

Nutrition

Who likes to eat food?

Outcomes that we are meeting:

- ▶ W-9.1 - use your knowledge of a healthy, active lifestyle to promote and encourage family/peer/community involvement
- ▶ W-9.5 - develop strategies that promote healthy nutritional choices for yourself and others

Vocab Lesson

- ▶ Take out a piece of paper and in your own words write what you think it means or an example.

Enriched

Nutrient content claim

Fortified

Health claim

Ingredients list

Nutrient dense

%DV (daily value)

Serving size

Sodium

Sugar

Bill Nye - Nutrition Video

- ▶ Video worksheet



Game first.

► **If we have time** get into our poster groups

1. Carbohydrates
2. Fats
3. Protein
4. Vitamins and Minerals
(Vitamin D and Calcium)
5. Fiber

Canada's Food Guide

- ▶ What is Canada's Food Guide?
- ▶ What are the groups in Canada's Food Guide?
- ▶ What are the **recommended** servings for your age group?
- ▶ Has anyone ever used it?

[Canada's Food Guide Video](#)

Nutrient Groups Posters

	Children			Teens		Adults			
	2-3	4-8	9-13	14-18 Years		19-50 Years		51+ Years	
	Girls and Boys		Female	Male	Female	Male	Female	Male	
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

Source: Recommended number of food guide servings per day. (2007), Health Canada. Reproduced with the permission of the Minister of Public Works and Government Services Canada, 2009.

- ▶ Canada's Food Guide is divided into categories that provide age and gender specific recommendations on the amount of food that should be eaten from each food group each day.

Vegetables and Fruit

- ▶ Servings: Girls - 6-7 Boys - 6-8
- ▶ What is a serving?

½ cup of fresh fruit or veggies

1 cup of raw leafy greens

½ cup of 100% juice (like from a juicer not a carton)



Since veggies and fruit are the largest part of the rainbow they play the biggest role in a healthy eating pattern.

Eat a LARGE variety to get the vitamins and minerals you need.

Grain Products

► Servings: Girls - 6 Boys - 7

► What is a serving?

1 slice of bread

½ a bagel

½ a pita

½ cup of cooked rice or quinoa

30 g of cereal

½ cup cooked pasta



Milk and Alternatives

► Servings: Girls - 3-4 Boys - 3-4

► What is a serving?

1 cup of milk

$\frac{3}{4}$ cup of yogurt

50 g of cheese

This group is key for developing bones, helping you grow and keeping teeth strong (CALCIUM)

Milk and
Alternatives

1 cup (250ml)
milk



=



use a
measuring
cup

$\frac{3}{4}$ cup (175g)
yogurt



=



small, single
serve container

2 oz (50g)
hard cheese or
2 processed
cheese slices

=

2 thumbs



Meat and Alternatives

► Servings: Girls - 1-2 Boys-3

► What is a serving?

$\frac{1}{2}$ cup of cooked fish, poultry or meat

$\frac{3}{4}$ cup cooked legumes

2 eggs

$\frac{3}{4}$ cup of tofu

2 tbsp peanut butter

$\frac{1}{4}$ cup shelled nuts or seeds



The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the left and right sides of the frame, creating a modern, clean aesthetic. The central area is a plain white space where the text is placed.

Nutrients

Eat better, feel better, be better.

Carbohydrates - give you energy

Simple	Complex
Not healthy	Healthy
Sugars with empty calories	Nutrient dense
Jam, candy, syrup	Full of fibre, vitamins and minerals
Lead to diabetes if eaten too much	Whole grains, fruits and veggies

Carbohydrate Deficiency

- ▶ The body will use fats and proteins stored in the body as fuel instead
- ▶ May cause low energy, constipation (as carb foods are often high in fiber as well)
- ▶ Headache
- ▶ Nausea
- ▶ You may develop ketosis
- ▶ Signs and symptoms of ketosis include nausea, headache and bad breath, as well as mental fatigue. Ketosis can cause your body to produce high levels of uric acid, which can be a risk factor for painful swelling of the joints and kidney stones

Fats - insulate, nerve function, brain development, padding

Saturated	Unsaturated
Bad for heart health	Healthier for you
Not healthy	Needed in small amounts
Solid at room temp	Liquid at room temp
Animal based	Plant based

Essential Fatty Acid Deficiency

- ▶ Dry skin
- ▶ Brittle nails
- ▶ Calluses
- ▶ Dry hair, mouth, throat, eyes
- ▶ Excessive thirst
- ▶ Cravings for fatty foods
- ▶ Painful joints

Proteins - build and repair cells

Complete	Incomplete
Come from animals	Plant based
Contain everything you need	Missing parts
Meat, milk , eggs	2 incomplete are complimentary and make a complete (rice/beans)

Protein Deficiency

- ▶ Muscle soreness, weakness, cramping
- ▶ Muscle wasting
- ▶ Edema (swelling of hands, feet, ankles) as protein helps maintain proper fluid balance
- ▶ Thinning hair/hair loss

Vitamins and Minerals - needed so the body can use other nutrients and function properly

What do vitamins and minerals do?

Vitamins and minerals are what make your body work properly

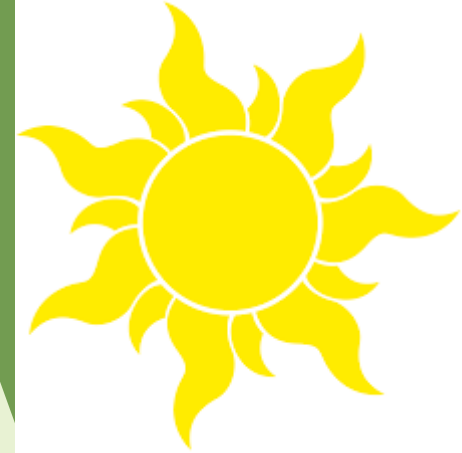
Vitamin C and B need to be replaced daily in the body as they pass quickly through your system

Vitamins and minerals boost immune system, support growth and development and help cells and organs function properly

They own you.

Vitamin D - the sunshine vitamin

- ▶ Your body manufactures it when in the sunlight! But ... We live in Canada and don't get much in the winter.
- ▶ Helps the body absorb **calcium** to build bones
- ▶ It is very difficult to get all of the vitamin D you need from just food. Often it necessary to take a supplement.
- ▶ Sources: egg yolks, oily/fatty fish like mackerel, fortified milk, soy milk and orange juice



Vitamin D Deficiency

- ▶ Excessive sweating
- ▶ Noticeable and unexpected weakness
- ▶ Broken bones
- ▶ Chronic pain
- ▶ Depression-like feelings

Vitamin D Deficiency: Are You at Risk?

Vitamin D deficiency occurs when you are not getting the recommended level of vitamin D over time. Certain people are at higher risk for vitamin D deficiency, including:

- ▶ People who spend little time in the sun or those who regularly cover up when outdoors
- ▶ People living in nursing homes or other institutions or who are homebound;
- ▶ People with certain medical conditions such as Celiac disease and inflammatory bowel disease
- ▶ People taking medicines that affect vitamin D levels such as certain anti-seizure medicines
- ▶ People with very dark skin
- ▶ Obese or very overweight people

Calcium

- ▶ Calcium is a mineral that is necessary for life.
- ▶ builds bones
- ▶ helps our blood clot
- ▶ Helps nerves send messages
- ▶ Helps muscles contract
- ▶ About 99 percent of the calcium in our bodies is in our bones and teeth. Each day, we lose calcium through our skin, nails, hair, sweat, urine and feces, but our bodies cannot produce new calcium.
- ▶ **That's why it's important to try to get calcium from the food we eat. When we don't get enough calcium for our body's needs, it is taken from our bones.**
- ▶ **Sources: dairy products, spinach, kale, fortified orange juice**

Fiber

- ▶ Needed for healthy digestion
- ▶ Prevents colon cancer by removing harmful bacteria
- ▶ Keeps you feeling good
- ▶ Regulates blood sugar
- ▶ Slows fat absorption

Fiber Deficiency

- ▶ Risk of developing colon cancer
- ▶ Being overweight
- ▶ Cardiovascular disease
- ▶ Constipation
- ▶ Diabetes

Water ... just drink it

- ▶ You should be drinking 8 glasses of water per day
- ▶ About 2L if you aren't exercising or in really hot weather
- ▶ Even if you're mildly dehydrated you will feel tired and like you have no energy

What food and drinks provide us with water?

- ▶ About 20% of our water needs come from food. Watermelon, oranges, grapes, cucumbers, tomatoes and peppers all have high water content. The other 80% comes from drinks.
- ▶ Healthy drinks include water, milk and 100% juice (but no more than $\frac{1}{2}$ a cup per day)
- ▶ You may think athletes need sports drinks. These are only needed if you are engaged in more than 60 minutes of intense activity. They are needed to replace electrolyte. Chocolate milk is also one of the best after-workout drinks there is!

Vitamin A

- ▶ Prevents eye problems
- ▶ Promotes healthy immune system
- ▶ Keeps your skin healthy
- ▶ Essential for growth and development

Sources: dark orange or green veggies like carrots, sweet potato, pumpkin, kale

Orange fruits like cantaloupe, apricots, peaches, papaya and mango

Vitamin A Deficiency

- ▶ Increased risk of respiratory infection
- ▶ Delayed growth and bone development
- ▶ Infertility
- ▶ Fatigue
- ▶ Night blindness
- ▶ Foamy patches on the whites of the eye
- ▶ Blindness due to damage to the retina
- ▶ Dry skin and hair
- ▶ Broken fingernails



Vitamin C

- ▶ Needed to form collagen (helps hold cells together)
- ▶ Essential for healthy bones, teeth, gums, and blood vessels
- ▶ Helps body absorb iron
- ▶ Aids in wound healing
- ▶ Contributes to brain function

- ▶ Sources: citrus fruits, kiwi, strawberries, guava, peppers, tomatoes, broccoli and spinach

Vitamin C Deficiency

- ▶ Condition called scurvy (easy bruising, bleeding, joint and muscle pain)
- ▶ Tiredness and weakness
- ▶ Dry skin
- ▶ Split ends
- ▶ Swelling and discoloration of gums
- ▶ Nosebleeds
- ▶ Poor healing
- ▶ Problem fighting infection
- ▶ Tooth loss
- ▶ Changes in bones
- ▶ Shortness of breath
- ▶ Nerve problems
- ▶ Bleeding in the brain and around the heart (can cause death)



Vitamin E

- ▶ Antioxidant
- ▶ Helps protect cells from damage
- ▶ Important for red blood cell health

- ▶ Sources: vegetable oils, nuts, green leafy vegetables, avocado, whole grains, liver, yams, turnip

Vitamin E Deficiency

- ▶ Muscle weakness
- ▶ Loss of muscle mass
- ▶ Abnormal eye movements
- ▶ Vision problems
- ▶ Unsteady walking

Vitamin K

- ▶ Plays a key role in blood clotting
- ▶ Prevents heart disease
- ▶ Needed for bone support

- ▶ Sources: spinach, asparagus, broccoli, kale, chard beans, soybeans, eggs, strawberries, grapes, blueberries, meat

Vitamin K Deficiency

- ▶ Easy bruising
- ▶ Excessive bleeding
- ▶ Blood in urine
- ▶ Heavier periods

Vitamin B-12

- ▶ Helps make red blood cells (or erythrocytes)
- ▶ Important for nerve cell function
- ▶ Sources: fish, red meat, poultry, milk, cheese, eggs



Vitamin B-12 Deficiency

Symptoms of Vitamin B12 Deficiency

- 1 Mental Problems**
Problems such as brain fog, Alzheimer's and dementia are symptoms of low B12
- 2 Fatigue**
The most classic B12 Deficiency Symptom
- 3 Hair Problems**
Thinning hair and grey hair can be symptoms too
- 4 Blood Disorders**
Blood disorders such as elevated MCV are symptoms
- 5 Infertility**
In both women and men
- 6 Chronic Pain**
Fibromyalgia, back pain, , neuropathy and more

Easy-immune-health.com

Vitamin B-6

- ▶ Important for normal brain function
- ▶ Helps break down proteins
- ▶ Helps make red blood cells

- ▶ Sources: potatoes, bananas, beans, seeds, nuts, red meat, poultry, fish, eggs, spinach, fortified cereal

- 1) Tuna
- 2) Beef
- 3) Chicken
- 4) Turkey
- 5) Venison
- 6) Potatoes
- 7) Codfish
- 8) Sunflower seeds
- 9) Halibut
- 10) Spinach



Vitamin B-6 Deficiency

- ▶ Anemia
- ▶ Itchy rashes
- ▶ Scaly skin on lips
- ▶ Cracks at the corners of the mouth
- ▶ Swollen tongue
- ▶ Depression
- ▶ Confusion
- ▶ Weakened immune system



Thiamine (Vitamin B-1)

- ▶ Helps convert carbohydrates into energy
- ▶ Essential for heart, muscles and nervous system to function
- ▶ Sources: fortified bread, cereals, pasta, lean meat, dried beans, soy foods, peas, whole grains

Thiamin Deficiency

- ▶ Headache
- ▶ Nausea
- ▶ Fatigue
- ▶ Irritability
- ▶ Depression
- ▶ Abdominal discomfort

Niacin (Vitamin B-3)

- ▶ Helps turn food into energy
- ▶ Maintains healthy skin
- ▶ Important for nerve function

- ▶ Sources: meat, poultry, fish, peanuts

Niacin Deficiency

- ▶ Indigestion
- ▶ Fatigue
- ▶ Canker sores
- ▶ Vomiting
- ▶ Poor circulation
- ▶ Depression
- ▶ Cracked scaly skin
- ▶ Burning in the mouth
- ▶ Swollen tongue

Riboflavin (Vitamin B-2)

- ▶ Essential for growth
- ▶ Turns carbs into energy
- ▶ Helps production of red blood cells

- ▶ Sources: meat, legumes, nuts, dairy, green leafy veggies, broccoli, asparagus

Riboflavin Deficiency

- ▶ Anemia
- ▶ Mouth or lip sores
- ▶ Skin disorders
- ▶ Sore throat

Folate (Vitamin B-9)

- ▶ Helps make red blood cells and DNA
- ▶ Sources: liver, legumes, green leafy veggies, asparagus and orange juice.

Folate Deficiency

- ▶ Weak, tired light headed
- ▶ Forgetful
- ▶ Grouchy
- ▶ Loss of appetite
- ▶ Trouble concentrating

Zinc

- ▶ Healthy skin
- ▶ Prevent acne
- ▶ Strengthens immune system
- ▶ Maintains sense of taste and appetite
- ▶ Important for vision (works with vitamin A)
- ▶ Prevents male infertility

- ▶ Sources: oysters, shellfish, beef, lamb, pumpkin seeds, lentils, cashews, turkey

Zinc Deficiency

- ▶ Diarrhea
- ▶ Blindness
- ▶ Loss of taste and smell
- ▶ Depression
- ▶ Weakened immunity
- ▶ Hair loss
- ▶ Acne
- ▶ Warts
- ▶ Mental lethargy

Iron

- ▶ Carries oxygen to all parts of the body
- ▶ Helps your brain work and develop
- ▶ Sources: meat, fish, poultry (easily absorbed), spinach, oatmeal, cereal, yogurt

Iron Deficiency

- ▶ Anemia (not enough hemoglobin - cant carry oxygen around the body)
- ▶ Exhaustion



Magnesium

- ▶ Needed for normal heart rhythm
- ▶ Energy production
- ▶ Building block for DNA
- ▶ Activates muscles and nerves

- ▶ Sources:

Magnesium Deficiency

- ▶ Eye twitches
- ▶ Abnormal heart rhythm
- ▶ Weakness
- ▶ Muscle spasms
- ▶ Numbness and tingling
- ▶ Seizures

Food Labels

Food labels are found on packaged food to help you make informed food choices. They provide the following information:

- ▶ *the nutrition facts table*
- ▶ *ingredient list*
- ▶ *nutrition and health claims*

What has to be included on a food label?

By law, most packaged food must be labelled with:

- ▶ a nutrition facts table, which gives you information on:
 - ▶ serving size
 - ▶ calories
 - ▶ nutrients
 - ▶ percent daily values (% DV)
- ▶ an ingredient list, which lists all the ingredients in a food by weight
 - ▶ this begins with the ingredient that weighs the most and ends with the ingredient that weighs the least

- ▶ Some packaged food may also have nutrition and health claims.
- ▶ These claims describe :
 - ▶ amount of a nutrient in a food, for example: "low sodium"
 - ▶ positive effects of a food on your health, for example: "A healthy diet rich in a variety of vegetables and fruit may help reduce the risk of some types of cancer."

Nutrition Facts

Serving Size 1 Cup (240mL)		Servings Per Container 8	
Amount Per Serving			
Calories 120	Calories from Fat 25		
% Daily Value*			
Total Fat 3g			4%
Saturated Fat 0.5g			3%
Trans Fat 0g			
Polyunsaturated Fat 1.5g			
Monounsaturated Fat 0.5g			
Cholesterol 0mg			0%
Sodium 95mg			4%
Potassium 350mg			10%
Total Carbohydrate 19g			6%
Dietary Fiber 2g			8%
Sugars 17g			
Protein 5g			10%
Vitamin A 10%		• Vitamin C 0%	
Calcium 45%		• Iron 15%	
Vitamin D 30%		• Riboflavin 25%	
Folate 8%		• Vitamin B12 50%	
Phosphorus 8%		• Magnesium 10%	
*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	
Potassium	3,500mg	3,500mg	
Total Carbohydrate	300g	375g	
Dietary Fiber	25g	30g	
Protein	50g	65g	
Calories per gram:			
Fat	9	Carbohydrate	4
		• Protein	4

Pay attention to serving size: Are you eating more or less?

Watch the ratio of total carbs to sugars. The closer the grams of "sugar" is to the "total carbohydrates" in each serving, the closer the food gets to the junk quality.

Look for foods with 5 grams of sugar per serving or less

Recommended DV typically ranges from 50-75g for protein

Ingredients aren't listed here.

A good rule of thumb is to only consume packaged foods with 5 or less ingredients.

If a high % of calories come from fat, eat sparingly.

Not all fat is equal. Limit trans and polysaturated fats. Aim for foods high in monosaturated fats.

Identifies cholesterol raising fats only; look for hydrogenated oils in the ingredients

Total DV of sodium should be less than 2,400 mg. 5% DV is LOW sodium 20% of DV is HIGH sodium

Potassium DV is 3,500 mg/day

Remember our calorie counting equation from week 1 (excluding fiber correction)?
 $Fat (g) \times 9 + Carb (g) \times 4 + Protein (g) \times 4 = Total\ Calories$

Here:
 $9g \times 3 + 19g \times 4 + 5g \times 4 = 123$

Nutrient Dense Foods

Nutrient-dense foods are foods that have a lot of **nutrients** but relatively few calories. Look for foods that contain vitamins, minerals, complex carbohydrates, lean protein, and healthy fats.

What Foods Should I Eat?

- ▶ Plan your meals and snacks to include
- ▶ fruits and vegetables
- ▶ grains, especially whole grains
- ▶ low-fat or fat-free dairy products
- ▶ seafood, lean poultry and meats, beans, eggs, and unsalted nuts
- ▶ limited amounts of solid fats. Consume less than 10 percent of calories from saturated fats. Keep intake of *trans* fats as low as possible.
- ▶ limited amounts of cholesterol, salt (sodium), and added sugars.

Serving Size

Serving size is not necessarily the suggested quantity of food you should eat. The serving size tells you the quantity of food used to calculate the numbers in the nutrition facts table.

Nutrition Facts	
Serving Size	4 cookies (30g)
Servings Per Container	4
Amount Per Serving	
Calories 220	Calories from Fat 110
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 6g	30%
Trans Fat 0.5g	
Cholesterol 10mg	2%
Sodium 70mg	4%
Total Carbohydrates 25g	8%
Dietary Fiber 1g	4%
Sugars 20g	
Protein 3g	

%DV

(% DV) daily value tells you if the serving size has a little or a lot of a particular nutrient.

Sample Label for Macaroni and Cheese

Nutrition Facts	
Serving Size 1 cup (228g) Servings Per Container 2	
Amount Per Serving	
Calories 250	Calories from Fat 110
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 1.5g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

* 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 Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Start Here

Limit these Nutrients

Get Enough of these Nutrients

Footnote

Quick Guide to % DV

5% or less is low
20% or more is high



Nutrient Content Claims

describe the amount of a nutrient in a food. A good source of iron is an example of a nutrient content claim.



Health Claims

are statements about the helpful effects of a certain food consumed within a healthy diet on a person's health. For example, a healthy diet containing foods high in potassium and low in sodium may reduce the risk of high blood pressure, a risk factor for stroke and heart disease is a health claim.



Assignment - Homework

- ▶ **BRING** a food package (that can be flattened and stapled to a regular piece of paper to evaluate the label)
- ▶ The food **must** contain **fat, carbs, and protein**
- ▶ You **may not** use a beverage

What are some small changes that I can make in order to make healthier choices?

- ▶ Turn to the person on your left and tell them two unhealthy habits you have when it comes to food choices.
- ▶ Now tell them two things you can do to make better choices.



Here are some tips to choose healthier options:

- ▶ Small changes can make a big impact. Try to:
- ▶ Cut back on, sugary drinks like soft drinks and energy drinks. Sugar-free versions are okay to drink sometimes, but sugar-free fizzy drinks are still acidic, which can have a negative effect on bone and dental health. Water is the healthiest drink - try adding a slice of lemon, lime or orange for flavor.
- ▶ Keep a fruit bowl stocked at home for fast snacks.
- ▶ Eat breakfast every day so you're less likely to snack on junk food in the morning. A wholegrain breakfast cereal that is low in sugar served with low-fat milk can provide plenty of vitamins, minerals and fiber. Other fast and healthy options include yogurt with fruit or whole grain toast.
- ▶ Don't skip lunch or dinner either.
- ▶ Help with the cooking and think up new ways to create healthy meals. Make those old family recipes lower in fat by changing the cooking method - for example, grill, stir-fry, bake, boil or microwave, instead of deep frying.
- ▶ Reduce the size of your meals.
- ▶ Don't add salt to your food.
- ▶ Don't eat high-fat foods every time you visit a fast food outlet with your friends. Many of the popular fast food chains now have healthier food choices on the menu.
- ▶ Change your meeting place. Rather than meeting up with your friends at the mall food court, suggest a food outlet that serves healthier foods, such as Subway, Press'd, Jeffery's or any other restaurant that serves sandwiches, soups and salads.

How can I help my friends and family eat healthy too?

- ▶ A lot of the time it is easier to make healthy choices when the people around you are making the same choices as you.
- ▶ Lobby your school canteen for healthier food choices.
- ▶ Ask your school canteen to include a range of low-price healthy food choices.
- ▶ Help with the grocery shopping and choose fewer processed foods.
- ▶ Get involved in cooking at home.



Make a list of some healthy foods that could be put into a vending machine.

- ▶ Get into groups of 3 or 4 and come up with at least 10 foods that could go into a vending machine.
- ▶ Keep in mind it needs to be foods that are healthy and will not go bad.



Some healthy alternatives may be:

- ▶ • Trans fat-free popcorn
- ▶ • Trans fat-free potato chips
- ▶ • Nuts such as almonds, pistachios or cashews
- ▶ • Pumpkin and sunflower seeds
- ▶ • Dried fruits such as cranberries, apricots and raisins
- ▶ • Fruit leathers
- ▶ • Low-fat crackers
- ▶ • Brown rice crackers
- ▶ • Canned fruit in natural juices
- ▶ • Rice cakes
- ▶ • Whole grain granola and fruit bars
- ▶ • Bottled water
- ▶ • Sugar-free beverages
- ▶ • Sugar-free cookies
- ▶ • Oatmeal



How does Charles Spencer measure up?

- ▶ Healthy Nutrition Squad Worksheet
- ▶ Get into groups of 4 or 5. Go to the cafeteria or vending machines and fill out as much of the worksheet as you can.
- ▶ Come back to the room as soon as you have finished

Cellular Biology
Molecular
Individual
Cardiac
Vascular
International
Global Health
Metabolism
Muscle
Fat Tissue
Exercise Physiology
Body Weight
Lifestyle
Energy
Food
Physical activity
Inactivity
Nutrition
Cardiovascular Health
Rehabilitation

Obesity

► Teach Every Child About Food

Questions: Please make notes during the video

How dangerous is obesity?

What effects does it have on the population?

What does it cost us?

Who does it hurt?

How can we change?

How much money do you spend on fast food?



Breakfast: Most Important Meal of the Day

- ▶ Video worksheet
- ▶ Greater physical stamina, better concentration at school or work, a more efficient metabolism—the evidence is overwhelming that a healthy breakfast is the key to a productive day.
- ▶ Yet it's the meal most likely to be skipped by children, teenagers, and adults alike.
- ▶ This video brings home the importance of the day's first meal by exploring the numerous mental and physical benefits of a nutritious breakfast. Viewers will understand the relationship between eating and metabolism, specifically between breakfast and blood-sugar levels.

Who eats breakfast?

- ▶ What reasons do you have for skipping it?

EAT BREAKFAST !!!!!

- ▶ **Breakfast helps you meet your nutrient needs.**
Breakfast provides essential vitamins and minerals for healthy growth and development. Those who skip breakfast may not make up for missed nutrients later in the day.
- ▶ **Those who eat breakfast do better at school.**
Eating breakfast is associated with improved memory skills, better test grades and greater school attendance rates. Teens who miss breakfast may feel tired and hungry, and find it hard to concentrate.
- ▶ **Breakfast is linked to healthier body weights.**
People who regularly eat breakfast have healthier body weights than those who skip breakfast.
- ▶ **Breakfast eaters have healthier lifestyle habits.**
Children and adults who eat breakfast tend to make healthy food choices throughout the day and are more physically active than those who skip breakfast.

► **Not Hungry?**

It's a common complaint in the morning, but not a good reason to skip breakfast! If you aren't hungry for breakfast first thing in the day, try eating at least a small amount of something nutritious, like a banana. Then balance out your breakfast by packing some more foods to-go, like a cereal bar, muffin and yogurt drink. That way you'll have something healthy to eat when hunger does set in.

► **No Time?**

Try these time saving tips to help your family make time for breakfast:

- Make it a rule that all homework is done before bed.
- put your clothes out the night before
- Get lunches packed and in the fridge in the evening
- Set out all the things you need for breakfast the night before
- Have a variety of quick and easy breakfast foods on hand
- Keep the television turned off and cell phones away until you've eaten

SMART Goals

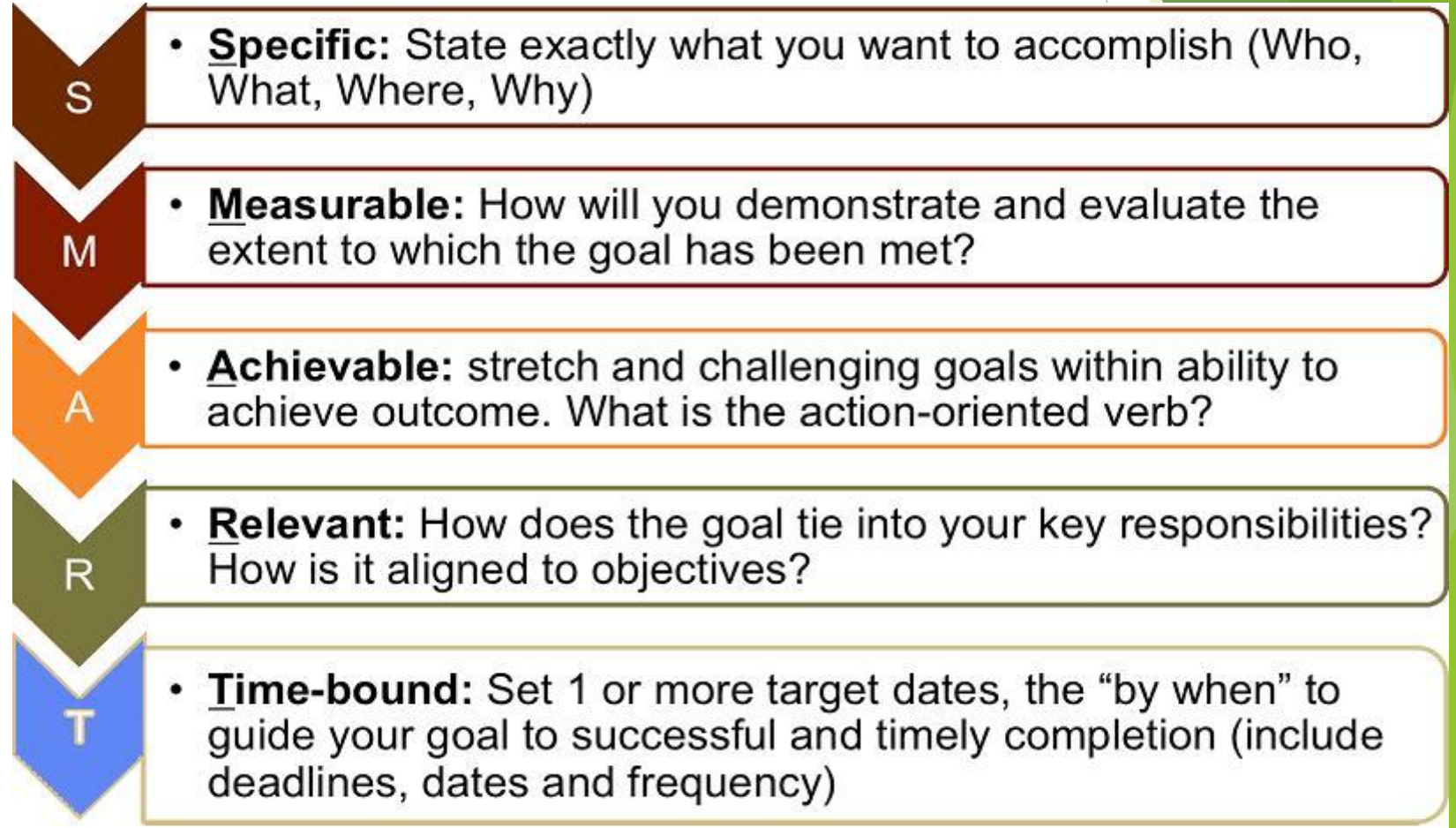
▶ S - specific

▶ M - measurable

▶ A - Attainable

▶ R - Realistic

▶ T - timely



S - Specific



- ▶ **Specific:** A specific goal has a much greater chance of being accomplished than a general goal. To set a specific goal you must answer the five “W” questions:
- ▶ *Who: Who is involved?
- ▶ *What: What do I want to accomplish?
- ▶ *Where: Identify a location.
- ▶ *When: Establish a time frame.
- ▶ *Why: Specific reasons, purpose or benefits of accomplishing the goal.
- ▶ **EXAMPLE:** A general goal would be, “Get in shape.” But a specific goal would say, “Join a health club and workout 3 days a week.”

M - measurable



How do you know
if you've reached
your goal??

- ▶ **Measurable** - Establish concrete criteria for measuring progress toward the attainment of each goal you set.
- ▶ When you measure your progress, you stay on track, reach your target dates, and experience the exhilaration of achievement that spurs you on to continued effort required to reach your goal.
- ▶ To determine if your goal is measurable, ask questions such as.....
- ▶ How much? How many?
- ▶ How will I know when it is accomplished?

A - attainable



- ▶ **Attainable** - When you identify goals that are most important to you, you begin to figure out ways you can make them come true. You develop the attitudes, abilities, skills, and financial capacity to reach them. You begin seeing previously overlooked opportunities to bring yourself closer to the achievement of your goals.
- ▶ You can attain most any goal you set when you plan your steps wisely and establish a time frame that allows you to carry out those steps. Goals that may have seemed far away and out of reach eventually move closer and become attainable, not because your goals shrink, but because you grow and expand to match them. When you list your goals you build your self-image. You see yourself as worthy of these goals, and develop the traits and personality that allow you to possess them.

R - realistic



- ▶ **Realistic-** To be realistic, a goal must represent an objective toward which you are both *willing* and *able* to work. A goal can be both high and realistic; you are the only one who can decide just how high your goal should be. But be sure that every goal represents substantial progress.
- ▶ A high goal is frequently easier to reach than a low one because a low goal exerts low motivational force. Some of the hardest jobs you ever accomplished actually seem easy simply because they were things you love.

T - timely



- ▶ **Timely** - A goal should be grounded within a time frame. With no time frame tied to it there's no sense of urgency. If you want to lose 10 lbs, when do you want to lose it by? "Someday" won't work. But if you anchor it within a timeframe, "by May 1st", then you've set your unconscious mind into motion to begin working on the goal.
Your goal is probably realistic if you truly *believe* that it can be accomplished. Additional ways to know if your goal is realistic is to determine if you have accomplished anything similar in the past or ask yourself what conditions would have to exist to accomplish this goal.

► **Feel sick in the morning?**

***make a smoothie to drink instead of eating heavy foods
bring some breakfast foods to school with you (muffins, fruits,
yogurt, cereal bars)

► **Watching your weight?**

Its not going to do you any good to skip breakfast. This will
actually cause you to gain weight.

You cannot save your calories for later in the day. It does **NO
ONE** any good.