Aerobic Fitness Prescription: Zone Training

Zone Training

The purpose is to understand the difference between different exercise intensities in Zone 1 (walking or jogging). Monitoring and prescribing training is using a five-zone scale. For elite endurance athletes, most of their training occurs at or below zone 2.

Based on our client's goals and program, their hypertrophy training should be done at Zone 2 or lower, and power training should be done at Zone 3 or lower. They need to be able to calculate their HRR and should consider wearing a heart rate monitor so they know if they are in the right zone and whether they should increase or decrease intensity.

Zone	%VO _{2max}	%HR _{max}	[BLa]	Duration (within Zone)
1	45-65	55-75	0.8-1.5	1-6 hours
2	66-80	75-85	1.5-2.5	1-3 hours
3	81-87	85-90	2.5-4.0	50-90 minutes
4	88-93	90-95	4.0-6.0	30-60 minutes
5	94-100	95-100	6.0-10.0	15-30 minutes

We need to understand the difference between exercise intensities.

Zone	%HRR	
1	60-70	
2	70-80	
3	80-90	

In Zone 1 we need our %HRR to be in between 60-70%.

HRR is calculated by

$$HR_{max}$$
 = 220-age
 HRR = HR_{max} - HR_{rest}
 $Training\ Zone$ = % Intensity (HRR) + HR_{rest}

For Example

$$HR_{max} = 220 - 22 = 198 \text{ bpm}$$
 $HRR = 198 - 56$
 $= 142 \text{ bpm}$
 $Training Zone = 0.60 (142) + 56 = 141.2 \text{ bpm}$
 $= 0.70 (142) + 56 = 155.4 \text{ bpm}$

For this person to train in Zone 1 their HR should be between 141 -155 bpm