

The Heart of the Matter



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There are three types of muscle in the human body: skeletal, smooth and cardiac. Skeletal muscle is found all over the body while smooth muscle is found in the organs and blood vessels. The third type, cardiac, is found only in the heart. The heart is actually two interconnected but separate pumping stations. The right side of the heart pumps blood through the lungs and the left side pumps blood to the rest of the body. The heart requires the same amount of oxygen as it pumps throughout the body to other muscles. One measuring factor for the health condition of the heart is resting heart rate. A strong healthy heart will require fewer beats to perform its blood pumping functions. This happens because it is able to push more blood with each stroke or beat. A conditioned male who exercises regularly will have a resting heart rate of around 60 beats per minute. A non-exercising, de-conditioned man will have a resting heart rate of around 80 beats per minute. A comparison of the two at com-

plete rest for an entire day will show you how important it is to maintain your cardio-vascular health.

Our conditioned man at 60 beats per minute multiplied by 60 minutes equals 3600 beats per hour. Now multiply that by 24 hours in the day and we have 86,400 beats per day for his heart.

Our de-conditioned man at 80 beats per minute multiplied by 60 minutes equals 4800 beats per hour. Now multiply that by 24 hours in the day and we have 115,200 beats per day for his heart.

The de-conditioned man requires almost 30,000 more beats per day, at rest, for the heart to perform its job as the engine for the body. It does not take much math to figure out how many more beats are taking place each year for the de-conditioned man. The miles are adding up much faster on his engine. The scary reality here is that nobody is at rest for 24 straight hours per day and normal activities of the day are going to require the heart to beat faster. The better the condition of your heart, the less taxing it will be on it to perform day to day tasks. Cardio-vascular training needs to be part of your current exercise regiment. Lifting weights alone is not enough for the cardiac muscle.

When setting up your cardio-vascular training program you need to establish your training heart rate. This is to make sure that you are putting enough effort into your routine to challenge and strengthen the heart. Identifying the top end of your training zone will assure that you do not put too much load on the heart. You can find your training zone by first estimating what is called your Maximal Heart Rate (MHR). This is computing by taking 220 minus your age. Lets say you

are 45 your MHR would be 220-45 which equals 175 beats per minute. The next step is to calculate your training zone, which is a percentage of the MHR. The training zone runs between 60% and 85% of MHR. So based on the previous example, 60% to 85% of 175 is a training zone of 105 to 149 beats per minute. Someone just starting out should look to get his or her heart rate to the bottom of this window. Most cardio equipment now has an area for you to hold while you are walking and it will display your heart rate. You can make adjustments to your workload based on the feedback of your heart rate. You can also purchase a heart rate monitor to wear if you are walking on your own or the equipment is not equipped with one. Proper cardio-vascular training coupled with sound nutrition and resistance training will improve resting heart rate immensely in as little as 3 weeks. I have observed these improvements on a regular basis.

No matter what your daily activities involve, you will perform at a much higher level with less stress on the heart by increasing your cardio-vascular training. This training can be as simple as a brisk walk around the neighborhood. If you are unsure of your fitness level or confused on how to put together a training program, you should contact a certified fitness professional and have an assessment performed. It is almost the end of January and that New Year's promise you made to yourself should be on its way to becoming a new habit. If cardio training was not part of that promise it is not too late to add it to your exercise routine. So do your heart some good and get moving today.