



# Healthy Living, Healthy Weight

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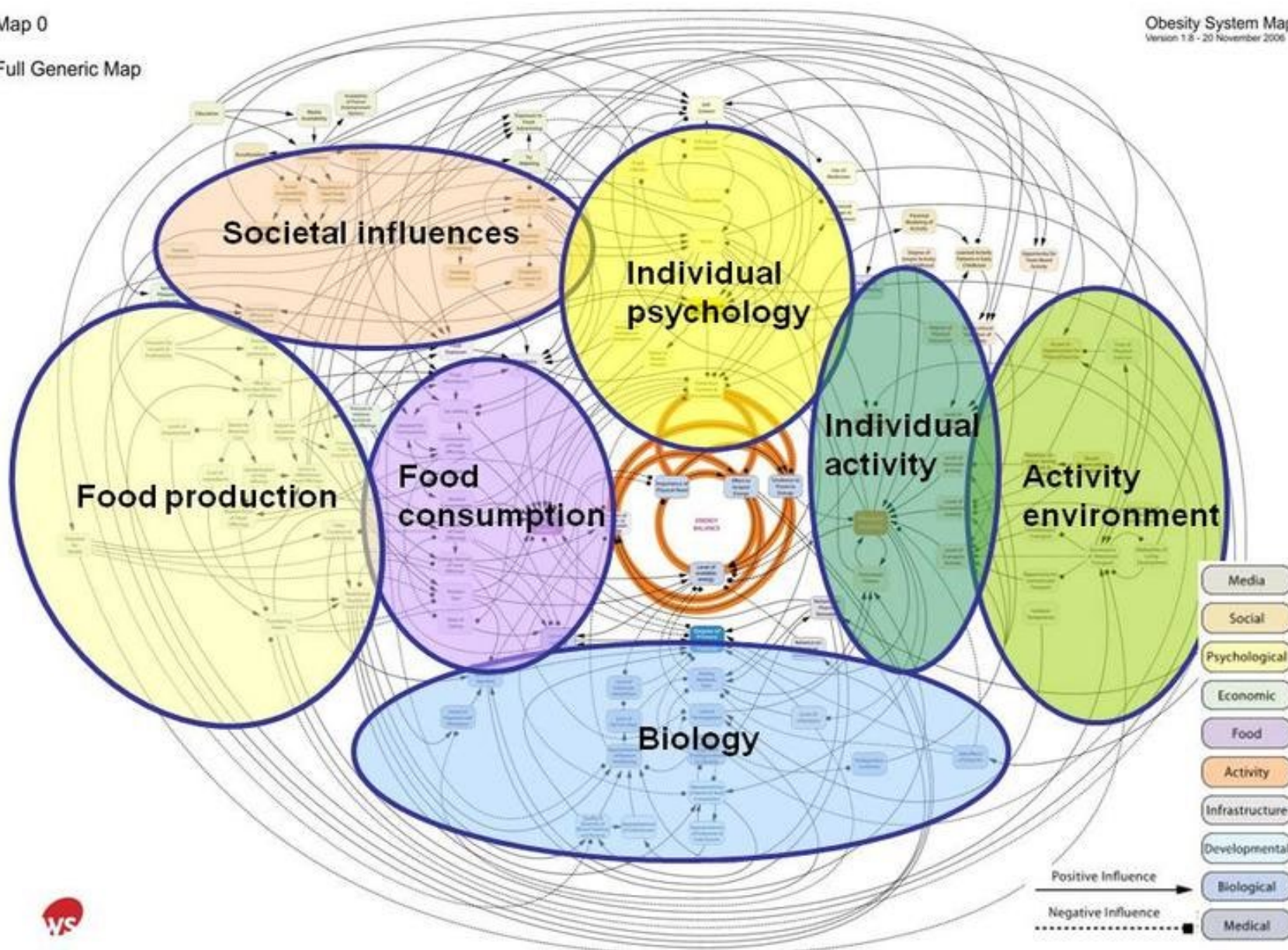
## The Weight Loss Discussion



Map 0

Full Generic Map

Obesity System Map  
Version 1.8 - 20 November 2006



# Physical Environment

Outings with friends

Urbanization

Absence of sidewalks

Dense calorie foods

Car culture

No sidewalks

Medications

Building design

Reliance on automobiles

Large portions

Energy Intake

Sedentary time

Eating on the road

Energy Partitioning  
↓  
Fat Accretion  
↓  
Adipogenesis

Obesity

Smoking cessation

Energy Expenditure

Overweight

Technology

Less access to healthy foods

Metabolic adaptation

Genetics

Viruses

RMR

Regulators of adipogenesis

Peripheral regulators of appetite

Appetite regulators

PA, metabolic rates

Meta & futile cycles

Gut flora

gene-environment interactions

Obesity virus

CNVs, modulator elements, etc.

Epigenetics & programming

Common & rare SNPs

## Biology

Bouchard C, unpublished



# Importance of weight maintenance when you have a chronic disease

## BMI

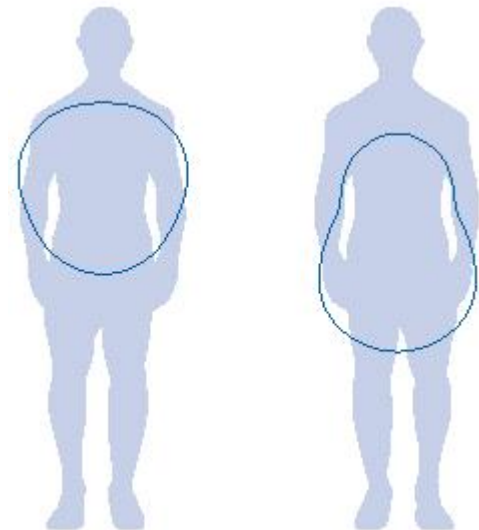
- It is a clinical tool, it doesn't always reflect overall health
- Weight (kg) / Height (m<sup>2</sup>)
- $\geq 30 \text{ kg/m}^2$  = Obesity

## Waist circumference

♀  $\leq 88 \text{ cm}$  and ♂  $\leq 102 \text{ cm}$

## Body shape

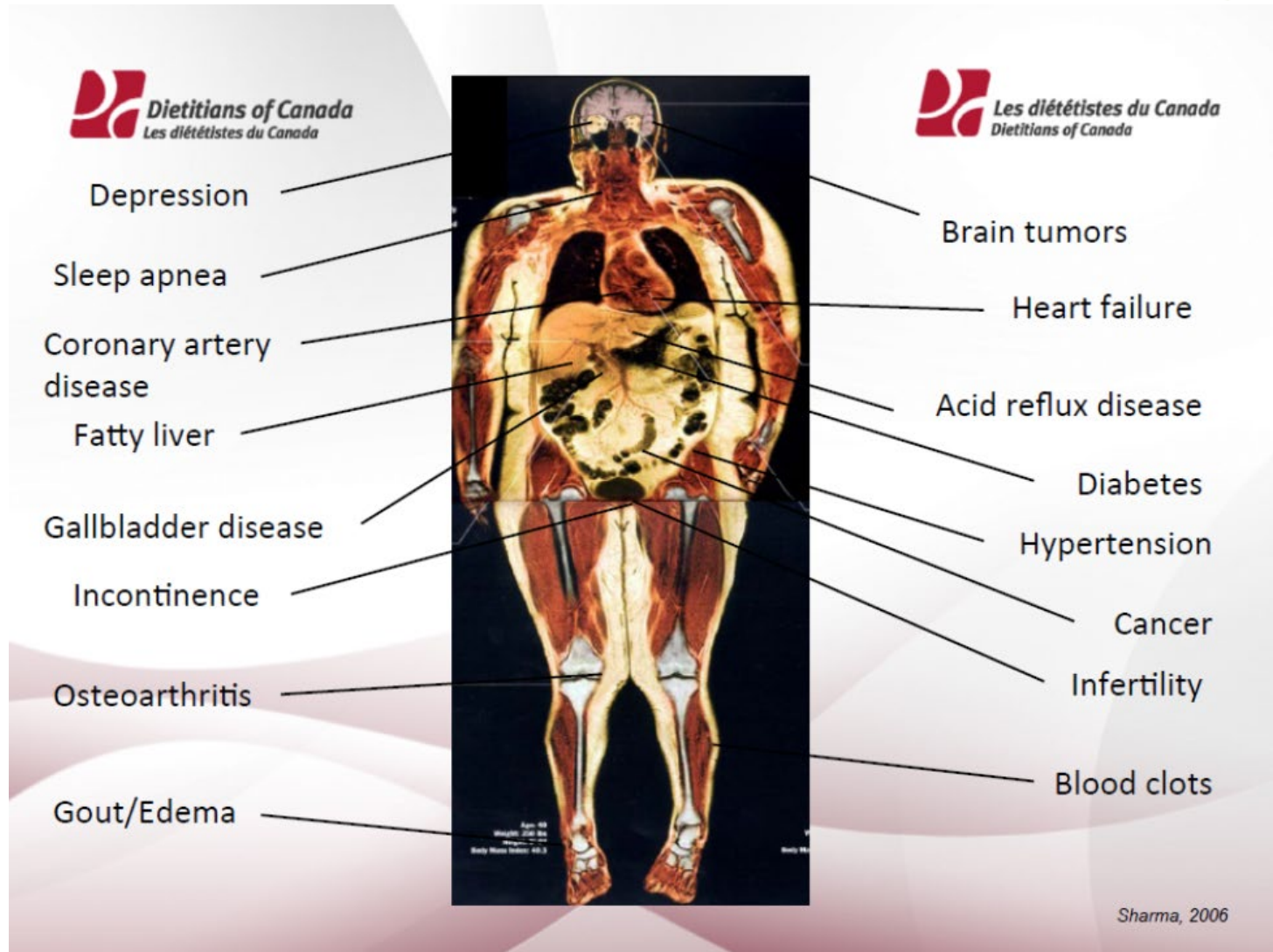
Apple, pear







# Side effects of excess weight

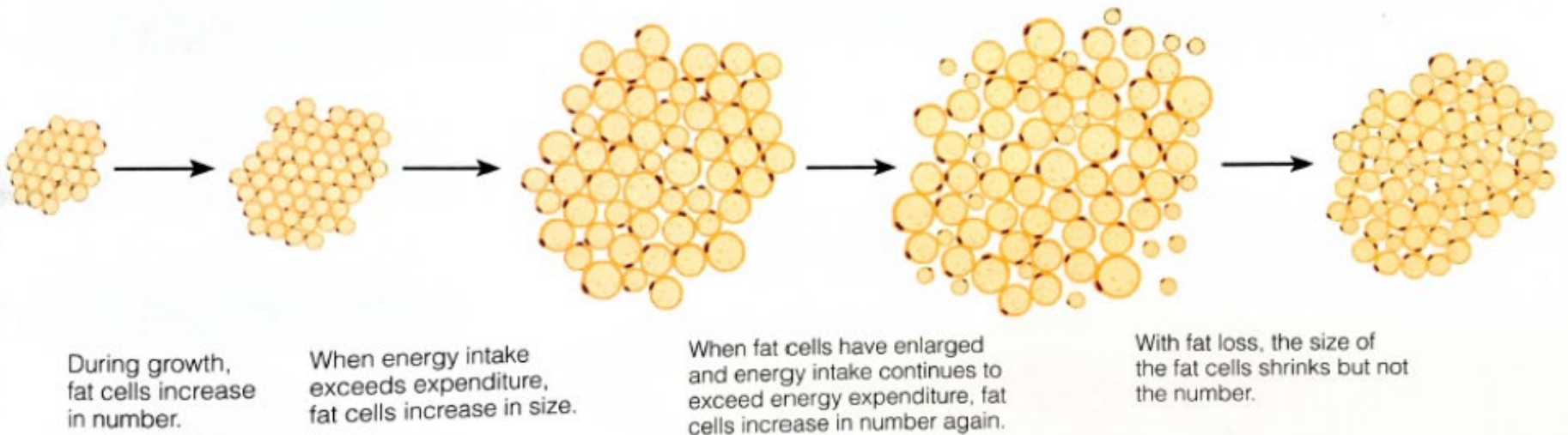




# Fat cell development

**FIGURE 9-2 Fat Cell Development**

Fat cells are capable of increasing their size by 20-fold and their number by several thousandfold.





# A Hormonal Affair...

Cortisol (brain) =	Stress
Dopamine (brain) =	Pleasure
Insulin (pancreas) =	Fat storage
Ghrelin (stomach) =	Hunger
Leptin (fat cells) =	Satiety
Others...	



# Cortisol – Brain Hormone

- Fight or Flight hormone
  - the body want's to survive and maintain its integrity
- Sleep deprived
- Screen watching
- Makes you hungry
- Increases belly fat
- Sleep patterns
  - Sleep before midnight - most sleep before 5:30 am
- No eating after 8pm - True or false?





# Dopamine - Syndrome

- Dopamine = Similar to endorphins
- Pleasure Hormone “Chocolate” = cravings/sweet tooth
  - raises dopamine levels in the brain
- Weight gain = Decreased receptors in the brain
  - Therefore always looking for more



# Insulin - Pancreas

- Eating refined carbohydrates increase insulin in the blood
- Too much insulin = fat storage

Newer research...

- Eating larger meals in the AM = less insulin at night  
= more weight loss

**VS**

- Large meal at supper = insulin spikes in the evening



# Ghrelin – Stomach Hunger

- High ghrelin stimulates the appetite... when you don't eat (low calorie diet) you feel hungry...
- Secreted by the stomach
- Released in response to low food intake/fasting
- Ghrelin levels are lower with exercise and gastric bypass surgery, therefore less appetite = lower food consumption

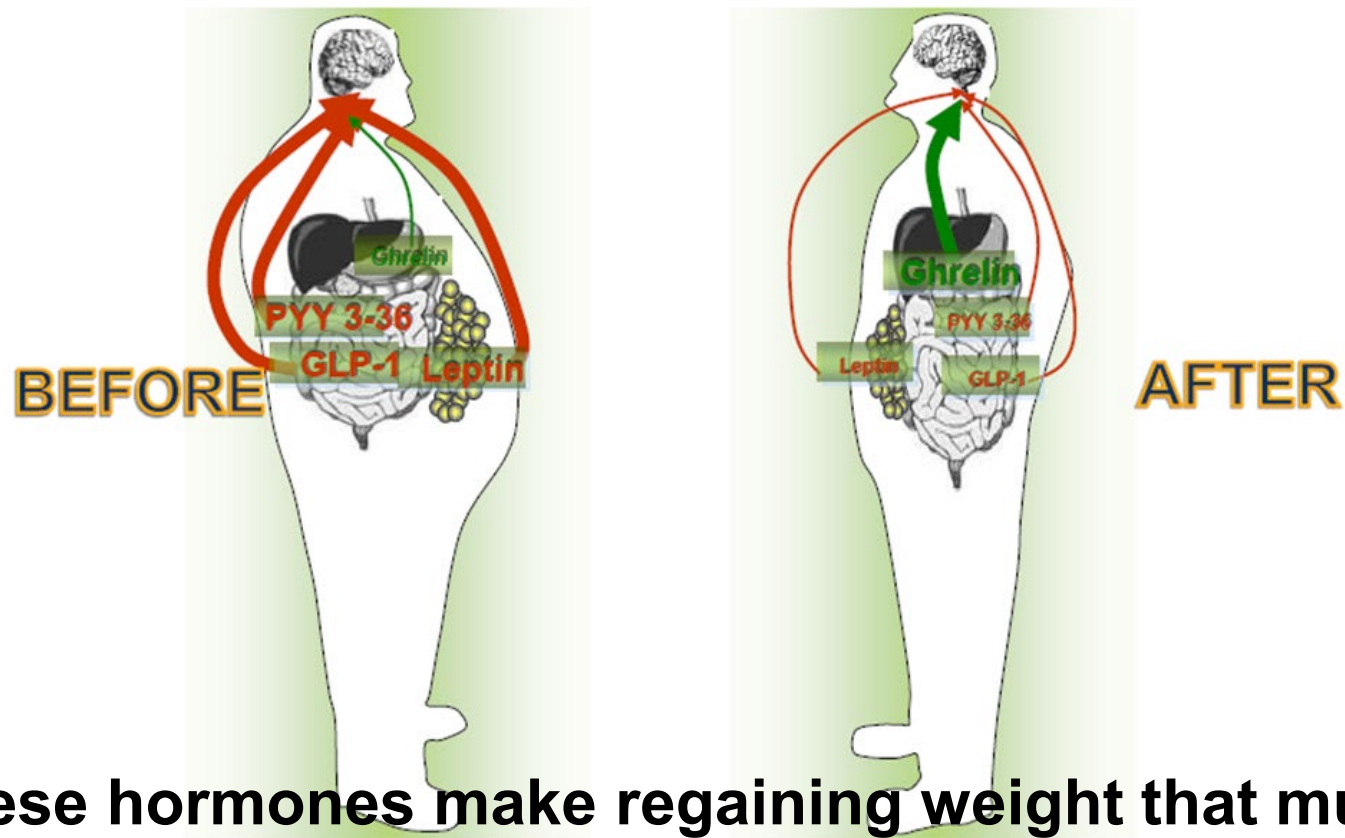


# Leptin

- High Leptin suppresses/controls appetite & Increases energy expenditure
- Produced by fatty tissue
- Low leptin = slower metabolism and desire to EAT MORE!
- Weight gain = High leptin levels BUT it is resistant!



# What happens after weight loss



**These hormones make regaining weight that much easier!!!**





# What happens to our metabolism?

	Mean energy expenditure	
	(kcal/day)	(observed minus predicted kcal)
Before weight loss	3100	
10% weight loss	2549	-244
Before weight loss	3129	
20% weight loss	2243	-301

Rapid weight loss will decrease basal metabolism so you end up burning less calories daily



# What to do about all these diets??

From the #1 NEW YORK TIMES Bestselling Author of **Eat This, Not That!**

**THE HILL**

Watch without David Zinc

© Amazon.com



**Diet**

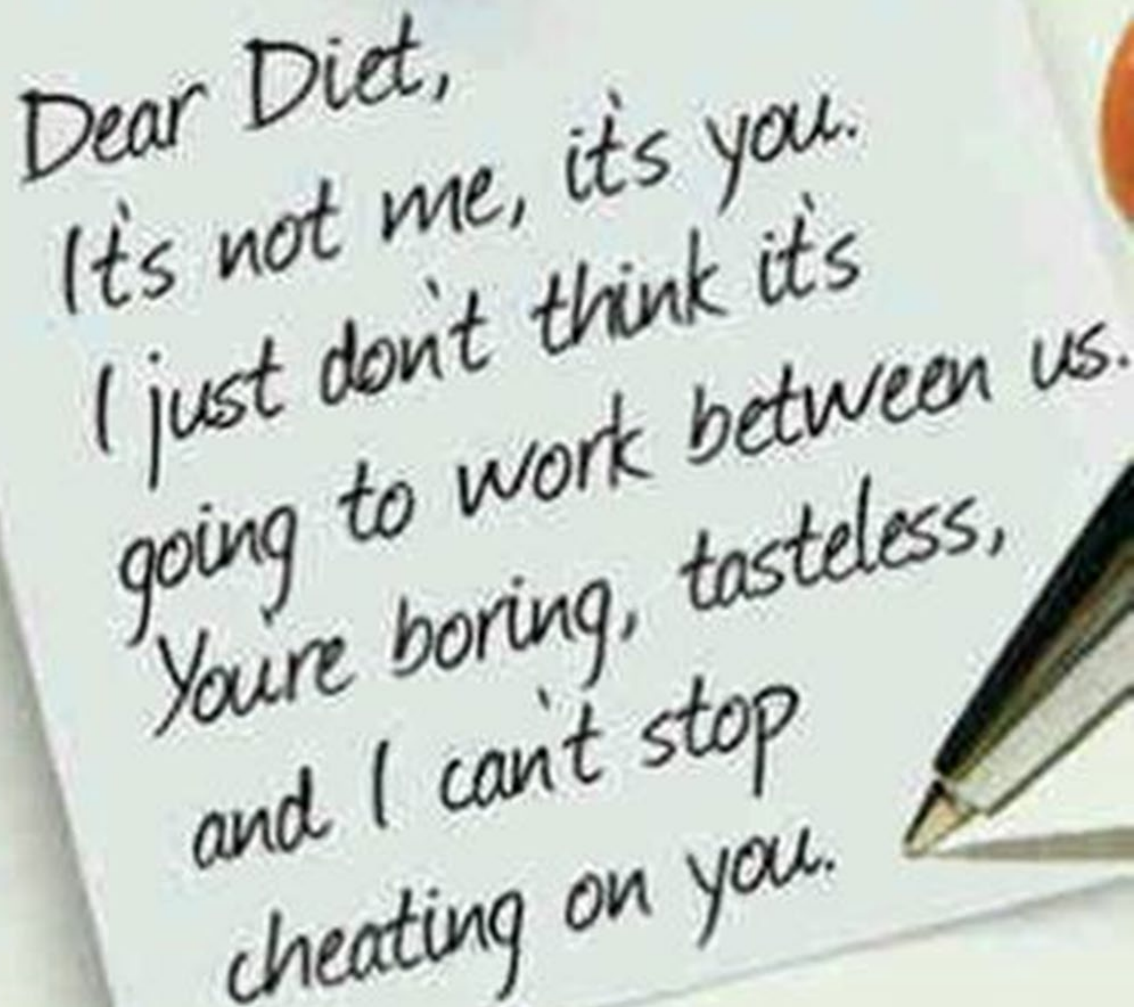
Processed Foods

Fruits, Juices

10 foods

Dairy





Dear Diet,  
It's not me, it's you.  
I just don't think it's  
going to work between us.  
You're boring, tasteless,  
and I can't stop  
cheating on you.

- Redu
- Loss
- Rega

E

lean

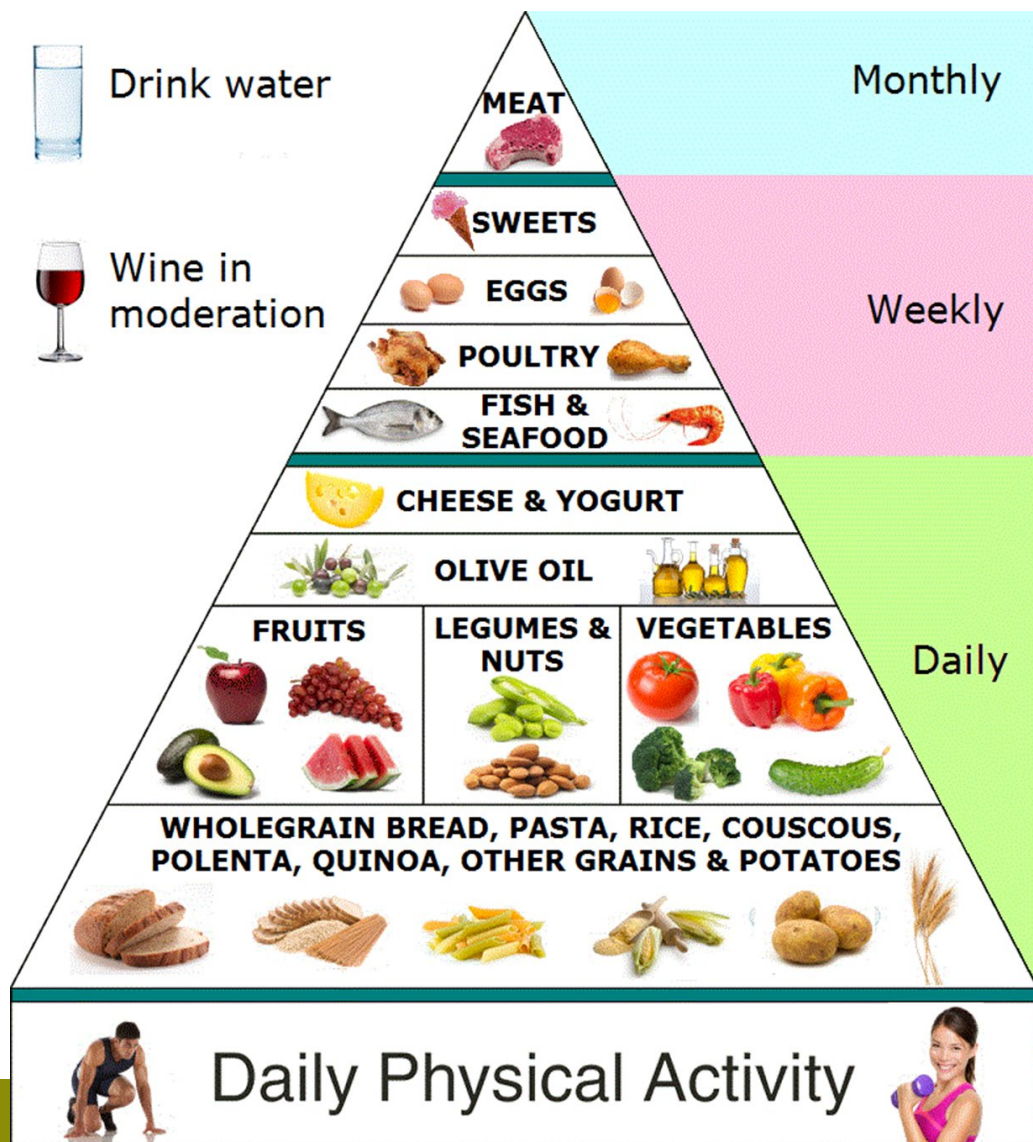
lic rate

orage





# Mediterranean Diet



## Characteristics of the Mediterranean diet:

- High consumption of fruits and vegetables & legumes
- Healthy oils such as olive oil
- Limited consumption of meats and poultry
- Regular intake of fish and seafood
- Moderate intake of dairy products (mostly cheese and yogurt)
- Moderate consumption of wine at meals
- Focus on physical activity



# Healthy eating with Canada's Food Guide

Have plenty of  
vegetables and fruits

Eat protein foods

Make water  
your drink  
of choice



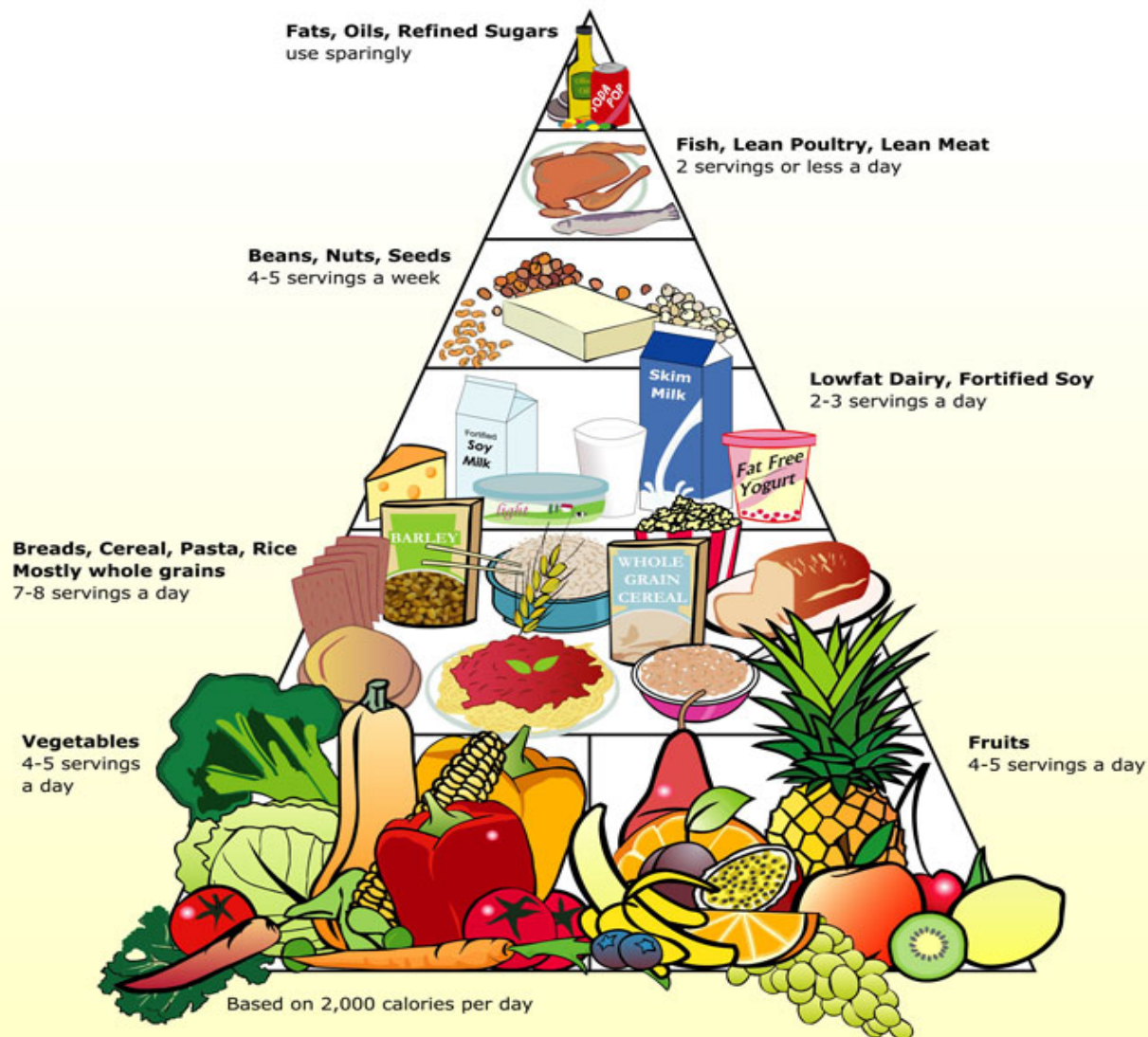
Choose  
whole grain  
foods





# DASH PYRAMID

Dietary Approaches to Stop Hypertension



Keep sodium to 2,400 mg or less per day

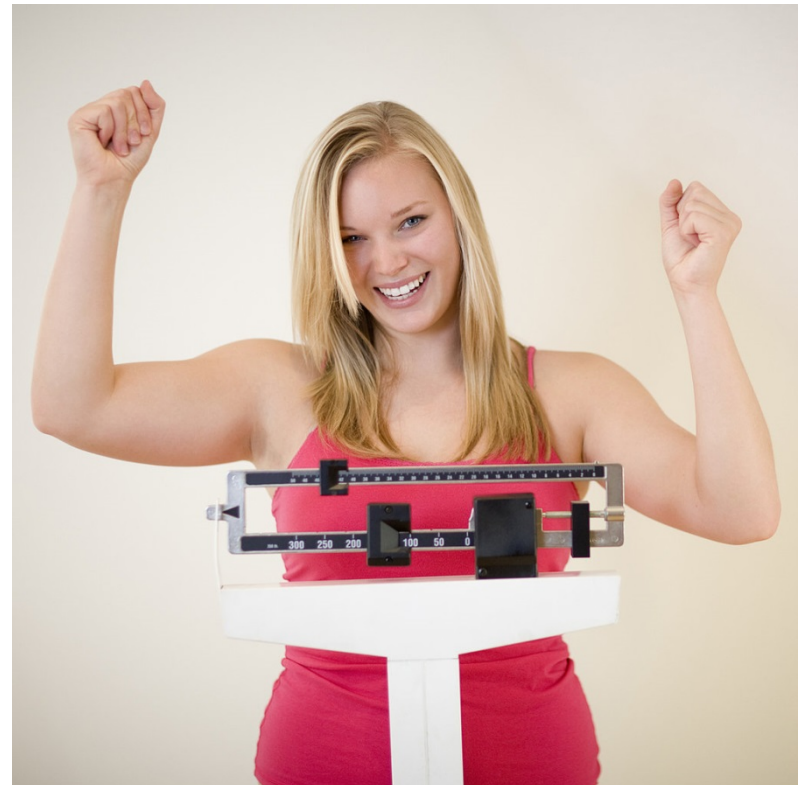


Exercise on most days



# So I'm Eating Healthy...

Now, How do I Lose Weight?





# How Much Weight Should I Lose?

Healthy Weight: Is not always your desired weight...

## ASK YOURSELF?

1. Is your weight hindering you (physically, emotionally)
2. Is it causing health issues
3. Will your weight cause health issues in the future
4. When was the last time you felt good about your body

Be realistic...





# Diet & Exercise: 3-5-10-20% weight loss?

- 90% of weight loss is food related...
- 10% exercise

Exercise helps to stay fit and healthy

## Recommendation:

- At least 30 minutes/day of moderate to high intensity (150 min/week)
- It can also be broken up throughout the day (10- 10-10 = 30 minutes)





# Medication 5-10%

## Options available on the market

- Orlistat- prevents fat absorption
- Saxenda (injectable medication) – slows down digestion
  - reduction in appetite and food intake
- Contrave – reduce hunger and helps to control cravings

\*\*\*Medications do not replace lifestyle, they work together to help promote weight loss



# Bariatric Surgery – 20-35%

- Invasive... removing part of the stomach
  - Reduction in appetite
  - Reduction in hunger hormones
  - Strict diet
  - Possible side effects: food preference, must take vitamins, dumping syndrome, no carbonated beverages, ...
  - Effective!

=Lifetime changes...



# Strategies to Adopt for Weight Loss...

- The following tips are adapted from the Wasting Away workshop by Helene Charlebois, RD

## Set Up For Success!

Ready? Set...GO!

Clean up your House

Set up for healthy choices





# Choose the Proper Foods First

- Keep your Plate Balanced... at least 3 food groups per meal

Include:

- 3 fruits per day
  - 4 vegetables per day
  - 3 dairy per day
- 
- Eat locally (farms)





# How Much Sugar is TOO MUCH

## Intrinsic Vs Natural Vs Added

Intrinsic = naturally occurring in food

Natural = honey, maple syrup molasses, agave, ...

Added = natural or refined sugars added to packaged goods

### Effects on the body:

Sugars are digested so quickly in our bodies.

We then become hungrier sooner

10 % of your total calories...no more from added sugars

## One Sweet App





# How much sugar can I eat?

## Total calories...

- 1500 kcal = 37.5 g of added sugars
- 1800 kcal = 45 g
- 2000 kcal = 50 g
- 2300 kcal = 57.5 g

## Examples:

- 1 small container activia yogurt = 13g
- 1 tbsp. jam = 15 g
- 1 can of Pepsi = 41 g
- 1 sweet and salty granola bar = 12g
- $\frac{3}{4}$  cup Special K protein plus cereal = 7 g

**Total = 88g**



# Whole Grains!

Change is good! Stop eating processed white foods!

- If it taste different...It doesn't mean its bad... it takes time to get used to it
- Whole grains + 100% whole wheat + sprouted grains
- High fibre = feel fuller longer = eat less
- Low glycemic index = digested slowly... think of insulin
- At least 3g of fibre per portion



# No Starch at Supper!

- Bonus weight loss... less calories in the evening is very helpful for weight loss
- Eat your grains and starches at breakfast and lunch
- Replace the starch with a starchy vegetable: carrots, sweet potatoes, parsnip, rutabaga, turnip, beets, corn, peas, winter squash, legumes/lentils

Note: The starchy vegetable does replace the ½ plate of non starchy veggies



# Eat your Vegetables First

- Put vegetables 1<sup>st</sup> on the plate (think of buffet meals)
- Vegetables should account for **½ the plate**
- Put meat 2<sup>nd</sup> and starches last...
- Avoid platters on the table as it is difficult to get away from the visual cue of eating
- Plate on Plate method : the smaller plate contains meat and starches



# Eating Out

*It's OK to eat out as long as you plan it!*

1. Look at the menu online... find the nutrition information
2. Make your meal choice at home... do not look at the menu
3. Be selective of your beverage
4. Opt out of the bread basket
5. Order 1 item at a time... often full after appetizer
6. Appetizer vs dessert vs alcohol/drinks
7. Portion distortion

**Stop eating when you are full**



# Snack Attacks!

- Plan for your snacks before you starve
- Keep healthy snacks accessible... work desk, car, ready to eat in the fridge, purse...
- Include protein (5 g) and fiber (3 g)
- Limit :2 snacks per day... no more than 150 kcal each
- Don't eat 1hr before your next meal = Ruin your appetite

Too often the combination of snacks per day can be equivalent to a full meal or more



# Journaling

- Write it down before you eat it VS writing in your journal at the end of the day
  - **Increases accountability and awareness**
  - Be realistic... Be flexible

## Strategies for success...

- Only write down the vulnerable parts of your day... typically breakfast and lunch are OK... Only write in the journal for evening meals
- Don't forget your beverages... They might contain hidden calories

Paper or electronic... See example

Apps: MyFitnessPal, Lose It, Calorie Counter



# WEEKLY FOOD JOURNAL – ARE MY MEALS BALANCED?

Meals w/ target calories...	Monday	Tuesday	Wednesday	Thursday
<b>Breakfast</b>				
Protein/dairy				
Starch				
Fruit				
<i>Beverage</i>				
<b>Morning snack</b>				
<b>Lunch</b>				
Protein/dairy				
Starch				
Vegetables				
<i>Beverage</i>				
<b>Afternoon snack</b>				
<b>Supper</b>				
Protein/dairy				
Starch				
Vegetables				
<i>Beverage</i>				
<b>Night snack</b>				
<b>OTHER BEVERAGES</b>				





# Damage Control

Avoid the guilty conscience... PLAN IT!

## Don't Get Angry... Get Even!

- For every “Cheat day”, it takes 2 days of “revenge” (cut back)
- We all cheat...

**Plan it, cheat it, feel good and happy about it, move on...**



"Double cheeseburger, large fries...  
is that for here or the treadmill?"

2013  
240g



1993 100g | 2013 150g



undation

## Portion Distortion

20 YEARS AGO

TODAY

DIFFERENCE

Renee Comet, National Cancer Institute



333 Calories



590 Calories

257 MORE CALORIES

Lifting weights for **1 HOUR AND 30 MINUTES** burns approximately 257 calories\* \*Based on 130-pound person



500 Calories



850 Calories

350 MORE CALORIES

Playing golf (while walking and carrying your clubs) for **1 HOUR** burns approximately 350 calories\* \*Based on 160-pound person



1 cup spaghetti with sauce and 3 small meatballs

500 Calories



2 cups spaghetti with sauce and 3 large meatballs

1,025 Calories

525 MORE CALORIES

Housecleaning for **2 HOURS AND 35 MINUTES** burns approximately 525 calories\* \*Based on 130-pound person

20 YEARS AGO

TODAY

DIFFERENCE



Coffee, 8 oz (with whole milk and sugar)

45 Calories



Mocha Coffee, 16 oz (with steamed whole milk and mocha syrup)

350 Calories

305 MORE CALORIES

Walking **1 HOUR AND 20 MINUTES** burns approximately 305 calories\* \*Based on 130-pound person



1.5 oz

210 Calories



4 oz

500 Calories

290 MORE CALORIES

Vacuuming for **1 HOUR AND 30 MINUTES** burns approximately 290 calories\* \*Based on 130-pound person

Renee Comet, National Cancer Institute



1.5 diameter

55 Calories



3.5 diameter

275 Calories

220 MORE CALORIES

Washing a car for **1 HOUR AND 15 MINUTES** burns approximately 220 calories\* \*Based on 130-pound person



Pol





## **DIETING**

Willpower  
Cultural Conformity  
External Cues  
Weight Loss  
Avoidance  
Rigid  
Counting Calories  
Restrictive  
Deprivation  
Denial  
Quick Fix  
Fight Food  
Trap  
Enemy

## **MINDFUL EATING**

Trust  
Individual Empowerment  
Internal Cues  
Health Enhancement  
Acceptance  
Integration  
Quality Calories  
Flexible  
Satisfaction  
Permission  
Lifestyle  
Celebrate Food  
Liberate  
Ally

[www.eatq.com](http://www.eatq.com)



# What you must remember...

- Managing your weight includes not only nutrition, but must also includes physical activity.
- Finding a balance 90/10 Or 80/20
- Moderation
- Aim to change lifestyles and not just weight loss
- You have to have self-confidence
- One change at a time



# What Works for You?





# Questions?

