

nutrition for you[®]

A RECIPE FOR HEALTH

PRESENTED BY: **THRIFTY FOODS**[™]

Healthy Youth

NUTRITION SEMINAR



University
of Victoria

THRIFTY FOODS[™]

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Overview of Healthy Youth Seminar

Introduction and Overview of Nutrition for Teens

Smart Eating for Teens

- Food Sense
- Foods to Avoid
- Smart Teen Food Guide
- Best Bets ... at the Mall ...



Eating to Win

Managing Weight

Supplements

Resources/Cookbooks

Recipes



Best whole foods choices in Eating Well with Canada's Food Guide:

1. Vegetables and Fruits – local, seasonal, organic, rainbow
2. Dairy and alternatives – lower fat, fortified
3. Protein foods: meat, fish, poultry, eggs, tempeh, tofu, beans
4. Grains: whole grains, pasta, cereal, bread, bulk
5. Fats and Oils

Label Reading

Food Sense

Studies show that teens seem to know more 'nutrition' information than ever before – but they also have less 'food sense' than ever before. What is food sense? It is a first hand experience with the sensory aspects of food – how it grows, where it grows, how to prepare and cook it and ultimately, how to really enjoy it! Food sense also includes an awareness of what is in season, and when in order to more easily, and economically, eat with the seasons. Food sense leads to body sense – an awareness of how great your body feels when you feed it good, fresh food, as well as a connection to your hunger and satiety.

There is no doubt that eating fast food and food from a box or a can just doesn't have the same nutritional benefits as 'real' food. There is a numbing of the taste buds – because most processed food tastes the same – full of artificial fat and sugar (high fructose corn syrup) and salt. And as the 2004 movie titled *Super Size Me* illustrated, these foods are everywhere!

On the other hand, you don't need to be neurotic to eat healthy. Here are some guidelines that might help you connect to some common sense around food choices in your life:

Starting Off: These ingredients or food additives contribute to cellular inflammation which interferes with how well your cells can communicate with each other. They can make you tired, crabby, moody and unfocused.

1. High fructose corn syrup (HFCS) – developed in the 80's – involves a complex chemical process that turns cornstarch into fructose. This processed fructose, unlike glucose, can only be broken down by the liver and has been shown to cause cell damage, blood sugar problems, weight gain and lead to Type 2 diabetes. HFCS (also seen on labels as glucose/fructose) is found in everything from canned soup to mayonnaise and marinades and most commonly in pop.
2. Hydrogenated fats/trans fats –these artificial fats have been added to the food supply over the past twenty years to the point that most people are getting 20 grams a day! The National Academy of Sciences states that there is no known safe amount and the World Health Organization recommends 0 grams a day. Read food labels and limit your visits to fast food restaurants in order to stay away from these.
3. Artificial colours, flavours, preservatives and sweeteners – avoid these whenever possible. Some people are more sensitive to these additives than others, but none are necessary in our diet or in our bodies. Choose real food instead.

4. White carbohydrates (white flour, white sugar, white bread, white pasta) – these foods are sometimes foods only, especially if you come from a family where weight and diabetes are issues. Choose whole grains instead which contain fibre and are more slowly absorbed, keeping you fuller longer.

Smart Teen Food Guide

NUTRIENT	FOODS	FAST FOOD BEST BETS
Good FATS	Olives/olive oil Nuts Seeds Avocados	Handful of nuts/seeds Trail mix
Energy CARBS	Brown rice Quinoa Granola Oatmeal High Fiber Cereals	Dry cereal (see list of healthy cereals) Granola Sprouted grain tortillas Corn tacos
Healing PROTEINS	Meat Fish Poultry Beans (legumes)	Bean burrito Tortilla wrap with turkey Sardines/toast
Calcium	Milk Fortified soy, rice, almond beverage Probiotic Yogurt and Kefir Cheese Almonds, Sesame Seeds Broccoli/Chinese greens	Probiotic Yogurt, Kefir Milk Fortified soy, rice, almond beverage Cheese Sesame Seeds, Almonds
Boosters	Power bar Smoothies Juices Protein powder	Lara Bar Booster Juice



CEREALS AND BARS

How to choose a good cereal:

The most nutritious and economical cereals are hot cooked *whole grains* like oats, brown rice, quinoa or barley. Cook with twice the amount of water, cinnamon, dried fruit and then sprinkle with ground seeds (flax, hemp or chia) and top with yogurt! However if you prefer a cold cereal, there are many good choices as well. They tend to be more expensive than hot cooked cereals.

Carbohydrates and **fibre** - Look for as much fibre as possible. We need about 35 gm a day. If your favourite breakfast cereal only has 4 or 5 gm of fibre, add some ground flax or hemp seed along with berries and you can easily boost the fibre up to 10.

Wholegrain - Look for a cereal that contains the words '**whole**' or '**wholegrain**' in the **first ingredient**.

Fat - Most cereals don't have much fat except granola or muesli type cereals, but generally the fat in these cereals is from the nuts and seeds!

Sugar - Avoid cereals with sugar as the first few ingredients!

Sodium - the lower the better – daily intake should be no more than 3 gm.

Breakfast cereals often contain **added minerals** (such as iron) and **vitamins** (mainly B vitamins), which can make a useful contribution to your diet.

Boosters – often functional foods such as green tea extract, acai berries, psyllium fibre or soy is added to cereals to boost the nutrition – go for it, if you enjoy the taste.

BEST BETS

Best Bets for Cold Cereals:

- Post Shredded Wheat Cereals – including original and spoon size: Cinnamon, Honey Nut, Wheat & Bran
- Quaker Oatmeal Squares and Corn Bran Squares
- Red River Cereals
- Nature's Path Granolas
- Weetabix – including Alpen, Wheat Flakes, Whole Grain
- Kashi Cereals

What about Granola, Energy and Breakfast Bars?

Look for bars made from real ingredients (nuts, seeds, dried fruit, whole grains) and no artificial colours, flavours or sweeteners. Keep one in your backpack to prevent blood sugar crashes. Here are a few products that fit the bill:

- Nature's Path Granola
- Kashi
- Nature's Path Optimum Energy Bars
- Clif Bars
- Rebar
- Vega Whole Food Energy Bars

Instant Oatmeal?

Sure it's not as nutritious as slow cooked oats, but it still is a pretty good instant breakfast or anytime snack, especially if you choose the ones without added sugar, colours or flavourings like the ones from Nature's Path.

Best bets when you are...

AT ...	WHAT TO EAT
... the movies	<ul style="list-style-type: none"> • Small popcorn without added butter or margarine • Frozen fruit yogurt • Water or small size of fruit juice
... the mall	<ul style="list-style-type: none"> • Stir-fry vegetables/meat/poultry/tofu with steamed rice • Bean burrito (ask for whole wheat) • Sandwich or wrap on whole grain, loaded with veggies and some protein (turkey, chicken) • Water
... a vending machine	<ul style="list-style-type: none"> • Nuts, seeds, trail mix • Fruit, fruit leather, fruit snacks • Yogurt, milk or soy beverage • Water
... at practice	<ul style="list-style-type: none"> • Nuts, seeds, trail mix • Fruit, fruit leather, fruit snacks • Water or 100% fruit juice
... at home after school	<ul style="list-style-type: none"> • Tortilla chips with salsa • Raw veggies or fruit • Crackers (whole grain) and cheese • Peanut or almond butter on whole grain toast • Tortilla with melted cheese and salsa • Popcorn (try it sprinkled with parmesan cheese) • Cold high fiber cereal with milk/soy/rice beverage • Yogurt and fruit • Water
... at the store	<ul style="list-style-type: none"> • Sushi • Tortilla chips and salsa • Sandwich or wrap loaded with veggies and beans or turkey • Small bag of trans fat free potato chips • Granola or trail mix • Yogurt • Fruit or cut up veggies and dip • Water
... at a fast food restaurant	<ul style="list-style-type: none"> • Subs, wraps, veggie pizza • Burger or chicken breast (not breaded) burger with extra veggies on whole wheat bun • Yam fries • Veggies and dip • Green salad with chicken, shrimp or steak • Water

PROTEINS

Proteins are the basic building blocks of the human body. They are made up of 20 essential amino acids (you need to eat them) and 12 non-essential amino acids (the body can make them) and help build muscles, blood, skin, hair, nails and internal organs. Next to water, protein is the most plentiful substance in the body, and most of it (around 60% to 70%) is located in the skeletal muscles.

How much do you need?

Most people can easily meet their protein needs if they follow a balanced diet according to Canada's Food Guide (even if they follow a vegetarian or vegan version).

1. Weight (lbs) divided by 2.2 = weight kg.
2. Weight in kg x 0.8-1.8 gm/kg = gm of protein/day.

Use a higher number (between 1 and 1.8) if you are under stress, recovering from an illness, or if you are involved in consistent and intense weight or endurance training.

Example: 154 lb male who is a regular exerciser and lifts weights
 $154 \text{ lbs} / 2.2 = 70 \text{ kg}$
 $70 \text{ kg} \times 1.5 = 105 \text{ gm protein/day}$

Do athletes need more protein?

Athletes do need a high quality diet to support their training (up to 1.2 gm protein/kg body weight). Athletes can also have outstanding performances with a vegan plant based diet since there are many good quality plant sources of protein. See www.veganathlete.com or Brendan Brazier's Book The Thrive Diet.

Protein powders and protein bars?

There are different bars/drinks marketed for different purposes. Here are some guidelines for how to pick a good one:

- Is it free of artificial colours, flavours, sweeteners? (check the list of ingredients)
- Is sugar or sweetener lower down on the list of ingredients? Sweeteners should never be the first ingredient. Make sure ingredients like sugar, corn syrup, glycerin, sorbitol, mannitol, and xylitol are further down the list. Try to keep the carbohydrate serving at less than 30 grams and the sugar at less than 15 grams.
- Does it provide at least 10 grams of protein? (check the Nutrient Facts Table) Bars can be made from whey, soy, hemp, nuts and/or seeds.
- Does it contain some fibre? More is better!

Remember to drink lots of extra water if you are taking a protein bar or shake as excess protein can stress your kidneys.

Amino Acid Supplements?

Amino acids are the building blocks of proteins. They each have specific functions and work together to keep your muscles strong and functioning optimally.

There is lots of controversy around the benefits of amino acid supplementation. This is not recommended unless you are working with a trained registered professional sports dietitian, naturopath or physician.

Weighty Issues

Weight is a big issue in our culture. There is generally a healthy weight range for most of us. It depends on our bone structure, genetics, and activity level. If you are feeling like you want to lose weight, there are some things you can do that are proven to work. Dieting doesn't work – in fact studies show that it actually leads to binging, more weight gain and eating problems.

The first thing to do is get active. Walk, run, ride, dance, jump, swim, board, cycle. Go to the gym or join a boxing, dance or exercise class.

Find a way to limit your total screen time from computers, television, phones and gaming systems. Studies show that people who limit screen time to less than two hours a day tend to lose excess weight.

Take a look at what you are drinking. Beverages can contribute lots of calories that don't really fill you up. Although milk and fortified milk products can be good for you, limit it to 2 – 3 glasses a day. Drink lots of water. Avoid pop, slurpees and fruit drinks. Sports drinks can be a good choice for a hot day when you are exercising, but generally aren't needed. Most of them contain artificial colors, flavors and sweeteners

Watch the movie *Supersize Me* and commit to eating smaller amounts of good food. Avoid supersizing unless you are splitting it with a friend. Large portions can train your body to want more than you need.

Bulking UP

If you are looking to gain weight, bulk up a little or you are working on getting toned – try small frequent meals and snacks every few hours. Include some protein and fat each time – like nuts, seeds, dried fruit, protein bars and smoothies. Snack on lots of fruits and vegetables. Protein powders are fine – just don't go over 1 gm of protein/kg of your body weight. Drink lots of water for a daily detox of your cells and especially your kidneys.



Supplements for Teens

Supplement	Possible Benefits	Notes
Multivitamin/mineral	Immune support	Choose one without artificial colours, flavours, sweeteners, yeast, preformed vitamin A, d(l)-alpha-tocopherol, iron
Vitamin D3	Immune system support Cancer prevention Absorption of calcium	Maximum 1000 IU/day from all supplements
B complex vitamins	Stress management Cognitive health	B12 is recommended for vegans B complex may help manage stress
Essential fats	Immune support Brain health ADD/ADHD	1 – 2 gm/day especially if you are not eating fish, flax, hemp or walnuts daily
Minerals – especially Calcium, Magnesium	Bone health	Choose calcium citrate with magnesium citrate
Protein powders	Immune support Weight management	Limit total protein intake from all sources to .8 gm/kg body weight
Athletic nutritional support	Build muscle, maximize performance	See www.sportsmedbc.ca
Other supplements may be recommended depending on your diet, heredity and health goals. Also other nutrients might be recommended if you are taking medications. Consult with your registered dietitian/nutritionist and other primary health care providers (doctor, naturopath, pharmacist)		



Be the Change You Want to See

School Food Policies set guidelines for what kinds of foods will be sold at your school. Check www.dashbc.org for information and support on how you can help your school get healthier. More and more schools are bringing in regular salad bars and healthy snacks for lunches and sporting events.

Recommended Resources:

- Computerized Nutritional Analysis www.springwellnutrition.com
- Vegetarian Resource Group for Teens www.vrg.org/nutrition/teennutrition.htm
- Jamie Oliver www.eatdrinkordie.com or www.jamieoliver.com
- Fast Food Nation, 2006 <http://www.imdb.com/title/tt0460792> based on the 2001 book by Eric Schlosser, this documentary examines the health risks involved in the fast food industry and its environmental and social consequences as well
- Supersize Me, 2004 www.imdb.com/title/tt0390521 An irreverent look at obesity in America and one of its sources - fast food corporations
- Starting Out: The essential guide to cooking on your own. Julie Van Rosendaal and Tom Bagley, 2006.
- The Meatrix <http://www.themeatrix1.com> Three short movies taking a critical, funny and enlightening look at the current food system

Orange Banana Smoothie (2 servings)

1 1/2 cups 2% probiotic yogurt
2 small oranges, peel and pith removed
and coarsely chopped
2 medium bananas, peeled and thickly sliced
2 tsp. honey, or to taste
1/2 tsp. grated fresh ginger
Pinch nutmeg
Orange slices and mint sprigs for garnish

Nutrients per serving:

Calories: 290
Carbohydrate: 57g
Protein: 11.8g
Fiber: 3.8g
Fat: 3.5g

Place all ingredients, except garnish, in a food processor or blender and pulse until smooth. Pour into chilled glasses, garnish, and serve. Thin with a little orange juice if too thick. Use 1 cup of chopped mango, papaya, kiwi or pineapple instead of the chopped orange for a change.

Here's a high energy drink great for breakfast. If you do not want dairy, substitute the yogurt with an equal amount of soft tofu.

Source: Thrifty Foods Website

Burritos (4 servings)

2 Tbsp. olive oil
6 large eggs beaten with 1/4 cup milk
4, 10-inch sprouted wheat or rice flour tortilla shells, warmed
Salt and pepper to taste
1/2 cup grated cheddar old cheese
1/3 cup tomato salsa
1 cup shredded romaine lettuce

Nutrients per serving:

Calories: 425
Carbohydrate: 35g
Protein: 11.8g
Fat: 23.3g
Fiber: 2.4g

Heat the oil in a large non-stick skillet. Add the eggs and cook and scramble them until just cooked through. Make a row of the eggs along the centre of each tortilla. Arrange the cheese, salsa and lettuce alongside the egg. Fold over the sides of the tortilla and then tightly roll into a closed cylinder. Slice in half at a slight angle, if desired. Serve additional salsa and sour cream, if desired

Source: Thrifty Foods Website

One Dish Chicken Dinner (4 servings)

2 medium onions, cut into wedges
4 garlic cloves, sliced
1 large red pepper, cubed
1 medium carrot, sliced
12-16 small new potatoes, halved & parboiled until just tender
olive oil
salt and cracked black pepper to taste
4 bone-in chicken breasts
8 lemon slices
1 cup chicken stock

2 Tbsp chopped fresh oregano, basil or parsley

Preheat oven to 375 degrees F. Toss vegetables with a little olive oil, salt and pepper. Place in a large, shallow-sided casserole dish. Brush chicken with a little oil, season with salt and pepper and then place on top of vegetables. Top chicken with lemon slices, pour in stock and roast for 35 to 45 minutes, or until the chicken is golden brown and vegetables are tender. Baste with pan juices a few times during cooking. Sprinkle with fresh herbs near the end of cooking. Arrange chicken and vegetables on dinner plates and spoon over pan juices.

Note: Chicken can be replaced with a 5-6 ounce piece of firm-fleshed fish such as salmon, sea bass or halibut or 3 ounces of tofu or tempeh. Roast vegetables 20 minutes before placing fish on top as fish/tofu/tempeh will only take 10-15 minutes to cook.
Source: Thrifty Foods Website

Nutrients per serving:

Calories: 290
Carbohydrate: 24g
Protein: 34g
Fiber: 4.5g
Fat: 4.5g

Oh-So-Good Chewy Oatmeal Cookies (30 cookies)

1 cup butter, softened
1 cup packed golden brown sugar
1/2 cup white sugar
2 eggs
2 tsp. vanilla extract and cinnamon
1 tsp. salt and 1/2 tsp. baking soda
1 1/4 cups flour
3 cups quick-cooking oats
1/2 cup raisins
1/3 cup raw sunflower seeds and pecan pieces

Preheat oven to 350 degrees F. Beat butter and sugars until light, and then beat in eggs one at a time. Mix vanilla, cinnamon, salt and baking soda. Add remaining ingredients and mix until just combined. Drop by spoonfuls about 2 Tbsp. in size onto ungreased cookie sheets. Bake 12 min.

Source: Thrifty Foods Website

Nutrients per serving:

Calories: 123
Carbohydrate: 18g
Protein: 2.1g
Fat: 3g
Fiber: 2g

Popcorn Snacker

Nutrients per serving:

Calories: 160

Carbohydrate: 21g

Protein: 7g

Fiber: 5g

Fat: 7g

Home alone with nothing to eat?

Pop some corn (in a hot air popper or in a paper bag in the microwave).
Melt a little butter and toss with this topping:

1 part nutritional yeast flakes

1 part sesame seeds

Grind together in coffee grinder and sprinkle over popcorn.

Source: Springwell Nutrition Group Inc.

Chocolate Blueberry Energy Bars (12 servings)

So easy to make if you have a food processor.

Nutrients per serving:

Calories: 80

Carbohydrate: 11g

Protein: 3g

Fat: 3g

Fiber: 3g

1 cup fresh or soaked dried dates

¼ cup almonds

¼ cup blueberries

¼ cup cocoa powder

¼ cup ground flaxseed

¼ cup hemp protein

¼ cup unhulled sesame seeds

1 tsp lemon juice

½ tsp lemon zest sea salt to taste

½ cup frozen blueberries

Mix together in food processor and spread onto pan.

Source: Thrive Diet, Brendan Brazier

Home Made Sweet Potato Fries

Serves 4.

5-6 good sized sweet potatoes
4 tbsp olive oil
salt to taste
1/4 cup sesame seeds or 1/4 cup chopped fresh rosemary

Nutrients per serving:

Calories: 260
Carbohydrate: 33g
Protein: 3g
Fiber: 5g
Fat: 14g

Preheat oven to 425 cut potatoes and put into a large bowl and drizzle with olive oil, toss with salt and seeds or herbs. Cover with foil and bake for 30 minutes, then uncover and cook another 15 minutes, turning occasionally.

Source: V Cuisine: The Art of New Vegan Cooking by Angeline Linardis, 2007

Gorgeous Guacamole

Serves 4.

2 ripe avocados
1/4 cup fresh lime or lemon juice
1 clove garlic chopped
1 green onion chopped
1 tomato chopped

Nutrients per serving:

Calories: 160
Carbohydrate: 9g
Protein: 2g
Fat: 16g
Fiber: 7g

Mix together and enjoy as a dip with raw veggies or trans fat free corn chips.

Source: V Cuisine: The Art of New Vegan Cooking by Angeline Linardis, 2007

ANTI-OXIDANTS

prevent damage to your body cells and repair damage that has been done. Antioxidants work by slowing or preventing the oxidative — or damage from oxygen — process caused by substances called free radicals that can lead to cell dysfunction and the onset of problems like heart disease and diabetes. Antioxidants may also improve immune function and perhaps lower your risk for infection

Red fruits and vegetables are coloured by natural plant pigments called "lycopene" or "anthocyanins."

Lycopene in cooked tomatoes may help reduce the risk of prostate cancer, breast cancer, and heart disease.

Anthocyanins in strawberries, raspberries, red grapes and other fruits and vegetables act as powerful antioxidants that protect cells from damage.

Reds include cherries, cranberries, pomegranates, radicchio, raspberries, strawberries, red apples, red grapes, red/pink grapefruit, red peppers, tomatoes and watermelon.

Orange/yellow fruits and vegetables are usually coloured by natural plant pigments called "carotenoids."

Beta-carotene in sweet potatoes, pumpkins and carrots is converted to vitamin A, which helps maintain healthy eyes, helps to reduce the risk of cancer and heart disease and can improve immune system function.

Cantaloupe, carrots, nectarines, peaches, apricots, oranges, papayas, mangoes, pineapple, sweet corn, sweet potatoes and yellow potatoes all contain beta-carotene.

White fruits and vegetables are coloured by pigments called "anthoxanthins." They contain health-promoting chemicals such as alliin, which lowers cholesterol and blood pressure and reduces risk of stomach cancer and heart disease.

Whites include bananas, cauliflower, dates, garlic, shallots, mushrooms, leeks, white flesh peaches, nectarines, white onions and white potatoes.

Green fruits and vegetables are coloured by natural plant pigments called "chlorophyll." Some members of the green group, including spinach and other dark leafy greens, green peppers, peas, cucumber and celery, contain lutein which works with another chemical, zeaxanthin, found in corn, red peppers, oranges, grapes and egg yolks to help keep eyes healthy.

The "indoles" in broccoli, cauliflower, cabbage and other cruciferous vegetables may help protect against some types of cancer.

Green artichokes, asparagus, avocados, broccoli, cabbage, cucumbers, green apples, green beans, green grapes, green pears, green peppers, honeydew, kiwifruit, lettuce, spinach, peas are members of the green group.

Leafy Greens are an especially great source of calcium, folic acid, vitamin A, vitamin C and fibre. These include Swiss chard, chicory, collard greens, arugula, dandelion greens, kale, mustard greens and spinach.

Blue/purple fruits and vegetables are coloured by natural plant pigments called "anthocyanins."

Anthocyanins in blueberries, grapes and raisins act as powerful antioxidants that protect cells from damage. They may help reduce the risk of cancer, stroke and heart disease. Other studies have shown that eating more blueberries is linked with improved memory function and healthy aging.

Blue/purple veggies also contain the phytochemical "phenolics", which are potent antioxidants helpful for reducing some cancers, maintaining urinary tract health, memory function and healthy aging.

Blueberries, blackberries, dried plums, raisins, eggplant, plums, purple grapes and purple potatoes and all in this group.

CALCIUM RICH FOODS

Calcium is a mineral that is required to maintain healthy bones, blood pressure and a broad range of organs and body systems. Calcium also plays an important role in weight management. **Adults over 50 need 1200 mg of calcium a day.**

Calcium is found in dairy products (milk, yogurt and cheese), fortified soy beverage/yogurt and fortified rice/oat beverages as well as in plant foods such as beans, nuts, seeds, molasses and leafy greens.

If you need some extra calcium from supplements, choose a calcium citrate, preferably with added magnesium and vitamin D to enhance absorption. Calcium is best absorbed when taken in small amounts throughout the day. Some people find that taking a calcium supplement before bedtime helps them sleep.

Food	Amount	Calcium (mg)	Vitamin D (IU)
Milk	1 cup	300	100
Almond Butter	2tbsp	88	0
Canned Salmon with bones	75g	208	605
Yogurt	¾ cup	290	0
Kale, cooked	½ cup	49	0
Tofu	150g	347	0
Soy Beverage	1 cup	319	80
	TOTALS	1601	785

VITAMIN D: Calcium works closely with Vitamin D, to build bones, teeth and a health immune system. Some dairy products and non dairy beverages are fortified with Vitamin D. The Canadian Cancer Society recommends **1000 IU of Vitamin D/day** for cancer prevention. We get some Vitamin D from the sun, some from fortified dairy products and fish.

PROBIOTICS?

Probiotics are good bacteria that live in your digestive system helping keep your digestive system and immune system healthy. The bacteria can get out of balance through stress and/or a poor diet and then less healthy organisms grow and crowd out the healthy ones. A healthy diet along with some live culture probiotic yogurt or kefir will keep the balance of good bacteria in check. If you have had a course of antibiotics or you have ongoing digestive concerns, you might find that a course of a high quality probiotic supplement helps to reestablish good bacteria in your gut.

W H O L E G R A I N S

Whole grains are plant foods that include all parts of the grain kernel: the bran, germ and endosperm. Whole grains contain the most nutrients, including B vitamins, magnesium, chromium and fiber. Wheat berries, spelt berries, kamut berries, barley, large oats, brown rice and quinoa are examples of true whole grains. They take longer to cook but are worth it for their flavour, texture and nutrition.

Refined grains are whole grains that have been processed to remove part of the bran, germ or endosperm. The more a whole grain is refined during processing, the more nutrients are lost. Some are partly refined like whole wheat flour, bulgur and couscous.

Some have been totally refined or processed to the point where there is very little nutrition left (white rice, white flour). Some refined grains have had nutrients added back to them after processing (enriched white bread).

Look for foods with “whole” in front of the grain in the ingredient list. For example: “whole rye flour” instead of “rye flour” or prepare your own whole grains such as buckwheat, bulgur, millet, or quinoa.

<p>Best whole grain choices (choose every day) – includes brown rice, large slow cook oats, millet, quinoa, spelt/kamut/wheat berries, barley, rye, buckwheat.</p>	<p>Good whole grain choices (choose often) – includes sprouted whole grain wheat/spelt/kamut breads, whole grain pastas, oatmeal, and whole grain cereals. Good choices for cereals are Nature’s Path™, Kashi™, and Bob’s Red Mill™ cereals.</p>	<p>Not so great grain choices (do not eat these products every day) – includes refined flours and products made from them including white flour, white rice, and white flour pasta. Avoiding these foods will help to manage weight, blood sugar, blood pressure and many other conditions.</p>
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DID YOU KNOW?

Barley and oatmeal are great cholesterol lowering grains.

COOKING GRAINS

Cooking grains is easy. You can use a simple pot and lid or a rice cooker to cook many different grains and have them ready for you when you walk in the door. Cook a little extra one night and toss it into a salad with chopped vegetables for lunch the next day. Or freeze extra in small containers. Once you get into the habit of having whole grains on hand, you will love them!

Rinsing – don't skip this part

Just rinse them quickly to remove dust or natural coatings that can give them a bitter taste. Put some in a sieve and run under the tap or put some in a pot and fill with cold water, swirl around and drain.

Soaking – an optional idea for people who find whole grains hard to digest

After rinsing, just soak the whole grain overnight in water before cooking to increase digestibility.

Toasting – an optional idea for bringing out the flavor

Toasting grains before cooking them brings out a nutty flavor and promotes a fluffier grain after cooking. After rinsing, just stir in a large heavy pot over medium heat with a little extra virgin olive oil for about 5 to 10 minutes.

Cooking

- To simmer grain, bring the water to a rolling boil before stirring in the grain or adding it to toasted grain.
- Make sure the lid of the pot fits tightly so that little or no steam escapes.
- For fluffier grain, put a clean towel under the lid of the pot during the standing time. The towel will absorb excess moisture instead of the grain and will keep the grains separate and fluffy.

Grain Standard Stovetop Cooking Times					
Grain (1 cup)	Liquid (cups)	Optional Salt (teaspoons)	Minutes Cooking	Standing Time (covered)	Yield (cups)
Barley, hulled	3	½	50-60		3
Barley, pearl	2½	½	30-45		3½
Buckwheat*	2	½ - ¾	10-12	5	2
Millet*	2½	½ - ¾	20-25	5	3½
Oats, steel cut	3	½	15		
Quinoa	2	½ - ¾	15	5	3
Rice, basmati white	2	½	15-20	5	3
Rice, brown	2¼	½	45-60	10	3
Rice, white	2	½	15-20	5	3
Wheat berries	2½		60-90		
Wild rice	2¼	¼ **	50-55	10	2½
*toast before boiling for improved flavour and more even cooking					
**add salt after cooking to ensure proper absorption of liquid					

PROTEINS

Meat, fish, poultry, legumes, eggs, tempeh, tofu, nuts and seeds are rich sources of protein, iron, B vitamins and zinc. Protein is needed every day to repair cell tissue and keep our immune system optimal. Studies also show that including a small amount of protein with each meal and snack helps to minimize between meal cravings and blood sugar lows.

Meat

If you choose to eat red meats, do so in moderation. Not more than once a week and choose lean cuts. Keep your serving size to no more than the size of the palm of your hand. Ideally choose specialty meats (raised without growth hormones or antibiotics and vegetarian fed) and organic meats (which have the added benefit of being raised on organic grains and vegetables).

Poultry

Turkey and chicken are great sources of lean protein, especially when eaten without the skin. Free run poultry run around freely and are not confined in a cage. All chicken raised for human consumption in Canada is free-run.

Free-range poultry are allowed access to the outside for part of the day. All turkey raised for human consumption in Canada is free range. Organic poultry is free range poultry that are fed a vegetarian diet that is at least 80% organic.

Fish

Mackerel, trout, herring, sardines, albacore tuna and salmon are all rich in omega-3 fatty acids which are needed for preventing heart disease, keeping our immune system optimal and our skin healthy.

But how do you follow advice to eat seafood twice a week without getting too much mercury? The reality is that most fish now contains some mercury (www.edf.org). High mercury fish are generally larger fish like fresh tuna, swordfish, shark and marlin. Limit your intake of these fish. Instead choose short lived deep sea Pacific fish such as wild salmon, mackerel, sardines and halibut.

Eggs

Eggs are an easy to digest inexpensive source of high quality protein. You can enjoy 3 – 5 eggs a week, even if your cholesterol is high. Don't forget about eggs for a quick high protein dinner!

Free Range eggs are laid by chickens that range free on pasture and are fed all vegetarian feed that does not contain animal byproducts. Free Run Eggs are laid by chickens that are cage free inside the barn on shavings and are fed all vegetarian feed but do not range outside on pasture.

Omega 3 - Free Run eggs are fed all vegetarian feed that contains ground flax to provide Omega 3 and Omega 6 essential fatty acids. The feed is also Vitamin E enhanced. Chickens are cage free inside the barn on shavings and are fed all vegetarian.

PROTEINS

Legumes

Legumes (beans, peas, lentils) are plant proteins that are rich in fiber, iron and B vitamins. Contrary to what some people used to think, legumes are not a lesser quality protein and you don't need to be a scientist to choose complementary proteins. Just eat a variety of foods and the body will do the rest. Eat legumes every day either for lunch or dinner. Add them to soups or salads, make them into dips, or cook up a batch of chili or bean casseroles. Keep your cupboards stocked with a variety of canned and dried beans.

Cooking Legumes

Cooking beans is so easy. Just clean them by rinsing under a cold tap and then soak them.

Overnight Soak: Let beans and water stand overnight in refrigerator. Drain.

Quick Soak: In a large saucepan, bring water and beans to a boil; cover and boil for 2 minutes. Remove from heat and let stand 1 hour. Drain.

Cook: Cover with fresh water, bring to a boil, reduce heat and simmer until soft. Lentils and split peas cook within an hour, while most legumes need a few hours. Crock pots are great to have on hand for cooking beans.

Soy based proteins

The controversy over soy continues, but the bottom line is that soy is an excellent food to add to the diet. Just try to include both fresh and fermented soy products in order to get the benefits of soy.

Tofu is fresh soy bean curd which is a quick to prepare source of protein that takes on the flavour of whatever you are cooking. Add it to a smoothie, slice into a stir fry or crumble into sauces or casseroles.

Tempeh and seitan are fermented soy bean products that have a similar taste and texture to cooked chicken. Use in sandwiches, on burgers, or in casseroles.

Nuts/nut butters

A great source of quick concentrated protein and good fats, limit your daily intake to no more than one ounce (about 20 nuts). For variety, try almond butter, cashew butter, and hazelnut butter in addition to natural peanut butter.

Seeds/seed butters

Seeds are a great source of quick concentrated protein and good fats. Nibble on a small handful each day or sprinkle on salads. Toss a tablespoon of ground flax seed on your oatmeal each morning. Try pumpkin seed butter, sunflower seed butter or hemp seed butter on your toast instead of butter or margarine.

Enjoy Good Fats

Healthy Fats are needed to maintain the integrity of every cell in your body.

The healthiest fats come from whole plant foods like olives, avocado, nuts and seeds.

Eat these and the oils made from these plant foods every day. Choose expeller or mechanically pressed oils as follows:

- extra virgin olive oil for medium/low temperature cooking and for salad dressings
- grapeseed oil for baking
- organic almond or high heat safflower oil for high temperature cooking.

Other nutritious oils such as sesame, black currant, avocado, hazelnut, sunflower can be used to add a variety of flavors to foods.

Small amounts of saturated fats from animal foods (meat, poultry, dairy) can be part of a healthy diet as well. Aim for less than 10% of calories from these foods.

Ideally choose organic or specialty animal products to minimize intake of chemical residues.

Avoid trans fats found in packaged, processed and fast foods. Read package labels and put back any foods with trans fats or partially hydrogenated oils, shortening, and mono or diglycerides.

Spreads?

Organic butter and Ghee (clarified butter) are tops in flavour. Use small amounts of them in your cooking where flavour counts.

Margarine can be an acceptable spread if you choose a non-hydrogenated margarine soft spread without artificial ingredients. *Earth Balance* is a good choice.

Nut and seed butters are excellent as well as nutritious spreads such as hummus, pesto, tapenade, and quark.

Drink Up!

Drink water for daily detox.

Our body needs water every day to help eliminate toxins and keep the cells hydrated and working optimally. Dehydration is bad for the body and the brain – and it ages your skin..

Get into the habit of drinking water, green tea, herbal tea and broth based soups. Aim for about 2 liters a day – more if you are exercising or working up a sweat or if you are drinking alcohol.

How essential is water? Some facts:

- The body is between 60 and 70% water by weight.
- The body's need for water increases during activity. Staying hydrated while exercising is crucial because water is what delivers oxygen to the muscles, fueling the muscles in the course of a workout.

Tips to help stay hydrated:

- Drink water before, during and after exercise.
- Keep a glass of water at your desk and beside your bed. Take a bottle with you in the car or on the bus doing errands.
- Drink water every time you eat.
- Order water at a restaurant and have a glass before and after your meal.

If you eat a mostly plant based diet, you will be naturally getting more fluids into your body.



LABEL READING

Healthy eating is easier when you focus mostly on eating a variety of real foods and limit your intake of processed foods. Real foods are generally foods without labels (fresh fruits, vegetables, nuts, seeds, beans, eggs, whole grains, lean meats, fish, poultry).

However, when you do choose packaged foods, first check out the list of ingredients. If the package of food contains any artificial colours or flavours, artificial sweeteners, hydrogenated fats (trans fats) or high fructose corn syrup, put it back. If you can pronounce most of the ingredients and they are recognizable, keep on going and check out the Nutrition Facts table.

When reading the “**Nutrition Facts**” table, consider the following five steps to label reading:

- 1) The serving size – if you eat twice as much as the stated serving size, then everything listed on the label is doubled.
- 2) Check the calories provided by the food and compare this to the amount of nutrition provided. The best foods are ‘nutrient dense’ rather than ‘empty calories’.
- 3) The % Daily Value puts nutrients on a scale from 0% to 100% (based on an average diet of 2000 calories per day). This scale tells you if there is a little or a lot of a nutrient in one serving of a packaged food. For example, if the sodium content of a food is 40% of what you should have in a day, it is very high.
- 4) Nutrients that you want to get less of are: saturated fats, trans fats, cholesterol, sodium, and sugar.
- 5) Nutrients that you want to get more of are: fiber and vitamins and minerals.

Nutrition Facts			
Per 1 cup (55 g)			
Amount	% Daily Value		
Calories 220			
Fat 2 g	3 %		
Saturated 0 g	0 %		
+ Trans 0 g			
Cholesterol 0 mg			
Sodium 270 mg	11 %		
Carbohydrate 44 g	15 %		
Fibre 8 g	32 %		
Sugars 16 g			
Protein 6 g			
Vitamin A 0 %	Vitamin C 0 %		
Calcium 4 %	Iron 40 %		

LABEL READING

Watch for words you will see on the ingredient list that you may not recognize. Avoid foods containing these ingredients:

Synthetic Fat

Mono and di-glycerides, glycerol, esters

Shortening

Hydrogenated fats and oils (trans fat)

Refined and Processed Sodium

Monosodium glutamate

Disodium phosphate

Sodium bisulfate

Brine, garlic/onion/celery salt

Sodium alginate/benzoate, sodium hydroxide/propionate

Hint: Watch for the word “sodium”.

Refined and Processed Sugars

Fructose, sucrose, maltose, lactose, liquid invert sugar, syrup, raisin

syrup, corn syrup solids,

high fructose corn syrup,

galactose, dextrose, dextrin

Hint: Watch for words ending in “ose”.

Sugar alcohols

Isomalt, Lactitol, Mannitol, Maltitol,

Sorbitol, Xylitol

Hint: Watch for words ending in “ol”.

Keep an eye on your intake of foods containing saturated fats in order to keep your daily intake at less than 5 – 10% of calories.

Tallow, lard, suet

Fat from meat, poultry, bacon

Butter, coconut oil, cocoa butter

Palm or palm kernel oil

DID YOU KNOW?

The recommended daily intake of sodium from all sources is between 2000 and 2500 mg of sodium per day. Only 1 teaspoon of salt has 2400 mg of sodium.

Final Reflections and Commitments

Think about what you have learned today about healthy eating and make a commitment to the following

One thing I plan to change as a result of today's session is ...

One new food I plan to try is



Superfoods for Super You!

Nutrition Trivia Quiz

1. PROTEIN

Teens should eat as much protein as they can in order to grow and develop muscles.

- True False

2. FAT

The amount of fat you eat is more important than the type of fats you eat.

- True False

3. CARBS

Slow carbs are carbohydrates that slow you down and make you tired.

- True False

4. WEIGHT LOSS

The best way to keep at a healthy weight is to exercise regularly.

- True False

5. WEIGHT GAIN

The best way to put on weight is to exercise more and eat everything you can.

- True False

6. SPORTS

Eating for optimal performance in sports competition means eating as much as you can about three hours before the event.

- True False

7. MEMORY AND COGNITION

Studies show that people who eat breakfast actually perform higher on tests than people who skip breakfast.

- True False

8. MOOD MANAGEMENT

Eating some protein, fat and carbs every 4 –5 hours helps to keep blood sugar levels and moods stable.

- True False

9. JUNK FOODS

There is no such thing as junk food

- True False

10. SNACKING

Snacking between meals is a bad and unhealthy habit.

- True False

11. EATING OUT

The best items to eat at a fast food restaurant are usually the best value meals.

- True False