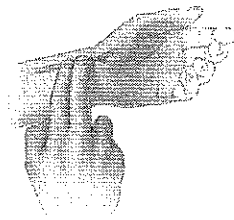


# Carolina Sports Concussion Clinic

## Exercise Progression Protocol Instructions

The following protocol can be used to *gradually* return you to activity.  
After **ALL** concussion symptoms (including headache) have resolved, you can begin the protocol.

- 1) Determine your resting heart rate (HR), average is between 60-80 beats per minute. The radial pulse is located just below the thumb. The carotid pulse is located on the side of the neck. Use two fingers when checking your pulse, do not use your thumb. Press lightly until you feel the pulse. Remember to use a watch or clock and count the number of beats in one minute. This determines your resting heart rate.



- 2) Determine your target heart rate. This is the average range of heart rate reached during exercise which enables your heart & lungs to receive the most benefit from the exercise. Use the following formula to calculate:

$$\text{Target HR} = (\text{Max HR (220-age)} - \text{Resting HR} \times \text{target \%}) + \text{Resting HR}$$

Example: 15 yr old at 50% exertion, resting HR of 60 bpm:  $(205-60 \times .50) + 60 = 132$  bpm

- 3) Pay careful attention to your symptoms, your thinking, and your concentration skills at each stage of activity.
- 4) A 24-hour rest period should be taken before progressing to the next level/stage.
- 5) Move to the next stage of activity **only if you do not experience ANY symptoms** when completing the current exercise stage.
- 6) If your symptoms return, immediately discontinue activity and rest for 24 hours. If symptoms do not resolve or significantly worsen, consult your physician and/or athletic trainer.