

Nutrition 101

Myths & Truths: Exposed!

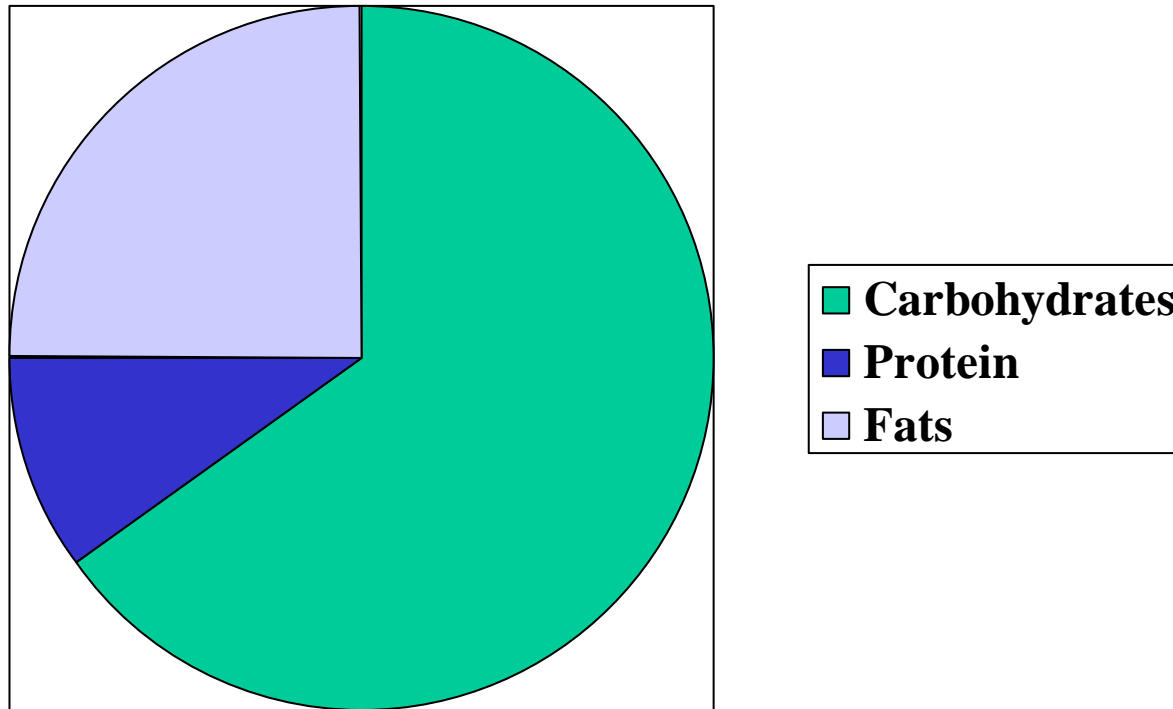
Overview

- Nutrition basics:
macronutrients/
micronutrients
- Tips for maintaining a healthy diet
- Common nutrition myths...exposed!

“Truths” to Tell...

- We can all improve our diet
- A balanced diet leads to better overall health
- A little knowledge about nutrition goes a long way

Nutrition Basics: Macronutrients



Carbohydrates

- Should make up approximately 45-65% of your diet
- Simple carbohydrates: sugar, honey, syrup
- Complex carbohydrates: bread, pasta, legumes, vegetables

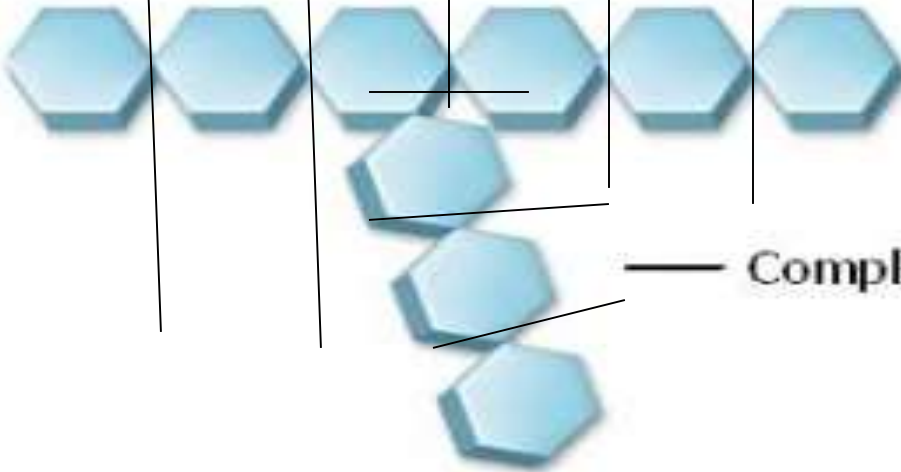
Glucose/
Sugar



Sucrose



Starch



Simple Carbohydrates (Sugars)

Complex Carbohydrate

SIMPLE CARBOHYDRATES POP QUIZ

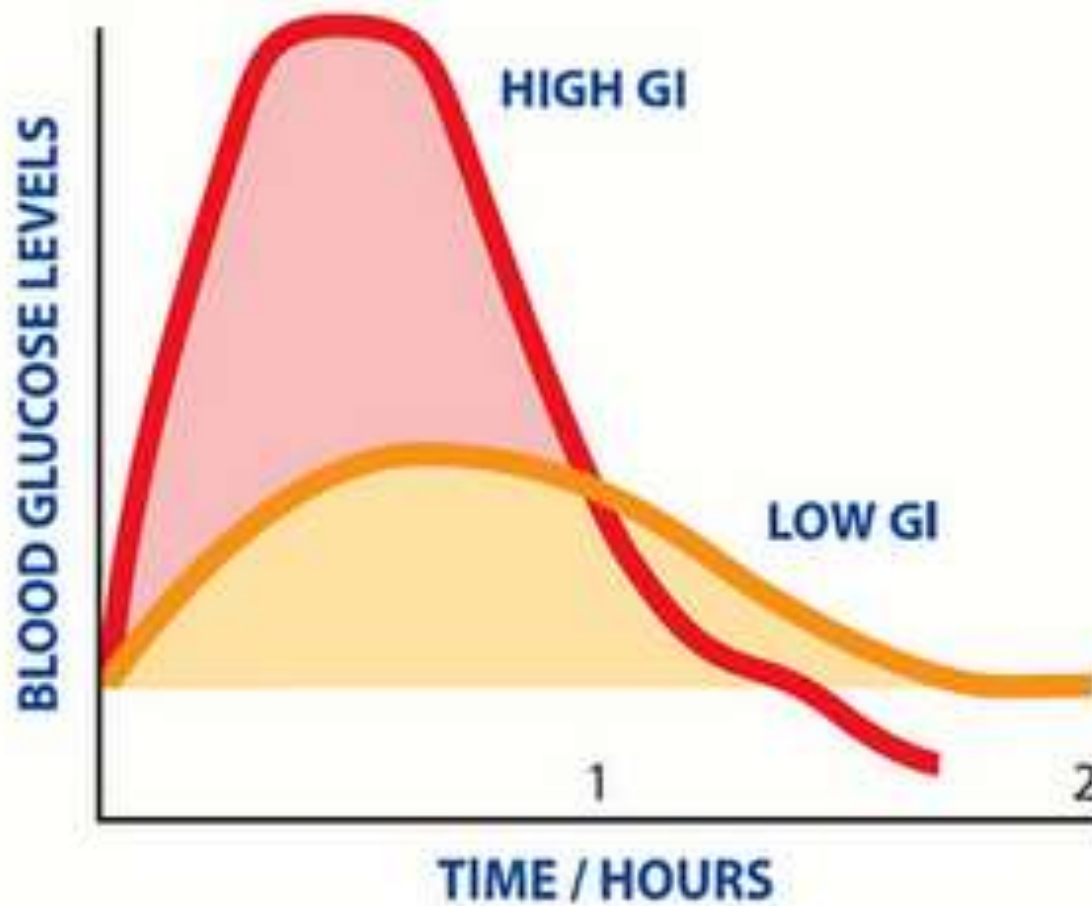


Nutrition Myth...EXPOSED!

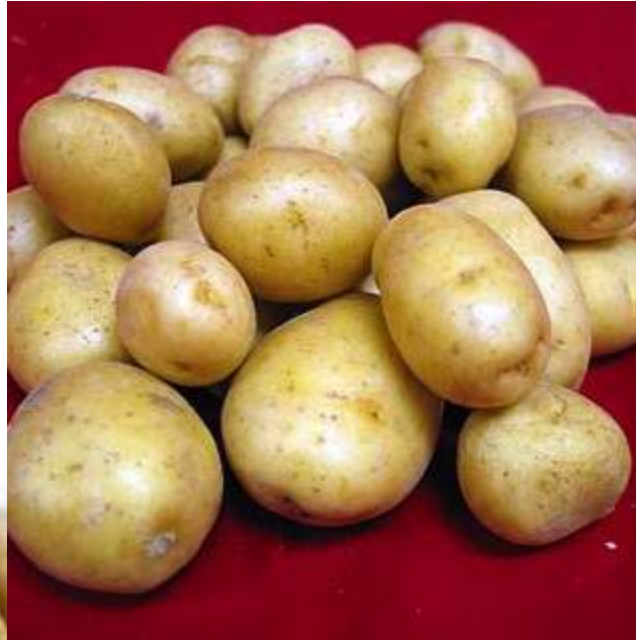
**You must avoid carbs if you want
to lose weight.**

Glycemic Index

- A measure of how long it takes for your body to get energy from a carbohydrate—how many bonds does your body have to break before it gets all the energy?
- Higher glycemic index = breaks down faster
- Lower glycemic index = breaks down slower
 - Sugar: high glycemic index
 - Fiber cereal: lower glycemic index



GLYCEMIC INDEX POP QUIZ!



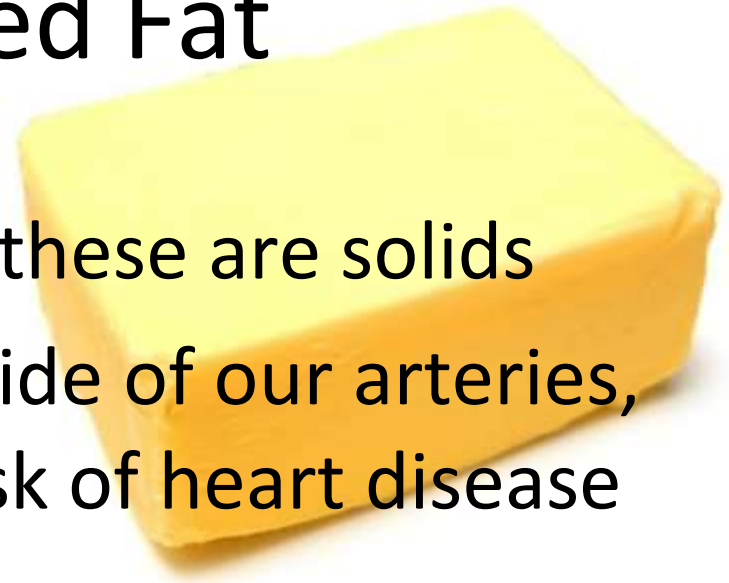
Fats

- Less than 20-35% of calories should come from fats
- Most calories per gram—9 calories compared to only 4 per gram of carbohydrates and protein

Not all fats are created equal!

- Saturated fat = bad fat
- Unsaturated fat = good fat
- Trans-saturated fat = WORST fat

Saturated Fat



- At room temperature, these are solids
- Tend to stick to the inside of our arteries, leading to increased risk of heart disease and stroke
- Increase cholesterol levels

BAD FAT!

Unsaturated Fat

- Two different types: monounsaturated and polyunsaturated
- Found as liquids at room temperature
- May cause levels of “good cholesterol” to rise



GOOD FATS!

TOXIC TRANS FAT

IN PROCESSED FOODS

CAP

GUIDE



WORST FAT!

DIETARY FATS POP QUIZ!



Total Fat: 46.9g
Saturated: 3.5g
Trans Fat: 0g
Unsaturated: 43.4g

Total Fat: 27g
Saturated: 24g
Trans: 0g
Unsaturated: 3g



Total Fat: 35g
Saturated: 5g
Trans Fat: 0g
Unsaturated: 30g

Protein

- 10-35% of calories should be from protein
- Proteins are made up from building blocks called amino acids
- Our body then breaks down these long chains of amino acids to make the “building blocks” necessary to make body parts— muscles, ligaments, skin, hair, nails

Supplements



Calories

- Unit of energy
- Technically speaking—the amount of energy it takes to raise 1kg of water by 1 degree Celsius

The Calories in these items could:



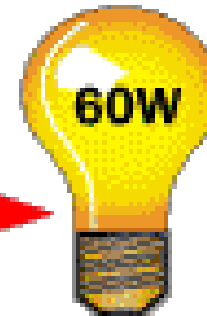
5 lbs of spaghetti



**Brew a pot
of coffee**



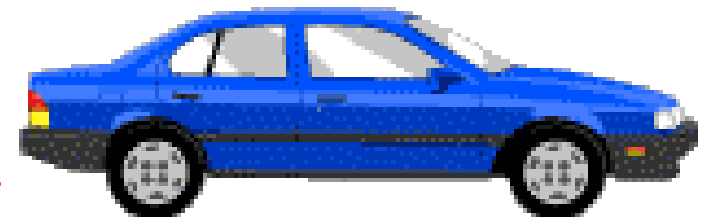
**1 piece of cherry
cheesecake**



**Light a bulb
for 1.5 hours**



217 Big Macs



Drive a car 88 miles

Calories are King!

- 3500 calories = 1 pound of fat
- Your body doesn't discriminate against calories—a calorie is a calorie is a calorie!

Soda



Original 8-ounce bottle
97 calories



12-ounce can
145 calories



20-ounce bottle
242 calories

Cup of Coffee



Coffee with milk and sugar
8 ounces
45 calories

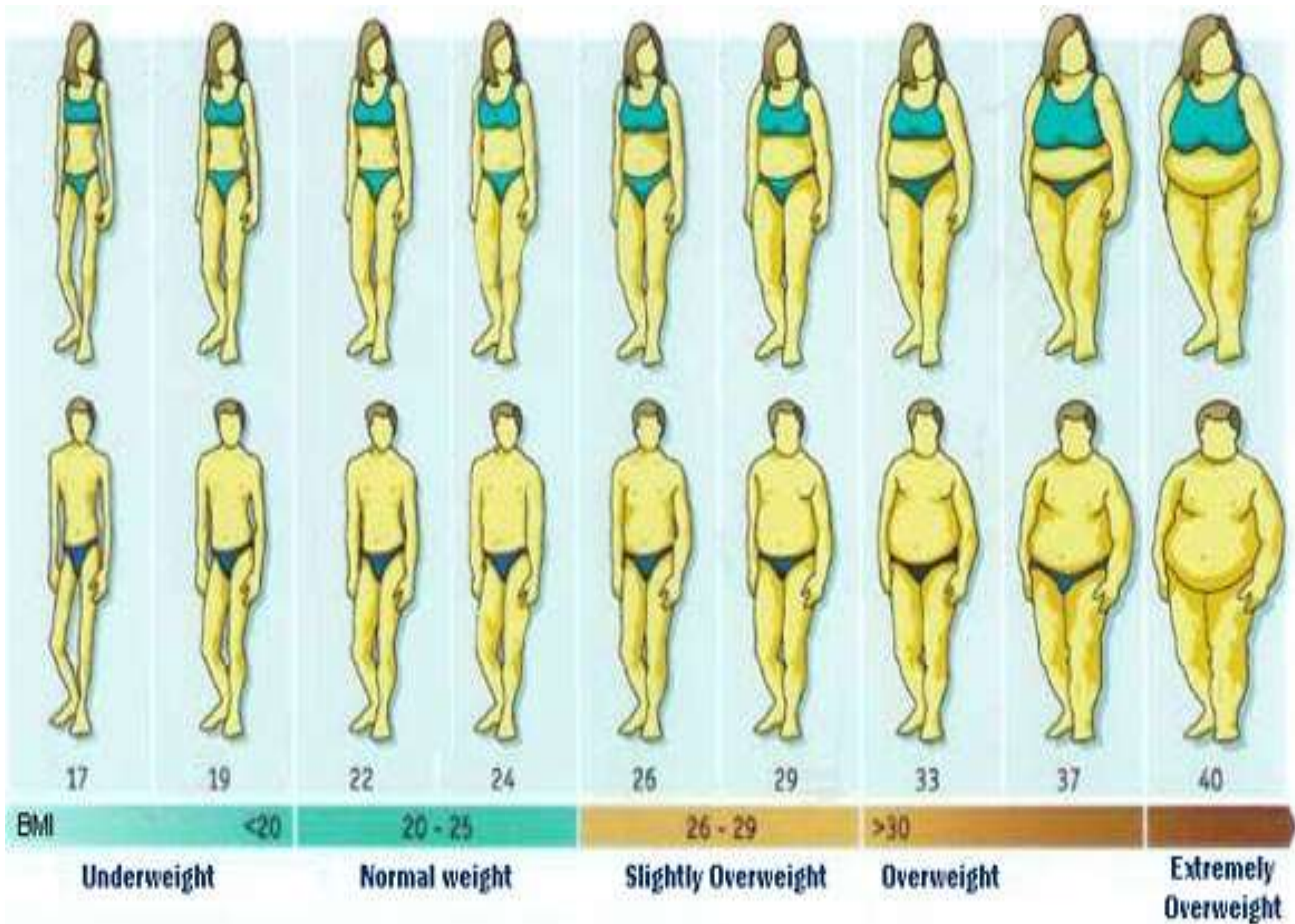


Grande cafe mocha with whip, 2% milk
16 ounces
330 calories

Body Mass Index

- BMI is the relationship between your weight and your height
- Not a perfect system, but generally recognized to approximate the amount of body fat you have
- Designed for age 18-65





BMI: Why does it matter?

- Heart disease
- Stroke
- Liver disease
- Gallbladder disease
- Type-2 diabetes
- Cancer
- Blood clots
- Breathing problems
- Arthritis
- Pregnancy risks

Premature Death!

Macronutrients and Micronutrients

Give us energy

- Fat
- Carbohydrates
- Protein

Nutrients that allow our body to function

- Vitamins
- Minerals

Finding a balance – the key to a healthy diet

The goal is to get the maximum amount of nutrients while staying within your daily energy requirements

Nutrient dense foods are the best way to do this



We all have a certain amount of energy we need each day - like 'cash flow'

- Use an on-line calculator to find out yours
 - Women between 1900-3000 per day
 - Men between 2400 – 3800 per day
- You can see the results within weeks your balance is 'off'

Your 'investments' pay off in the long term

- Adequate nutrient intake helps to prevent disease

Canada's Food guide

- Eating a variety of foods is the best and easiest way to ensure that you are meeting your micronutrient needs
- You DO NOT need to be an expert



CANADA'S FOOD GUIDE

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

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			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	7	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



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 (35 g)



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)

Myth or Truth?

These two foods are equally healthy



Myth

Vitamin D

- Results from large trials expected in 2016 – until then there is a lot we don't know
- Difficult to get enough from food. Traditionally, sunshine was our main source
- Sunshine has its risks though – supplements are safer
- New recommendations are...

Adults up to age 70	600 IU per day
Over age 70	800 IU per day

Fibre

- High fibre diet can reduce your risk of heart disease, stroke and type 2 diabetes
- Need 25-30g of fibre a day for health benefits
- Dietary fibre = soluble and insoluble fibre
- May need to increase fibre in your diet slowly to avoid side effects

Myth or Truth?

Fruit and vegetable juices are as good for you as fruits and vegetables

Myth

A smart choice for your sweet tooth. Since you probably don't have a vegetable tooth.

Not a veggie fan? Well, V8 V-Fusion® juice gives you a full serving of vegetables plus a full serving of fruit.* But it just tastes like fruit. With no added sugar. Sweet.

WHAT'S YOUR NUMBER?

*See V8.com for more information. © 2011 V8 Juice Co.

The advertisement features three bottles of V8 Fusion juice: Pomegranate & Raspberry, Cranberry & Blackberry, and Strawberry & Orange. A large green speech bubble contains the headline text. The background is a light, textured surface.

Sodium

Did you know?

- About 77 percent of sodium comes from processed foods and foods eaten outside the home
- Many restaurant meals provide more than a whole day's worth of sodium
- A low sodium diet contains fewer than 2 grams (2,000 milligrams) of sodium each day
- Read food labels carefully!
- Explore other tastes ie. Lemon pepper, herbs and spices

Nutrition Myth...EXPOSED!

The best way to limit your sodium intake is to stop using the salt shaker.

Guess the sodium content...



270 mg



450mg



1050mg (crispy)
630mg (grilled)

Calcium

- Consuming calcium in childhood can lead to higher bone mass in adulthood
- Calcium and Vitamin D are good for bones and teeth
- Exercise is just as important
- Most people need at least 1000mg per day – over 2000mg can cause side effects
- Supplements are just as well absorbed – but talk to your doctor about the best way to take supplements

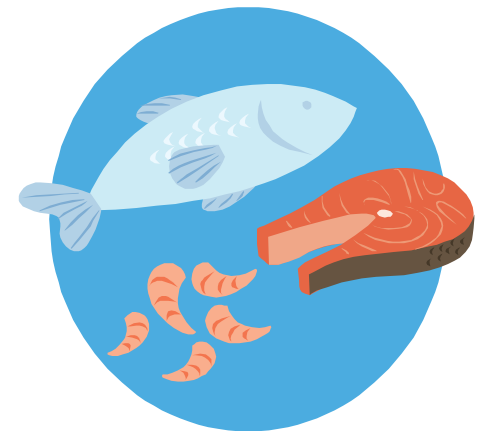
Antioxidants

- Supplementing with antioxidants has not been shown to decrease disease
- Fruits and vegetable intake is associated with lower rates of disease – including heart attack and stroke



Omega 3 Fatty acids

- Found in fatty fish, canola oil, walnuts and flax
- Good for heart health in adults
- Good for visual and cognitive development in fetuses and children under the age of 2
- Suggest 250mg/day
- Equivalent to
 - 3 oz of salmon a week
 - 8 oz canned tuna a week
 - 2 omega-3 enriched eggs per day



Cholesterol

- Probably more useful to look at saturated fat than at cholesterol when choosing your foods
- Saturated fat should be less than 7% of energy intake (15 grams if 2000 cal diet)
- Regular exercise also helps cholesterol levels
- Talk to you doctor if you are at risk...follow a healthy diet even if you're not

Nutrition Myth...EXPOSED!

You need vitamin and mineral supplements to be healthy.

Bottom line...

Pick something that is important to you
and count it

Some ideas...

Calories

Saturated fats

Sodium

Fibre

Calcium

Medications

There are few medications to help with weight loss

Most only work while you are taking them – not in the long term

They can be expensive and have side effects

Talk to your doctor

Beware of advertising – if there were something that was 100% safe and that worked 100% of the time – your doctor would be prescribing it!

Nutrition Myth...EXPOSED!

Reading food labels is too hard.



Nutrition Facts

Per 9 crackers (23 g)

Amount	% Daily Value
Calories 90	
Fat 4.5 g	7 %
Saturated 2.5 g	13 %
+ Trans 0 g	
Cholesterol 0 mg	
Sodium 275 mg	12 %
Carbohydrate 12 g	4 %
Fibre 1 g	4 %
Sugars 0 g	
Protein 3 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 2 %	Iron 8 %

Nutrition Facts

Per 4 crackers (20 g)

Amount	% Daily Value
Calories 85	
Fat 2 g	3 %
Saturated 0.3 g	2 %
+ Trans 0 g	
Cholesterol 0 mg	
Sodium 90 mg	4 %
Carbohydrate 15 g	5 %
Fibre 3 g	12 %
Sugars 1 g	
Protein 2 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 2 %	Iron 7 %

Serving size
Portion size that all the nutrition facts are based on.

Calories
Number of calories per serving

Total fat
Number of grams per serving.

Saturated fat
Number of grams per serving.
This type of fat raises blood cholesterol. Foods with more than 1 gram of saturated fat per serving should be limited.

Trans fat
Number of grams per serving.
Like saturated fat, trans fat raises blood cholesterol. Choose foods with the lower combined amount of saturated fat and trans fat and low cholesterol.

Nutrients
Shows cholesterol, sodium, sugar and protein amounts per serving.

Sodium
Number of milligrams per serving.
Healthy diets limit sodium to 2,400 milligrams each day; however, your doctor may restrict your sodium further.

Nutrition Facts

Serving Size 3 (120g)
Servings per container 2

Amount Per Serving

Calories 180

Calories from Fat 20

% Daily Value*

Total Fat 2.5g 4%

Saturated Fat 1g 4%

Trans Fat 0g 0%

Cholesterol 10mg 4%

Sodium 430mg 18%

Total Carbohydrate 34g 11%

Dietary Fiber 2g 3%

Sugars 3g

Other carbohydrate 30g

Protein 7g

Vitamin A 0% • Vitamin C 0%

Calcium 4% • Iron 8%

Thiamin 15% • Riboflavin 10%

Niacin 8%

* 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 Carb.			300g	375g
Dietary Fiber			25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

Ingredients: Water, enriched flour, flour, niacin, iron, thiamin, riboflavin, folic acid, hydrolyzed soy protein, dehydrated cheese, eggs, margarine, salt, dehydrated onions, spices.

Calories from fat
Number of calories per serving that come from fat.

% Daily Value
A percentage of daily intake in a serving, based on a 2,000-calorie diet. This is of limited value when selecting foods.

Fiber
Number of grams of fiber per serving. Most people should aim for 25 or more grams of dietary fiber per day.

Daily Value chart
Recommended daily intake of key nutrients, for both 2,000- and 2,500-calorie diets. Your calorie needs may be more or less than this amount.

Calories chart
Number of calories per gram of fat, carbohydrate, and protein.

Nutrition Facts

Per 9 crackers (23 g)

Amount	% Daily Value
Calories 90	
Fat 4.5 g	7 %
Saturated 2.5 g	13 %
+ Trans 0 g	
Cholesterol 0 mg	
Sodium 275 mg	12 %
Carbohydrate 12 g	4 %
Fibre 1 g	4 %
Sugars 0 g	
Protein 3 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 2 %	Iron 8 %

Nutrition Facts

Per 4 crackers (20 g)

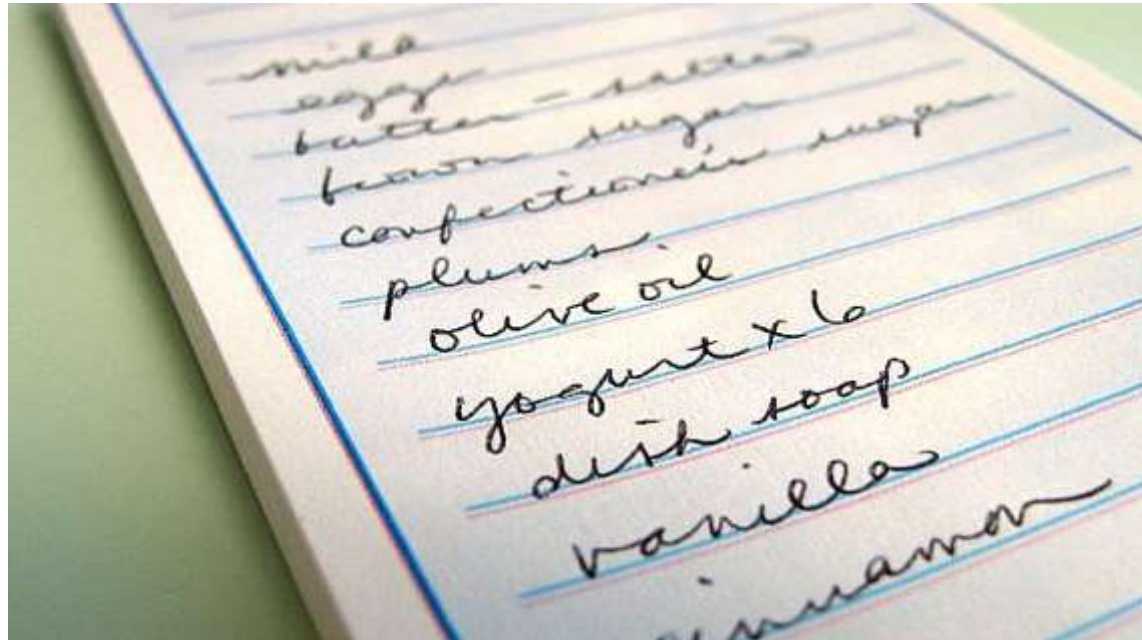
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Calories 85	
Fat 2 g	3 %
Saturated 0.3 g	2 %
+ Trans 0 g	
Cholesterol 0 mg	
Sodium 90 mg	4 %
Carbohydrate 15 g	5 %
Fibre 3 g	12 %
Sugars 1 g	
Protein 2 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 2 %	Iron 7 %

Notorious Tricksters/Superstars

- Processed meats
- Granola Bars
- Muffins
- Cheese
- Frozen Yogurt
- Crackers
- Popcorn
- Whole grain pasta
- Oatmeal
- All-Bran/Bran Buds
- Olive oil
- “Fatty” Fish
- Sweet potatoes
- Tofu
- Dark green/orange vegetables

HOW do we eat well?

Planning



Budgeting



Grocery Store Survival Tips



Cooking at Home

- Low fat dairy
- Home-made dressings/sauces
- Skinless chicken
- Substitute oils/creams/cheeses/white rice
- Add vegetables
- Recipes with nutrition info

Daily Eating Habits

- Eat breakfast
- Limit portions, more frequent snacks
- Eat your calories instead of drinking them
- Cut down alcohol
- Plan for cravings/desserts
- Plan for stress

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"I'M ON THE 3 MONTH DIET... IT ONLY LASTS A WEEK,
BUT IT FEELS LIKE 3 MONTHS."

search ID: cza0554

Nutrition Myth...EXPOSED!

**Dietitians only eat healthy foods
– never chocolate, fries, chips or
candy.**

Restaurants

- Grilled, not battered
- Avoid: bread baskets, cream sauces
- Portions (SHARING!)
- Salad dressing on the side
- Be aware when you are treating yourself

Vacations

- Prepare your own food when possible
- Exercise
- Eat breakfast
- Plan your day
- Reduce alcohol



Where to get more help...

- www.healthlinkbc.ca/dietitian (call 8-1-1)
- www.dietitians.ca (Dietitians of Canada)
- www.cpha.ca (The Basic Shelf cookbook, \$7.50)
- www.eatrightontario.ca (EatRight Ontario)
- www.eaTracker.ca (Dietitians of Canaa)
- www.hc-sc.gc.ca (Health Canada)
- my.clevelandclinic.org (Cleveland Clinic)

Healthy Lifestyle Tips

- Sleep well
- Exercise
- Consider your eating habits
- Avoid making food a reward





I'll have you know you're talking to the leader of the largest nation on Earth.

And what nation is that?

PROCRASTINATION

Peter Dinklage
8-28-07

BIZARRRO.COM

Benefits of Healthy Eating and a Healthy Weight

- Longer life
- Less illness
- More energy
- Better mental health
- Better sex-life
- Overall improved quality of life

Main “Truths”

- No miracle foods, only balanced diets (labels!)
- Try to make changes you intend to be permanent
- Habits take a lifetime to build and are HARD to change
- You CAN do it! (But we’re here to help...)
- A little knowledge goes a long way

Thank you!

(Questions?)

Where to get more help...

- www.healthlinkbc.ca/dietitian (call 8-1-1)
- www.dietitians.ca (Dietitians of Canada)
- www.cpha.ca (The Basic Shelf cookbook, \$7.50)
- www.eatrightontario.ca (EatRight Ontario)
- www.eaTracker.ca (Dietitians of Canaa)
- www.hc-sc.gc.ca (Health Canada)
- my.clevelandclinic.org (Cleveland Clinic)