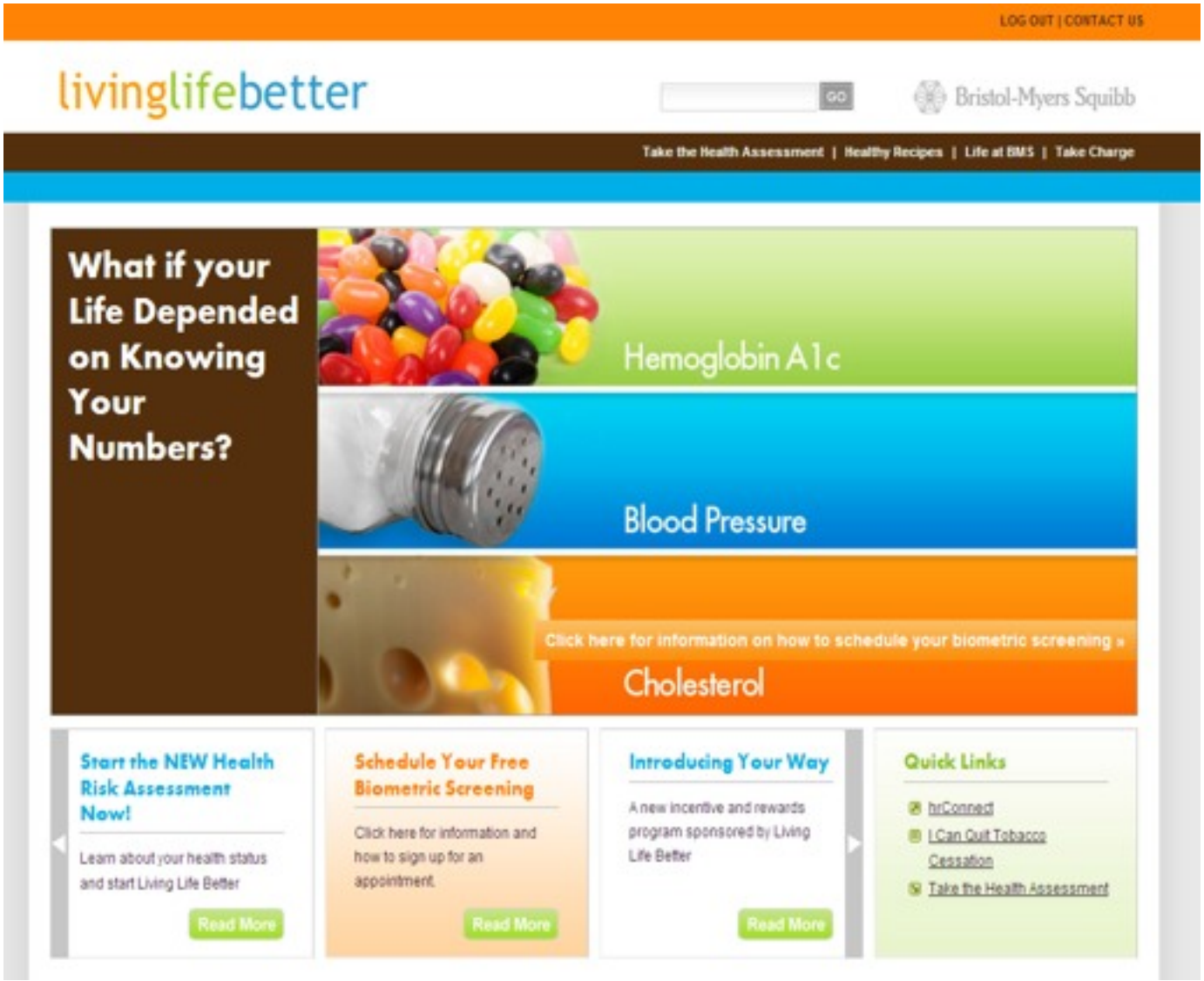
Healthy Ways To Living Life Better

Living Life Better

Know Your Numbers

Control Your Numbers

Control Your Future



HEALTHY WEIGHT MANAGMENT

Three Topics:

- First month - Nutrition
- *Second month - Weight Management*
- Third month - Exercise

Picture three random American adults in a room. Odds are, one is obese, one is overweight, and one is normal weight.

If the three were children one out of three would be overweight or obese.

Review

Review From Last Talk

Abrupt Change from the 1980-90s to 2000s-Obesity and Diabetes Rates Soaring.

Switch from the Food Pyramid to MyPlate

Myplate is much better.

Obesity is a major risk factor for

cardiovascular diseases such as heart disease

high blood pressure and stroke

arthritis and other musculoskeletal disorders

several cancers

type 2 diabetes

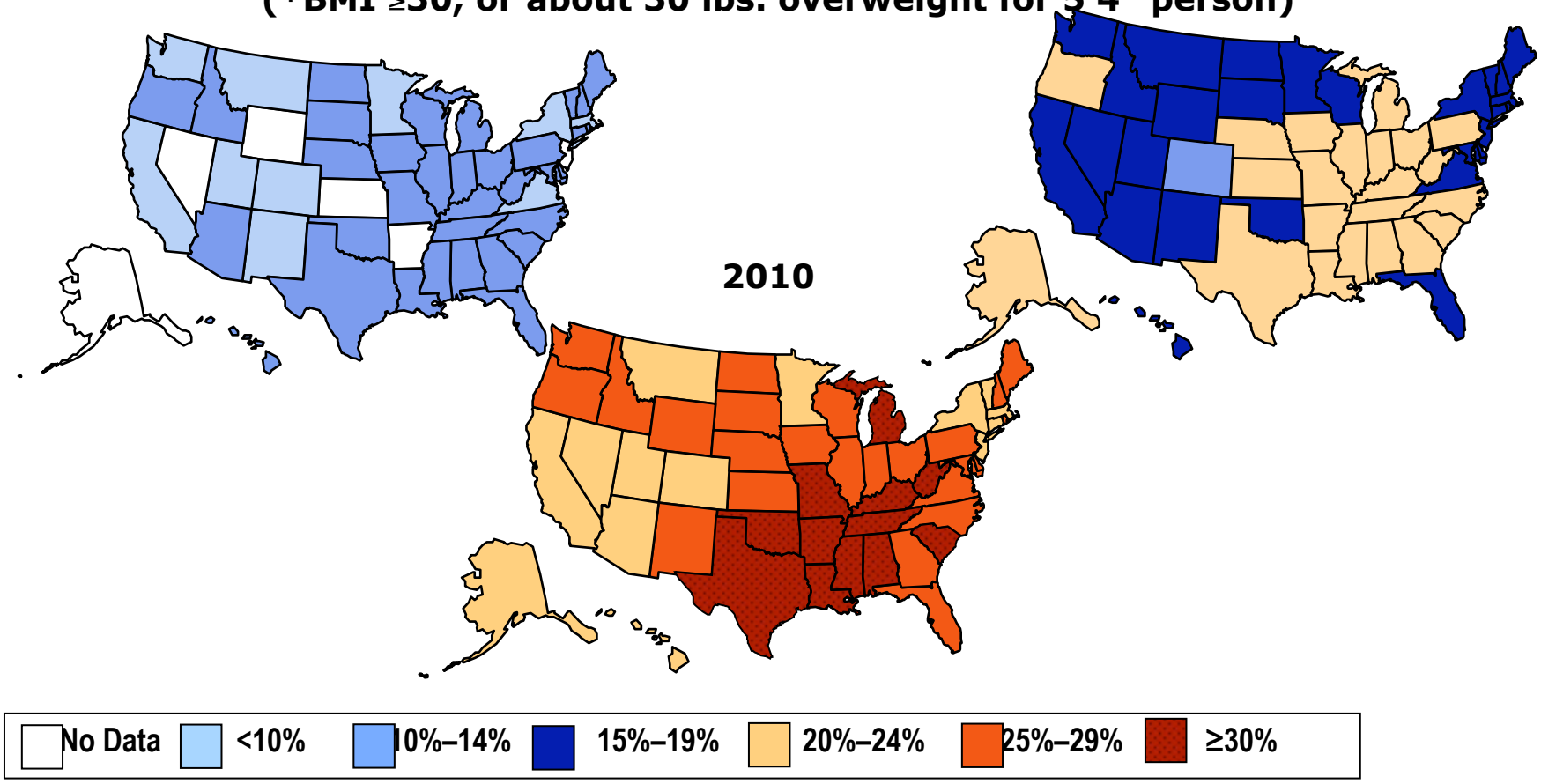
and sleep apnea.

Obesity Trends* Among U.S. Adults

1990 2000

1990, 2000, 2010

(*BMI ≥30, or about 30 lbs. overweight for 5'4" person)



What brought us here?

There was no state in 1990 that had an obesity rate above 20 %.

Cases of diabetes doubled from 1990 to 2005.

More information now than ever before.

Weight Loss Industry $60 billion with a 95% failure rate. Exercise Industry $20 billion.

What brought us here?

Food Pyramid

-USDA Predecessor of the MyPlate

High Carb/Low-fat Diet

People Gorged on Carbs/Reduced fat

Portion Distortion

-Serving Sizes doubled from the 90s, people eat on average 140 pounds more food than in the 1970s.

Sugar

Introduction of additional Sugar and High Fructose Corn Syrup in the 80s and 90s; almost 20% more sugar than in the 1970s.

More Processed Food

We consume less veggies and fruit than we did in the 1970s.

We conditioned ourselves to eat larger amounts of food, especially more refined carbs and sugars, with less veggies.

It takes more food to make us satisfied. We made our stomachs larger.

We also talked about how toxic sugar is, all types, as well as refined carbohydrates (white bread and pasta).

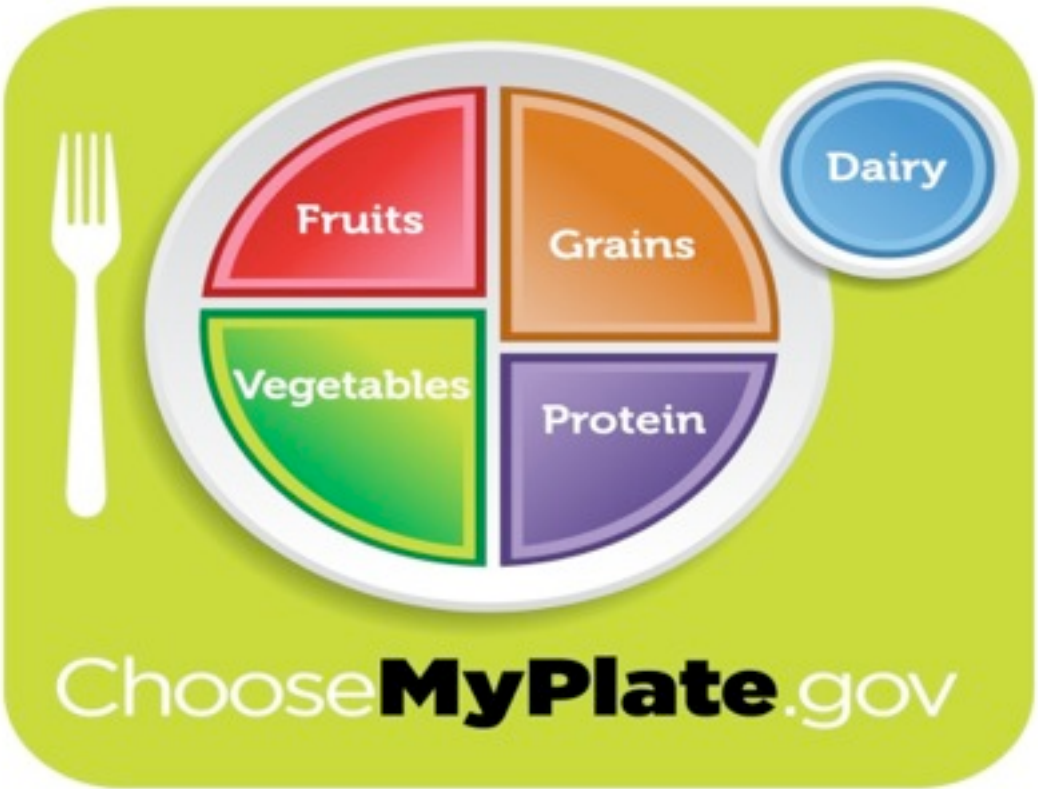
As well as how bad having no fat is.

In order to understand how to lose weight we needed to know how we gained all this weight in this first place.

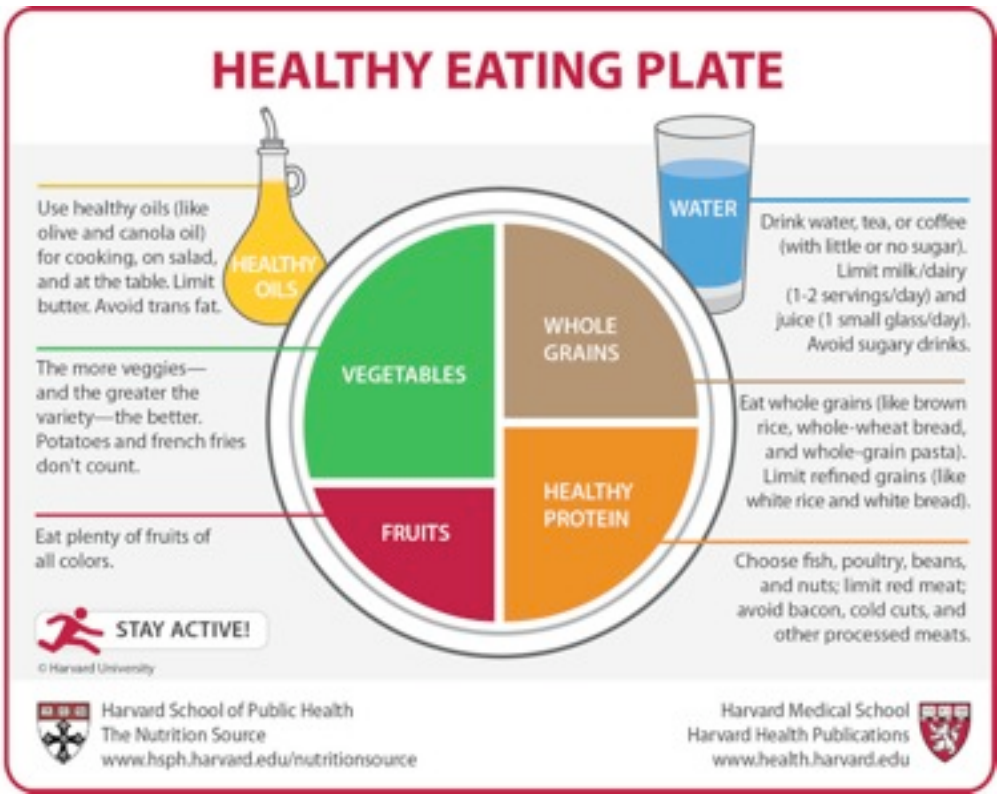
From this knowledge we can reverse what we have been doing.

Reduce Portions, Less Processed and Prepared Foods, and Less Sugar

MyPlate
2011



Harvard Plate Even Better 2011



Good oils - YES
Trans/Sats fats - NO

All whole grains

Water instead of milk, but ok 1-2 servings a day of low fat dairy.

Severely limit red and processed meat

Move your body

TODAY WEIGHT MANAGEMENT

- Discussion
  - Body Mass Index
  - Waist Measurement
  - Exercise
  - Daily Calories

BMI

WEIGHT MANAGEMENT

- Body Mass Index
  - Underweight <18.5
  - Normal 18.5-24.9
  - Overweight 25-29.9
  - Obese >30
- Goal-18.5-24.9 range
- Weigh yourself daily

Body Mass Index (BMI) Table for Adults

Obese (>30) | Overweight (25-30) | Normal (18.5-25) | Underweight (<18.5)

HEIGHT in feet/inches and centimeters

WEIGHT		4'8"	4'9"	4'10"	4'11"	5'0"	5'1"	5'2"	5'3"	5'4"	5'5"	5'6"	5'7"	5'8"	5'9"	5'10"	5'11"	6'0"	6'1"	6'2"	6'3"	6'4"	6'5"
lbs	(kg)	142cm		147	150	152	155	157	160	163	165	168	170	173	175	178	180	183	185	188	191	193	196
260	**(117.9)**	**58**	**56**	**54**	**53**	**51**	**49**	**48**	**46**	**45**	**43**	**42**	**41**	**40**	**38**	**37**	**36**	**35**	**34**	**33**	**32**	**32**	**31**
255	(115.7)	57	55	53	51	50	48	47	45	44	42	41	40	39	38	37	36	35	34	33	32	31	30
250	**(113.4)**	**56**	**54**	**52**	**50**	**49**	**47**	**46**	**44**	**43**	**42**	**40**	**39**	**38**	**37**	**36**	**35**	**34**	**33**	**32**	**31**	**30**	**30**
245	(111.1)	55	53	51	49	48	46	45	43	42	41	40	38	37	36	35	34	33	32	31	31	30	29
240	**(108.9)**	**54**	**52**	**50**	**48**	**47**	**45**	**44**	**43**	**41**	**40**	**39**	**38**	**36**	**35**	**34**	**33**	**33**	**32**	**31**	**30**	**29**	**28**
235	(106.6)	53	51	49	47	46	44	43	42	40	39	38	37	36	35	34	33	32	31	30	29	29	28
230	**(104.3)**	**52**	**50**	**48**	**46**	**45**	**43**	**42**	**41**	**39**	**38**	**37**	**36**	**35**	**34**	**33**	**32**	**31**	**30**	**30**	**29**	**28**	**27**
225	(102.1)	50	49	47	45	44	43	41	40	39	37	36	35	34	33	32	31	31	30	29	28	27	27
220	**(99.8)**	**49**	**48**	**46**	**44**	**43**	**42**	**40**	**39**	**38**	**37**	**36**	**34**	**33**	**32**	**32**	**31**	**30**	**29**	**28**	**27**	**27**	**26**
215	(97.5)	48	47	45	43	42	41	39	38	37	36	35	34	33	32	31	30	29	28	28	27	26	25
210	**(95.3)**	**47**	**45**	**44**	**42**	**41**	**40**	**38**	**37**	**36**	**35**	**34**	**33**	**32**	**31**	**30**	**29**	**28**	**28**	**27**	**26**	**26**	**25**
205	(93.0)	46	44	43	41	40	39	37	36	35	34	33	32	31	30	29	29	28	27	26	26	25	24
200	**(90.7)**	**45**	**43**	**42**	**40**	**39**	**38**	**37**	**35**	**34**	**33**	**32**	**31**	**30**	**30**	**29**	**28**	**27**	**26**	**26**	**25**	**24**	**24**
195	(88.5)	44	42	41	39	38	37	36	35	33	32	31	31	30	29	28	27	26	26	25	24	24	23
190	**(86.2)**	**43**	**41**	**40**	**38**	**37**	**36**	**35**	**34**	**33**	**32**	**31**	**30**	**29**	**28**	**27**	**26**	**26**	**25**	**24**	**24**	**23**	**23**
185	(83.9)	41	40	39	37	36	35	34	33	32	31	30	29	28	27	27	26	25	24	24	23	23	22
180	**(81.6)**	**40**	**39**	**38**	**36**	**35**	**34**	**33**	**32**	**31**	**30**	**29**	**28**	**27**	**27**	**26**	**25**	**24**	**24**	**23**	**22**	**22**	**21**
175	(79.4)	39	38	37	35	34	33	32	31	30	29	28	27	27	26	25	24	24	23	22	22	21	21
170	**(77.1)**	**38**	**37**	**36**	**34**	**33**	**32**	**31**	**30**	**29**	**28**	**27**	**27**	**26**	**25**	**24**	**24**	**23**	**22**	**22**	**21**	**21**	**20**
165	(74.8)	37	36	34	33	32	31	30	29	28	27	27	26	25	24	24	23	22	22	21	21	20	20
160	**(72.6)**	**36**	**35**	**33**	**32**	**31**	**30**	**29**	**28**	**27**	**27**	**26**	**25**	**24**	**24**	**23**	**22**	**22**	**21**	**21**	**20**	**19**	**19**
155	(70.3)	35	34	32	31	30	29	28	27	27	26	25	24	24	23	22	22	21	20	20	19	19	18
150	**(68.0)**	**34**	**32**	**31**	**30**	**29**	**28**	**27**	**27**	**26**	**25**	**24**	**23**	**23**	**22**	**22**	**21**	**20**	**20**	**19**	**19**	**18**	**18**
145	(65.8)	33	31	30	29	28	27	27	26	25	24	23	23	22	21	21	20	20	19	19	18	18	17
140	**(63.5)**	**31**	**30**	**29**	**28**	**27**	**26**	**26**	**25**	**24**	**23**	**23**	**22**	**21**	**21**	**20**	**20**	**19**	**18**	**18**	**17**	**17**	**17**
135	(61.2)	30	29	28	27	26	26	25	24	23	22	22	21	21	20	19	19	18	18	17	17	16	16
130	**(59.0)**	**29**	**28**	**27**	**26**	**25**	**25**	**24**	**23**	**22**	**22**	**21**	**20**	**20**	**19**	**19**	**18**	**18**	**17**	**17**	**16**	**16**	**15**
125	(56.7)	28	27	26	25	24	24	23	22	21	21	20	20	19	18	18	17	17	16	16	16	15	15
120	**(54.4)**	**27**	**26**	**25**	**24**	**23**	**23**	**22**	**21**	**21**	**20**	**19**	**19**	**18**	**18**	**17**	**17**	**16**	**16**	**15**	**15**	**15**	**14**
115	(52.2)	26	25	24	23	22	22	21	20	20	19	19	18	17	17	16	16	16	15	15	14	14	14
110	**(49.9)**	**25**	**24**	**23**	**22**	**21**	**21**	**20**	**19**	**19**	**18**	**18**	**17**	**17**	**16**	**16**	**15**	**15**	**15**	**14**	**14**	**13**	**13**
105	(47.6)	24	23	22	21	21	20	19	19	18	17	17	16	16	16	15	15	14	14	13	13	13	12
100	**(45.4)**	**22**	**22**	**21**	**20**	**20**	**19**	**18**	**18**	**17**	**17**	**16**	**16**	**15**	**15**	**14**	**14**	**14**	**13**	**13**	**12**	**12**	**12**
95	(43.1)	21	21	20	19	19	18	17	17	16	16	15	15	14	14	14	13	13	13	12	12	12	11
90	**(40.8)**	**20**	**19**	**19**	**18**	**18**	**17**	**16**	**16**	**15**	**15**	**15**	**14**	**14**	**13**	**13**	**13**	**12**	**12**	**12**	**11**	**11**	**11**
85	(38.6)	19	18	18	17	17	16	16	15	15	14	14	13	13	13	12	12	12	11	11	11	10	10
80	**(36.3)**	**18**	**17**	**17**	**16**	**16**	**15**	**15**	**14**	**14**	**13**	**13**	**13**	**12**	**12**	**11**	**11**	**11**	**11**	**10**	**10**	**10**	**9**

Note: BMI values rounded to the nearest whole number. BMI categories based on CDC (Centers for Disease Control and Prevention) criteria.

www.vertex42.com

BMI = Weight[kg] / (Height[m] x Height[m]) = 703 x Weight[lb] / (Height[in] x Height[in])

Are you Obese?

It is hard to believe, but you just may be obese.

BMI

The most commonly used indicator of obesity is the body mass index (BMI).
Simple calculation.
weight in kg/height in m^2
or
703 (lbs./in^2 x 703).

Obesity a BMI of >30 as obese.
Overweight is classified as a person with a BMI of 25-29.9.
People of Asian decent may be obese at a BMI of closer to 25.
Body fatness may differ based on sex, age, and fitness level.
Women may have a higher percentage of body fat than men at the same BMI.
Older adults may have higher levels of body fat than younger adults due to the age related loss of muscle mass, therefore BMI may underestimate their degree of fatness.
Very physically fit people, like athletes, usually have higher levels of muscle mass and lower percentages of body fat than non-athletes, therefore BMI may overestimate their degree of fatness.

Calculate your BMI.

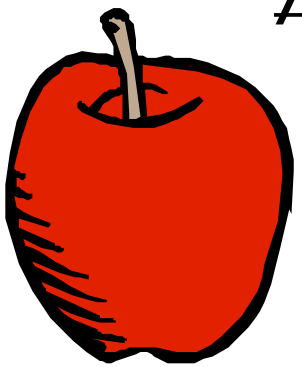
It is easy to do.

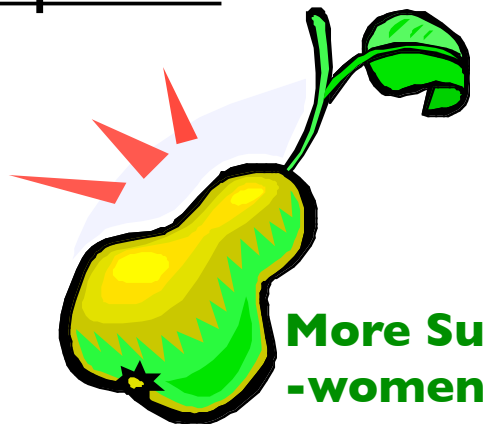
Compared with BMI, measuring waist circumference was considered superior in detecting adverse health outcomes.

About 21 per cent of women who wouldn't be considered at normal weight based on BMI are at risk because of their abdominal obesity

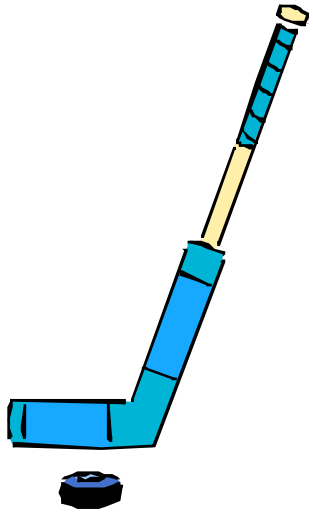
Belly Fat

What kind of shape are you?





More Subcutaneous fat -women have more



More Visceral fat-men have more

Fatness is generally described as **"pear shape"** appearance where deposits of fat are centralized in the hips, thighs, and buttocks areas or **"apple shape"**, refers to a fat distribution centralized on the abdomen or at **"stick"**, refers to lack of body fat.

Abdominal obesity has been shown to represent the deposit of fat under the skin (subcutaneous) and within and among the organs of the abdomen (intra-abdominal also known as visceral) and is **associated with greater health risks**.

Visceral (intra-abdominal) fat surrounding the internal organs has been found to be more metabolically active, producing more changes in cholesterol, blood pressure and blood sugar, than fat in the legs and buttocks.

Like BMI, Waist Circumference has been going up.

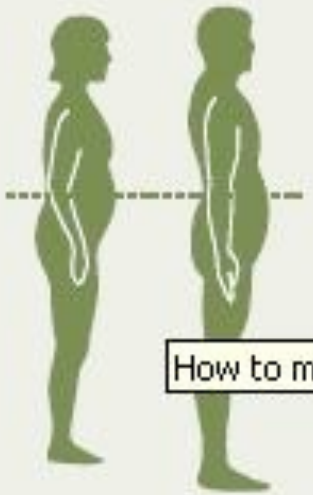
The percentage of overweight men at increased or high risk based on waist circumference rose from **45** per cent in 1981 to **62** per cent from 2007 to 2009.

Among overweight women, the percentage at increased or high risk rose from **64** per cent to **93** per cent.

WAIST MEASUREMENT

TO MEASURE YOUR WAIST SIZE

To measure your waist size (circumference), place a tape measure around your bare abdomen just above your hip bone. Be sure that the tape is snug, but does not compress your skin, and is parallel to the floor. Relax, exhale, and measure your waist.

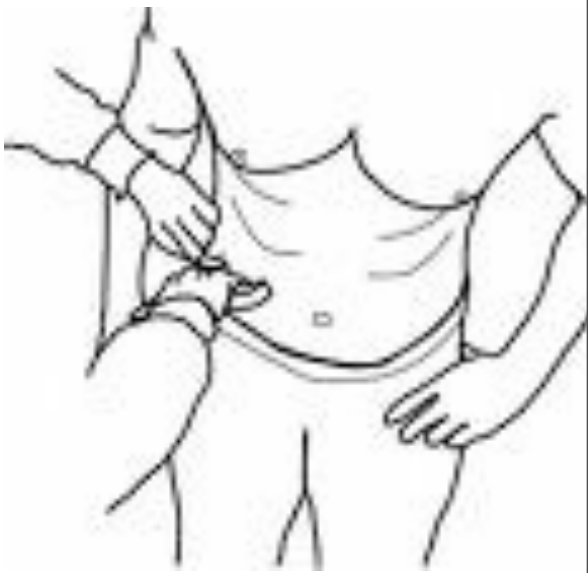


How to measure your waist size

WAIST MEASUREMENT

- Ideal for men < 40 inches
- Ideal for women <35 inches
- Don't be satisfied with these numbers, less is best.....

Pinch an inch.



If you can pinch an inch at your belly, you are at increased risk for Metabolic Syndrome. Having a skinfold measure of your abdomen is a good way to understand the level of fat thickness there. The mechanisms that we deposit excess visceral fat are not completely understood.

The “Fat Shift” in women

As you age and your metabolism slows down, women experience an even greater fat percentage increase than men do. Then after menopause, your body fat distribution tends to shift — less in your arms, legs and hips, and more in your abdomen.

How risky is weight gain after menopause?

Weight gain after menopause can have serious implications for your health. Excess weight increases the risk of high cholesterol, high blood pressure and type 2 diabetes. In turn, these conditions increase the risk of heart disease and stroke. Excess weight also increases the risk of various types of cancer, including colorectal cancer and breast cancer. In fact, **some research suggests that gaining as little as 4.4 pounds (2 kilograms) at age 50 or later could increase the risk of breast cancer by 30 percent.**

Why?

Exercise Less

Menopausal women tend to exercise less than other women, which can lead to weight gain. In addition, muscle mass naturally diminishes with age.

Less muscle

If you don't do anything to replace the lean muscle you lose, your body composition will shift to more fat and less muscle — which slows down the rate at which you burn calories.

Genetics

For many women, genetic factors play a role in weight gain after menopause. If your parents or other close relatives carry extra weight around the abdomen, you're likely to do the same.

Stress

Sometimes, factors such as children leaving — or returning — home, divorce, the death of a spouse or other life changes may contribute to weight gain after menopause. For others, a sense of contentment or simply letting go leads to weight gain.

The “Fat Shift” in women

After menopause, your body fat distribution tends to shift — less in your arms, legs and hips, and more in your abdomen.

Female hormones and weight gain after menopause

- You can be doing everything right and you still gain weight.
- Hormones are the reason behind the gradual weight gain.

Estrogen decreases

Body needs estrogen.
Fat cells produce estrogen.

Progesterone decreases

This phenomenon is known as bloating.

Testosterone decreases

The level of testosterone declines during menopause.

Androgen increases

Its increased levels directs the deposition of fat around the abdomen. Depicts the onset of the so called "middle age spread". It increases during menopause.

Cortisol increases

Under physiological-stress conditions, secretion of cortisone increases.

Fight back the bulge and hormonal changes

Spot reduction does not work.

Exercise. In fact, you may notice that your tummy bulge is the first area to shrink when you start exercising.

Interval Aerobic Exercise

Strength training. Some research has shown that exercising with weights is effective in trimming tummy fat. Weight training can increase growth hormonal levels that help burn fat, while increasing insulin sensitivity. Miriam Nelson, a Tufts University researcher, showed that a group of women who followed a weight loss diet *and* did weight training exercises lost 44% more ab fat than those who only followed just the diet.

Healthy diet. As mentioned.

Tone your tummy. While you can't "spot-burn" belly fat, you can firm up your abdominal muscles and get a flatter belly. Traditional sit-ups aren't the most effective way **CORE TRAIN.**

Hormone therapy. Seems not to keep off belly fat as once thought.

Sleep more and stress less, Sleep deprivation increases the appetite-stimulating hormone, ghrelin, and decreases the satisfaction hormone, leptin, say researchers from the University of Chicago-study 68,183 women for 16 years, they found that those averaging five hours of shut-eye per night were 32 percent more likely to gain 33 pounds than those who got seven hours a night. **Appetite-stimulating hormone, ghrelin-INCREASES while satisfaction hormone, leptin-DECREASES with lack of sleep.**

The mechanisms that we deposit excess visceral fat are not completely understood.

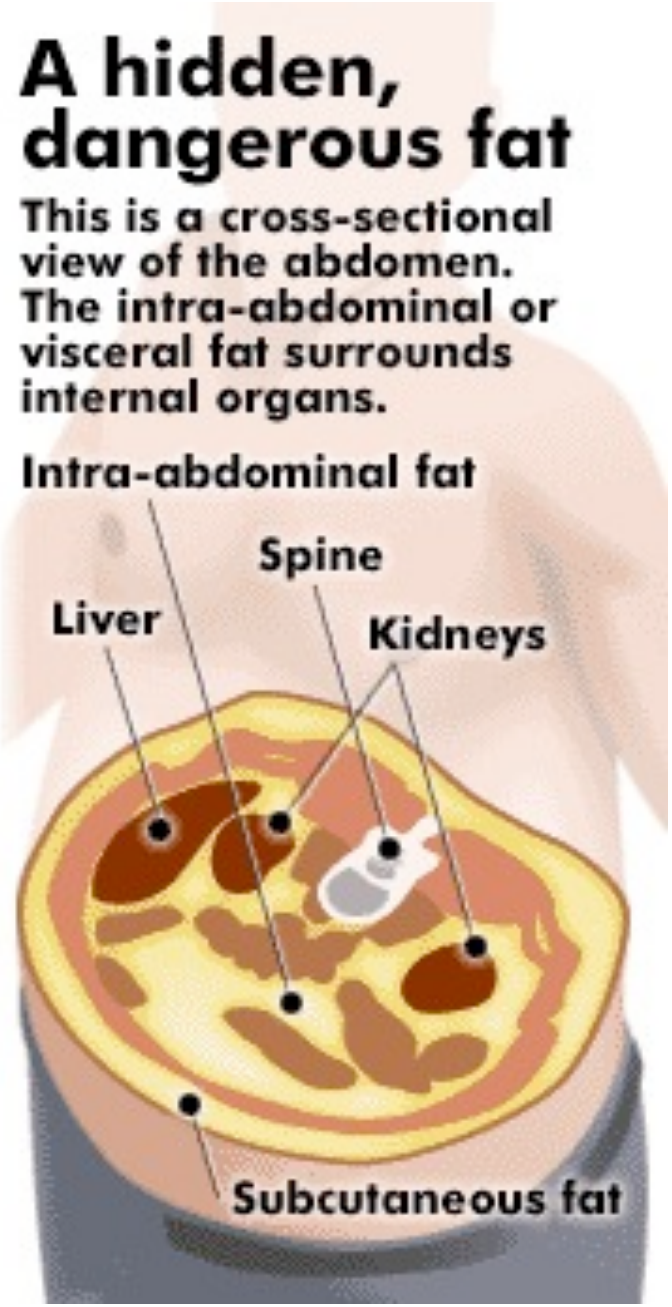
Visceral fat is likely linked to

- **genes**
- **sex hormones**
- **stress hormones (cortisol)**

Visceral and subcutaneous fats act differently in the body. The visceral fat produces much more inflammatory molecules, which raises a person's risk of heart disease and diabetes.

Inflammation associated with so many health problems

Abdominal fat exerts excessive forces on the organs it surrounds and increases blood pressure due to the pressure the fat places on the arteries going through it.



New Research on Ab Fat

Researchers at Oxford University have discovered the fat in foods can be converted into tissue around the abdomen within 3 hours after a high fat meal. ***ie VISCERAL FAT IS VERY ACTIVE***

Brazilian researchers found that within months of abdominal liposuction, there may be an increase in the so-called "visceral" fat that surrounds the abdominal organs.

ie LIPOSUCTION NO TREATMENT FOR OBESITY

Having a large waist is linked with having fat around the internal organs, which can lead to inflammation and insulin resistance and increased cardio-metabolic risk.

Inflammation (Buzz Word)

What so bad about inflammation?

Everyone who has had a

sore throat, rash, hives, or a sprained ankle

This kind of inflammation is good. Your body's defense system -- to

injury and infection.

The trouble occurs when that defense system runs out of control.

allergies, rheumatoid arthritis, autoimmune disease, and asthma.

Hidden inflammation run amok is at the root of all chronic illness

heart disease,

obesity,

diabetes,

dementia,

depression,

cancer,

and even autism.

Know your Numbers

C-reactive protein is a test for inflammation.

A study of a generally "healthy" elderly population found that those with the highest levels of C-reactive protein and interleukin 6 (two markers of systemic inflammation) were 260 percent more likely to die during the next 4 years. The increase in deaths was due to cardiovascular and other causes.

Triggers and causes of inflammation.

• Poor diet--mostly sugar, refined flours, processed foods (lunch meats), and inflammatory fats such as trans and saturated fats. Avoid junk and fast foods.. **All the same players.**

• Lack of exercise as well as **too** much exercise.

• Stress -practice yoga or meditation, breathe deeply, or even take a hot bath.

• Hidden or chronic infections with viruses, bacteria, yeasts, or parasites

• Lack of Vitamin D

• Hidden allergens from food or the environment

• Toxins such as mercury and pesticides

Anti-inflammatory Foods

omega-3 fatty acids

cold-water oily fish, walnuts, flax seeds, canola oil and pumpkin seeds. Adding omega-3 fatty acid supplements from flax oil or fish oil may also help reduce inflammation; just be sure to speak with a doctor or nutritionist

olive oil has been shown to reduce the risk of cardiovascular disease and help to reduce pain. Other healthy oils include rice bran oil, grape seed oil, and walnut oil.

The pigments in **brightly colored fruits**, vegetables and berries contain many phytochemicals that have anti-inflammatory properties.

Choose **probiotic foods** like yogurt and pickled vegetables.

Choose **fresh foods** instead of heavily processed foods

Choose **whole grains**

How to lose weight.

Where to go for help

Weight loss is a multi-billion dollar industry. It is hard to figure out what is the best.

Bookstores shelves are filled with books offering many promises, **but few deliver.**

There are many diet centers like Jenny Craig, Nutra Systems, Weight Watchers, and so on.

Jenny Craig

The reason why these programs works at first is the prepackaged meals have **set calories and they advocate reduced caloric portions**.

If they are truly working **why are we getting fatter as a nation**.

Is our genetics and the quality and quantity of food going to defeat us?

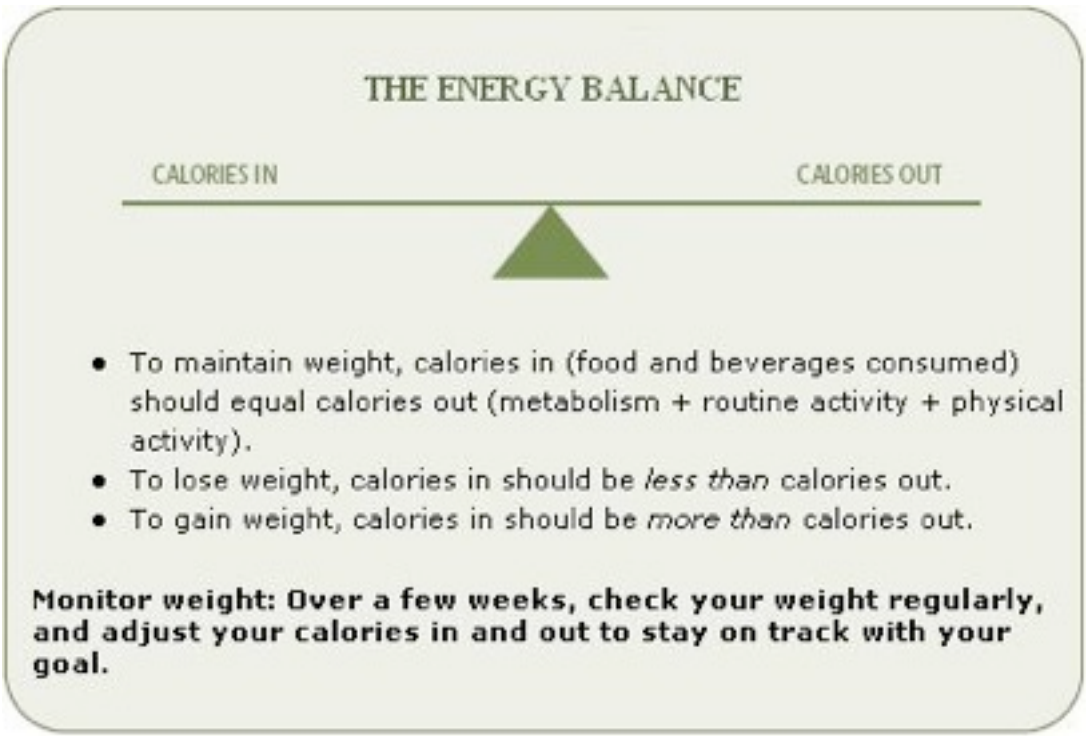
Weight Watchers

It sure seems it considering that losing weight is very difficult for most people, with more than 95% of people who set out to lose weight not succeeding.

Nutrisystem | D

It is up to you.....

CALORIE BALANCE CHART



Putting It all Together to Achieve Fat/Weight Loss

Fat and Weight Loss is actually very simple understand.

Calories ingested < Calories expended = fat loss

Less Calories In

Calories Ingested - **Take in fewer calories than what you are normally use to**. **How-record 3 to 5 days of what you normally consume**. Calculate how many calories that you take in daily. **Five hundred calories less this value is what you should consume to achieve a 1 pound fat loss per week**.

Thermic Effect of Food - The body **expends a great deal of calories** in just **digesting foods (10% daily)**, especially when the foods are high in fiber and are different than what you are normally use to consuming. **Eat more fiber**, it takes more energy to digest whole foods. **Eat a variety of foods**. Your body gets use to eating the same foods; variety will cause your body to adjust how it digests food. **Drink cool water**, it takes energy to warm the water to body temperature.

Putting It all Together to Achieve Fat/Weight Loss

Fat and Weight Loss is actually very simple understand.

Calories ingested < Calories expended = fat loss

Increase Calories Out

Exercise - In addition to doing more daily activities, follow a **formal aerobic exercise program 4 to 6 times a week for 20 to 60 minutes**. A formal exercise program such as this will allow you to expend up to 3,000 calories a week.

Resting Metabolic Rate (RMR) - **Strength training increases muscle mass which increases resting metabolic rate** (a 1 pound muscle gain can increase RMR by 25 to 100 calories a day). **The body burns additional calories after exercise (some call it after glow). To increase after glow perform different exercises and work at a somewhat hard intensity**. The body has to expend more calories after exercise when the sessions are hard and novel. That is why it is a good idea to cross train.

Daily Activities - **Stand and move around extra during the day**. Park further from the building you work at. Always try to use the stairs. Do not use the television remote control. Pace around rather than sitting while at work. Extra jitters and movements in the day adds to calories expended.

COUNTING CALORIES

- Choose your current level of activity
  - Sedentary
    - light physical activity daily
  - Moderately active
    - physical activity equivalent to walking 1.5-3 miles/day at 3-4 miles/hour
  - Active
    - physical activity equivalent to walking more than 3 miles/day at 3-4 miles/hour

CALORIE INTAKE CHART

		Activity Level		
Gender	Age (years)	Sedentary	Moderately Active	Active
		Calories		
Child	2-3	1,000	1,000-1,400	1,000-1,400
Female	4–8	1,200	1,400–1,600	1,400–1,800
	9–13	1,600	1,600–2,000	1,800–2,200
	14–18	1,800	2,000	2,400
	19–30	2,000	2,000–2,200	2,400
	31–50	1,800	2,000	2,200
	51+	1,600	1,800	2,000–2,200
Male	4–8	1,400	1,400–1,600	1,600–2,000
	9–13	1,800	1,800–2,200	2,000–2,600
	14–18	2,200	2,400–2,800	2,800–3,200
	19–30	2,400	2,600–2,800	3,000
	31–50	2,200	2,400–2,600	2,800–3,000
	51+	2,000	2,200–2,400	2,400–2,800

It's all about the Calories.

Twinkies. Nutty Bars. Powdered Donuts Diet
For 10 weeks, Mark Haub, a professor of human nutrition at Kansas State University,

His premise: That in weight loss, pure calorie counting is what matters most -- not the nutritional value of the food.

Results
He shed 27 pounds in two months.

He went form 207 to 174 pounds.

Haub's "bad" cholesterol, or LDL, dropped 20 percent and his "good" cholesterol, or HDL, increased by 20 percent. He reduced the level of triglycerides, which are a form of fat, by 39 percent.

Haub's body fat dropped from 33.4 to 24.9 percent.

How
1,800 calories a day. A man of Haub's pre-dieting size usually consumes about 2,600 calories daily.

Why
His success is probably a result of caloric reduction.
It's a great reminder for weight loss that calories count

How did the blood markers improve even when he loaded up on processed snack cakes?
Being overweight is the central problem that leads to complications like high blood pressure, diabetes and high cholesterol.

More info:
Two-thirds of his total intake came from junk food. He also took a multivitamin pill and drank a protein shake daily. And he ate vegetables, typically a can of green beans or three to four celery stalks.

Volumetrics

Research has found that people eat the same weight of food daily.

Lose weight by decreasing the caloric density of food and eating the same amount of weight.

Decrease caloric density by increasing water and fiber content of meals by adding vegetables.

People that have kept off 10% of their body weight ate more than 5 servings of vegetables a day.

Add a 1/4 cup per serving of whole or blended vegetables to your favorite meals (squash, onion, cauliflower, or parsnips).

Volumetrics

Apples
385 grams = 200 calories

Fried Bacon
34 grams = 200 calories

Kiwi Fruit
328 grams = 200 calories

Butter
28 grams = 200 calories

Beverages don't Satisfy your Hunger urge.

Hunger and thirst are not the same.

Thirst-dry, unpleasant sense in mouth.
Hunger-stomach rumbling, headachey, or lethargic.

You could drink a few hundred calories of juice or soda and still want the same weight of food.

<u>That is why liquid calories are so problematic towards weight loss.</u>

Understand the plates?

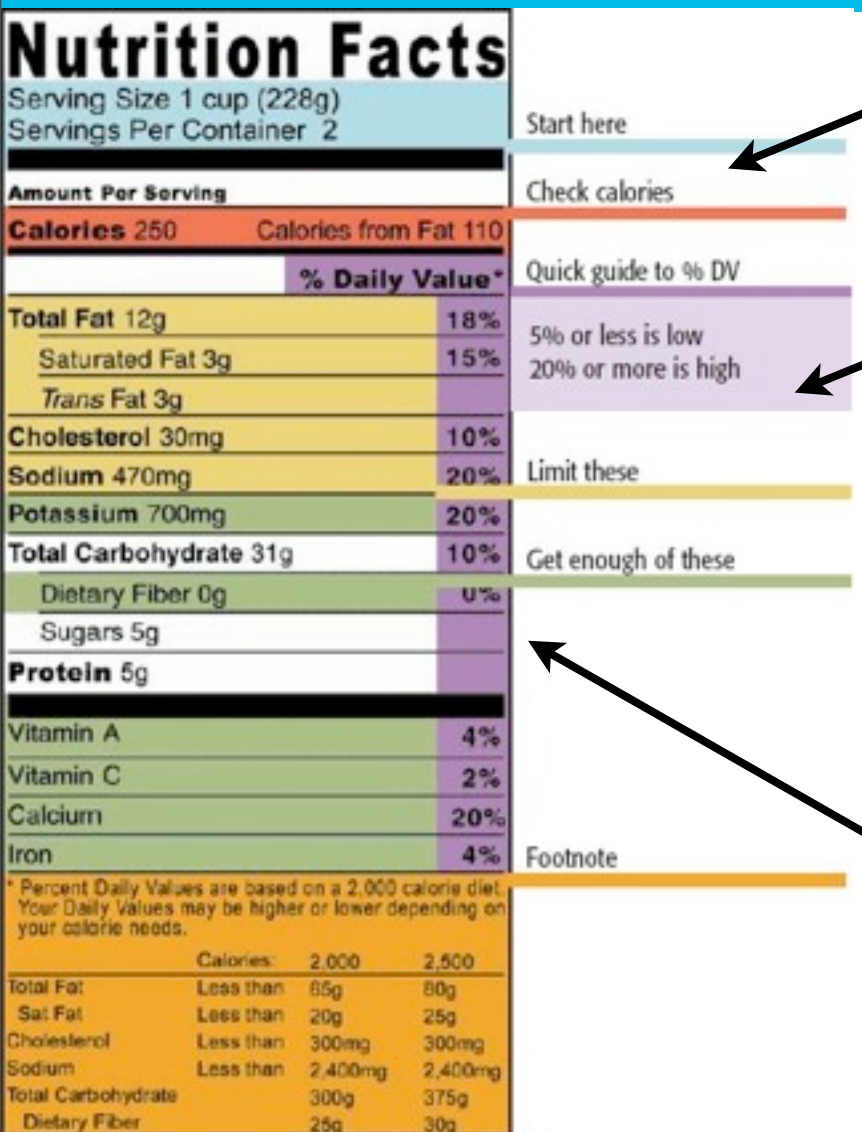
PORTION CONTROL

- Light bulb=one serving of fruits and vegetables

- Deck of cards=one serving of protein

Ice cream scoop=one serving of rice, cereal, potato, pasta

READ FOOD LABELS



Nutrition Facts

Serving Size 1 cup (228g)
Servings Per Container 2

Start here

Amount Per Serving

Check calories

Calories 250 Calories from Fat 110

Quick guide to % DV

	% Daily Value*
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Potassium 700mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

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

Limit these

Get enough of these

Footnote

* 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

Serving Size and Calories.

5% Daily Values or Less in Fat and Cholesterol and want 0 % Trans fat.

Whole grains should be listed as one of the first ingredients.

Check the fiber content. Fiber helps to give a feeling of fullness and is healthy for the heart and digestive tract. Look for at least

3 grams of fiber per serving.

Less than 2 teaspoons of sugar or

< 8 grams of sugar=32 calories.
One (**1**) **teaspoon of sugar** has 15 **calories**

TAKE CHARGE

- At home
  - Grocery list with healthy foods
  - Don’t eat while watching TV
  - Don’t bring candy or unhealthy snacks into your house
  - Clean out your kitchen cupboards and remove unhealthy snacks
  - Eat off a small plate

TAKE CHARGE

- Healthy plate in the BMS cafeteria

- Stop vending machine snacks
- Snack on fruit and raw vegetables

Exercise

How about exercise.

Why I believe exercise alone doesn't work for weight loss.

When people just exercise without dieting they see modest losses eventually getting discouraged.

You may be able to shed a few pounds with just exercise, but combination of exercise and a reduce caloric diet is the key.

For instance, if you exercised for one hour a day burning 350 calories, which is roughly walking 3 to 4 miles,
and diet was the same you would lose approximately one pound every 10 days (3500 calories = one pound of fat).
This kind of weight loss is **unacceptable for most**.
Unfortunately many feel it is **OK to have a larger portion or treat** if they exercise, which further slows the process.

This is one of the reasons why diet modification and exercise are the key to successful weight loss.

I'm not saying to give up on exercise. A habitual high level of physical activity is a recurring theme among many long-term studies that identify predictors of successful weight management.

Several studies have reported that people who performed between 250 and 300 minutes of physical activity per week were the most successful at maintaining their weight loss long-term.

Losing body fat requires a flip in the energy imbalance, where more calories are expended than are consumed.

Cut calories by 500/day to lose 1 pound per week or exercise 500 calories/day extra a day.

Best to do both.....

CALORIES EXPENDED WITH ACTIVITY

Moderate Physical Activity	Approximate Calories/Hr for a 154 lb Person[a]
Hiking	370
Light gardening/yard work	330
Dancing	330
Golf (walking and carrying clubs)	330
Bicycling (<10 mph)	290
Walking (3.5 mph)	280
Weight lifting (general light workout)	220
Stretching	180
Vigorous Physical Activity	**Approximate Calories/Hr for a 154 lb Person[a]**
Running/jogging (5 mph)	590
Bicycling (>10 mph)	590
Swimming (slow freestyle laps)	510
Aerobics	480
Walking (4.5 mph)	460
Heavy yard work (chopping wood)	440
Weight lifting (vigorous effort)	440
Basketball (vigorous)	440

Exercise goals

The goals of an exercise program for weight loss and long term management are to

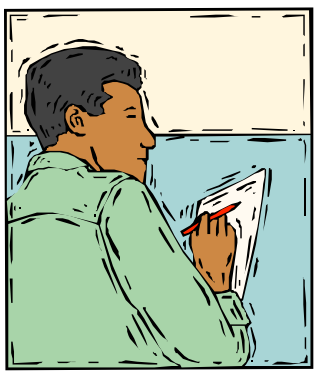
- reduce body fat stores
- preserve muscle mass (linked to metabolic rate)
- improve overall health and body function

Exercise can have a very powerful affect on a person's emotional health and well-being.

It is well accepted that habitual exercise can improve depression and other mental health conditions.

For long-term success follow these exercise tips

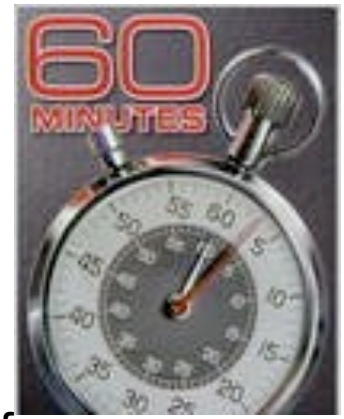
- **Enjoyable exercise** has a greater chance of being continued.
- **Convenient** at home or work, just try to get it in.
- **Flexible** to fit into a person's lifestyle (10 minutes morning 10 minutes at night). **Cross train**, try a variety of activities.
- **Be reasonable**, too much too soon will end up in failure, be true to yourself, don't over commit. A great example is Oprah Winfrey's dramatic weight loss and regain.
- Remember this mantra "**slow and steady** wins the race."
- **Know what to do and how often** to do is a challenge for some. But it doesn't have to be. It can be real easy, just walk, don't make it too hard but not too easy.
- **Make a plan.**



NO for Most Extreme Fitness

BOOT CAMP

WHAT THE SCIENCE SAYS.
HOW MUCH-REALLY 60 MINUTES-WHAT THE, ARE YOU NUTS.

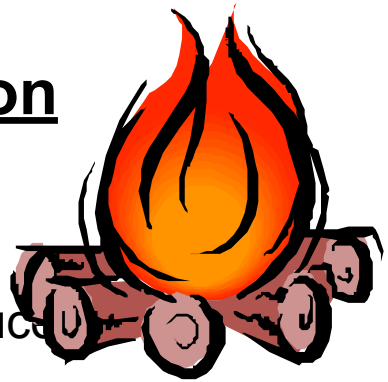


US Dietary Guidelines for Americans (2005)
The guidelines address three levels of health.

1) **reduce the risk of chronic disease**, suggests at least 30 minutes of moderate intensity physical activity at work or at home, on most days of the week.
2) **to help manage body weight and prevent gradual body weight gain**, suggests approximately 60 minutes of moderate to vigorous physical activity at work or home on most days of the week.
3) **sustaining weight loss in adulthood**, suggests daily physical activity of moderate to vigorous intensity for 60 to 90 minutes is recommended.

60 MINUTES OF EXERCISE IF YOU DON'T WATCH WHAT YOU EAT.....
These recommendations are based on research findings from large populations that include individuals who were obese, had pre-diabetes, and who lost **70 pounds or more and kept it off for longer than three years**. (Weight Loss Registry).

Basic 3 Part Approach to Body Fat Reduction



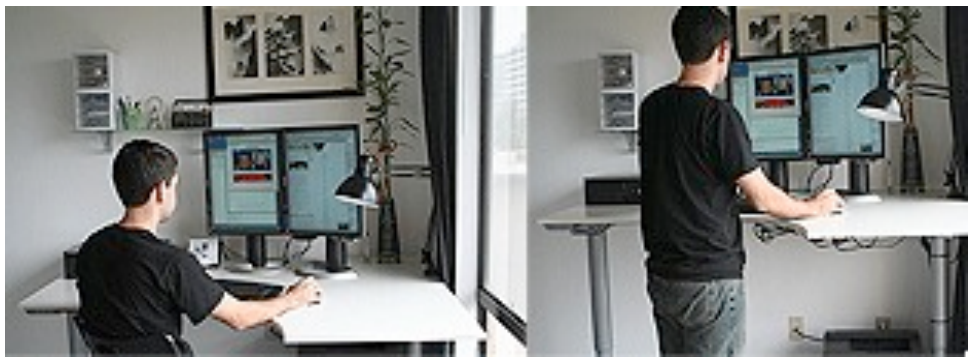
- Strength train
- Cardiovascular train
- Follow a low saturated fat, high fiber, nutrient dense, and reduced caloric diet

Strength train **boost ones metabolism** through building lean muscle mass **(A one pound muscle gain can increase RMR by 25 to 100 calories a day)**. The other benefit is the increase tone of the muscle pulls excess body fat stores inward giving one the appearance that they are less fat. 2 days a week.

Walking is an essential part of everyday life and a preferred form of physical activity for many who are looking for weight loss. A general rule is that you should **walk (or perform any other aerobic activity)** with **a sense of determined purpose**. (Rooks 1997). 5 to 7 days a week 30-60 minutes.

Proper nutrition is essential to weight loss. Permanent weight loss is not achieved without exercise and proper diet.

No time for formal exercise.
Studies have found standing health benefits.
Standing for a few hours a day is better for your health than 30-60 minutes of moderate aerobic activity.



The simple act of standing up instead of sitting may help you burn as many as 60 more calories per hour, depending on your size. Although 50 calories may not seem like a lot in a 2,000-calorie day, making the standing adjustment for four hours out of the day can burn an extra 200-300 calories a day--leading to a 20 lb. weight loss over the course of a year. Standing more often also contributes to an overall better sense of well-being and health.

Prolonged Sitting Causes Disease, Standing Fights It

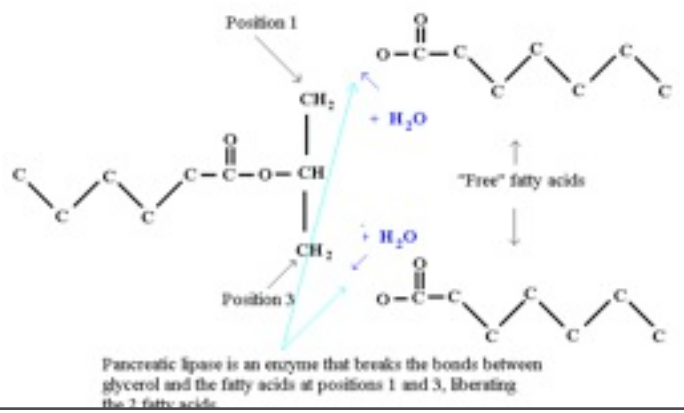
Standing is Physical Activity
Our Health Depends on it.

Donald Rumsfeld was in great shape, stood 8-10 hours a day, no chair in his office.

Cavemen spent all day standing, we are meant to be upright.

One study suggested that lean people spent 150 minutes extra a day standing and doing light activity compared to the obese subjects even though they did the same amount of activity and ate the same.

Standing turns on Lipase enzyme, which clears the blood stream of fat, while sitting shuts if off.



Pancreatic lipase is an enzyme that breaks the bonds between glycerol and the fatty acids at positions 1 and 3, liberating

Lipase enzyme is turned on while standing fat goes into muscle.

Some studies suggest that the rate of heart disease and diabetes doubled or triple in those who sit a lot.

Energy-metabolism lab, Dr. Braun had a group of volunteers spend an entire day sitting ane then another day standing

stood all day, “not doing anything in particular

entire day sitting. If they needed to visit the bathroom or any other location, they spun over in a wheelchair.

“hundreds of calories difference because of standing”

“no increase among the upright in their blood levels of ghrelin or other appetite hormones”

Standing did not ignite hunger

Braun says: if you want to lose weight, you don’t necessarily have to go for a long run. “Just get rid of your chair.”

School of Public Health and Health Sciences
Department of Kinesiology

Simple Points on Exercise Summary

Walking is probably the best exercise, but there is no one superior aerobic exercise.

Try a variety of activities. Cross training is fun.

Try to work at a somewhat hard intensity, not too hard.

Don’t work at such a low intensity that your not burning calories.

Achieving a high number of calories expended should be your goal.

A way to monitor the effort during aerobic exercise is the talk test.

This simple test says that if you are not able to carry on a conversation while exercising, you are pushing too hard and should slow down.

Food Instincts

Food instincts dictate why, what, and how much we eat.

Survival throughout our evolution-these instincts now interfere with our health and well being.

We can not change them, but we need to try to work with them.

Hunger-We all get hungry and since we were a baby we have been satisfied when we are full.
Availability-Study after study shows we will eat food if it is presented to us and will eat more of it when it is in abundance, especially when it is free.
Calorie density-Across cultures we all love high calorie foods. They satisfy and make us full.
Familiarity- Everyone has a particular food preference, especially those we grew up with. They comfort and in a certain way make us feel safe.
Variety-We also enjoy variety and will eat more if there are many choices.

Instincts

Hunger
Availability
Calorie density
Familiarity
Variety

How to work with your food instincts.

Hunger

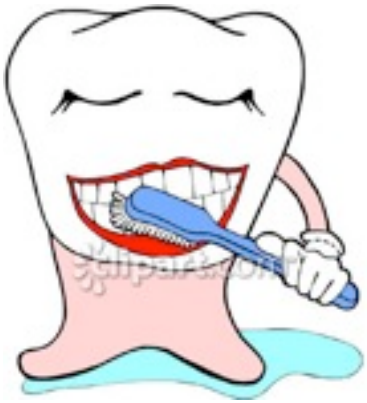
Simply don't let yourself feel hungry, as you heard over and over again **eat small frequent meals and snacks.**

Have 3 to 4 meals a day or 3 meals and a couple of snacks a day

Women meals should be about 300-350 calories per meal

men should be 400-600

Snacks should be about 100 calories.



***Practice the art of distraction.**

Distraction works well with weight loss.

Busy-If your busy you will be less likely to eat.

Water-When hungry drink water

Chew sugarless gum

Go for a walk

Brush your teeth

Have a fiber tablet with cold water

Distract yourself-tell yourself I'll eat in another 15 minutes, just try to distract yourself with something else.

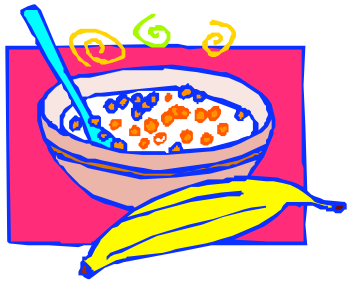
Availability- Make available to you healthy, low fat, low calorie, high fiber foods. Try not to have high calorie, processed foods around.

Familiarity- Try to gain a relationship with healthier lower calorie foods.

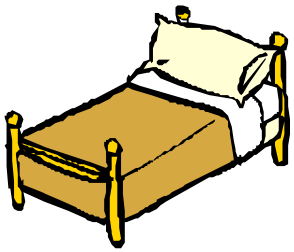
Try to eat a **variety** of them not only to satisfy but for better nutrition. After awhile of practice new foods will become familiar and hopefully preferred.

My Diet tips

My Diet Tips for Fat Loss



Try to eat **small and frequent meals** or snacks every 2 to 4 hours.
- caloric distribution throughout the day allows less calories to be set up as fat
- less fluctuations in blood glucose and insulin levels
- clients feel sated (satisfied), not hungry all the time
- prevents bingeing or eating large meals at one time



Try not to eat the same foods each day, **vary your diet**.
- variety assures proper nutrient intakes
- prevents clients become bored with plan
- gives more options than a set meal plan

Try to have a **good breakfast**.
- after 6 or more hours of sleep liver stores of glycogen and amino acids have become somewhat depleted and should be restored.
- prevents early fatigue or possibly light headiness

Try not to eat a meal **1-2 hours before bed**, a snack is o.k.
- a heavy meal may interfere with sound sleep

Try to drink **6 to 8 - 8 oz.** servings of cold water daily
- water is the key nutrient, can't survive without it
- inadequate consumption can **increase blood viscosity** placing stress on the heart and other organs including the kidneys
- inadequate consumption may not allow carbs to be converted to **glycogen** for water needs to be present in its synthesis, these carbs may be converted to fat
- inadequate consumption may cause headaches
- **cold water is absorbed faster and expends additional calories**

No regular sodas, but occasional diet sodas/seltzer water is acceptable.
- soda contains empty calories
- liquid calories adds very little to satisfying ones hunger
- aspartame, the artificial sweetener, is not tolerated in some people

If you can no alcoholic drinks, but if you must don't exceed 3 drinks a week
- alcohol contains a high amount of calories, **Alcohol**: 1 **gram** = 7 **calories**, compared to carbs and protein at 4.
- **I like to call them fat beverages.**
- Alcohol has toxic effects and because of its structure the body can converts it into fat

My Diet Tips for Fat Loss

Try not to have high saturated fat and trans **fats foods**

Try not to have juices have fruit instead.

- juices are high caloric beverages
- juice processing robs fruit of many key nutrients
- liquid calories adds very little to satisfying ones hunger

No sweets or limit sweets

- sweets for the most part have very little nutritional value
- most sweets have a high caloric density where most don't sated ones hunger
- some sweets may stimulate appetite

Try to have 1 to 2 pieces of fruit a day.

- most fruits have high amount of fiber, vitamins, carotenoids, and flavonoids
- some, like apples, leaves people sated

Try to eat more vegetables, especially green 3 to 4 servings a day.

- most vegeatbles have very high amount of fiber, vitamins, carotenoids, and flavonoids
- most leaves people sated

Try not to have raisins or dried fruit, high caloric food items.

- it's amazing how many calories dried fruit has as well as nuts

Remember nuts are high in calories

Try to have only nonfat or low fat dairy products (skim-1% milk, nonfat yogurt, and nonfat cottage cheese), at least 1-2 a day.

- dairy is a great source of absorbable calcium
- its also a good quality protein source

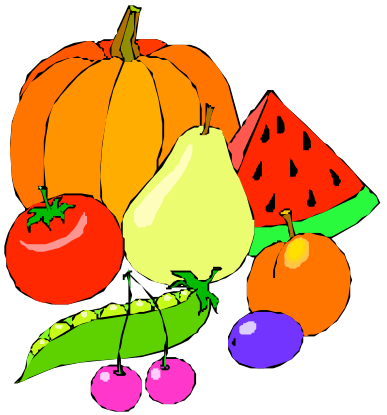
If you want take a multi-vitamin.

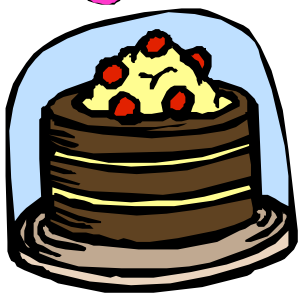
- adds a degree of protection, especially for those on a low caloric plan

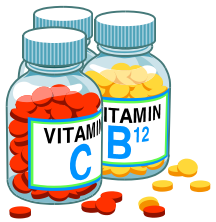
You can cheat/treat at 1-2 meals a week and have whatever you want within reason.

Eating at a slow to moderate pace allows your stomach and intestines time to send messages to the brain they are full.

- The mechanism of satiety is a slow one taking 20 to 30 minutes after the stomach is full to get the message through.







Be a Grazer Not a Gorger

Studies have shown that people who eat small, frequent meals throughout the day tend to consume fewer calories and fat grams at the end of the day.

You burn more calories metabolizing food when you spread it throughout the day.

Grazing also prevents tiredness brought on by drops in blood glucose, and it's easier on your stomach.

Keys Reviewed

- **Eat Breakfast**
- **Drink Cold Water**
- **Eat More Fiber and Eat More Veggies**
- **Move and Stand at Work**
- **Do aerobic exercise for 20-60 minutes most days**
- **Strength train twice a week**
- **Sleep**
- **Destress**

Practice the art of distraction.

Distraction works well with weight loss.

Busy-If your busy you will be less likely to eat.

Goals

Try to weigh-in only once a week and do not get obsessed about it.

A good weight loss is **1 to no more than 2 pounds a week**. A greater weight loss than this could mean that you are losing precious muscle. Muscle loss will slow your metabolism for it is highly metabolic active tissue. That is why it is so hard for people who have yo-yo dieted for many years to lose weight, their metabolism has slowed down. For those people to lose weight they need to exercise to speed up their metabolism.

What should your goals be?

American College of Sports Medicine Suggestions

The ACSM states that it is not necessary to achieve an optimal weight to experience many health benefits. A slight amount of weight loss of **5 to 10% of body weight are associated with many health benefits**, such as reduction in blood pressure, increases in insulin sensitivity, and improved blood lipids.

Focus on gradual and permanent weight loss, improvement of cardiorespiratory capacity, and reductions of cardiovascular risk factors when trying to lose weight. **Weight maintenance is more important than weight loss.**

TAKE CHARGE

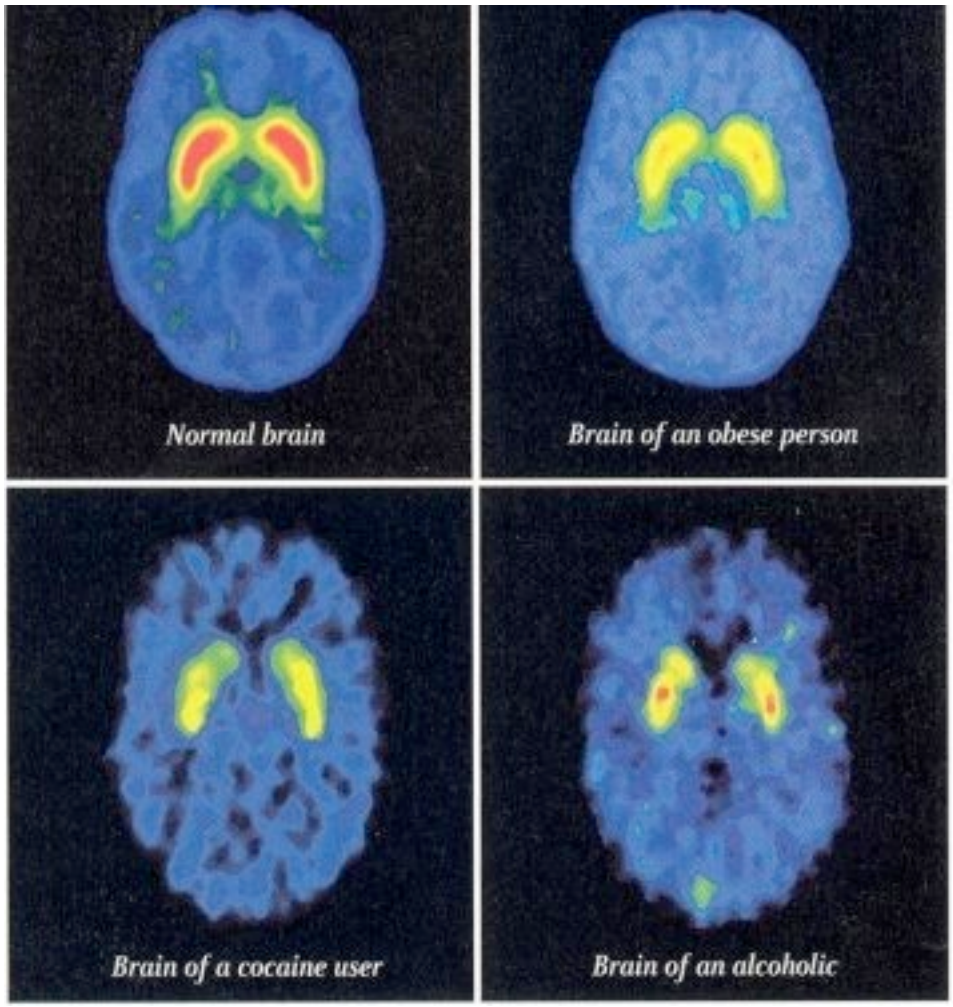
- Incorporate one change per week
- Set your goal weight
- Set the goal date
- Plan to lose one pound per week
- Maintain don't gain vacation/holiday
- Food diary

Other Info

Is there such a thing as a food addiction?

- There is no clinical recognized definition.
- A Yale study fund 11% of those surveyed had criteria for food dependence.
- Other research found that the very obese people had lower levels of dopamine in the reward center of their brains; same as other addicts. **Those who don't get much reward want more to be satisfied.**
- One study found that obese subjects had less dopamine response when drinking a milkshake, but much more of response when seeing a picture of one.
- Overeating may dampen the dopamine response, which may make you overeat more.

Is there such a thing as a food addiction?



BRAIN REWARD CENTER

What do the colors mean?

RED
high dopamine
normal pleasure and interest

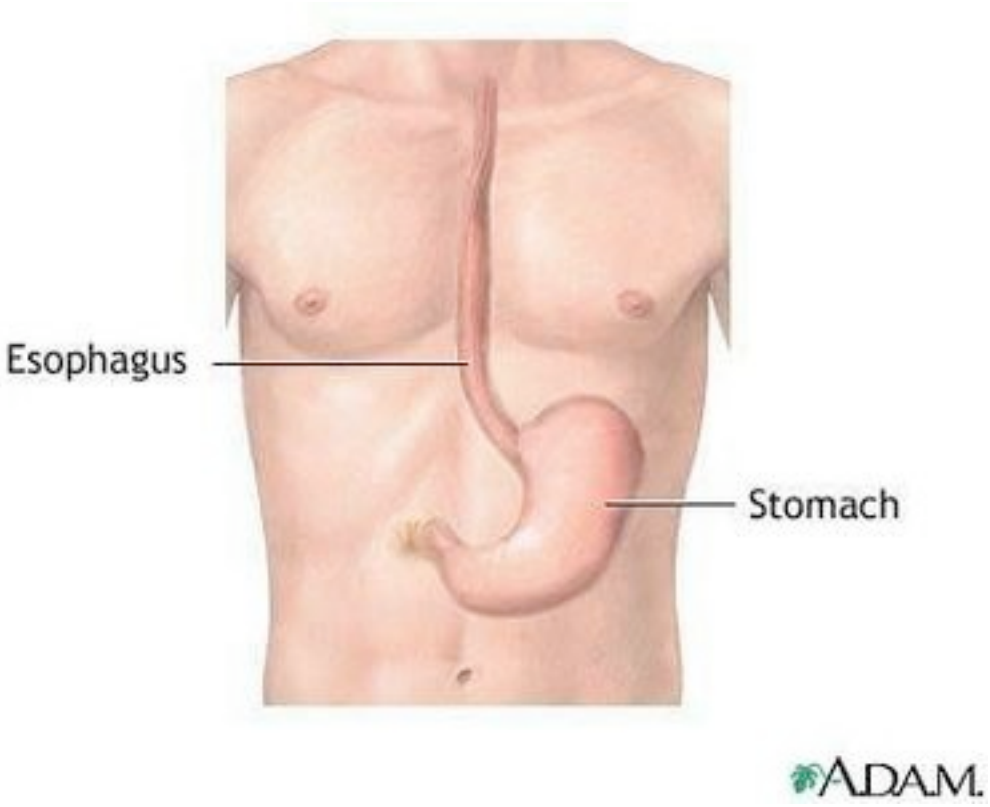
YELLOW
medium dopamine
difficulty feeling joy or pleasure

GREEN
low dopamine
lack of pleasure

Our Stomachs have be conditioned to be large; we need to condition it to be smaller.

The stomach is not a large organ but it has the ability to **stretch and contract** depending on the amounts of food it processes at any given meal. If you consistently consume food in large portions, your stomach will gradually stretch and it will take more food to make you feel full.

To reduce
Eat smaller portions of food; to keep your metabolism up, you have to eat several meals



There is no magic bullet or potion.

CSPI no supplement really works that safe.

The problem is that it is hard work and may be painful at points.

That is why 95% of people who set out to lose weight do not succeed.

National Weight Control Registry Facts

"you see over and over that exercise is **one constant among people who've maintained their weight loss**."

About 90 percent of the people worked out.

How did they lose.

• 45% of registry participants lost the weight **on their own** and the other 55% lost weight with the help of **some type of program**.

• 98% of Registry participants report that they **modified their food intake** in some way to lose weight.

• 94% **increased their physical activity,** with the most frequently reported form of activity being walking.

How did they keep it off.

There is variety in how NWCR members keep the weight off.

Most report continuing to maintain a low calorie, low fat diet and doing high levels of activity.

• 78% **eat breakfast** every day.

• 75% **weigh themselves** at least once a week.

• 62% watch **less than 10 hours of TV per week.**

• 90% exercise, on average, a**bout 1 hour per day.**

• **Majority ate more than several fruits and veggies a day.**

My Favorite Sayings

Your body will get use to eating fewer calories and healthier foods.

It takes awhile, but if you are consistent it will happen.

Weight loss is about effort, practice, replacing bad habits with good ones, and being consistent with a plan.

If you can find time to eat you can find time to move.

Every Meal doesn't need to be a Party.

Eat to Live.
Don't Live to Eat.

sodexo

http://yourhealthyourwayonline.com

https://hospitality.catertrax.com

sodexo

your health your way™

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Your Health Your Way meals meet these nutrition guidelines:

- **– 600 calories or less**
- **– 35% calories from fat or**
- **less**
- **– 10% calories from**
- **saturated fat or less**
- **– 100 mg cholesterol or less**
- **– Trans fat free**
- **– 800 mg sodium or less**
- **– 3g fiber or more**

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YOUR ACTION ITEMS

- Log onto www.livinglifebetter.com
  - Sign up for Know Your Numbers
  - Take the Health Risk Appraisal
  - Make commitment(s) to your health on Your Way
    - Earn Rewards on **Your Way**
    - Make a commitment to attend Healthy Ways workshops
    - Each workshop attended = 400 pts

QUESTIONS?

What's New in Research

Brown Fat

Brown fat is not just found in newborns. Finding it adults as well. People are being subjected to cold temperatures to increase their metabolism.

Viruses

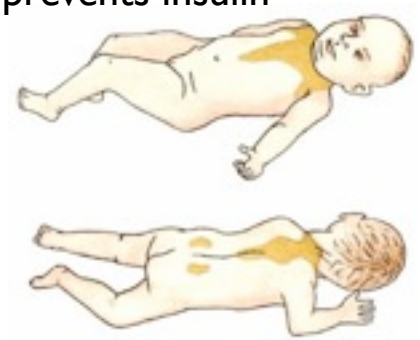
Human adenovirus-36 increases fat storage in chickens, mice, and primates. One study of 500 people found that the antibodies to the virus was present in 30% of the Obese subjects and only 11 % of those with normal weight.

Gut bacteria

Transplanting bacteria from the feces of a lean animal to fat animal and vice versa could change the fat ones into lean and vice versa.
Looking into this with humans. Found it made some less insulin resistant.

Bypass Surgery

Not just about changing the volume of the gut. Seems that it cures people of Type 2 Diabetes not just by weight loss. Bypassing a section of the colon prevents insulin production which makes people less hungry.



What's New in Research

Genes

Does genes make us fat. Look at populations and you will see a range of weight. Due to mostly genes. People same gender, age, and body size metabolic rate may vary by a few hundred calories. For millions of years evolution favored people with the thrifty gene type. Our genes haven't changed over the last 40 years but our environment has.

Example: Pima Indians in Arizona and Pima Indians in Mexico have the same genetic pool.
Mexico Pima's very few are overweight with only 6% being diabetic
US Pima's 75% are overweight with only 45% being diabetic

difference the Mexico Pimas eat more fiber (vegetables and fruit) and they move more.

Like many diseases Genetics Loads the Gun and Environment Pulls the Trigger.

Not all genetics-Look at mice that are almost Identical-if placed on a high fat diet not all gain weight and some exercise more than others. The same is true for people.

It is called **epigenetics**- Above Genes. Example babies with low birth weights have an increased risk for cardiovascular disease, diabetes, and obesity. Those babies who are breast feed typically have normal weight as children.

Leptin

Leptin the hormone produced by fats cells is being heavily study. It tells the brain when the body has too much fat. Injecting Leptin makes some people's metabolism go up, while some overweight people are resistant to leptin as they are for insulin. Looking into a drug, but to many redundant systems.