The Eduardo Dias Cardio Program

By Eduardo Dias
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Introduction

Simply put, any exercise in which you sustain an elevated heart rate for a prolonged period of time is a cardiovascular exercise. The way you achieve that is by using larger muscles (like your legs) and as many muscles as possible, which will require more oxygen, which will require that you breathe faster, and that your heart beat faster. That includes walking, running, riding a bicycle, swimming, or equipment such as stationary bikes, stair masters or elliptical machines.

The American College of Sports Medicine recommends 20 to 60 minutes a day, three to five days a week of cardio training. Although I don’t necessarily disagree with that, I have personally found that realistically, most people would have a hard time starting a program that intense. Instead, I find that most people can stick to a two or three day a week program. So for our program, we will start with 20 to 30 Minutes, two days a week. If you want to eventually increase to three that’s great. If after a while you want to go for four or even five, go ahead, but remember it’s better to do two days a week and remain consistent than to do five days a week and stop after a month. Again, please remember to check with your physician to make sure about how frequently and how intense you should exercise.

The ideal, for the sake of time and habit, is for you to do your cardio on the days you are not doing your workout. This way you can tap into the power of habit and put aside approximately the same amount of time to take care of your health every day. But if for whatever reasons you have to do your cardio and your workout on the same day, that’s ok too.

The most important thing about your cardio program is that you get out there and do it, especially in the beginning. Depending on what your level of fitness is, a nice 20 to 30 minute walk is a great way to start. For some people even a 5 to 10 minute walk will be enough to make you will feel like you are exercising. No matter where you are, the key is to keep it up and make a habit of it.

In this booklet, I will talk about three methods of doing your cardio exercises: The first is what I call the “go for it” method, the second is using the Rate of Perceived Exhaustion method, and the third is using a Heart Rate Monitor.
The “Go For It” Method

This is just a fun name for those of you who want to just go out there and get started. The bottom line is if you do any of the suggested cardio exercises for ten to thirty minutes, even at the lowest possible intensity level, and do it consistently two to three times a week, your body will be happy.

But how hard do you do it? Well, with the “Go for it” method, it is pretty much up to you how hard you will be exercising. You will let your body tell you how much you should do. The general guideline is to do it from ten to thirty minutes and to keep it at an intensity level that you feel you are exercising. Make sure to keep it comfortable enough that it doesn’t get daunting or you injure yourself. This will vary greatly from person to person and even from workout to workout. For example, if your work and lifestyle haven’t allowed you to even walk at a regular pace for more than five minutes for a while, even a light, slow walk for five to ten minutes might feel like exercising for you.

On the other hand, if your work and lifestyle keep you pretty active or moving pretty fast throughout the day, you might be able to go for it a little harder for thirty minutes right from the start. The bottom line is your body will tell you how fast or how slow to go. And as you get fitter your body will tell you when it is time to push yourself a little further. You will simply want to go harder. One of the amazing things that happens when you start exercising is that your will develop great awareness of your body. So listen to your body and you will know exactly how long and how hard to go. At the same time, if one particular day or at a particular period of time you don’t feel like exercising as hard as you have been, again, listen to your body. Keep the habit and keep exercising, but if your body is telling you to take it easy, do things a little lighter.

Now, know that there will be times when you will feel very motivated, and times when you won’t feel very motivated at all. It happens to practically everybody. It happens to me, it happens to my clients, and it happens to world-class athletes. The issue is not whether those times will come around for you or not, because they most likely will. The issue is how you are going to deal with them. Those “unmotivated times” will in reality be very important for you. Those are the times when you will have the chance to set yourself apart from the people who would quit. I have found that the most effective way to work through them is to keep up the habit but lighten the load. Say you are very exited and motivated about going for a nice walk or running three times a week, been riding your stationary bike or walking on the treadmill while you watch the news then all of a sudden, for no particular reason, you just don’t feel like doing it anymore. Last week was great but this week you just don’t feel like it. What do you do? You do it anyway, so that you keep the habit, but make it very light. Instead of a brisk walk just go for a stroll, if you were going for a half hour run go for a gentle twenty-minute jog or even a walk, if you were doing the bike or treadmill for thirty minutes drop the time and make it very light. The idea is for you at the end of your workout, to be able to say “this wasn’t bad at all; I can do this again next time I feel like that”. This way, you are not afraid of those times and you can feel completely confident that you will always keep up with your exercises. The truth is even these small workouts will give you great results, and eventually the motivation will come back. Also know that those less motivated times will probably come around again. If they do you’ll be ready again. No big deal.

In the next sections I will teach you three different methods to optimize your cardio workout, in addition to giving you several sample workouts. The most important thing is

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that you do it. If these methods seem too complex for now, just put them aside for a while and go back to “just doing it”. If you want to come back and try them again at some point, go for it. Just remember to always keep your workout pleasant.

**Rate of Perceived Exhaustion (RPE)**

Rate of Perceived Exhaustion is a scale based on *your* perception of how hard *you* are working. Since one of our goals is for you to develop awareness and good communication with your own body this may work very well for you. Different people use this scale in different ways. I do it through *percentage*.

On my scale sleeping is 0%, sitting down watching TV is 10%, and working as hard as you can is 100%. A relaxed stroll would be 30%, a warm up would be 40%, and 50% would be doing an activity intensely enough that you feel you are exercising. This scale is very personal. For example for some people walking briskly is 60% while for others jogging would be 60%. Let your own perception be your guide. Keep in mind that you can use this scale with equipment as well. If you are using a stationary bike, a stair master or an elliptical machine find out what difficulty level is the equivalent of your 50% (i.e. - the smallest percentage of exertion) and go from there.

**RPE sample programs:**

**Beginner:**

Phase 1: A 5 Minute light warm up at 40% intensity  
Phase 2: 5 Minutes at 50%  
Phase 3: 3 Minutes at 60%  
Phase 4: 2 Minutes at 70%  
Phase 5: 3 Minutes back at 50%  
Phase 6: A 2 Minute cool down at 40%  
Total time: 20 Minutes

This is a simple workout that allows you to physically go up and come down without pushing yourself too much.

**Intermediate:**

Phase 1: A 3 Minute light warm up at 40% intensity  
Phase 2: 3 Minutes at 50%  
Phase 3: 3 Minutes at 60%  
Phase 4: 5 Minutes at 70%  
Phase 5: 3 Minutes at 80%  
Phase 6: 5 Minutes at 60%  
Phase 7: A 3 Minute cool down at 40%  
Total time: 25 Minutes

Notice how we are spending less time warming up by making the light part of the workout part of the warm up. You are also spending more time up at 60, 70, and even 80%.
Advanced:

Phase 1: A 5 Minute warm up at 50%
Phase 2: 3 Minutes at 60%
Phase 3: 3 Minutes at 70%
Phase 4: 5 Minutes at 80%
Phase 5: 5 Minutes at 90%
Phase 6 (optional): Up to 1 minute at 100% (good luck keeping up for a whole minute if you are really giving 100%)
Phase 7: 3 Minutes at 70%
Phase 8: 2 Minutes at 90%
Phase 9: 2 Minutes at 60%
Phase 10: Cool down for 3 Minutes between 40-50%
Total time: about 32 Minutes

This is a much harder workout where you stay “up” for much longer, and don’t come down completely until the very end.

Now remember these are just examples to help you get started. If you want to keep following these examples that’s fine, but most likely you will want to make up your own workouts. These will probably vary from day to day. Some days you might feel like hitting 100% twice or more and some days you may go only as high as 80%. Some days you will feel like going for 45 minutes and some days you will feel like going for only 20. What really matters is that you are doing it and enjoying it.

Using a Heart Rate Monitor

The good thing about using a heart rate monitor is that you can plan your cardio workouts in advance and have a very specific cardio workout designed before you start. I have found that some people do very well with this method, and some people don’t. Again, our goal is for you to DO IT. If you find that the following method is too much work, then don’t worry about it. But if you find that it will give you structure and may even challenge you more (if that’s what you need), then go for it.

You will need to purchase a heart rate monitor. You can find them at any fitness store. They have different monitors that do all kinds of fancy things, but all you really need is a good quality monitor that will accurately give you your heart rate. For this you can go usually for the most reasonably priced one. They all operate differently, so refer to the owner’s manual to learn how to operate your monitor. For the most part they are very simple to operate.

The following charts are based on the Karvonen Formula. The Karvonen Formula takes into consideration both your age and your resting heart rate in order to figure out your Target Heart Rates. The healthier you are, the lower your heart rate will be. That’s because your heart is stronger, and therefore needs to beat less in order to pump your blood. I used different targets so I can take you through a wide range of difficulty levels. Please remember that your body communicates with you and will tell you everything you need to know. I am not with you during the workout, so these are only suggestions. In other words, if something feels too easy even though you are at the required heart rate and you would like to increase a little use your own judgment and go for it if you feel
you’ll be safe. By all means if something feels too hard tone it down or stop it all together. Again, let your body be your guide. Remember to consult a physician before starting your exercise program.

In order to do these workouts you need to know you Resting Heart Rate (HRrest), which is your heart rate when you are completely rested. The best time to figure out your resting heart rate is right when you wake up. The simplest way to do it is to use your heart rate monitor. Keep your heart rate monitor next to your bed and immediately upon waking, put it on and record that number. Do it **before you get up**, since when you start walking around you heart rate changes. Do it for three days in a row to find an average just in case you had a bad dream or woke up startled for whatever reason. If for whatever reason you can’t do it right upon waking, you can do it at a different time. Just make sure to lie down and completely relax for at least five minutes before taking the reading.

The following workouts are broken down by age and by HRrest. Find the right one for you and follow it. This will work for any method of cardio you choose. If you walk or run, speeding up will increase your heart rate and slowing down will decrease it. If you use a piece of equipment that allows you to change resistance level such as a stationary bike or inclination such as a treadmill, you can use those to affect you heart rate also. Of course with the bike the more resistance the higher the heart rate, and with the treadmill the higher the inclination the higher the heart rate.

You may notice that often the beginning and intermediate levels will require higher heart rates than the advanced. That’s because if you are fit you need to put out more effort in order to achieve a higher heart rate. For example, a beginner may need to simply walk at 3.5 m/h to reach a heart rate of 150 but an advanced person may be running at 6 m/h and still have their heart rate at 140. That’s because they are so fit that their heart can handle more without having to work so hard.

You will also learn when you put a heart rate monitor on, that those numbers don’t stay fixed. When I say 114 BPM it doesn’t mean you have to stay exactly at that number. You will get close to it, fluctuate a little, but you will never hit 114 exactly and stay there.

**Hart Rate Monitor Sample Programs:**

**AGE: 18-25:**

**Beginner (HRrest >71):**

4 Min 104- 129 BPM (Warm Up)

4 Min 129- 141 BPM

4 Min 141- 153 BPM

4Min 153 – 184 BPM

4 Min 104- 129 BPM (Cool Down)

Total= 20 Min

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Intermediate (HRrest 61-70):

5 Min 96-123 BPM (Warm Up)

5 Min 123-136 BPM

5 Min 136-149 BPM

5 Min 149- 182 BPM

5 Min 96-123 BPM (Cool Down)

Total= 25 Min

Advanced (HRrest ≤61):

5 Min 90- 118 BPM (Warm Up)

5 Min 118-131 BPM

5 Min 131- 145 BPM

5 Min 145- 181 BPM

5 Min 181- 186 BPM

5 Min 90- 118 BPM (Cool Down)

Total= 30 Min
AGE 26-35

Beginner (HRrest >72):
4 Min 102- 124 BPM (Warm Up)
4 Min 124- 135 BPM
4 Min 135- 146 BPM
4 Min 146- 174 BPM
4 Min 102- 124 (Cool Down)
Total= 20 Min

Intermediate (HRrest 62-71):
5 Min 94- 118 BPM (Warm Up)
5 Min 118- 130 BPM
5 Min 130- 142 BPM
5 Min 142- 172 BPM
5 Min 94- 118 BPM (Cool Down)
Total= 25 Min

Advanced (HRrest <62):
5 Min 86- 112 BPM (Warm Up)
5 Min 112- 125 BPM
5 Min 125- 138 BPM
5 Min 138- 171 BPM
5 Min 171- 177 BPM
5 Min 86- 112 BPM (Cool Down)
Total= 30 Min
AGE 36-45

Beginner (HRrest >73):
4 Min 100-120 BPM (Warm Up)
4 Min 120-130 BPM
4 Min 130-140 BPM
4 Min 140-165 BPM
4 Min 100-120 (Cool Down)
Total: 20 Min

Intermediate (HRrest 64-72):
5 Min 92-114 BPM (Warm Up)
5 Min 114-125 BPM
5 Min 125-136 BPM
5 Min 136-164 BPM
5 Min 92-114 BPM (Cool Down)
Total: 25 Min

Advanced (HRrest <64):
5 Min 84-108 BMP (Warm Up)
5 Min 108-120 BPM
5 Min 120-132 BPM
5 Min 132-162 BPM
5 Min 162-168 BPM
5 Min 84-108 (Cool Down)
Total: 25 Min
AGE: 46-55

Beginner (HRrest >73):
4 Min 98-116 BPM (Warm Up)
4 Min 116- 125 BPM
4 Min 125-134 BPM
4 Min 134- 157 BPM
4 Min 98- 116 BPM (Cool Down)
Total: 20 Min

Intermediate (HRrest 64-72):
5 Min 90- 110 BPM (Warm Up)
5 Min 110- 120 BPM
5 Min 120-130 BPM
5 Min 130 155 BPM
5 Min 90- 110 BPM (Cool Down)
Total= 20 Min

Advanced (HRrest <64):
5 Min 82- 104 BPM (Warm Up)
7 Min 104- 115 BPM
7 Min 115-126 BPM
7 Min 126-154 BPM
5 Min 82- 104 BPM (Cool Down)
Total= 31 Min
AGE: 56-65

Beginner (HRrest >72):
4 Min 96-112 BPM (Warm Up)
4 Min 112-120 BPM
4 Min 120-128 BPM
4 Min 128-148 BPM
4 Min 96-112 BPM (Cool Down)
Total: 20 Min

Intermediate (HRrest 64-71):
5 Min 88-106 BPM (Warm Up)
5 Min 106-115 BPM
5 Min 115-124 BPM
5 Min 124-147 BPM
5 Min 88-106 BPM (Cool Down)
Total: 25 Min

Advanced (HRrest <64):
5 Min 80-100 BPM (Warm Up)
7 Min 100-110 BPM
7 Min 110-120 BPM
7 Min 120-145 BPM
5 Min 80-100 (Cool Down)
Total: 31 Min
OVER 65:

Beginner (HRrest >70):

3 Min 93- 110 BPM (Warm Up)
3 Min 110- 117 BPM
3 Min 117- 124 BPM
3 Min 124- 143 BPM
3 Min 93- 110 BPM (Cool Down)
Total: 15 Min

Intermediate (HRrest 62-69):

4 Min 85 – 103 BPM (Warm Up)
4 Min 103 – 112 BPM
4 Min 112- 120 BPM
4 Min 120- 142 BPM
4 Min 85- 103 BPM (Cool Down)
Total= 20 Min

Advanced (HRrest <62):

5 Min 79- 98 BPM (Warm Up)
5 Min 98- 108 BPM
5 Min 108- 117 BPM
5 Min 117- 141 BPM
5 Min 79- 98 BPM (Cool Down)
Total= 25 Min
The 15-Minute Super-Cardio Blast

I saved the best for last. This is the program I usually do and the one I recommend to my most dedicated clients. Although it takes just 15 to 20 minutes, it is the single most difficult and intense cardio workout. In fact, it takes so little time because 15 to 20 minutes is all most people can do, if they follow the guidelines. You get the best fat-burning workout and the best conditioning, plus as a bonus it is the shortest of all cardio programs.

The program uses the most scientifically advanced method of cardio training: high intensity interval training (HIIT).

It is based on the principle that humans are designed to perform short bursts of extreme output alternating with longer periods of lighter output. Think hunting: When our ancestors hunted, they didn’t jog around until they found and killed prey. They walked slowly and quietly. When they found prey, they got as close as possible, as quietly and slowly as possible, and then went all out for the kill or the chase and the kill – with just a few seconds or maybe a minute to catch it or lose it.

Turns out this also is the most effective way to go about cardio exercise: extreme output, then and active-but-light “rest.”

In the 15-Minute Super-Cardio Blast, you will go for a short period of intense output alternating with a slightly longer (but still brief) period of light output. You recover just long enough to go for another short period of intense output and so on. You need to do that only a few times (and you will be able to do that only a few times if you do it correctly). You will not only burn a lot of calories but also you will also put your body in a high fat-burning mode for a whole hour after you stop.

You can do this workout indoors or outdoors, but regular stepping machines and bicycles won’t provide enough intensity for this program. Instead, try one of the following:

- If you do this routine outdoors, you need a setting that allows you to sprint or do an activity that requires 100 percent of your effort for 30 seconds to one minute.
- You can do this in a track, stadium stairs or a hill1 where the surface is even enough so you can sprint without risk of tripping or twisting your ankle.
- If you use cardio equipment, it must provide a wide range of resistance, from light to extremely heavy, such as an elliptical machine that uses arms and legs and allows increasing the resistance, or equipment like the X-iser, which I offer for sale on my website.
- A treadmill that can go fast and on which you can increase the incline will work. (Be careful sprinting; if you fall on a treadmill, it will send you flying across the room.)

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1 On stadium stairs or uphill: Sprint up, then come back down slowly (never run downstairs or downhill, or you are likely to hurt your knees in the long run) and walk around until you have actively rested for the required length of time, then repeat.
At the end of the 30 seconds, you must be spent; you must have given everything you’ve got. You must be looking at the timer and, at the last five seconds, praying for the 30 seconds to be over.

An important detail: Do not eat for one hour after you finish your cardio workout. If you eat, you will stop the fat-burning process. Drink a lot of water but no food (which includes juices or anything that has calories).

An important word of caution: This is not a beginning program. If you are starting out, this program is not for you. Start with beginning programs of any of the three previous methods. When you feel you are in at least moderately good shape, you can try this. Also, because you are giving 100 percent, you must be focused, because you have greater chance for accidents. I once stepped on a sprinkler hole while sprinting down a football field and took a pretty hard fall.

Here are the programs. Notice that the lower level is already “intermediate-advanced”:

**Intermediate-Advanced**

Three minutes of light intensity work followed by one minute of moderately intense (80% to 85%). Sprint at minutes 3, 7, and 11 with 3-minute “cool downs” after each sprint.

Warm up: 3 minutes
At minute 3: Sprint (80%-85% of maximum intensity): 1 minute
At minute 4: Active rest: 3 minutes.
At minute 7: Sprint (80%-85% of maximum intensity): 1 minute
At minute 8: Active rest: 3 minutes.
At minute 11: Sprint (80%-85% of maximum intensity): 1 minute
At minute 12: Cool down: 3 minutes.
Total time: 15 minutes.

**Advanced**

Go between 2½ minutes of light intensity to 30 seconds of 100% intensity work. Sprint at the 3-, 6-, 9- and 12-minute marks, and “cool down” for 2.5 minutes between sprints:

Warm up: 3 minutes
At minute 3: Sprint (100% intensity): 30 seconds
At minute 3.5: Active rest: 2.5 minutes.
At minute 6: Sprint (100% intensity): 30 seconds
At minute 6.5: Active rest: 2.5 minutes.
At minute 9: Sprint (100% intensity): 30 seconds
At minute 9.5: Active rest: 2.5 minutes.
At minute 12: Sprint (100% intensity): 30 seconds
At minute 12.5: Active rest: 2.5 minutes.
Total time: 15 minutes.

If you are in amazing shape, you can do two more cycles for a total of six sprints in 20 minutes.

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Closing Thoughts

There are four different cardio options that can accommodate every personality type and the daily variances of the body. Those who prefer structure may like the “Heart Rate Monitor” method, exercisers who want spontaneity should prefer the “Go For It” method, people who like a combination of both should try the “RPE” method, and those who want a challenge will opt for the “15 Minute Super-Cardio Blast”.

Remember: the most important thing is that you stay active. The biggest advantage of having different methods is that you can always find an option to suit your current level or mood. You don’t have to always do the same thing. If you are in terrific shape and regularly do the 15-Minute Super-Cardio Blast, but feel a bit run down one day, shoot for a lighter straight up jog for 20-30 minutes. If you usually use a heart rate monitor, but feel like doing something different, try the RPE method for that day. The important thing is to be consistent.

The science of Kinesiology is constantly evolving. New things about the body and how it responds to exercise are regularly discovered. Subsequently, new methods and ideas about maximizing your cardio routine will be revealed. Stay informed: visit my website and other health websites frequently and read newspaper/magazine articles about health and fitness. Leading a healthy lifestyle is important and can be fun. And you will reap the benefits tremendously.

Finally: Always listen to your body. Never do anything you don’t feel safe doing, or anything that might have a negative impact in your health. Our bodies are amazing at communicating with us if we just listen to them. If you are open to this, your body will tell you when it’s time to exercise, and when it needs to take it easy. Follow its directions and you will be in your way to a long, healthy and happy life.

Eduardo Dias
For Health, For Fitness, For a Great Body.