

# "Aerobic" Training Zones

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If your serious about your Aerobic training and your looking for a good formula to set out your Heart Rate (HR) training zones, then forget about the method that uses a percentage of your maximal HR (220- your age). This method is a rough guesstimate that doesn't take into consideration "Individuality" nor does it take into consideration adjustments that should be implemented if your aerobic threshold increases.

The method that I use is quite simple, very effective and tailed to the individual.

You first need to find out what your heart rate is when you are working at threshold pace; this is the absolute maximal HR that can be consistently maintained for a five minute period.

## Equipment Needed

A heart rate monitor

If your sport involves running, then a treadmill is preferable.

If your sport involves cycling, then exercise bike is preferable.

If you sport is striking, then a punching bag is preferable.

The means you choose to test your HR at threshold pace should be

- 1) Specific to your sport (where possible)
- 2) In a training environment that allows for uninterrupted consistency.

## Guidelines for testing

- 1) You must be well rested for a few days prior to establishing your HR at threshold pace.
- 2) Warm up for 5 minutes to get your body working aerobically.
- 3) Gradually increase your work rate enough to bring your HR up 8-10 beats per minute (BPM) and hold for 3-minutes, keep increasing the work load and holding for 3-minutes until you get to step 4.
- 4) When you get to the stage where the limbs you are using to apply force start to feel heavy (eg your legs if you are running or your arms if you are punching), you increase your work load enough to bring your HR up by 3-5 BPM, still holding for 3 minute intervals. At this point lactic acid is being produced at a level, which is slightly greater than your body can metabolise it.
- 5) When the limbs you are using to apply force start to feel moderately heavy, you start increasing the length of your intervals to 5 minutes, if you can still hold an interval for five minutes, you then increase your work load enough to bring your HR up by 2-3 BPM and keep repeating until you fail to hold an interval for 5 minutes.
- 6) The maximal HR that you were able to hold for 5 minutes is your HR at threshold pace.

- 7) This test needs to be repeated again 2-3 days later (when you are fully recovered) to fine tune your threshold HR, second time around you will have a better understanding of what is involved and you won't have to waste unnecessary energy while you slowly push the limits. Again warm up for 5 minutes, then work up to your threshold HR over three evenly spaced 3 minute intervals, once you get to your threshold HR, hold it for five minutes, if you feel as though you can increase your training load then do so but only enough to bring your HR up by 2-3 BPM at a time and hold for 5 minutes, keep repeating until you fail (you should find that there won't be much difference from your first test). If you find that you can't increase your HR from your previous test, that's fine, you have just reconfirmed your threshold HR.

If you are using a treadmill, you adjust the load by increasing the speed and or elevation.

If you are using an exercise bike you adjust the load by increasing the cadence or increasing your RPM.

If you are using a punching bag you will need an assistant to hold you HR monitor and give you feedback. When striking the bag, it is better if you can work in a constant rhythm, if you are a boxer, you'll find that alternating between a jab and a cross creates a good constant rhythm. If you are a Kick-boxer, then try repeating one of the following combinations,

1) Left front kick, left jab, right cross, right front kick, right jab, left cross, left front kick, left jab, right cross etc. Your stance alternates each time you throw a kick.

2) Left round kick, left jab, right cross, right round kick, right jab, left cross, left round kick, left jab, right cross etc. Your stance alternates each time you throw a kick.

To increase your work rate, either increase the tempo at which you are striking or increase your striking force.

If possible, have someone there to help steady the bag.

Once your threshold HR has been established, you then need to work out different percentages of it so you can establish different training zones to periodise your training. I use percentages from 75% (light work out) up to 100% for actual threshold training.

### Calculating percentages

Let's say for arguments sake, your threshold HR was 182 BPM

#### **75% of your threshold HR**

75 times 182 divided by 100 which equals 136 BPM

#### **85 % of your threshold HR**

85 times 182 divided by 100 which equals 154 BPM

#### **95 % of your threshold HR**

95 times 182 divided by 100 which equals 173 BPM

The percentages you use for your training will depend on what you are attempting to get out of your training (read article "Fighting Fit").

Every three months you should check your threshold HR to see if there are any changes, ideally with the correct training your threshold HR will go up.

If there is a change in your threshold HR, you'll need to recalculate your percentages to make sure you are on track with your training.