

Exercise and Weight Loss

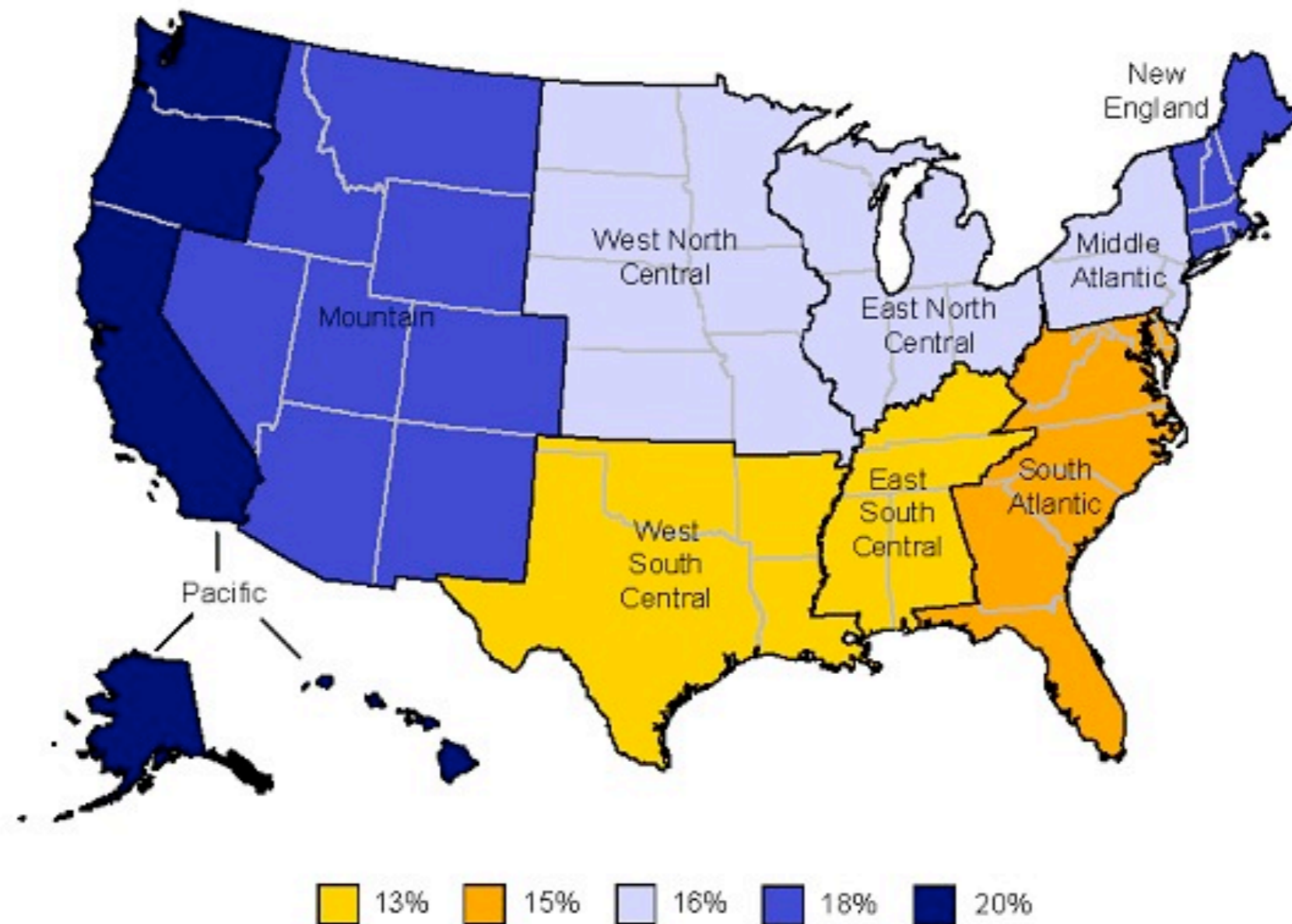
Wednesday, January 16, 2013

Now that you have your diet going lets talk exercise and weight loss.

How are we doing when it comes to exercise?

16 percent people participated in sports and exercise activities on an average day in recent years. In comparison, consider that the number of people who watched television on an average day is roughly five times larger.

Percent of people aged 15 years and older who engaged in sports or exercise activities on an average day, by region, 2003-06



Wednesday, January 16, 2013

First of all we are not doing well as a country when it comes to physical activity. In the Northeast we are a little better, but 20% participation daily is not poor.

How are we doing when it comes to exercise?

What are the recommendations?

Percent of adults 18
years of age and over
who met the **minimum**

Physical Activity
Guidelines for both
aerobic and muscle-
strengthening physical
activity: **20%** (2010)

Wednesday, January 16, 2013

Only 20 % of our population get the recommended **MINIMUM** amount of activity through exercise, which is 150 minutes per week of moderate aerobic exercise (example: walking) or 75 minute of vigorous aerobic exercise (example: jogging) as well strength training sessions 2 days per week. **Be part of the 20%. We are just talking 20 minutes a day.**

Exercise is Great for your Health.

Benefits of Regular Exercise

Improves physical health and quality of life

Reduce risk of premature death- Reduce the risk of premature death from heart disease, high blood pressure, high cholesterol, diabetes, and colon and breast cancers. It increases high-density lipoprotein (HDL, or good cholesterol) while decreasing Triglycerides. Overall it increases resistance to various diseases by bolstering the immune system.

Improves psychological well-being - Regular exercise improves your mood and reduces the likelihood of depression and anxiety.

Increases your energy levels - When your heart and lungs work more efficiently, you'll have more energy to do the things you enjoy.

Helps you manage your weight

Promotes better sleep - Regular exercise helps you fall asleep faster and into a more deep sleep.

Helps maintain and increase muscle strength, improves balance, coordination, reaction time and flexibility; can even improve mental concentration.

- Prevents muscle decay. Inactive people lose muscle fiber at a rate of 3% to 5% every decade after age 30 which amounts to a loss of 30% of muscle fiber by age 60.
- Reduces incidence of many illnesses.
- Research suggests that regular exercise can reduce the risk of colon cancer by as much as 50% and may considerably reduce the risk of breast cancer.
- Relieves symptoms of osteoarthritis and rheumatoid arthritis and therefore reduces the need for medication.
- Helps control hypertension, high blood cholesterol and diabetes.
- Reduces the risk of accidental injury and shortens the recovery period from accident and illness.

Wednesday, January 16, 2013

You are well aware how good exercise is for you. If you are not check out what exercise can do for you. We need to do better as a nation when it comes to exercise. Our national economy depends on it.

How about exercise for weight loss? 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. A study found that vigorous exercise increase appetite hormones in women.
- This is one of the reasons why diet modification is the key to successful weight loss.**

Wednesday, January 16, 2013

Now that i told you how good exercise is for you here's the truth weight loss through exercise alone doesn't typically work. Exercise induced weight loss is a slow process. It takes a couple of weeks of consistent exercise just to lose 1 pound. That loss for that much work is unacceptable for most. Most people increase their calorie intake when they start exercising; especially in women. They have found that the appetite hormone, ghrelin, increases in women when they exercise heavily.

The Other Exercise Problem

Problem: The weight loss exercise industry make it hard and expensive to reach lofty goals.

Multi-Billion Dollar Industry-they want your money.

Machines, Supplements, 1-2 hour training videos

Most Fail

Many drop out of health & wellness programs if it is too hard.

Physically too hard

Mentally too much to take in.

- Set up for failure

Wednesday, January 16, 2013

The other problem is that the exercise industry makes you think that you need all the best and latest equipment and supplements to get the job done. They also make it out that you have to exercise really hard, which sets people up for failure. Most people will not continue to come if something is too hard. People like to be efficient.

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. It should be part of a weight loss program.

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

- > calories are expended = exercise**
- < calories consumed = diet**



Wednesday, January 16, 2013

I'm not saying no to exercise. It should be part of a weight loss program, but not the main emphasis. More emphasis should be placed on diet. A reduced calorie diet and a moderate exercise program work hand in hand towards sustained weight loss.

To lose 1 pound per week.

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

Best to do a mix of them both.
Based on the Weight Control Registry most did both.

Wednesday, January 16, 2013

Best to do both a mix of them both; diet and exercise. Shoot to burn 150-250 calories through exercise, which is walking 1.5 to 2.5 miles a day while decreasing calories in diet by almost 500.

CALORIES EXPENDED WITH EXERCISE

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

Wednesday, January 16, 2013

150-250 calories through daily exercise is a good goal; see above for exercise caloric expenditure.

Exercise Goals other than weight loss.

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

- Reduce body fat stores
- Preserve and Increase muscle mass
(linked to metabolic rate)
- Improve overall health and body function

Wednesday, January 16, 2013

I'm not down on exercise. Exercise is one of the best things you can do for your body. I just want to be honest with people. It alone is a slow and hard way to lose weight. Exercise does add more to a weight loss program such as increasing muscle mass which helps appearance and increase metabolism as well as improving overall health and body function. It should be included but it is not the end all when it comes to weight loss.

Remember 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.



Wednesday, January 16, 2013

Exercise can also have an incredible impact on your emotional well being; which is helpful when you are trying to lose weight.

NO!!!!!!!

Extreme Fitness



Wednesday, January 16, 2013

Forget the extremes when it comes to fitness; that's just for a very small percent of the population. Good chance of getting hurt or burnt out from these types of programs.

Understand your goals.

What are you looking to get out of your program?

Don't think about the latest fad or what you see on TV. Seek what is best for you and what you need. It is simple. You need aerobic exercise.

“Don't train like an athlete if you are not an athlete.”

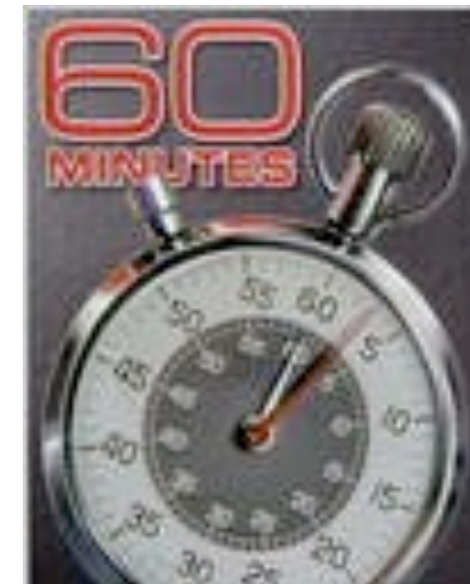
All programs should be health based and then work from there.

Get aerobic exercise in first.

Wednesday, January 16, 2013

Set up reasonable goals. Something that you can achieve. Again, you don't need to train like an athlete or a wild person. Make it a health based program with aerobic exercise like walking coming first. If you have time to do toning exercise that would be great.

WHAT THE SCIENCE SAYS ABOUT AEROBIC EXERCISE. 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 AEROBIC 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).

Wednesday, January 16, 2013

Generally speaking in order to lose weight through exercise you need to over 60 minutes a day of aerobic exercise. That is a lot. That is why you need to diet and exercise together.

What is aerobic exercise?

- Continuous body movement causing heart rate to be elevated. Exercise heart rate ranges depends on age and fitness level- See your reports.
- Walking, running, biking, swimming, hiking, dancing, elliptical
- No static muscle actions or breathe holding
- 15 to 20 minutes a day is a good initial goal.
- 150 minutes per week of moderate aerobic exercise (example: walking) or 75 minute of vigorous aerobic exercise (example: jogging)

Wednesday, January 16, 2013

Lets makes sure we understand what aerobic exercise is. It is planned activity that is continuous that elevates heart rate for a sustained period of time (> 5 minutes). 15 to 20 minutes a day is a good initial goal.

Basic 4 Part Approach to Body Fat Reduction

with exercise and diet.



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

1. Aerobic -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 20-60 minutes. If you can and want to be more vigorous try walking at a very fast pace or jogging (a slow run) at times (interval training). Other forms of aerobic exercise are great as well as long as it is steady and safe. Try to do most days per week.

2. Toning - Strength training **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. perform an exercise for most body parts for 1-3 sets 2 days a week.

3. Diet - Proper nutrition is essential to weight loss. Decrease calories in a healthy manner. Permanent weight loss is not achieved without exercise and proper diet.

4. Informal activity - What is this. Read on.

Wednesday, January 16, 2013

With all that said these are the four keys to body fat reduction through exercise and diet. You need to burn calories through exercise as well burning excess calories that are stored on your body.

***No time for formal
exercise?***

**Increase Daily Physical
Activity
like Standing....**

ex·er·cise/'eksər,sīz/

Noun:

Activity requiring physical effort, carried out esp. to sustain or improve health and fitness.

Physical activity is any body movement that works your muscles and requires more energy than resting.

Exercise is planned (formal) physical activity, like lifting weights, taking an aerobics class, and playing on a sports team. Informal physical activity are motions like standing, walking to and fro, cleaning, and gardening.

Want to increase both.....

Wednesday, January 16, 2013

Exercise is planned, formal activity while physical activity is any bodily movement and is considered informal and unplanned. It is best to do both.

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

Wednesday, January 16, 2013

Standing several hours a day is better for your health than doing formal aerobic activity for 30 to 60 minutes a day and sitting for the rest. Just standing a few hours a day can help you an additional couple hundred calories.

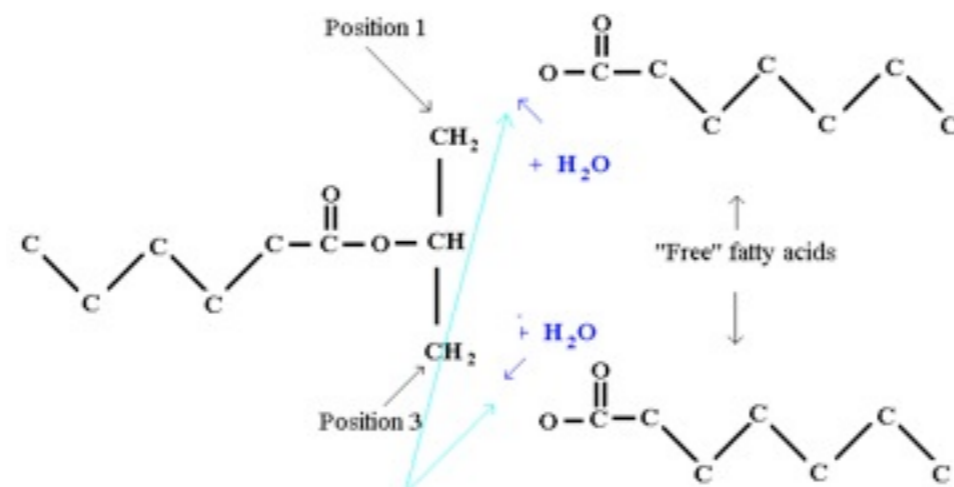
Standing is Physical Activity Our Health Depends on it.

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 it off.



Pancreatic lipase is an enzyme that breaks the bonds between glycerol and the fatty acids at positions 1 and 3, liberating the 2 fatty acids.



Wednesday, January 16, 2013

People disregard standing as physical activity but it is. We are meant to move steadily throughout the day. Lean people seem to do more informal activity than their obese counterparts despite doing the same amount of formal exercise.

**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.

Wednesday, January 16, 2013

Standing turns on an enzyme that draws fat from the blood into the muscle.

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

Wednesday, January 16, 2013

This is an explanation of an important study done at the my old lab and by an old friend at UMASS. It showed that standing burns a considerable amount of calories throughout the day while not causing the hormone that causes hunger to spike.

Pedometers-Great Device

Pedometer training works; see study below. Cheap ones seem to break and not that accurate / Apps on phones seem to work

The results of two recent independent meta-analyses focused on pedometer-based programs conclude that they work; that is, they are effective. Specifically, physical activity increases while blood pressure and weight decrease as a result of participating in a pedometer-based intervention.

Fitbit-Awesome pedometer-click on for more info

Features/Benefits:

- 1 Tracks steps, distance, calories burned, and sleep quality using a MEMS 3-axis accelerometer for the most accurate data; measures stairs climbed using an altimeter
- 2 Tracks how long you sleep, how well you sleep, and how many times you wake up
- 3 Silicone clip keeps it secure anywhere: pocket, belt, or bra; wristband lets you wear it in your sleep
- 4 Fitbit free mobile app and free online dashboard let you see your stats as graphs or charts so you know exactly how close you are to reaching your personalized weekly fitness goals
 - ~ Fitbit helps keep you motivated by awarding badges when you achieve a goal
 - ~ Connect with friends and family on Fitbit.com so you can see each other's progress

10,000 STEPS A DAY-Great goal.

How many steps do you walk each day?-click link for more details.

Maybe you have heard the recent guidelines about walking 10,000 steps per day. How far is 10,000 steps anyway? The average person's stride length is approximately 2.5 feet long. That means it takes just over 2,000 steps to walk one mile, and 10,000 steps is close to 5 miles.

Wednesday, January 16, 2013

So no time for formal exercise; just try to keep moving via pedometer training. A pedometer is a device that tracks your steps. Try to get at least 5,000 steps a day.

Calorie Watcher's Exercise Programs

Pick an Exercise Plan

- Pedometer training 5,000-10,000 steps
 - Cardio exercise 20 minutes (walking, bike, elliptical)-you can split sessions
 - 1-2 days of Exercise class-see class schedule with Cardio exercise 20 minutes other days.
 - 1-2 days of Strength training machines-see example of exercises at BMS with Cardio exercise 20 minutes
 - 1-2 days of Band or Dumbbell training-see example of exercises with Cardio exercise 20 minutes
 - 1-2 days of Easy home program-see next few pages with Cardio exercise 20 minutes. see program
 - Couch to 5k-see program
- ***More informal activity- Standing and Stairs**

Exercise

Wednesday, January 16, 2013

Some simple exercise plans that you can do during breaks at work. Gave you a lot of options. It is all about being on a program. One program is not superior to the other.

Easy Dumbbell Program

[Click link for my dumbbell program](#)



Easy Band Program

[Click link for my band program](#)



Easy Home Program

Side bridge



Row



10-15
reps

Crunch



Push Ups



Easy Home Program-pg

Squats



10-15
reps



Lunge



**10-15
reps**

Bridges

Easy Home Program

pg 3

[Click for PDF File](#)

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.**



Wednesday, January 16, 2013

These are my basic tips when it comes to exercise. Make it enjoyable, you'll be more apt to stick with it. Find something that works for you that is convenient and flexible, if it is not you will definitely not stick with it. Above all be reasonable; if you do too much you will get hurt. Just take it slow.



Other Points on Exercise Summary

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

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.

Exercise Adds Years to Your Life

People who were moderately active added about **2** years to their lives and those who were highly active added about **4** years.

Some say that is not much but increases quality of life by preventing disability.

Disability

Highly active 65-years-olds, however, have an additional **7** years of healthy life expectancy -- they will remain disability free until age **84**, compared to **77** year in their sedentary counterparts.

**Pick a program.
Get Moving....**