

Author Year Country PEDro Score Research Design Sample Size	Methods	Outcomes																														
Kendall et al. 2005 USA Cross-over RCT PEDro=9 N <sub>Initial</sub> =9; N <sub>Final</sub> =8	<p><b>Population:</b> Level of injury: C5/C6; Severity of injury: AISA A-C; Time since injury=16.5 yr.</p> <p><b>Intervention:</b> Subjects were randomized into one of two groups receiving either 10 g creatine orally twice daily for six days, then maintained on 5 g daily until testing, or placebo. After a wash-out period they crossed over to the other arm.</p> <p><b>Outcome Measures:</b> Grasp and Release Test (GRT) and Functional Independence Measure.</p>	<ol style="list-style-type: none"> <li>There were no significant between-group differences for GRT or FIM scores.</li> </ol>																														
Jacobs et al. 2002 USA Cross-over RCT PEDro=8 N=16	<p><b>Population:</b> Mean age=35.3 yr; Gender: males=16 females=0; Level of injury: tetraplegia; Mean weight=71.4 kg.</p> <p><b>Intervention:</b> Individuals received 20 g of creatine monohydrate 4x/day mixed with 8 oz water or placebo powder for 1 wk. A washout period occurred for 3 wk and then individuals crossed over to receive the alternate treatment protocol.</p> <p><b>Outcome Measures:</b> Power output, time to fatigue, heart rate (HR), oxygen uptake (VO<sub>2</sub>), minute ventilation (V<sub>E</sub>), ventilatory frequency (V<sub>F</sub>), respiratory exchange ratio (RER), tidal volume (V<sub>T</sub>).</p>	<ol style="list-style-type: none"> <li>No adverse effects were reported.</li> <li>There was no change in HR, RER and V<sub>E</sub>, although there were significant difference in VO<sub>2</sub>, VCO<sub>2</sub>, V<sub>F</sub> and V<sub>T</sub> between trials (p&lt;0.001).</li> <li>VO<sub>2</sub> increased by 18.6% with creatine treatment versus placebo.</li> <li>After creatine consumption, VO<sub>2</sub>, VCO<sub>2</sub> and V<sub>T</sub> reached their highest peak.</li> </ol>																														
<p><b>Effect Sizes:</b> Forest plot of standardized mean differences (SMD ± 95% C.I.) as calculated from pre- and post-intervention data.</p> <div style="text-align: center;"> <p>Jacobs et al. 2002; Creatine vs Maltodextrin</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Variable</th> <th>SMD</th> <th>95% C.I.</th> </tr> </thead> <tbody> <tr> <td>TTF</td> <td>0.05</td> <td>(-0.64, 0.75)</td> </tr> <tr> <td>HR</td> <td>0.03</td> <td>(-0.67, 0.72)</td> </tr> <tr> <td>PPO</td> <td>0.01</td> <td>(-0.68, 0.70)</td> </tr> <tr> <td>VO2</td> <td>0.08</td> <td>(-0.62, 0.77)</td> </tr> <tr> <td>VCO2</td> <td>0.12</td> <td>(-0.57, 0.81)</td> </tr> <tr> <td>RER</td> <td>0.09</td> <td>(-0.60, 0.78)</td> </tr> <tr> <td>VE</td> <td>0.04</td> <td>(-0.65, 0.73)</td> </tr> <tr> <td>TV</td> <td>0.07</td> <td>(-0.62, 0.77)</td> </tr> <tr> <td>Vf</td> <td>0.01</td> <td>(-0.68, 0.70)</td> </tr> </tbody> </table> </div>			Variable	SMD	95% C.I.	TTF	0.05	(-0.64, 0.75)	HR	0.03	(-0.67, 0.72)	PPO	0.01	(-0.68, 0.70)	VO2	0.08	(-0.62, 0.77)	VCO2	0.12	(-0.57, 0.81)	RER	0.09	(-0.60, 0.78)	VE	0.04	(-0.65, 0.73)	TV	0.07	(-0.62, 0.77)	Vf	0.01	(-0.68, 0.70)
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