾ cup)	 Eggs 2 eggs	 Peanut or nut butters 30 mL (2 Tbsp)	 Shelled nuts and seeds 60 mL (¼ cup)



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What does a healthy meal look like?



This **Balanced Plate** gives you an idea about portion size using a dinner plate



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Daily

- Optimal sports nutrition starts with making **healthy choices** and following a **healthy eating** schedule every day!
- Eat every 2-3 hours, which should include 3 meals and 3 snacks





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Benefits of healthy eating every 2-3 hours:

- 1) Curbs your hunger. Less likely to make impulsive FOOD purchases.
- 1) Blood sugar levels are stable throughout the day = normal brain function, increased energy/alertness.
If unstable, you will feel weak and will find it difficult to be physically active and work at maximum capacity.



Sports Nutrition

Daily

- Don't skip meals. Include at least 3 food groups at a meal
- Choose snacks that include 2 of the 4 food groups
- Focus on high quality whole foods that provide fibre and protein
- Avoid packaged, processed foods like bars, shakes, and fast foods





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Daily

- By focusing on developing healthy eating habits and making healthy food choices on a daily basis, this places your body in an **optimal state** to output your best performance.





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Homemade Meal

Homemade roast beef sandwich
whole wheat bread, lean roast beef,
tomato, lettuce,
with lemon-lime water



Cost for 5 days = \$14.49

- Saves you money
- High in protein, fibre,
vitamins/minerals,

What your body needs to be healthy!

Fast Food Meal

Take out roast beef sandwich
with fries & soft drink



Cost for 5 days = \$31.50

- Spend more money in a week
- High in calories, fat, sugar & salt,

Which one will you choose?



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Before Sport Meals

Start your day off right with any of these breakfast choices:

Breakfast
Burrito



Smoothie



Yogurt
Parfait



Microwave Mug
Scramble



Overnight
Oats





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Before Sport

2-4 hours prior - Eat a **MEAL**

- Meal should contain all 4 food groups
- Should be moderate in protein & low in fat
- Drink 1-2 cups of water





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Before Sport

2-3 hours prior meal examples:

- Lean roast beef on whole grain bread with low-fat cheese, mustard and unsweetened apple sauce
- 2 slices whole grain toast with natural peanut butter, a piece of fruit and cup of 1% milk
- Bowl of soup
- Omelette with whole grain toast



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Carbohydrate rich/moderate protein examples:

- Fruit (*ex. banana, apple, strawberries*)
- Fruit smoothies
- Whole grain bread or cereal
- 1% milk fat dairy (*ex. yogurt, cottage cheese, skim milk*)
- Lean beef in a wrap



Best to avoid: *Orange juice, granola bars, chips, muffins*



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Before Sport Meals

WAN approved meals

SOUP is a great meal choice:

- Pack it with your choice of protein (beef, chicken, fish)
- Contains fluid which aids with your body's hydration
- Can add your choice of vegetables for solids
- Overall, high carbohydrate, fibre & protein rich that will keep you feeling fuller for longer because it takes longer to empty from the stomach
- **PLUS, it's cheap and you can take it to-go!**



Sports Nutrition

Crockpot Lentil Soup



Ingredients:

- * 1 cup dry lentils
- * 1 ½ cups carrots, chopped
- * 1 ½ cups celery, chopped
- * 1 ½ cups onions, chopped
- * 3 garlic cloves
- * 1 tsp dried basil
- * 1 tsp dried oregano
- * ½ tsp dried thyme
- * 1 tbsp dried parsley
- * 2 bay leaves
- * 3 ½ cups vegetable broth, no salt added
- * 1½ cups water
- * 14 oz can diced tomatoes, no salt added, undrained
- * Pepper to taste

Directions:

Rinse lentils, then place all ingredients, except pepper, into a 6 quart slow cooker. Cover and let cook on high for at least 5 hours. Remove bay leaves and season with pepper.

Makes 8 servings.

Before Sport Meals WAN approved meals

Did you know? Lentils provide amazing health benefits! They are low in fat, high in protein, easy to digest and are inexpensive.

Nutrition Facts

Serving Size 1
Calories 132

Amount Per Serving	% Daily Values*	Amount Per Serving	% Daily Values*
Total Fat 0g	0%	Total Carbohydrate 24g	8%
Saturated Fat 0g	0%	Dietary Fiber 4g	16%
Trans Fat 0g		Sugars 6g	
Cholesterol 0mg	0%	Protein 8g	16%
Sodium 436mg	18%		
Vitamin C 24%			
Folate 33%			

*Percent Daily Values are based on a diet of other people's secrets.

Recipe adapted from: <http://www.food.com/recipe/lentil-veggie-soup-crock-pot-109607>



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Grilled Cheese & Tomato Chickpea Soup



Ingredients:

- * 1 lb Roma tomatoes
- * 2 tbsp olive oil
- * 1 yellow onion, chopped
- * 4 cloves garlic, minced
- * 1 tsp cumin
- * ½ tsp paprika
- * ½ tsp cinnamon
- * 3 x 15 oz can chickpeas, no salt added
- * 4 cups chicken broth, no salt added
- * 1 tbsp light sour cream
- * Pepper to taste
- * 12 slices rye bread, thin
- * 6 tbsp cheddar cheese, reduced fat, shredded

Directions:

Preheat oven to 450°F. Slice tomatoes in half, place in bowl and add 1 tbsp olive oil and pepper. Mix to coat evenly, then place in a single layer on a baking sheet. Roast for about 30 minutes, until tomatoes are caramelized, then let cool. Next, using a large pot, add another 1 tbsp olive oil and sauté onion and garlic until soft. Then add cumin, paprika and cinnamon, stir often for about 2 minutes. Add in chickpeas, chicken broth and roasted tomatoes. Stir and bring to a boil. Reduce heat and let simmer for about 45 minutes until chickpeas are tender then let cool. Transfer in batches to a blender and puree. Once all pureed, return to pot, stir in sour cream and pepper to taste. Make grilled cheese by adding 1 tbsp cheddar cheese between 2 slices of rye bread. Grill on pan until toasted.

Makes 6 servings.

Before Sport Meals WAN approved meals

This recipe packs chickpeas which are high in fibre & protein!

Recipe adapted from: <http://relish.com/recipes/chickpea-and-roasted-tomato-soup-with-fried-rosemary/>

Nutrition Facts

Serving Size 1
Calories 420

Amount Per Serving	% Daily Values*	Amount Per Serving	% Daily Values*
Total Fat 10g	15%	Total Carbohydrate 64g	21%
Saturated Fat 2g	10%	Dietary Fiber 12g	48%
Trans Fat 0g		Sugars 5g	
Cholesterol 6mg	2%	Protein 19g	38%
Sodium 428mg	18%		
Vitamin C 27%		Calcium 26%	
		Thiamin 19%	

*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

Calories	2,000	2,500
Total Fat	Less than 65g	80g
Sat Fat	Less than 20g	25g
Cholesterol	Less than 300mg	300mg
Sodium	Less than 2,400mg	2,400mg
Total Carbs	300g	375g
Dietary Fiber	25g	30g



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Hearty Beef Minestrone Soup



Ingredients:

- * 1 lb (500 g) Extra Lean Ground Beef
- * 1 large onion, chopped
- * 4 cloves garlic, minced
- * 3 cups (750 mL) frozen mixed vegetables
- * 1 1/2 tsp (7 mL) dried Italian seasoning
- * 1/4 tsp (1 mL) chili pepper flakes (optional)
- * 1 can (28 oz/796 mL) low sodium diced tomatoes
- * 1 pkg (900 mL) sodium-reduced chicken broth
- * 1 can (213 mL) low-sodium tomato sauce
- * 1 cup (250 mL) shredded fresh spinach
- * 1/4 cup (50 mL) chopped fresh parsley
- * 1/2 cup (125 mL) broken whole wheat spaghetti or other pasta
- * 1/2 cup (125 mL) kidney beans, drained, rinsed

Directions:

Makes 8 servings.

Cook beef, onion, garlic, frozen mixed vegetables, Italian seasoning and chili pepper flakes (if using) in Dutch oven over medium-high heat for 10 to 15 minutes or until meat is thoroughly cooked and any liquid has evaporated.

Add tomatoes, broth and tomato sauce; bring to boil. Reduce heat and simmer for 15 minutes.

Before Sport Meals WAN approved meals

This recipe packs vegetables, beans and beef which are excellent sources of carbohydrates, protein, fibre vitamins and minerals!

Amount Per Serving		% Daily Value*	Amount Per Serving	% Daily Value*
Total Fat 4.5g		7%	Sodium 380mg	16%
Saturated Fat 2g		10%	Total Carbohydrate 19g	6%
Trans Fat 0g			Dietary Fiber 4g	16%
Cholesterol 35mg		12%	Sugars 5g	
Potassium 620mg		18%	Protein 19g	38%
Vitamin A 30%			Percent Daily Values are based on a diet of other people's secrets.	
Thiamin 0%			Your Daily Values may be higher or lower depending on your calorie needs.	
			Calories 200	
			Total Fat 4.5g	
			Saturated Fat 2g	
			Trans Fat 0g	
			Cholesterol 35mg	
			Sodium 380mg	
			Total Carbs 19g	
			Dietary Fiber 4g	
			Sugars 5g	
			Protein 19g	
			Vitamin A 30%	
			Thiamin 0%	
			Iron 20%	



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Strawberry Banana Dog



Ingredients:

- * 1 banana, medium
- * 2 tbsp peanut butter, natural, no added salt
- * 2 whole wheat tortilla, small
- * Dash of cinnamon
- * 4 strawberries, medium, sliced
- * 2 tsp dark chocolate chips

Directions:

Makes 2 servings.

Peel banana and slice in half lengthwise. Next cut in half so you have 4 equal slices. Spread a tablespoon of peanut butter onto a whole wheat tortilla, add 2 slices of banana and the equivalent of 2 sliced strawberries. Finish with a dash of cinnamon and teaspoon of dark chocolate chips. Roll and enjoy!

Before Sport Meals WAN approved meals

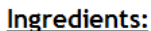
This recipe is high in carbohydrates and packs potassium & vitamin C which will help fuel your brain and muscles!

Recipe adapted from: <http://www.unconventionalkitchen.com/easy-banana-roll-ups-5-minute-lunch-that-is-not-peanut-butter-and-jelly/>

Nutrition Facts		Amount Per Serving		% Daily Values*	
Serving Size 1		Total Fat 13g		20%	
Calories 272		Saturated Fat 2g		10%	
		Trans Fat 0g		0%	
		Cholesterol 0mg		0%	
		Sodium 301mg		13%	
		Total Carbohydrate 40g		13%	
		Dietary Fiber 17g		68%	
		Sugars 16g		32%	
		Protein 12g		24%	
		Vitamin C 32%		64%	
		Calcium 11%		22%	
		Vitamin B6 11%		22%	

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Sunny Up Eggs Toast with Avocado



- * 4 eggs
- * 1 avocado, sliced thin, 8 pieces
- * 1 tomato, sliced thin, 8 pieces
- * 4 slices rye bread, sliced thin
- * 4 cups milk, 2%
- * Canola oil spray
- * Pepper to taste

Directions:

Spray large pan with oil. Heat pan to medium-high. Crack 4 eggs onto pan, season with pepper and let cook to desired texture. You can serve them sunny side up or flip over to make over easy or over medium. Place rye bread in toaster. Place egg on toast and top with 2 tomato slices and 2 avocado slices. Serve with a glass of cold milk.

Makes 4 servings.

Before Sport Meals

WAN approved meals

This recipe is a nutrient powerhouse - rich in healthy fats and protein!

Nutrition Facts	Amount Per Serving	% Daily Values*	Amount Per Serving	% Daily Values*	*Percent Daily Values are based on a diet of other people's secrets.
Total Fat 18g		26%	Total Carbohydrate 27g	9%	
Saturated Fat 4g		20%	Dietary Fiber 5g	20%	
Trans Fat 0g			Sugars 15g		
Cholesterol 202mg		67%	Protein 17g	34%	
Sodium 314mg		13%			
Calcium 34%			Vitamin D 32%		
			Riboflavin 49%		
			Vitamin B12 37%		



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Carrot Apple Slaw



Ingredients:

- * 10 oz shredded carrots
- * 4 cups Granny Smith apples, cut into matchstick slices
- * ½ cup raisins (not packed)
- * ¼ cup plain Greek yogurt
- * 1 tbsp light mayonnaise

Directions:

Whisk together yogurt and mayonnaise in a large bowl. Add in carrots, apples and raisins. Toss well to coat evenly. Add honey if you desire a sweeter salad.

Makes 6 servings.

**Nutrition
Facts**
Serving Size 1
Calories 111

Amount Per Serving	% Daily Values*	Amount Per Serving	% Daily Values*	Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.	
Total Fat 1g	2%	Total Carbohydrate 25g	8%	Calories	2,000 2,500
Saturated Fat 0g	0%	Dietary Fiber 4g	16%	Total Fat	Less than 65g 80g
Trans Fat 0g		Sugars 15g		Sat Fat	Less than 20g 25g
Cholesterol 1mg	0%	Protein 2g	4%	Cholesterol	Less than 300mg 300mg
Sodium 37mg	2%			Sodium	Less than 2400mg 2400mg
Vitamin A 28%				Total Carbs	300g 375g
				Dietary Fiber	25g 30g

Before Sport Meals WAN approved meals

This recipe is an excellent pre-activity choice as it is high in carbohydrates to fuel your muscles!

Carrots are a great source of vitamin A and apples are a great source of vitamin C



Sports Nutrition

Simple Hummus



Ingredients:

- * 15 oz can chickpeas, no salt added, drained, rinsed
- * 2 tbsp water
- * 2 tbsp olive oil
- * 1 tbsp lemon juice
- * 1 clove garlic, minced
- * ¾ tsp cumin
- * ¼ tsp paprika

Directions:

Makes 8 servings.

Place all ingredients, except paprika, into a food processor. Process until mixture is smooth and creamy, you can add up to 2 more tablespoons of water if needed. Transfer to bowl, sprinkle with paprika, cover and refrigerate.

Before Sport Meals
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This recipe packs chickpeas which are a great source of protein and will keep you feeling full!

Nutrition Facts	Amount Per Serving		% Daily Values*		Amount Per Serving		% Daily Values*		*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.
	Total Fat 8g		12%		Total Carbohydrate 20g		7%		
Serving Size 1	Saturated Fat 1g		5%		Dietary Fiber 4g		16%		
Calories 172	Trans Fat 0g				Sugars 1g				
	Cholesterol 0mg		0%		Protein 6g		12%		
	Sodium 26mg		1%						



Sports Nutrition

Beef and Broccoli Rigatoni



Ingredients:

- * 2 cups (500 mL) chopped broccoli
- * 2 tbsp (30 mL) extra-virgin olive oil
- * 1 onion, chopped
- * 3 cloves garlic, minced
- * 1/4 tsp EACH salt and hot pepper flakes
- * 2 tbsp all-purpose flour
- * 2 cups (500 mL) tomato juice
- * 2 cups (500 mL) slivered cooked roast beef
- * 2 green onions, thinly slice
- * 1 cup (250 mL) shredded cheddar cheese
- * Iceberg lettuce
- * 1 cup whole wheat pasta

Directions:

Makes 8 servings.

Cook pasta in boiling salted water for 6 minutes. Add broccoli; cook until pasta and broccoli are tender, about 4 minutes. Drain.

Meanwhile, in deep skillet, heat oil over medium-high heat; add onion, garlic, salt and hot pepper flakes; cook until softened, about 3 minutes. Stir in flour, cook, stirring constantly, for 1 minute. Whisk in tomato juice; bring to boil. Reduce heat and simmer, stirring occasionally, until thickened, about 4 minutes.

Stir in beef, pasta mixture and green onions; cook to heat through, about 3 minutes. Toss with Cheese.

Before Sport Meals WAN approved meals

A great way to get vegetables and protein into a pasta dish; high in carbs but it incorporates beef and vegetables which pack nutrients!

Nutrition Facts		Nutrition Facts		Nutrition Facts	
Amount Per Serving	% Daily Value*	Amount Per Serving	% Daily Value*	Amount Per Serving	% Daily Value*
Total Fat 5g	9%	Sodium 210mg	9%	Total Fat 5g	9%
Saturated Fat 1.5g	8%	Total Carbohydrate 29g	10%	Saturated Fat 1.5g	8%
Trans Fat 0g		Dietary Fiber 4g	16%	Trans Fat 0g	
Cholesterol 25mg	8%	Sugars 4g		Cholesterol 25mg	8%
Potassium 490mg	14%	Protein 20g	40%	Potassium 490mg	14%
Vitamin A 6%				Vitamin A 6%	
Zinc 40%				Zinc 40%	

*Percent Daily Values are based on a diet of other people's secrets.



Sports Nutrition

Mediterranean Beef Panini



Ingredients:

- * 4 whole wheat panini buns
- * 3 tbsp (45 mL) hummus
- * 1 tbsp (15 mL) prepared pesto sauce
- * 2 cups (500 mL) roasted vegetables such as mushrooms, zucchini, eggplant, onions, sweet red and yellow peppers and/or plum tomatoes
- * 2 cups (500 mL) slivered thinly sliced cooked roast beef

Directions:

Slice buns in half; set aside.
Mix hummus with pesto sauce; spread on inside of each bun.
Top each with 1/2 cup (125 mL) roasted vegetables and 2 oz (60 g) sliced roast beef.

Makes 5 servings.

Before Sport Meals WAN approved meals

**This recipe packs fibre,
keeping you energized
throughout your sport!**

Nutrition Facts		Amount/serving	% Daily Value*	Amount/serving	% Daily Value*
Serving size 1 sandwich (216g)		Total Fat 11g	14%	Total Carbohydrate 24g	9%
Calories per serving 320		Saturated Fat 3.5g	18%	Dietary Fiber 4g	14%
		Trans Fat 0g		Total Sugars 5g	
		Cholesterol 55mg	18%	Includes 0g Added Sugars	0%
		Sodium 320mg	14%	Protein 26g	52%
		Vitamin D 0.4mcg	2%	• Calcium 78mg	6%
		Potassium 799mg	15%	• Iron 6.3mg	35%
		Zinc	70%	• Vitamin A	6%
				• Vitamin C	15%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.



Sports Nutrition

Before Sport

1 hour prior - Eat a **SNACK**

- Snack should contain 2 of the 4 food groups
- Try fibre-rich snack, which slowly releases energy to sustain activity!
- Drink 1 cup of water



Sports Nutrition

Before Sport

1 hour prior snack examples:

- Low fat yogurt & banana
- Low fat cottage cheese with pear
- Roast beef on whole grain bread
- Hummus & whole wheat pita
- Apple slices & almonds





**WHY
ACT
NOW**

Sports Nutrition

Before Sport

Buying healthy snacks is super affordable!

\$20 of snacks can last you 1 week or more.

2 EXAMPLES: A Week's Worth of Healthy Snacks for \$20.00

454g	Dole Strawberries, whole	\$2.88 (on sale, reg. 4.99)
2lb/907g bag	Compliment's Peeled Baby Carrots	\$2.99
835g (5 pieces)	Del Monte Banana	\$1.45
4 pack	Grapple (apple that tastes like grape)	\$3.99
500g	Beatrice 2% Cottage Cheese	\$4.09
2lb/907g bag	Mandarins	\$3.99 (on sale, reg. \$5.49)

TOTAL = \$20.35 (with GST)

8oz/227g bag	Mann's Snap Peas	\$2.88 (on sale, reg. \$3.49)
12oz/340g	Compliment's Garden Salad	\$1.99
1	Del Monte Pineapple, whole	\$3.99
12	Compliment's Large Eggs	\$2.69
600g bag	Compliment's Frozen Wild Jumbleberry Fruit Blend	\$5.99
650g	Astro Original Vanilla Yogurt	\$2.49 (on sale, reg. \$3.99)

TOTAL = \$21.05 (with GST)



WHY ACT NOW

Sports Nutrition

Before Sport Snacks

WAN approved snacks

WHY ACT NOW

CELERY TRACKS



Ingredients

- 1 large celery stalk
- 1 tablespoon natural peanut or almond butter
- 1 small package raisins or dried cranberries

Nutrition Facts

Serving Size 1	
Amount Per Serving	% Daily Value*
Calories 127	
Total Fat 1g	2%
Saturated Fat 1g	2%
Trans Fat 0g	0%
Sodium 0mg	0%
Total Carbohydrate 35g	13%
Dietary Fiber 4g	16%
Sugars 21g	
Protein 1g	2%

*Percent Daily Values are based on a diet of other people's secrets.

Directions

Wash celery stalk, pat dry, cut in half or thirds. Spread nut butter into groove, top with raisins or cranberries. *Makes 1 serving.*

Celery is great for your digestive system and peanut butter is packed with nutrients, healthy fats, protein and fiber!

Recipe adapted from: <http://www.jingfoods.com/recipes/celery-sticks-as-a-sig-83679>

WHY ACT NOW

APPLE STACKS



Ingredients

- 1 medium apple
- 2 tablespoons natural peanut or almond butter
- 2 tablespoons flake oats
- Miniature box of raisins
- Sprinkle of cinnamon

Nutrition Facts

Serving Size 1	
Amount Per Serving	% Daily Value*
Calories 151	
Total Fat 17g	34%
Saturated Fat 3g	6%
Trans Fat 0g	0%
Sodium 4mg	0%
Total Carbohydrate 47g	16%
Dietary Fiber 3g	12%
Sugars 23g	
Protein 11g	22%

*Percent Daily Values are based on a diet of other people's secrets.

Directions

Wash apple, pat dry, remove core. Cut into 4 even slices. Spread nut butter, top with oats, raisins & cinnamon. *Makes 1 serving.*

Apples contain Vitamin C which helps your immune system. Peanut butter is packed with nutrients, healthy fats, protein and fiber!

Recipe adapted from: <http://www.ahandmadeheart.com/recipe-apple-stacks-with-peanut-butter-and-oats/>

WHY ACT NOW

BLUEBERRY POPPERS



Ingredients

- 1 cup blueberries, raw
- 1 container (170g) plain, non-fat Greek yogurt

Nutrition Facts

Serving Size 1	
Amount Per Serving	% Daily Value*
Calories 155	
Total Fat 1g	2%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Sodium 10mg	2%
Total Carbohydrate 27g	9%
Dietary Fiber 4g	16%
Sugars 20g	
Protein 10g	20%

*Percent Daily Values are based on a diet of other people's secrets.

Directions

Wash blueberries, pat dry. Dip blueberries in yogurt with toothpick. Evenly space on foil lined sheet. Freeze for 1 hour. *Makes 1 serving.*

Blueberries are rich in antioxidants and vitamin C and Greek yogurt is packed with protein that your body will love!

Recipe adapted from: <http://www.jessicahelms.com/2012/05/20/5-ways-to-get-your-blueberry-fix/>



WHY ACT NOW

Sports Nutrition

Before Sport Snacks

WAN approved snacks

WHY ACT NOW

AVOCADO SQUARES



Ingredients

- 1/2 avocado, sliced
- 2 rye crispbread/cracker
- 2 teaspoons light cream cheese
- Pepper to taste

Nutrition Facts	
Serving Size 2	
Amount Per Serving	Calories from Fat 140
Calories 254	
	% Daily Values*
Total Fat 17g	34%
Saturated Fat 3g	6%
Trans Fat 0g	
Sodium 107mg	4%
Total Carbohydrate 25g	9%
Dietary Fiber 10g	40%
Sugars 1g	
Protein 5g	8%

Directions

Cut avocado into even slices. Spread 1 teaspoon cream cheese onto cracker. Add avocado slices. Makes 2 servings.

Avocados are loaded with heart-healthy monounsaturated fats and have more potassium than a banana! Rye crackers are a great source of fiber.

Recipe adapted from: <http://www.ypc.ca/en-us/recipes/avocado-cream-cracker-squares>

WHY ACT NOW

STRAWBERRIES & CHEESE



Ingredients

- 2 large strawberries, sliced
- 4 tablespoons 2% cottage cheese
- 2 rye crispbread/cracker
- Sprinkle of cinnamon

Nutrition Facts	
Serving Size 2	
Amount Per Serving	Calories from Fat 17
Calories 134	
	% Daily Values*
Total Fat 2g	4%
Saturated Fat 1g	2%
Trans Fat 0g	
Sodium 206mg	9%
Total Carbohydrate 21g	7%
Dietary Fiber 6g	18%
Sugars 5g	
Protein 1g	18%

Directions

Spread 2 tablespoons of cottage cheese onto rye crispbread/cracker. Top with 1 sliced strawberry. Makes 2 servings.

Cottage cheese is a great source of calcium, which builds strong bones and teeth! Strawberries are a great source of vitamin C and fiber.

Recipe adapted from: <http://www.parents.com/kids/nutrition/healthy-snacks/10-beneficial-after-school-snacks/strawberry-cheese>

WHY ACT NOW

HUMMUS & VEGGIES



Ingredients

- 1/2 cup hummus, home prepared
- 8 baby carrots
- 1 celery stalk, large

Nutrition Facts	
Serving Size 1	
Amount Per Serving	Calories from Fat 140
Calories 256	
	% Daily Values*
Total Fat 11g	17%
Saturated Fat 1g	2%
Trans Fat 0g	
Sodium 411mg	17%
Total Carbohydrate 33g	11%
Dietary Fiber 10g	32%
Sugars 5g	
Protein 7g	14%

Directions

Cut celery stalk in half and then into smaller lengths. Dip carrots and celery into hummus. Try various hummus flavours! Makes 1 serving.

Hummus is made from chickpeas which are loaded with fiber and protein! It's a snack that will keep you feeling fuller for longer!

Recipe adapted from: http://www.canadianliving.com/food/snack_your_own_hummus.php



WHY ACT NOW

Sports Nutrition

Before Sport Snacks

WAN approved snacks

WHY ACT NOW

BERRY NUT POW



Ingredients

- 1 container (170g) plain, non-fat Greek yogurt
- 1/4 cup blackberries
- 1/4 cup raspberries
- 2 tablespoons raw almonds

Nutrition Facts	
Serving Size 1	
Amount Per Serving	Calories from Fat 95
Calories 105	% Daily Value*
Total Fat 10g	20%
Saturated Fat 1g	2%
Trans Fat 0g	0%
Sodium 100mg	2%
Total Carbohydrate 17g	6%
Dietary Fiber 5g	24%
Sugars 1g	
Protein 20g	40%

Directions

Place yogurt in a container or bowl, top with fruit and nuts. Try other fruits and nuts for different combinations! *Makes 1 serving.*

Almonds are heart and brain healthy nuts! They contain monounsaturated fats, vitamin E and fiber!

Recipe adapted from: <http://healthline.com/2011/11/greek-yogurt-berry-breakfast.html>

WHY ACT NOW

PEANUT ENERGY BITE



Ingredients

- 1/2 cup large flake oats
- 1/4 cup peanut butter
- 1/4 cup chocolate chips
- 1/3 cup shredded coconut
- 1/4 cup honey
- 1/2 teaspoons vanilla extract

Nutrition Facts	
Serving Size 2	
Amount Per Serving	Calories from Fat 44
Calories 117	% Daily Value*
Total Fat 5g	10%
Saturated Fat 2g	4%
Trans Fat 0g	0%
Sodium 80mg	2%
Total Carbohydrate 15g	6%
Dietary Fiber 1g	4%
Sugars 1g	
Protein 3g	6%

Directions

Combine all ingredients in bowl. Roll into 2 jumbo size balls. Refrigerate in airtight container until firm. *Makes 2 servings.*

These bites are a great on-the-go snack packed with protein! Easy to prepare, healthy, no bake bites that can be stored for up to 1 week in the refrigerator.

Recipe adapted from: <http://www.cheftoasting.com/2012/01/no-bake-energy-bites/>

WHY ACT NOW

POWERHOUSE SMOOTHIE



Ingredients

- 2/3 plain Greek yogurt
- 2/3 cup blueberries, frozen
- 1 cup baby spinach leaves
- 1/2 cup skim milk
- 3 strawberries, frozen
- 1 banana, medium

Nutrition Facts	
Serving Size 2	
Amount Per Serving	Calories from Fat 11
Calories 263	% Daily Value*
Total Fat 1g	2%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Sodium 125mg	3%
Total Carbohydrate 53g	18%
Dietary Fiber 7g	28%
Sugars 34g	
Protein 16g	32%

Directions

Add yogurt, spinach & milk to blender, whirl until smooth. Add remaining fruit & blend. If too thick, add a little more milk. *Makes 2 servings.*

Spinach is a super food - it's packed with vitamins, minerals and other nutrients but is low in calories! The high protein & fiber will keep you full.

Recipe adapted from: <http://www.dailysmoothies.com/2013/05/26/blueberry-spinach-smoothie/>



Sports Nutrition

During Sport

Healthy meals and snacks before sport give you enough energy during sport!

HYDRATE! DRINK H₂O !!



However, you may need to eat during sport when:

- you're taking part in an endurance activity for **over 1 hour**
(for example, triathlon, cross-country skiing)



Sports Nutrition

During Sport

If you do need to eat, you require...

carbohydrates for energy + **water** to keep hydrated!

Try 1 large banana, 1 medium orange, or 1 small box raisins with water!



Sports Nutrition

After Sport

If you plan to do another activity within 24 hours...

————→ Should eat within 30 minutes so muscles can refill their energy before the next activity!

Otherwise,
You can eat when hungry, at the next regular meal or snack.



Sports Nutrition

After Sport

What type of food should be chosen to refuel after sport?

1 medium banana + 1 cup low-fat milk

low-fat yogurt with frozen berries

whole grain toast with peanut butter + 1 small apple

dried fruit + 1 hard boiled egg



**WHY
ACT
NOW**

Sports Nutrition

After Sport

SMART TIP:

Pick snacks that you can easily carry in your bag!

That way after sport, when hunger strikes, you have a snack ready to eat!

ex. ¼ cup dried fruit + 1 large hard boiled egg



Sports Nutrition

Beef Cheeseburger Mini Meat Loaves



Ingredients:

- * 1 ½ lb (750 g) Extra Lean Ground Round or Chuck
- * 1 egg, beaten
- * 1 cup (250 mL) shredded low fat mozzarella cheese
- * ⅓ cup (75 mL) finely shredded onion (1 small)
- * ¼ cup (50 mL) dry bread crumbs
- * 1 tbsp (30 mL) and prepared mustard
- * ¼ tsp (1 mL) EACH salt and pepper
- * ½ cup (125 mL) low sodium tomato sauce

Directions:

Makes 12 servings.

Combine beef, egg, 1/2 cup (125 mL) of the cheese, onion, bread crumbs, relish, mustard, salt and pepper. Mix lightly but thoroughly to blend. Lightly spray 12 muffin or custard cups with cooking spray. Divide mixture among cups; make indentation in centre of each with back of spoon. Fill indentations with ketchup. Sprinkle each with remaining cheese, dividing equally. Bake in 375°F (190°C) oven for 25 to 30 minutes or until digital rapid-read thermometer inserted into meat portion of EACH reads 160°F (71°C).

After Sport Snack

This recipe is high in protein to help repair muscles after exercise. It also has iron to transport oxygen around your body

Nutrition Facts		Nutrition Facts		Nutrition Facts	
Amount Per Serving	% Daily Value*	Amount Per Serving	% Daily Value*	Amount Per Serving	% Daily Value*
Total Fat 7g	11%	Sodium 220mg	9%	Total Fat 7g	11%
Saturated Fat 3g	15%	Total Carbohydrate 3g	1%	Saturated Fat 3g	15%
Trans Fat 0.2g		Dietary Fiber 1g	4%	Trans Fat 0.2g	
Cholesterol 50mg	17%	Sugars 1g		Cholesterol 50mg	17%
Potassium 240mg	7%	Protein 17g	34%	Potassium 240mg	7%
Vitamin A 2%		Vitamin C 2%		Calcium 10%	
Zinc 40%				Iron 10%	

*Percent Daily Values are based on a diet of other people's misdeeds. Your daily values may vary depending on your individual needs. For more information, contact your local health department.



Sports Nutrition

Carne Asada

Ingredients:



Fresh Tomato Salsa

- 2 tomatoes, seeded and diced
- 1 small avocado, diced
- ½ onion, minced
- 2 cloves garlic, minced
- 1 jalapeno pepper, seeded and diced
- 1 lime, juiced
- 2 tbsp olive oil
- Handful of fresh herbs (oregano, basil and/or cilantro) chopped

Carne Asada

- 4 cloves garlic, minced
- 2 limes, juiced
- ¼ cup (50 mL) olive oil
- 2 tbsp (30 mL) vinegar
- 1 tsp (5 mL) ground cumin
- ½ tsp (2 mL) chipotle chili powder
- ½ tsp (2 mL) granulated sugar
- 1 handful fresh herbs, minced
- 2 lb (0.91 kg) Skirt Marinating Steak
- Coarse salt and ground black pepper

Directions:

Carne Asada: Combine garlic, lime juice, oil, vinegar, cumin, chili powder, sugar and herbs in large re-sealable freezer bag. Pierce steak all over with fork; place into bag and refrigerate for 1 to 12 hours. Remove steak from marinade and pat dry with paper towel; discard marinade. Season all over with salt and pepper. Cook steak on lightly oiled grill over medium heat (400°F/200°C); close lid and cook, for 6 to 8 minutes, turning at least twice, for medium-rare doneness 145°F (63°C). Remove to cutting board; tent with foil and let stand about 5 minutes before carving into thin slices across the grain. Serve with Fresh Tomato Salsa.

Fresh Tomato Salsa: In medium bowl, combine tomatoes, avocado, onion, garlic, jalapeno pepper, lime juice, olive oil and herbs. Season with some granulated sugar, salt and pepper to taste.

Makes 10 servings.

After Sport Snack

This recipe is full of carbohydrates to replenish glycogen stores, protein to help repair muscles, AND extra nutrients from the veggies!

Amount Per Serving		% Daily Value*	Amount Per Serving		% Daily Value*
Total Fat 17g		26%	Potassium 430mg		12%
Saturated Fat 4g		20%	Sodium 35mg		1%
Trans Fat 0g			Total Carbohydrate 5g		2%
Polyunsaturated Fat 1g			Dietary Fiber 2g		8%
Monounsaturated Fat 11g			Sugars 1g		
Cholesterol 40mg		13%	Protein 20g		40%
Vitamin A 2%			Vitamin C 15%		
Zinc 70%			Calcium 2%		
			Iron 15%		

*Percent Daily Values are based on a diet of other people's secrets. Your Daily Values may be higher or lower depending on your calorie needs.

Calories	2,000	2,500
Total Fat	Less than 65g	80g
Sat Fat	Less than 25g	25g
Cholesterol	Less than 300mg	300mg
Sodium	Less than 2400mg	2400mg
Total Carb	300g	375g
Dietary Fiber	25g	30g



**WHY
ACT
NOW**

Sports Nutrition

After Sport Snack

**WHY
ACT
NOW**

FROZEN GRAPES



Ingredients

- 20 seedless grapes

Directions

Wash grapes thoroughly with water. Spread onto towels to dry completely. Remove grapes from stems and place in single layer on baking sheet lined with wax paper. Freeze for 1 hour, transfer to airtight container or Ziploc bag. *Makes 1 serving.*

Nutrition Facts	
Serving Size 1	
Amount Per Serving	
Calories 32	Calories from Fat 1
Total Fat 0g	
Saturated Fat 0g	
Trans Fat 0g	
Sodium 1mg	
Total Carbohydrate 8g	
Dietary Fiber 0g	
Sugars 8g	
Protein 0g	

*Percent Daily Values are based on a diet of other people's secrets.

Grapes are delicious with a high nutrient content! They are rich in flavonoids, powerful antioxidants, and Vitamins A, C, B6 and folate!

Recipe from: <http://realfoodthefirst.com/how-to-freeze-grapes/>

**WHY
ACT
NOW**

HARD BOILED EGGS



Ingredients

- 2 large eggs

Directions

Place eggs in saucepan of cold water. Bring to a boil then turn off heat. Cover, let sit for 12 min. Drain, cool, refrigerate. *Makes 1 serving.*

Nutrition Facts	
Serving Size 1 (2 eggs)	
Amount Per Serving	
Calories 141	Calories from Fat 88
Total Fat 10g	
Saturated Fat 3g	
Trans Fat 0g	
Sodium 125mg	
Total Carbohydrate 2g	
Dietary Fiber 0g	
Sugars 1g	
Protein 12g	

*Percent Daily Values are based on a diet of other people's secrets.

Eggs are inexpensive and a very good source of high quality protein! They are also rich in Vitamins A, D, E and K.

Recipe from: <http://www.eggs.ca/eggs101/view/6/how-to-make-the-perfect-hard-cooked-egg>

Sports Nutrition

Tangy Thai Beef Pinwheels



Ingredients:

- ½ lb (250 g) shaved Cooked Roast Beef (or deli roast beef)
- 1/2 cup (250 mL) Thai-style sweet chili sauce
- 1 small carrot, finely shredded
- 2 sweet red bell peppers, finely diced
- 2 green onions, finely diced
- ¼ cup (50 mL) fresh basil, finely chopped
- 2 tsp (30 mL) fresh cilantro, finely chopped
- Low-fat cream cheese, softened
- 8 plain or flavoured 8 inch (20 cm) tortillas

Directions:

Place cooked beef in sealable bag. Add 1/4 cup (50 mL) of the chili sauce; marinate for 10 minutes. Drain beef, discarding sauce. Combine carrot, red peppers, onions, basil, cilantro and 1/4 cup (50 mL) of the chili sauce in small bowl. Add drained beef mixture; mix well. Spread each tortilla with some cream cheese. Divide beef mixture evenly among tortillas. Roll up and tightly wrap each with plastic wrap; refrigerate for 1 and up to 24 hours. Cut off and discard ends from each wrap. Cut each wrap into 1 inch (2.5 cm) slices to make about 40 pinwheel appetizers. Serve with remaining sauce for dipping.

Makes 40 servings.

After Sport Snack

This recipe contains protein to aid in repairing muscle, nutrients like vitamin A & C and carbohydrates to restore your energy stores in your body

Nutrition Facts		Amount/serving	% Daily Value*	Amount/serving	% Daily Value*
Serving size 4 pinwheels (126g)		Total Fat 7g	9%	Total Carbohydrate 30g	11%
Calories per serving 260		Saturated Fat 2.5g	13%	Dietary Fiber 2g	7%
		Trans Fat 0g		Total Sugars 6g	
		Cholesterol 25mg	8%	Includes 2g Added Sugars	4%
		Sodium 350mg	15%	Protein 13g	26%
		Vitamin D 0mcg	0%	Calcium 52mg	4%
		Potassium 282mg	6%	Vitamin A	15%
		Zinc 30%		Iron 2.7mg	15%
				Vitamin C	35%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.



**WHY
ACT
NOW**

Sports Nutrition

After Sport

Don't forget to drink more water to rehydrate!





**WHY
ACT
NOW**

Sports Nutrition

Water is important!

Drink water *before, during and after* sport!

Sweating + no water ➡ dehydration
decreased performance



**WHY
ACT
NOW**

Sports Nutrition

Proper nutrition and hydration can improve physical performance!





Sports Nutrition

How about sports drinks?

Sport drinks contain water, sugar, and some minerals.

You can get these from drinking water and eating healthy meals and snacks!!

Besides, a sports drink costs about \$2.10

- If you had 3 a week, that's \$6.30
- In a month that's \$25.20 wasted money



**WHY
ACT
NOW**

Sports Nutrition



**Guess what we've learned
through our research...**

Teenagers drink up to **13 cans**
of pop or energy drinks **every**
week!



Sports Nutrition

So why exactly are pop and energy drinks not the best choice?

Sports Nutrition

Contain lots of **added sugar!**





Sports Nutrition

What are ‘**added sugars**’?

Sugars & syrups added to drinks during processing.

ex. Fruit drinks

Sugar sweetened soft drinks (pop)





**WHY
ACT
NOW**

Sports Nutrition

Drinks containing added sugars have no nutritional benefit *and* can damage your teeth.

They only add extra calories to your diet.





Sports Nutrition

Whether it is *honey*, *white sugar* or *syrup*, they become the same thing in the body: simple sugar.

Too much sugar is stored in the body as fat.



Sports Nutrition

What are **‘natural sugars’**?

Sugars that occur naturally (not added) in food or drink (fruits, vegetables, milk)

Although these foods contain sugar, they contain lots of nutrients & are recommended as part of a healthy eating plan!



**WHY
ACT
NOW**

Sports Nutrition

When sugar is consumed in large amounts, it can lead to *weight gain* or other health problems such as *diabetes*.





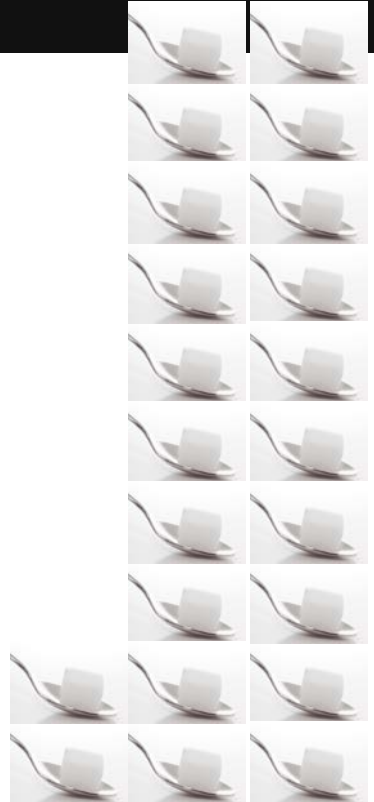
Sports Nutrition

On average, 14-18 years old Canadian boys
consume 43 teaspoons of total sugar daily

About 50% came from foods like sweets and
sugary drinks!

This means about 22 teaspoons of added
sugar per day!

Source: Statistics Canada





Sports Nutrition

The maximum amount of added sugar for youth between 14-18 years old is:

13 teaspoons/day

Source: World Health Organization





Sports Nutrition

Let's take a look at some drinks you might consume during the week...

Source: Alberta Health Services, Sugar Shocker Education Kit





Sports Nutrition

**1 bottle of pop
(591mL)**





Sports Nutrition

**1 sports drink
(710mL)**



10



Sports Nutrition

**1 energy drink
(473mL)**



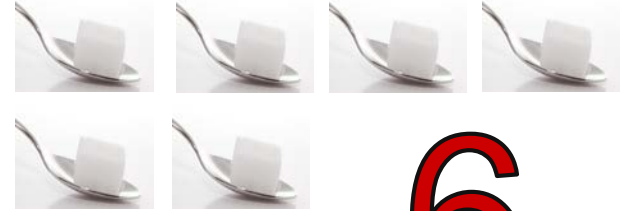
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**WHY
ACT
NOW**

Sports Nutrition

**1 vitamin water
(473mL)**



6



**WHY
ACT
NOW**

Sport Nutrition

How much added sugar does
1 cup of water have?



0



**WHY
ACT
NOW**

Sports Nutrition

How much added sugar does
1 cup of milk (250mL) have?



0



Sports Nutrition

Sugar

The bottom line...

Avoid **'added sugar'** as much as possible.

They are in products with little to no nutritional value.

Natural sugars found in fruit & milk are good for you because it comes with additional nutrients and is part of a healthy diet.



**WHY
ACT
NOW**

Sports Nutrition

Sports food products

Sports gels, beans, chews, bars... are marketed as products to **refuel energy and minerals** during intense activity, just like sports drinks.

These products are typically low in fibre and high in sugar and calories AND they are costly.



Sports Nutrition

Sports Food Products

The bottom line...

having water & healthy snacks is the best choice!



**WHY
ACT
NOW**

Sports Nutrition

Nutrient dense foods such as meat, poultry, fish, eggs, and dairy foods provide many of the nutrients you need without unnecessary added sugar or sodium!



← Let's watch!

Sports Nutrition

- Tips for Weight Management





Sports Nutrition

Weight Management

The approach is about lifestyle changes for a healthier body!



Sports Nutrition

Weight Management

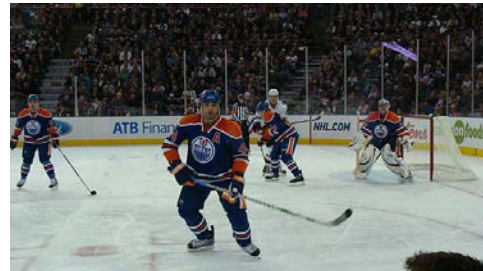
Tips for success:

- Don't skip meals
- Learn how to make healthy meals/snacks
- Limit juice and sweetened beverages
- Be active for at least 60 minutes a day
- Get enough sleep to maintain good energy
- Focus on filling your plate with more vegetables – aim for 7+ servings of fruits and vegetables every day!



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- Living the Best Life
 - No alcohol and smoking!
 - Benefits of Physical Activity & Organized Sport





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Alcohol

Alcohol contains calories and tells the body to convert carbs into fat for storage

Basically, you are putting empty calories in your stomach.



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Smoking

Cigarettes contain harmful chemicals like nicotine, which could kill a person in <1 hour if it was injected directly into the bloodstream.

Source: American Lung Association
<https://www.lung.ca/lung-health/smoking-and-tobacco>

Example		Common Use
Carbon Monoxide		Gas in car exhausts
Copper		Electric wiring
Tar		Road surfaces
Nicotine		Pesticide
Acetone		Paint stripper
Ammonia		Cleaning agent
Arsenic		Rat poison
Benzene		Petrol fumes
Butane		Lighter fuel
Formaldehyde		Embalming fluid
Hydrogen cyanide		Poison in gas chamber
Methanol		Rocket fuel
Methane		Swamp gas
Toluene		Industrial solvent
DDT		Banned insecticide
Radon		Radioactive gas
Polonium		Radioactive fallout



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Smoking

Let's watch what smoking does to our body

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Smoking on a regular basis OR being around second-hand smoke damages your lungs!

Permanent damage in the lungs makes it difficult to participate in any activity or sport!





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Smoking

Smoking also doesn't just damage your lungs, it can put you at a higher risk for dozens of other diseases, including cancer.



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Benefits of Physical Activity

1. Build stronger bones & muscles





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Benefits of Physical Activity

2. Improve your balance, skills, posture & flexibility

↓ risk of injury

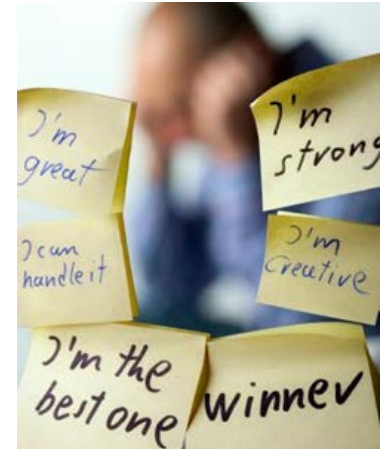




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Benefits of Physical Activity

3. Maintain a healthy body weight, increase confidence, self-esteem & your image of self





**WHY
ACT
NOW**

Sports Nutrition

Benefits of Physical Activity

4. Improve your cardiovascular fitness
 ↓ risk of health problems
 = strong heart!





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Benefits of Physical Activity

5. Reduce stress and blow off steam, in a healthy way



Results = ↑ relaxation & improved mental health & well-being



**WHY
ACT
NOW**

Sports Nutrition

Benefits of Physical Activity

6. Sleep better



Put smart phones, computers away and give your body time to relax and recover!



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Benefits of Physical Activity

7. Make new friends and have fun



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3 Take home messages from today:

- ☐ Participating in sport is great for your mental & physical well-being.
- ☐ Making healthy food & lifestyle choices puts you in control of your life and makes you feel good about yourself.
- ☐ Making healthy nutrition choices will **improve** your sports ability and mental concentration.



Sports Nutrition

THANK YOU



Sports Nutrition



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Sources:

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Canadian Lung Association

<https://www.lung.ca/lung-health/smoking-and-tobacco>

Canada Beef

<https://canadabeef.ca/>