

## COOPER 1.5 MILE RUN TO CALCULATE VO2 MAX

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The formula to calculate VO2 max from the cooper 1.5 mile run, requires the time taken to do the run and the clients weight in kilograms, the trainer can then input these values into the following equations to calculate VO2 max

**Men:**

$$91.736 - (0.1656 \times \text{body weight (KG)}) - (2.767 \times \text{time (min)}) = \dots\dots\dots (\text{ml/kg/min})$$

**Women:**

$$88.020 - (0.1656 \times \text{body weight (kg)}) - (2.767 \times \text{time (min)}) = \dots\dots\dots (\text{ml/kg/min})$$

These figures can be classified using the tables below or used directly as a measure of fitness which can then be reassessed to see improvement against goals set for the client

<b>Males VO2 max categories (ml.kg.min)</b>					
<b>Age (Years)</b>	<b>Low</b>	<b>Below Average</b>	<b>Average</b>	<b>Above Average</b>	<b>Good</b>
<b>20 – 29</b>	<28.3	28.4 – 33.0	33.1 – 37.8	37.9 – 41.0	>41.1
<b>30 – 39</b>	<26.7	26.8 – 31.4	31.5 – 34.6	34.7 – 39.4	>39.5
<b>40 – 49</b>	<25.1	25.2 – 29.9	30.0 – 33.0	33.1 – 36.2	>36.3
<b>50 – 59</b>	<21.9	22.0 – 26.7	26.8 – 29.9	30.0 – 33.0	>33.1
<b>60+</b>	<20.3	20.4 – 23.5	23.6 – 26.7	26.8 – 31.4	>31.5

Normative Data for Male VO2 max Values, ACSM 2006

<b>Females VO2 max categories (ml.kg.min)</b>					
<b>Age (Years)</b>	<b>Low</b>	<b>Below Average</b>	<b>Average</b>	<b>Above Average</b>	<b>Good</b>
<b>20 – 29</b>	<34.6	34.7 – 41.0	41.1 – 44.2	44.3 – 49.0	>49.1
<b>30 – 39</b>	<33.0	33.1 – 39.4	39.5 – 42.6	42.7 – 47.4	>47.5
<b>40 – 49</b>	<31.4	31.5 – 36.2	36.3 – 41.0	41.1 – 45.8	>45.9
<b>50 – 59</b>	<29.9	30.0 – 34.6	34.7 – 37.8	37.9 – 41.0	>41.1
<b>60+</b>	<26.7	26.8 – 31.4	31.5 – 34.6	34.7 – 37.8	>37.9

Normative Data for Female VO2 max Values, ACSM 2006

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## Anti-Gravity Training

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