# Section 5

# Exercise

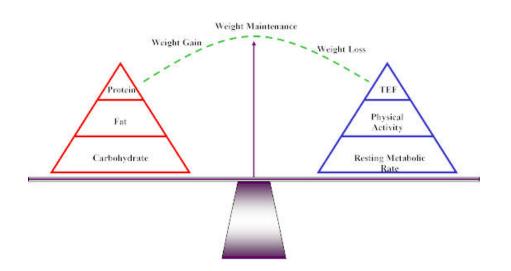
# **EXERCISE BASICS.**

Most weight loss programs focus on dietary restriction alone, however a sedentary lifestyle consistently emerges as the MOST important factor in weight gain. Many patients report gaining weight after an injury or change to a desk job.

In kids the most influential factor for weight gain is the number of hours spent watching TV.

Multiple studies show that increased level of REGULAR physical activity plus dietary restraint (note I did not say "DIET") maintain weight loss more than long term calorie restriction alone.

It comes down to the Energy balance equation.



# Energy Balance Equation

To maintain weight: To lose weight: To gain weight: calories out (exercise) = calories in (what you eat) calories out are greater than calories out calories out are less than calories in Example of this energy balance are

20oz caffe Mocha	=	45minutes of tennis
1 slice cheese pan pizza	=	60 minutes of swimming
Chocolate chip cookie	=	100 minutes raking.
Muffin	=	103 minutes walking

DON'T go to the gym and "reward" yourself for your hard work! You are effectively undoing your hard work!

Being physically active doesn't mean you have to perform long, difficult exercise routines. In fact, the heavier you are, the more calories you burn even with moderate physical activity. This means that a small increase in physical activity can go a long way in helping you lose weight. Moderate intensity activities – such as walking, bike riding, dancing, or washing your car – have many of the same benefits of more vigorous exercise.

# How Does Physical Activity Help With Weight Loss?

- When you exercise, your body burns more calories.
- Exercising helps your body build more muscle, and muscle, in turn, burns more calories than fat. So, the more muscle you have, the more calories your body uses ALL day even at rest!
- Exercise helps maintain muscle strength too and aerobic capacity
- Aerobic (cardio) exercise increases fat tissue breakdown.
- Aerobic exercise increases resting metabolism. So you burn more when you are resting !!
- After moderate intensity exercise you continue to burn an small amount calories during the recovery phase (afterglow effect)
- Exercise helps lower your weight "set-point" (the weight your body wants you to be)
- Exercise helps to alter your body composition. Your will have less fat around your organs.

# **Other Benefits to Exercise?**

Apart from weight loss regular exercise has additional spin offs.

It can help you feel better about yourself and increase your confidence. For many people, feeling good about themselves is the most important factor in their weight loss efforts. When you are confident, you will be much more capable to take on the challenges of weight management.

# People who are overweight but physically FIT suffer fewer deaths from all causes than people who are normal weight but unfit.

So even if you never lose weight the benefits of exercise are tremendous.

- 1) Health Benefits
  - A. Reduces risk for diabetes and decreases insulin requirements
  - B. Increases "good" HDL cholesterol
  - C. Improves heart and lung health, increases endurance
  - D. Lowers blood pressure
- 2) Prepare yourself for surgery
  - A. Improve strength, balance, flexibility and coordination. You will be expected to walk immediately after surgery in addition to getting in/out of bed and up/down from a chair.
  - B. Conditions the heart and lungs to better tolerate the stress of surgery and minimize the changes of complications.
  - C. Stimulates weight loss.
- 3) Improved outlook on life
  - A. Relieves tension and stress
  - B. Boosts self image
  - C. Builds confidence (you can do it!)
  - D. Increases energy and decreases fatigue
  - E. Reduces anxiety and depression

# How Do I Get Started?

It is much better to increase your TOTAL daily energy or calorie use. This includes both the time you put aside for formal exercise AND being as active as possible in your daily life.

- Commit yourself to a walking program or chair based aerobic program.
- Set aside time every day.
- Look for opportunities to increase activity in everything you do each day.
- Wear a pedometer EVERY day. It will help you be honest with yourself.
- Do something enjoyable while exercising (listen to music, dance...).
- Start slowly and increase activity every week.
- Keep an activity log.
- Get a partner.
- ENJOY! If you hate the treadmill do NOT get yet another one! Find something that makes you tick.
- Get the right equipment. Invest in some walking shoes,

If it's been a long time since you've been active, you'll want to begin slowly so that you won't injure yourself. Choose activities that you enjoy and will stick with over time. Gradually start to do a little bit more, go a little bit faster, or a little bit farther. Challenge yourself at your own pace and set realistic goals. Remember, your overall goal is to try to build a physical activity program that you can stick with for the long term. If you can achieve this, you will be much better able to manage your weight for the rest of your life.

Finally, moderate exercise is safe for most people. To be safe, start slowly and gradually increase the intensity of your exercise. If you have a serious health condition or can answer yes to any of the following questions, you will want to check with your doctor or health professional prior to beginning a vigorous exercise program.

- Do you have heart trouble?
- Do you have undiagnosed chest pains?
- Do you have uncontrolled high blood pressure? (> 140/90)
- Do you often feel faint or dizzy?

- Do you have arthritis or other bone or joint problems that might be aggravated by improper exercise?
- Do you have diabetes? You may want to talk to your physician about how increased exercise affects your insulin needs.

# What Activity Can I Do?

Anything Counts:

- Walking
- Swimming (try walking or using a kick board in the pool)
- Biking (try stationary or recumbent if you have a bad back)
- Hiking (there are many parks and trails in the Bay Area for walking)
- Gardening (create that peaceful heaven you've always wanted)
- Cleaning (kill two birds with one stone)
- Washing the car
- Walking the dog (animals need exercise too)
- Dancing (put on your favorite music and start moving to the beat)
- Tennis (you don't have to be the Williams sisters, you just need a ball and racket)

Here is a list of the calories burned during some activities. There is variation in these numbers based on your age, gender and genetics. Also notice that the heavier you are the MORE calories you burn doing the same exercise as a lighter person.

Activity (1-hour duration)	Weight of person and calories burned		
	160 pounds (73 kilograms)	200 pounds (91 kilograms)	240 pounds (109 kilograms)
Aerobics, high impact	533	664	796
Aerobics, low impact	365	455	545
Aerobics, water	402	501	600
Backpacking	511	637	763

Basketball game	584	728	872
Bicycling, < 10 mph, leisure	292	364	436
Bowling	219	273	327
Dancing, ballroom	219	273	327
Football, touch or flag	584	728	872
Golfing, carrying clubs	314	391	469
Hiking	438	546	654
Racquetball	511	637	763
Resistance (weight) training	365	455	545
Rope jumping	861	1,074	1,286
Rowing, stationary	438	546	654
Running, 5 mph	606	755	905
Running, 8 mph	861	1,074	1,286
Skiing, cross-country	496	619	741
Skiing, downhill	314	391	469
Softball or baseball	365	455	545
Stair treadmill	657	819	981
Swimming, laps	423	528	632
Tae kwon do	752	937	1,123
Tai chi	219	273	327
Tennis, singles	584	728	872
Volleyball	292	364	436
Walking, 2 mph	204	255	305
Walking, 3.5 mph	314	391	469

No one can prescribe the perfect fitness plan for you. You have to figure it out based on what you enjoy doing and what you will continue to do.

Consistency is the most important, the most basic, and the most often neglected part of fitness. **Consistent**, regular exercise or moderate activity delivers all of the fitness benefits.

# How Hard Should I Exercise?

Exercise does not have to be intense to be of value.

Above all, listen to your body. If the exercise feels too hard, slow down. You will reduce your risk of injury and enjoy the exercise much more.

Try the 'talk-sing test' to determine your ideal exercise pace:

- If you can't talk and exercise at the same time, you are going too fast.
- If you can talk while you exercise, you are doing fine.
- If you can sing while you exercise, it would be safe to exercise a little faster.

Your exercise is most effective when you can talk, but not sing, while doing it.

As you lose weight you will burn FEWER calories doing the same exercise. If your weight loss slows you will need to increase your exercise duration or intensity. This will be easier because you weight less and are fitter. Check in with yourself, Be honest! Is your exercise **pleasantly uncomfortable**?

# **Target Heart Rate**

Another way to see how hard you are exercising is to check your heart rate. You gain the most aerobic benefit when your exercise heart rate is 60 percent to 80 percent of your maximum heart rate. This is your target heart rate. After exercising for about 10 minutes, stop and take your pulse for 10 seconds. Compare the number to the <u>chart below</u>. Adjust the intensity of your exercise so that your heart rate stays between the two numbers. However, the target heart rate is only a guide. Each individual is different, so pay attention to how you feel.

Target Heart Rate		
Age	10-second heart rate	
30	19-25	
35	19-25	
40	18-24	
45	18-23	
50	17-23	
55	17-23	
60	16-22	
Normal Adult '10 sec' pulse rate: 8-17		

Target Heart Rate = 50% to 80% of maximum heart rate. Maximum Heart Rate = (220 - Age)

# How Often and How Long Should I Exercise?

Most studies show that exercising for **30 minutes** on most days each week is what it takes to improve body composition. However, sometimes it is easier to make exercise a habit if you do it every day.

Ideally you should aim to burn 300 calories each time. This can be done with: 30mins of running, biking, swimming 60mins of brisk walking.

With aerobic exercise, harder is not better, but longer is. Although you can get good fitness benefits from as little as 10 minutes of aerobic exercise per day, extending your exercise time rather than increasing the intensity will increase your rewards. This is true for up to 1 hour of exercise per day.

## Warm Up and Cool Down

For the first 5 minutes of you're exercise routine, start out slowly and easily so your muscles have a chance to warm up. Do not stretch until you are warm.

End your exercise with a little cool-down period. If you've been running or walking quickly, gradually slow your pace, then do a few light stretches to improve flexibility.

Drink some calorie free electrolyte water before and after exercising.

# **Troubleshooting and Misconceptions**

"The more I exercise the more I eat and I gain weight!"

Exercise does have a SMALL short term effect on increasing your appetite. This effect is LESS than the calories burned. If you eat more calories than you burned that is NOT because of appetite increase. Look at your food choices. You do not need to eat a 800 calorie dessert just because you worked out for an hour and burned 600 calories!! You're 200 calories up!! Great workout but if you had only added a small post gym portion controlled snack you would still be negative several hundred calories.

*"Exercise does not burn that many calories compared to what I need to do to lose weight"* 

To lose 1 lb of fat (if you only relied on exercise) you would need to burn 3500 calories. This would take 20 hours of golf (no cart). Wow! That's a lot of golf to lose one pound of weight. That's the glass half empty point of view. Let's look at the very positive side. 2 hours of golf (350calories) 2 days a week loses you 1 lb in 5 wks and 10 lbs a year. Imagine if you were active 5 days a wk and did something a little more intensive than golf!! (Apologies to all golfers!)

The calories burned through exercise are cumulative. ie they add up over time.

## " If I need to lose weight from my tummy I should do focus on crunches"

While this will help tone your abdominal muscles, your weight loss will occur all over your body and not just in the muscles you are using. Research does not support this idea of "spot reduction". Exercise does not cause greater loss of fat in the muscle being used.

" I want to built more muscle so I should take more protein supplements"

There is NO evidence that commercially prepared mixtures of special protein supplements promote muscle growth any more than protein contained in your diet. Several months after your weight loss surgery you will be advancing OFF your protein supplement and onto a high protein meal plan. Additional protein supplements may add significant calories to your energy balance.

## "I start an exercise plan then I stop"

Keep and exercise log one day a week. List all the reasons (or excuses!) you used not to exercise that week. Find a solution, write it down, take action.

Here are a few examples:

*"Its raining"* Solution: It rains every winter so you have time to plan for a rainy weather routine. Consider mall walking, exercise equipment in your house, exercise DVDs or put on your rain gear and off you go!

*"My knee hurts"* Solution: So your knee hurts. This does not mean you are completely disabled. Rest your knee but find something to do that does not bother your knee. Consider water aerobics, chair aerobics, reclined stationary bike, rowing machine.

Same goes for any injury. Considering seeing a physical therapist if that joint continues to be a problem.

*"I've no time"* Solution: Who has enough time?! You may not be able to head off to the gym for an hour (you have to get there too) but in the course of your day there are multiple opportunities to get exercise without using time. Take the longest way possible to that meeting. You'll have to walk faster to get there on time but you'll burn calories in he process. Park AS FAR away as you can from anywhere you need to go. Never take the elevator. Take 5 trips to bring the laundry upstairs rather than 1 big trip. USE A PEDOMETER.

*"I can't afford the gym"* Solution: Open the front door and go for a walk. It's free, easy, and accessible!

*"I hate exercise!"* Solution: There most be something you enjoy doing. Take those Salsa lessons you're always wanted too. Make it functional as well, walk to the local grocery store or post office. See if you can get a position at work that will give you more physical activity. Read a magazine while on the stationary bike. If you truly hate all physical activity, then please reconsider weight loss surgery. Hopefully you now understand how essential physical activity is to weight loss maintenance.

# Suggested Walking Program

# Get Moving: Add Steps to Your Day!

## Why a step counter (pedometer)?

A step counter can be a great way to get you motivated. This easy-to-wear device senses your body's motion and counts your footsteps. This count can be converted into distance so it lets you know how active you have been on that day.

These can be purchased from many Kaiser Health Education Departments.

#### How do I wear my step counter?

A step counter is comfortable to wear all day. It can be held securely by its clip and an extra safety leash is helpful. Step counters can be worn on belts, pockets, or waistbands. Place the step counter where you can easily read it. It should be protected so that a button is not accidentally pressed should it get bumped.

### Where do I begin?

Without much activity, a person takes 2,000-5,000 steps per day. A 5 mile walk will itself add 10,000 steps. Try to set reasonable daily goals by adding 50-100 steps more than what you are doing now. Do your best and don't be discouraged if you didn't reach your goal. Just try again tomorrow.

### How can I start adding steps to my day?

It doesn't take much to start using your step counter. With your step counter clipped on, all you need is a good pair of walking shoes and a little motivation to get moving. Try some of the following ways to add steps while having fun.

- Start a walking club with your friends or co-workers.
- Take several short 10 minute walks during the day.
- Walk or dance while listening to music.
- Try walking in parks, by water, or in new neighborhoods.
- Walk to a restroom or copy machine on a different floor.
- Take the stairs instead of the elevator.
- Host "walking meetings" and walk and talk instead
- Plan active weekends.

## How can I stay motivated?

- 1. Think positive and make small changes To be sure that this activity stays with you, make small changes in your routine. This will help you reach your goals and stay motivated to try again tomorrow. Be patient with yourself. The most important thing is being active.
- 2. Make it fun.

Activity can be a great way to relax or even socialize. When you'd like to spend some time alone, try walking while listening to music. When you'd like to spend some time with your family, take a walk after dinner together. See how you can make each step more enjoyable.

3. Keep a journal.

Use a log to track your steps and mark your progress. Write down reasons that may have prevented you from reaching your goals, such as an illness.

## Walking Program

	Warm-Up	Target Exercise	Cool Down	Total Time
Stage 1	Walk slowly 5 min.	Walk briskly 5 min.	Walk slowly 5 min.	15 min.
Stage 2	Walk slowly 5 min.	Walk briskly 7 min	Walk slowly 5 min.	17 min.
Stage 3	Walk slowly 5 min.	Walk briskly 9 min.	Walk slowly 5 min.	19 min.
Stage 4	Walk slowly 6 min.	Walk briskly 11 min.	Walk slowly 6 min.	23 min.
Stage 5	Walk slowly 6 min.	Walk briskly 13 min.	Walk slowly 6 min.	25 min.
Stage 6	Walk slowly 7 min.	Walk briskly 15 min.	Walk slowly 7 min.	29 min.
Stage 7	Walk slowly 7 min.	Walk briskly	Walk slowly	31 min.

		17 min.	7 min.	
Stage 8	Walk slowly 8 min.	Walk briskly 19 min.	Walk slowly 8 min.	35 min.
Stage 9	Walk slowly 8 min.	Walk briskly 21 min.	Walk slowly 8 min.	37 min.
Stage 10	Walk slowly 9 min.	Walk briskly 24 min.	Walk slowly 9 min.	42 min.
Stage 11	Walk slowly 9 min.	Walk briskly 27 min.	Walk slowly 9 min.	45 min.
Stage 12	Walk slowly 10 min.	Walk briskly 30 min.	Walk slowly 10 min.	50 min.

## Easy Ways To Increase Your Steps

There are many simple ways you can add steps throughout your day. Every step counts towards your good health and happiness. Think steps – anytime, anywhere.

### At Home

- Make the after-dinner walk a family tradition.
- Walk your dog, or offer to walk your neighbor's dog.
- Do a fun family challenge to see who can log the most steps.
- Reward your family for meeting step goals with fun activities.
- Take a walk while your kids are playing sports.
- Walk to your neighbor or friend's house instead of calling.
- If you make a call, walk while you talk.
- Start a walking club with your neighbors or friends.
- Walk to the television to change the channel.
- Turn off the television and do an active family activity.
- Walk around your house during television commercials.
- Get up and move around once every 30 minutes.
- Try to take half of your goal steps by noon.
- Plan walks into your day, for example, with a friend at the beginning of the day, and with your family at the end of the day.
- Plan active weekends (longer walks, scenic hikes, playing in the park).



• Take a walk and pick up litter in your neighborhood or in a park.

## On the Town

- Park farther away in store parking lots
- Return your grocery cart to the store.
- Avoid elevators and escalators try the stairs instead.
- Walk, don't drive, for trips less than one mile.
- Walk at the airport while waiting for your plane, and avoid the people movers.
- Take several trips to unload groceries from your car.
- Avoid the drive-through. Instead, walk inside.
- Plan active vacations.
- Hike some of California's beautiful trails.

## At Work

- Take several 10-minute walks during the day.
- Choose the farthest entrance to your building, then walk the long way to your office.
- Host "walking" meetings.
- Walk to a restroom, water fountain, or copy machine on a different floor.
- Take a longer route to your meeting.
- Walk a few laps on your floor during breaks, or go outside and walk around the block.
- Walk during your lunch break.
- Walk to a colleague's office rather than calling or sending e-mail.
- Take 5-minute walking breaks from your computer.
- Park farther away in the morning and when you go to lunch.
- Take the stairs rather than the elevator.
- Start a break-time walking club with your co-workers.
- Walk while using a speaker or cordless phone.
- Get up and move at least once every 30 minutes.

## **Other Resources**

- Log on to our members-only Web site at www.kp.org,
  - Look at the Member Discount program for discounts on gym memberships
  - Check out the 10000 steps program online
  - Look for exercises classes offered through your local Kaiser health education
  - Look at the tips for staying active (Live Healthy...Healthy Weight)
  - Order your paper copy of our guidebook (available in Spanish and Chinese also)
- Visit your local Kaiser Permanente Health Education Center for classes from Get Moving to Tai Chi, Yoga, to Zumba
- Check your Kaiser Permanente Healthwise Handbook

# **K-Plus Fitness**

Kaiser Permanente's K-Plus Fitness program allows you to join specified health clubs in your neighborhood with financial discounts. For more information on details of the program and participating clubs, call 1-800-234-6985 or on the web at

# **Choose Healthy**

At no cost to you "ChooseHealthy" offers a directory of complementary care providers , online store and savings on health products and services. If you register you'll also receive a personalized exercise plan and save 10% on telephone coaching sessions for weight management. www.ChooseHealthy.com or call 1-877-335-2746.

## **Exercise DVDS:**

## Jodi Stolove's Chair Dancing A New Concept in Aerobic Fitness

DVDs for anyone who wants to get or stay fit and enjoys moving to music. Program is easy and fun to do. Warm-up, toning, and aerobic sections use a novel way to exercise from your chair. Good for anyone, fat or thin, with limited mobility. Three levels of exercises are demonstrated by people of various ages and sizes.

Available online at Amazon.

## Plus-Size Fitness Fitness is the result of your actions, not your body size www.kellybliss.com

All **TEN** different Fitness with Bliss exercise videos focus on SELF-APPRECIATION as you exercise! This is key to improved body image and self-esteem. It is also key to continuing your fit lifestyle. If it FEELS good both physically and emotionally.

# **Exercise Questionnaire**

1.	. What activity would you plan to start in	the next week?			
2.	. When is the best time for you to exercise Days:				
	Times:				
3.	. How long do you think you can do this a Time now:	-			
4.	. What are your short term fitness goals? Short term goals: In the next	weeks, I will try to			
	<ul> <li>For example:</li> <li>Do my activity three times each</li> <li>Increase my walking by two bl</li> <li>Try one new activity I always was</li> </ul>	ocks.			
5.	5. When will you rethink your exercise plan? In weeks (date).				
6.	Circle the ones that apply to you:				
	I have no one to exercise withTThere is no convenient placeII do not enjoy exercisingII do not have the timeE	am usually too tired The weather is too bad am too overweight am afraid of being hurt Exercise is boring am self conscious in public activities			

What are two reasons that could prevent you from exercising?

\_\_\_\_\_

\_\_\_\_\_

- 7. How do you think you could avoid these barriers?
- 8. Who will help you start and stay with your exercise program?

\_\_\_\_\_

9. How can these people best help you?