

Move Yourself

The Cooper Clinic Medical Director's Guide to All the Healing Benefits
of Exercise (Even a Little!)

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Part One – The Power of Movement

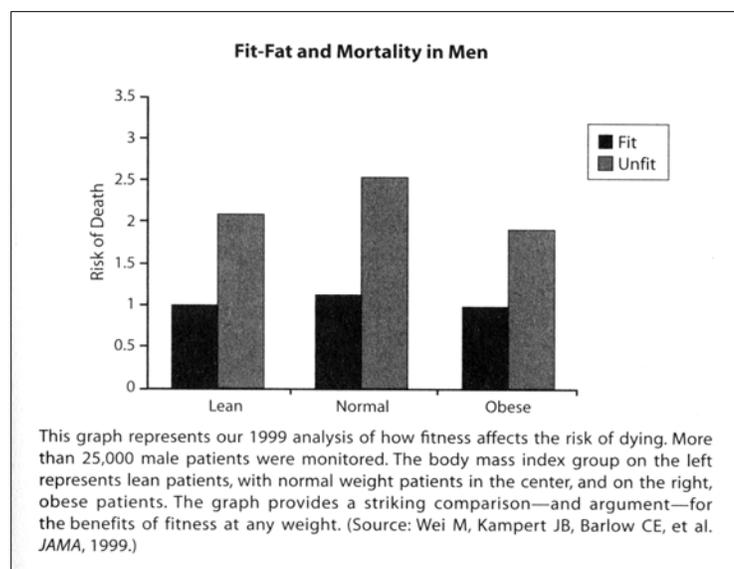
1. A Little Activity Goes a Long Way

- We know beyond any shadow of a doubt, that a sedentary lifestyle directly *causes* chronic disease and a shorter life span regardless of whether you are thin, overweight, or obese.
- According to government statistics, approximately 75 percent of U.S. adults are sedentary. By definition that means that they sit most of the time and are physically active for fewer than the recommended 150 minutes per week.
- Experts predict that excess weight will soon pass smoking as the number one preventable cause of premature death.
- Our research indicates the problem is not so much being overweight, but the lack of physical activity. Regular activity, even if you are obese, protects your health more than if you are thin but physically inactive.
- Our research also indicates that sedentary individuals achieve improved fitness even if they perform less physical activity than the 150 minutes per week that is recommended.
- The benefits of physical activity:
 - Better utilization of blood sugar (meaning better protection against diabetes)
 - Reduced blood pressure
 - Lower risk of cardiovascular disease (heart attacks and strokes)
 - Lower risk of certain cancers, such as colon cancer
 - Reduced stress
 - Improved recovery from illness by promoting the body's healing mechanisms
 - Healthier & stronger muscles – a key to healthy aging
 - Less belly fat that is dangerous to your health

- An average sedentary person takes fewer than 3,000 steps a day. So if you fall below that number, you are distinctly sedentary. Figure it this way:
Below 4,500 steps means you're very sedentary
4,500 – 5,500 steps: You're sedentary.
5,500 – 7,500 steps: You're headed in the right direction.
7,500 – 8,500 steps: You're active but it wouldn't hurt to add more.
8,500 and above: You're good and active. Stick with it.

2. Focus on Fitness, Not Thinness

- Most studies investigating the connection between weight and health fail to give adequate emphasis to physical activity.
- We believe physical inactivity is a paramount cause of our rampant weight problem. To us, getting yourself physically active is the first step to health and weight loss.
- In 1999 we first reported that physically active overweight people – even those who are obese – are much healthier than their skinnier but sedentary peers.
- We found that a low fitness level was a strong and independent predictor of cardiovascular disease and premature death from all causes.
- The graph below shows fit men with a body mass index categorizing them as obese had virtually the same risk of dying during the follow-up period as the so-called normal-weight men. Unfit obese men had three times the risk of dying.



- Our conclusion: Don't focus on your weight so much. You may be where you belong. Focus on your behavior – diet and activity – not the pounds. Genetically, not everyone can be skinny. Everyone, however, can be healthier and more fit.
- There are two kinds of belly fat depending on where the fat is stored:
 - Subcutaneous belly fat – just beneath the skin – the fat you can pinch. From a health standpoint, we are not concerned with it.
 - Visceral fat – the fat that surrounds the liver and other abdominal organs. The more of it you have the more at risk your health is.
 - This inner padding acts like a factory zone, producing a steady stream of unhealthy substances that spill in the body.
- Other medical findings:
 - Waist sizes are much more significant indicators of heart attack than their BMI numbers, based on data involving 27,000 people from multiple ethnicities.
 - A study of more than 2,000 older adults, aged 70 to 79, indicated that excess abdominal fat could be a stronger risk factor for heart failure than overall obesity.
- The good news about belly fat: a minimum amount of physical activity, with or without dietary changes or weight loss, goes a long way to neutralize this deep visceral fat, and even shrink it.
 - Unlike superficial fat, visceral fat is extremely responsive to physical activity. When you trim body fat in general, you lose a greater percentage of visceral fat.
 - As the inner fat zone shrinks, so does the volume of harmful chemicals it spews out.
- Do you have too much visceral fat? Too much visceral fat translates to a 40-inch waist and above for men, and 35 inches or more for a woman.

3. The Healing Miracle of Movement

- The big lesson we have learned studying data equal to 350,000 patient years at our center is that regular physical activity may be as important as diet and quitting smoking.

- **What is metabolic syndrome?** Your risk for serious illness increases if you have three or more of the five factors below and probably increases with only two:
 - Your waist circumference is greater than 35 inches for women or greater than 40 inches for men.
 - Your fasting blood sugar is over 100 mg/dl
 - Your triglycerides (blood fats) are over 150 mg/dl
 - Your HDL is less than 50 mg/dl for a woman and less than 40 mg/dl for a man.
 - Your blood pressure is over 130/85 or you need to take blood pressure medication.
- If you have three or more of the five characteristics described above you are very high risk – with quadruple the chance of developing coronary artery disease and triple the chance of developing diabetes.
- Our research clearly indicates that a direct cause of metabolic syndrome in most cases is sedentary living. Our experience also shows that physical activity is one of the keys to prevention and reversal, even for individuals who are overly heavy.
- **Ways that physical activity benefits the heart** – the most important thing you can do to prevent a heart attack or stroke is to be physically active.
 - Damage to arteries (called atherosclerosis) is now recognized as an inflammatory process which leads to tissue changes that cause heart attacks.
 - A person's level of CRP (short for C-reactive protein) is the leading indicator of arterial inflammation.
 - Individuals that are physically active have a much lower level of CRP than sedentary people. What's the connection? Physical activity decreases visceral fat, where an array of potent inflammatory compounds is produced stimulating the liver to make CRP.
 - Other ways that physical activity benefits your heart
 - It improves blood flow and the inherent health of blood vessels and the blood itself.
 - The better the blood flows, the better it can deliver oxygen and critical nutrients to the cells.

- It makes red blood cells more flexible. The more flexible the better they flow within the plasma. The tendency for clumping and sluggishness is lessened.
- **The relationship between cancer rates and physical activity**
 - 1922 two studies concluded cancer rates declined with increasing physical activity demanded by the jobs, and “hard muscular work” apparently promoted cancer prevention.
 - 1989 study – based on 13,000 patients followed for 8 years. People at the bottom 20% level of fitness were more than 60% likely to die from cancer, compared to people in the top 20%.
 - 1996 study – based on 25,000 men and 7,000 women showed that physically active people had a much lower risk of dying from cancer than non-active people. The fittest 20% had a cancer rate 81% less than the least fit 20%.
- **Move for a better memory** – Those who remain active physically do better mentally. Seniors that are fit appear to experience less mental function decline than their unfit counterparts.
 - 2003 study found that regular physical activity 3 times a week or more – significantly reduced the incidence of dementia and Alzheimer’s among a population of 1,740 individuals over the age of 65. The researchers concluded that regular physical activity produces a “delay in onset” of age-related cognitive disorders.
 - Why does physical activity benefit the brain? It increases oxygen flow to the brain, which stimulates new blood vessels. It stimulates growth factors important for the survival of new nerve cells.
 - Our advice – along with physical activity, do something that actively engages the memory. Read a book. Do crossword puzzles. Brain scans show that doing things that our bodies are not used to doing physically stimulates brain function.
- **Move for better sleep** – one overlooked reason for poor sleep is a lack of physical activity. If you are sedentary by day, that often translates to disruptive sleeping patterns at night. Without enough physical activity you have more difficulty initiating and maintaining sleep. Physical activity quickly improves both and recognition of that has made it a primary remedy at sleep clinics.

Part Two – The Cooper Center Move Yourself Programs

- 4. Choose the Right Program for You** – Our physical activity prescription includes three plans. Choose the plan that fits you best from the chart below.

Your Goal	Where You Are Now		
	Sedentary	Partially Active	Active
Better Health	Plan A	Increase the number of days you are active. Use Plan A concepts to achieve that goal.	Plan B
Better Health + Fitness	Become consistent with Plan A, then proceed very slowly with Plan B.	Move up to Plan B once you are consistently active.	Plan B
Better Health + Fitness + Waist Removal and Weight Loss	Become consistent with Plan A, and then with Plan B. Only then proceed to Plan C.	Advance from Plan B to Plan C.	Plan C

- Plan A generates enough fitness to improve your health and quality of life, and to neutralize some of the visceral fat you may have acquired over the years.
- If you are partially active, perhaps a weekend warrior, or you go to the gym once or twice a week, you can probably start with Plan B. Higher levels of fitness call for an expanded program of aerobic activity along with strength training and stretching exercises.
- If your ultimate goal is major trimming of visceral fat and overall body weight, eventually you'll need to move up to Plan C. But don't start there if you're sedentary.
- Plan A stands for Active, and it eases you into physical activity. You take it at your own pace, counting your steps and gradually learning how to fit physical activity into your schedule.

5. Step Counting and Logging: Your Keys to Success

- **Success Key 1: Buy a Step Counter**

- Your master key to jump-starting the Plan A physical activity program is to get yourself a step counter. It's the only piece of equipment you'll need.
- You'll be amazed at how much this device motivates physical activity.
- **Success Key 2: Log Your Activity** - Highly recommend tracking your activity because
 - It gets people to realize how really sedentary they are in a concrete, quantitative way;
 - It enables them to readily see opportunities in daily life where they can include physical activity; and
 - It's a powerful key to making lasting changes.
- **Success Key 3: Set Your Target**
 - Determine your starting point – we find that folks who enter our weight management programs are averaging 2,000 to 3,000 steps per day.
 - Determine what you would like to set as your target. If 8,500 to 10,000 steps a day seems like an unreachable target, how about a goal of doubling your average number of steps in a day?
- **Success Key 4: Reassess After One Month** – after a month of logging your physical activity, it's a good time to check your progress and health status.
 - How do you feel compared to how you felt before you started?
 - What benefits have you gotten? Write down the improvements.
 - Is it time to change increase your steps?

8. Stepping It Up – Plan B

- Plan B takes you to a higher state of fitness, and the additional health benefits that come with it, through a balanced program of regular, dedicated, and more intense physical activity.
- Plan B comprises of four parts: aerobics, strengthening, stretching and nutrition.

- Plan B stands for Balance, a principle that many people neglect in the pursuit of fitness.
- Aerobics and Beyond
 - Aerobics, while fantastic for your heart and cardiovascular fitness, it is not enough for overall health and fitness.
 - Successful aging not only requires aerobic exercise but good nutrition, appropriate stress management, good emotional health, and strength and flexibility training.
 - Without a basic level of muscular strength and flexibility we are less able to perform the various activities of daily living that are essential for self-sufficiency and living life to the fullest.
- **FIT (Frequency, Intensity and Time)** – FIT is a simple but profound concept for developing fitness.
 - **Frequency** – The first thing to focus on is how often you exercise. The idea is to establish the habit of regular exercise, keeping your intensity low in the beginning. Ultimately you want to try to get in aerobic activity every day.
 - **Time** – Next you want to increase the length of time you exercise, while maintaining the frequency. Keep in mind your ultimate goal of at least 150 minutes of aerobic activity during the course of a week.
 - **Intensity** – Once you get the frequency and time where they need to be, then, and only then, increase the intensity.

12. Move Yourself Plan B Nutrition

- **Four Nutritional Golden Rules**
 1. **Don't Think Diet, Think Healthy Eating** – the best diet is no diet at all. Why? Because typically people go on a diet until they reach their goal and then regress to their former bad eating habits. Moderation and variety are the keys to good nutrition. In your food choices emphasize quality, not quantity.
 2. **Concentrate on Complex Carbohydrates** – about 45 to 65 percent of what you eat should come from plant derived foods such as fruits, vegetables, whole grains, breads and

cereals. Complex carbohydrates are rich in vitamins, minerals and fiber and low in fat and calories.

- 3. Limit Fats** – trans fats should be avoided. They are the man made, partially hydrogenated fats used in processed foods to prolong their shelf life. They are margarine, packaged baked goods, fried foods, microwavable popcorn, commercial salad dressings and more.

Not all fats are bad. Certain fats are vital to good health, such as the essential omega-3 fatty acids found in fish. Monounsaturated fats, found in olive and peanut oils, are believed to actually help lower your cholesterol.

- 4. Go Easy on Protein** – cut down on animal protein (it contains saturated fats). Have a steak that fits in the palm of your hand (3 ounces). Two, 3-ounce servings of protein is all an average adult needs on a daily basis.

- **Five Common Nutritional Traps**

- 1. Overeating** – Duh! We should never eat to the point of fullness, only to the point of satisfaction.
- 2. Skipping Breakfast** – Omitting breakfast places a strain on the body.
- 3. Unhealthy Snacking** – is an exercise in overindulgence and loss of control. Healthy snacking can be a great way to reduce calorie intake and get you through those moments when you're starting to feel hungry but your next meal is still a ways off.
- 4. Dining Out and Not Watching Out** – when dining out avoid high calorie, large portion sized selections.
- 5. Overdoing the Sweet Stuff** – eat them less often, but when you do, take the time to savor every delicious mouthful.

- **Commonsense Supplementation**

- 1.** The foundation for a good supplement program is a high-quality multivitamin and mineral formula, which includes:
 - 400 mcg of vitamin B
 - 400 mcg of folic acid

- 1,000 mcg of vitamin C
 - 800 IU of vitamin D
 - 400 IU of vitamin E in the form of natural d-alpha tocopherol
2. Take 1,000 mg of fish oil supplement daily. Fish oil provides important omega-3 fatty acids, which help maintain healthy blood, arteries, and heart rhythm and improve blood sugar metabolism and the quality of the nails, hair and skin.
 3. Don't forget adequate hydration – eight glasses throughout the day and at least half of that in the form of water.
 4. Products made from whey protein have specific immune-supporting nutrients.

13. Move Yourself Plan C – Waist Removal & Weight Loss

- Plan C is about calories. If you want to trim your waist and lose weight permanently, you must burn a lot more calories with exercise and reduce your calorie intake through diet.
- You should commit to Plan C only if you have reached the end point of the Plan B fitness programs. That means you are exercising at least five days a week and have adopted a more disciplined approach to your eating habits.
- **The Five Keys to Successful Waist Removal & Weight Loss** – based on the current research those who lose weight and keep it off do the following five things consistently.
 1. **Exercise.**
 2. **Reduce the calories they eat.**
 3. **Eat breakfast.**
 4. **Log, log, log, log.** Logging keeps you tuned in to the process. Makes you accountable day by day. Log anything that you regard as important to help you reach your goal.
 5. **Take it slow and steady.** You are not in a race. When it comes to behavioral changes that modify your life, slow and steady wins in the end. You cannot view weight loss as a short-term project. It has to become a long-term lifestyle