

COMBINED TEST: CAN YOU SPEAK COMFORTABLY? (FOSTER SUBMAXIMAL HEART RATE TEST)

This assessment estimates your maximal heart rate and your threshold heart rate using one test to determine your talk threshold, also known as the first ventilatory threshold (VT_1). After taking this test, you can set your sport-specific training zones using either of two anchor points: your maximal heart rate or your threshold heart rate.

Step 1. Warm up adequately for 5 to 10 minutes.

Step 2. Each stage is two minutes long. Starting at a heart rate of 120 bpm, increase your exercise effort, speed, or intensity by 10 bpm for each two-minute stage.

Step 3. One minute and 30 seconds into each two-minute exercise stage, recite the Pledge of Allegiance (or any verse you know by heart) out loud.

Step 4. At the final moments of each stage and after reciting the verse out loud, answer this question: *Can you speak comfortably?*

Step 5. There are only two possible answers: *Yes* or *Uncertain*.

Step 6. Continue to increase your exercise effort 10 beats every two minutes until the answer to the question *Can you speak comfortably?* is *Uncertain*. Record the *Uncertain* heart rate number in beats per minute. This is your first ventilatory threshold (VT_1), or your estimated threshold heart rate.

Step 7. Cool down adequately for 5 to 15 minutes.

Step 8. Complete the following chart. Your estimated threshold heart rate is your *Uncertain* heart rate number.

To calculate your estimated maximal heart rate, add to the heart rate number at the *Uncertain* stage the math factor based on your current level of fitness:

- If you are in poor shape, add the math factor of 50 bpm.
- If you are in average shape, add the math factor of 40 bpm.
- If you are in excellent shape, add the math factor of 30 bpm.
- If you are in competitive athletic shape, add the math factor of 20 bpm.

Example:

$$\begin{aligned} 150 \text{ bpm (heart rate at } \textit{Uncertain})} &+ 40 \text{ bpm (math factor for average shape)} \\ &= 190 \text{ bpm (estimated maximal heart rate)} \end{aligned}$$

ANCHOR POINT		HEART RATE NUMBER (BPM)
Threshold heart rate:	Threshold heart rate \ 80% =	_____bpm
Maximal heart rate:	_____ \ 80% =	_____bpm

Step 9. To set your heart rate training zones based on maximal heart rate, take your estimated MHR number and multiply it by 10 percent for each of the five zones.

Step 10. To set your threshold training zones, take your threshold heart rate estimated number and multiply it by 10 percent for zones 4 through 1 (90, 80, 70, and 60 percent) and 5 percent for each of the three zones above (5a, 5b, 5c).