

Fitness And Wellness Principles - Part 2 – Exercise And Fitness

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Being physically fit provides a foundation for overall health and well being (Health and Fitness Principles). We can define physical fitness as, the physical attributes and skills that one has that allows them to perform the tasks of daily living effectively and alertly, while leaving an adequate amount of energy in reserve for recreational and/or emergency activities (Health and Fitness Principles). When we hear the term, physical fitness, we typically think of activities such as running, jumping, or lifting weights. But, fitness involves much more than how much you can "lift", how fast you can run, or how high you can jump (Physical Activity and Health).

Practically speaking, it has more to do with your ability to easily and effectively carry out common activities like shoveling snow, back packing, mowing grass, or playing with your children.

What can exercise do for me?

Regular physical activity has been associated with decreased risk for many illnesses. According to the American Heart Association, regular, moderate exercise has been shown to provide the following benefits:

- Decreased risk of heart disease
- Decreased risk of heart attack
- Lower total cholesterol
- Lower blood pressure
- Decreased risk of being overweight or obese
- Decreased risk of stroke
- Lower stress levels
- Improved sleep
- Improved physical appearance
- Increased energy and strength
- Stronger heart, lungs, bones, and muscles

(Why Should I be Physically Active, AHA)

As with other components of wellness, the transition to becoming more physically fit requires lifestyle changes. In order to reap the benefits of regular physical activity you must be able to make a lifelong commitment to your program (Fitness Fundamentals). It isn't necessary to have any special equipment, or to join a health club or gym. It only requires that you participate consistently in some type of moderate - vigorous physical activity. Again, this does not need to be limited to traditional health club style exercises. Use your imagination, and select activities that you can enjoy. For example, rock climbing, hiking, rowing, or dancing would be excellent alternatives to the typical exercise program.

Physical Assessment

Regardless of your current health or physical condition, it is always a good idea to have a physical examination before undertaking any exercise or nutrition program. This is especially true if you are over the age of 35 and have been inactive for several years (Fitness Fundamentals). There are several other indications that would also suggest the need to consult with your physician before starting:

- High blood pressure
- History of heart disease
- Dizzy spells
- Difficulty breathing after mild exertion
- Arthritis or other bone ailment
- Muscle, ligament, or tendon problems
- Known or suspected disease
- If you smoke

(Fitness Fundamentals)

Although there are some small risks that go along with exercise, it has been well documented that the risks associated with inactivity, and/or being overweight are much, much greater (Fitness Fundamentals).

A properly designed fitness program should always focus on balance. In other words, a program should address each component of fitness. According to The Aerobics Fitness Association of America, there are five components of fitness (Yoke, et al).

1. Muscular Strength
2. Muscular Endurance
3. Cardio-respiratory endurance
4. Flexibility
5. Body Composition

In addition to including balance in your routine, you should always begin the program development process by establishing a set of realistic goals. It is unfortunate that the majority of information about cardio and strength training that people hold as true are nothing more than "urban legend". I have listed below several of my favorite fitness and exercise myths:

Popular Exercise Myths

1. "If you stop weight training the muscle that you have built will turn to fat." As bodybuilding legend, Franco Colomбу once said, "That would be like saying that an apple can turn to an orange." Muscle and fat are two completely unique types of tissue. Therefore, it is impossible for fat to "turn into" muscle. Likewise, it is not possible for muscle to "turn into" fat.
2. "Weight training makes women have a masculine appearance." Proper weight training will help almost anyone to look healthier by improving body composition and making the body look more tight and firm. The huge muscles that are seen in the professional women's bodybuilding ranks are produced by very large quantities of anabolic/androgenic steroids, not simply by strength training alone.
3. "You need to spend a great deal of money on dietary supplements to be successful." The foundation of any exercise program is built upon the combination of a balanced diet, plenty of rest, and a well designed exercise regimen. Supplements are definitely not necessary for strength trainers or endurance trainers regardless of their fitness level.
4. "It takes expensive machines and workout equipment to build a quality physique." Although it is desirable to have a few basic pieces of equipment at your disposal, it is very possible to design an effective workout routine with no equipment at all. There is a great deal of research that has demonstrated a number of advantages to "low tech" functional strength training programs. This doesn't mean that you should avoid the fancy weight machines. But, you should keep in mind that some of the greatest physiques in history were developed with little or no exercise equipment at all.
5. "Weight training will make you muscle bound and stiff." Actually, research has demonstrated that when resistance exercises are performed through their full range of motion, flexibility increases. Weight training stretches opposing muscle groups.

Designing Your Program

As you begin putting together your program, it is helpful to use what is known as the FITT formula.

F.I.T.T. =

F = Frequency (how often you exercise)

I = Intensity (how hard you are working when exercising)

T = Type (what type of exercise is being done?)

T = Time (how much time is spent exercising)

The American College of Sports Medicine has established specific guidelines concerning the FITT formulas for both cardio-respiratory training and strength training. The guidelines for Cardio training are as follows:

Cardio Guidelines:

- Frequency = three - five times per week
- Intensity = 55 - 90% of max heart rate
- Time (or duration) = from 20 - 60 minutes
- Type = Common forms of cardio training: walking, cycling, jogging, swimming, stair climbing, and dancing
- Beginners = Start by working at approximately 55 - 70% of max heart rate
- Hydration = be certain that your body is adequately hydrated before and after exercise
Approximately ½ - 1 cup of fluids per 15 minutes of vigorous activity
- Warm Up = an exercise session should always begin with a brief warm up period of about five minutes. Warming up consists of light activity such as walking or cycling
- Cool Down = Always slow down your pace during the last several minutes of your exercise session in order to allow your heart rate and core body temperature to gradually return to normal
- Over exertion can be hazardous to your health. Be certain that you are training at an intensity that is appropriate relative to your age, fitness level, and personal health condition.

Intensity Level

It is extremely important that you are exercising at an appropriate level of intensity. There are several methods that can be used to measure how hard you are working. The method that you choose will depend on what type of equipment that you have at your disposal. The two most common measures of intensity are heart rate, and the talk test.

As mentioned earlier, your training heart rate should be from 55 - 90% of maximum heart rate, depending on your current fitness level and goals. (Consult with your physician to determine if this range is appropriate for your personal condition). You can use the following formula to approximate your target heart rate.

$220 - \text{Age} = \text{Max Heart Rate}$

$\text{Max Heart Rate} \times .55 = \text{beginners level training heart rate}$

$\text{Max Heart Rate} \times .70 = \text{Intermediate level training heart rate}$

$\text{Max heart rate} \times .90 = \text{advanced level training heart rate}$

The most common measure of intensity, however, is "The Talk Test".

Basically, if you can speak conversationally (but not get enough air to sing), while performing your aerobic exercise you are probably somewhere between the desired range of 55 - 90 % of MHR. If speech becomes broken, you are exceeding the desired range.

Next we will discuss strength training. There are many health benefits associated with strength training that are often overlooked by recreational exercisers. A few of the benefits include:

- Increased motor performance
- Increased bone density
- Decreased risk of injury
- Increased metabolic rate
- Increased capacity to perform work

Strength Training guidelines

- Frequency = Two - Three non-consecutive days for beginners

- Intensity = Perform each movement to muscular fatigue or near muscular failure
- Type = The most common forms of resistance training include weight lifting, pushups, pull-ups, crunches, resistance bands.
- Time (or volume) = Beginners perform one - three sets of eight - fifteen repetitions per exercise.
- Progression = Increase weight by approximately 5% when you are able to reach your repetition target on two consecutive training sessions.
- Exercise Order = It is most desirable to work from largest muscle group to smallest muscle group.
- For example, Squats, Pushups, Chin Ups, Calf Raise, Crunches
- Breathing = Always exhale on the positive (concentric) portion of the movement. In other words, exhale when you exert force. NEVER hold your breath when strength training.
- Tempo = Move the weight in a slow and controlled manner. Many popular methods recommend two seconds for the positive phase, followed by four seconds for the negative phase of the lift.
- In my opinion, it isn't necessary to count your tempo. Just embrace the concept of slow and controlled movement.
- Overload = You must challenge you body to work at increasingly higher levels to bring about ongoing improvement
- Regularity = you must work out consistently to benefit from strength training. At least two non-consecutive sessions per week are required on a consistent basis.

As with cardio training, it is necessary to begin all strength-training sessions with a brief, five minute warm up period. At the conclusion of your strength routine, you should conclude with a short cool down, followed by static (non-bouncing) stretching of the major muscle groups.

Tips for finding time

1. Wake up an extra 30 - 60 minutes early to exercise before your workday starts.
2. Take a brisk walk on your lunch break.
3. Begin your workout immediately upon arriving home from work.

4. Incorporate exercise into family time. Take everyone out for a 30-minute walk after dinner, or go to the park for a game of basketball or soccer.
5. Split your exercise into two separate sessions, fifteen minutes in the morning and fifteen minutes in the evening.
6. Schedule your exercise just like you would any other appointment. Put it in your Palm Pilot, Day Planner, or Outlook Calendar.

Developing a realistic plan of action before adding exercise to your schedule is necessary to ensure your long-term success. Making any change to your lifestyle requires commitment to change. Identifying potential roadblocks to your success will help you to make more realistic plans. The number one reason that people cite for failing to exercise is "lack of time".

Therefore, you should examine your daily work and activity schedule thoroughly to determine where you can fit exercise in to the mix. For more detailed information about developing an effective training routine it may be helpful to consult with a professional personal trainer. There are also a number of qualified personal trainers that offer online coaching for those who don't have the time to work with a trainer in person.

As mentioned earlier, regardless of your current health or physical condition, it is always a good idea to have a physical examination before undertaking any physical exercise or nutrition program.

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