

Exercise Is Bad For You

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The first sentence of chapter 84 of Guyton's Textbook of Medical Physiology states: "There are no other normal stresses to which the body is exposed that even nearly approaches the extreme stresses of heavy exercise." The rest of the chapter goes into detail about the specific stresses to the muscles, the various energy systems, the glandular system, the buffering system, nutritional demands and heat stresses and doesn't even mention the skeletal system.

This is not to say that I recommend a sedentary life style. I love to play and fitness is a requirement for nearly every thing I consider fun. Plus, regular exercise gives us the fitness we need to complete difficult tasks, is great recreation, helps regulate depression and anxiety, is good for our self esteem, makes us more attractive and gets us out of the house. As a doctor, my problem with exercise is that, because we have been brainwashed into thinking it is good for us and we live in a more is better world, too many of us get injured and/or ill by doing too much, too soon and too hard and for too many years without enough rest and recovery.

The fact is that the reason exercise works is that it is "bad for you." When we exercise, our bodies are so stressed that they respond by making all sorts of adaptive changes which protect us from literally killing ourselves. We call these adaptations we make to the stress of exerciseFITNESS. Fitness is the sum total of the adaptations we make to exercise.

Our bodies can only handle so much stress at a time without illness or injury. We must not add more at any one given time then we can adapt to or we will not reach our goals with our health intact. We will "break" instead of adapt successfully. Also, keep in mind that exercise is not our only stress. All of our stresses have to be taken into account. Work stress, relationship stress, dietary stress, lack of sleep stress, school stress, the stress of infections or allergies and bad hair day stress all have to be factored into the equation if we are going to survive our exercise program and reach our goals.

If we believe exercise is good for us it tends to lead to bad decisions. "I can eat candy bars all day and drink beer at night and call it a diet because I exercise and that keeps me healthy." Wrong!! Not healthy just fit and eventually you will break. Jim Fix, the author of The Complete Book of Running, honestly believed that running would protect him from the negative effects of smoking. He died of a heart attack at a very young age.

On the other hand, if we understand that exercise is bad for us we tend to have more respect for it and realize that if we are going to ride our bike 15 hours per week, we need to eat better then the average person, sleep more then the average person, work a reasonable number of hours, hydrate way more then the average person and perhaps take supplements to make up for the loss of nutrients associated with that volume of effort.

A very interesting retrospective study was published in Russia in 1990. They looked for common elements in the training history of athletes who broke world records in track and field over the previous 40 years. There was only one common factor. They had all been able to train 5 or more years in succession without having to lay off for significant illness or injury. In other words, the most important thing we can do to become the strongest, fastest or most talented athlete we can be is to stay healthy long enough to reach our goals. The common pattern of training hard, breaking down, having to lay off to heal, training hard, breaking down etc. causes many of us to fall short of our goals and of course get very depressed.

The trick to designing an exercise program is to balance the desire to achieve a specific result, for example running the Austin Marathon, with the desire to protect our health. This requires an honest

evaluation of where our fitness is now and a set of guidelines as to the volume and intensity of exercise over a given time needed to reach our goal. In our example, if we are running 3 miles 3 times/week and the marathon is in 3 months the mileage increase required to get us to the 40 miles per week necessary to prepare us to run the marathon safely is just too much too soon. We really need to shift our goal to a more realistic one. Many people have run the marathon on just this little training and finished, but at costs ranging from as mild as colds and flues to knee surgeries and lots of chiropractic visits. Remember... Phidipides ...DIED.

This is not an article on training but examples of simple safety guidelines might include: never increase duration of exercise more than 10% per week. If you are running 3 miles 3 times/week at 8 minute pace or 72 minutes/week, you get to add 7 minutes next week. That doesn't sound like much but if you are riding 15 hours/week you get to add 1.5 hours next week. Always wear a heart monitor or in some way measure your intensity. Never increase intensity without reducing volume. If the intensity increases a lot, decrease the volume a lot.

Every time someone hears me say that exercise is bad for you, I get to hear all the reasons this is just not true. I hear you. There are some health benefits to a small amount of moderate exercise. The long bone stress of walking, running or resistance training can help increase bone density, but the prolonged efforts in cycling decrease bone density. The average set of knees seems to have about 25 years, give or take, of running relatively long distances in them, whereas cyclists knees hold up rather well as long as the rider remember the first rule of cycling: the rubber side goes down. The term aerobic exercise was coined by Dr. Kenneth Cooper a Dallas cardiologist who has for many years tested his patients exhaustively and put them on running programs and diets to improve everything from their cardiovascular health to their bone density. After years of keeping records on these patients he noticed a disturbing trend. His patients were getting cancer at a much higher rate than the general population. He theorizes that the free radicals related to excessive oxygen consumption overwhelmed their antioxidant systems and caused their diseases. Now he give more supplements and recommends more walking and less running.

The point of calling exercise bad for you and for this ramble is to get you to argue, rationalize, scream and holler and to think. My generation is the first to ever recreationally exercise into adulthood. We are also the first to encourage our female children to exercise and play sports. The literature today is full of articles about the number of knee injuries to these children and the number of hip and knee replacements in us older athletes. We don't have exact parameters for exercising safely, but until we know a whole lot more of the specifics, the general thought that exercise is bad for you just might give us the perspective to manage the stresses involved in a way that allows us to maintain our health while still enjoying the sports we love.