**Table 1**. **Standards for the assessment of fitness (W170/kg)**

|  |  |  |
| --- | --- | --- |
| **Performance** | **Men** | **Women** |
| **Perfect** | 3.26 and more | 2.61 and more |
| **Above average** | 2.94 – 3.25 | 2.28 – 2.60 |
| **Average** | 2.61 – 2.93 | 1.96 – 2.27 |
| **Under average** | 2.28 – 2.60 | 1.63 – 1.95 |
| **Unsatisfactory** | 2.27 and less | 1.62 and less |

**Table 2**. **Reference couple – 12 training units - 2 x 40 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Obstacle track** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 70 kg | 14.7 | 4 | 21.7 | 2.67 | 42.1 | 82 |
| Output - Cadet 1 | 70,5 kg | 14.2 | 5 | 21.8 | 3.21 | 42.0 | 90 |
| End of training | +0,5 kg | - 0.5 | + 1 | +0.1 | + 0.54 | - 0.1 | + 160m |
| Input - Cadet 2 | 77 kg | 9.7 | 3 | 22 | 3.66 | 35.9 | 85 |
| Output - Cadet 2 | 76 kg | 9.1 | 3 | 21.6 | 3.79 | 36.3 | 92 |
| End of training | -1 kg | - 0.6 | No change | - 0.4 | +0.13 | + 0.4 | +140m |

**Table 3.** **Experimental couple – 24 training units 4 x 20 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Obstacle track** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 87 kg | 15.1 | 7 | 26 | 2.30 | 44.0 | 81 |
| Output - Cadet 1 | 84 kg | 14.2 | 6 | 24.1 | 2.96 | 44.8 | 92 |
| End of training | - 3 kg | - 0.9 | -1 | -1.9 | + 0.66 | + 0.8 | + 220m |
| Input - Cadet 2 | 81 kg | 24.2 | 9 | 26.8 | 2.54 | 42.5 | 80 |
| Output - Cadet 2 | 79 kg | 23.0 | 8 | 24.5 | 2.92 | 43.0 | 94 |
| End of training | - 2kg | - 1.2 | - 1 | - 2.3 | +0.38 | + 0.5 | +280m |

**Table 4**. **Reference couple – 12 training units - 2 x 40 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Fartlek** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 84 kg | 17.3 | 8 | 27 | 3.11 | 43.2 | 84 |
| Output - Cadet 1 | 83 kg | 16.8 | 8 | 25.1 | 3.21 | 43.0 | 87 |
| End of training | - 1 kg | - 0.5 | No changes | -1.9 | + 0.10 | - 0.2 | + 60m |
| Input - Cadet 2 | 82 kg | 15.8 | 9 | 26.2 | 2.64 | 41.7 | 78 |
| Output - Cadet 2 | 82 kg | 15.3 | 8 | 24.1 | 2.71 | 42.0 | 85 |
| End of training | No changes | - 0.5 | - 1 | - 2.1 | +1.3 | + 0.3 | +140m |

**Table 5.** **Experimental couple – 24 training units 4 x 20 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Fartlek** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 82 kg | 21.2 | 8 | 26 | 2.19 | 44.7 | 76 |
| Output - Cadet 1 | 80 kg | 18.2 | 6 | 21.1 | 2.87 | 43.1 | 86 |
| End of training | - 2 kg | - 3 | -2 | -4.9 | + 0.68 | - 1.6 | + 200m |
| Input - Cadet 2 | 88 kg | 24.1 | 10 | 26.9 | 2.54 | 45.3 | 79 |
| Output - Cadet 2 | 85 kg | 20.8 | 8 | 19.6 | 2.92 | 44.1 | 87 |
| End of training | - 1kg | - 0.5 | - 1 | - 2.1 | +1.3 | - 1.2 | +160m |

**Table 6**. **Reference couple – 12 training units - 2 x 40 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Running treadmill** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 72 kg | 22.7 | 6 | 23.5 | 3.51 | 42.8 | 88 |
| Output - Cadet 1 | 71 kg | 22.1 | 6 | 23.2 | 3.55 | 42.5 | 90 |
| End of training | - 1 kg | -0.6 | No changes | - 0.3 | +0.04 | - 0.3 | +40m |
| Input - Cadet 2 | 95 kg | 14.4 | 6 | 25.8 | 4.24 | 44.2 | 95 |
| Output - Cadet 2 | 94 kg | 14.3 | 5 | 25.4 | 4.25 | 44.0 | 99 |
| End of training | - 1 kg | - 0.1 | -  1 | -0.4 | +0.01 | - 0.2 | + 80m |

**Table 7.** **Experimental couple – 24 training units 4 x 20 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Running treadmill** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 80.6 kg | 14.4 | 5 | 23.8 | 3.53 | 38.6 | 89 |
| Output - Cadet 1 | 79.0 kg | 14.0 | 5 | 23.1 | 3.55 | 38.6 | 91 |
| End of training | - 1.6 kg | - 0.4 | No changes | -0.7 | + 0.02 | No changes | + 40m |
| Input - Cadet 2 | 77.3 kg | 14.2 | 5 | 23.9 | 3.30 | 42.2 | 84 |
| Output - Cadet 2 | 77.0 | 14.1 | 5 | 23.1 | 3.28 | 42.0 | 85 |
| End of training | - 0.3 kg | - 0.1 | No changes | -0.8 | - 0.2 | - 0.2 | + 20m |

**Table 8**. **Reference couple – 12 training units - 2 x 40 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Shuttle run** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 64 kg | 12.7 | 4 | 21.6 | 2.89 | 39.6 | 79 |
| Output - Cadet1 | 64 kg | 12.6 | 4 | 21.7 | 3.21 | 39.7 | 85 |
| End of training | No changes | - 0.1 | No changes | + 0.1 | + 0.32 | - 0.2 | + 120m |
| Input - Cadet 2 | 77 kg | 15.1 | 7 | 19.2 | 2.92 | 41.9 | 81 |
| Output - Cadet 2 | 77 kg | 15.2 | 7 | 19.0 | 2.71 | 41.5 | 92 |
| End of training | No changes | - 0.5 | - 1 | - 2.1 | +1.3 | - 0.4 | +220m |

**Table 9.** **Experimental couple – 24 training units 4 x 20 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Shuttle run** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 84 kg | 22.2 | 8 | 24.1 | 2.44 | 42.8 | 77 |
| Output - Cadet 1 | 82 kg | 20.8 | 7 | 22.4 | 3.11 | 42.7 | 86 |
| End of training | - 2 kg | - 1.4 | -1 | -1.7 | + 0.67 | - 0.1 | + 220m |
| Input - Cadet 2 | 80 kg | 20.1 | 8 | 25.1 | 2.66 | 44.3 | 76 |
| Output - Cadet 2 | 77.5 kg | 19.1 | 7 | 24.0 | 2.94 | 44.0 | 84 |
| End of training | - 2.5kg | - 1 | - 1 | - 1.1 | +0.28 | - 0.3 | +160m |

**Table 10**. **Reference couple – 12 training units - 2 x 40 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Swimming** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 81 kg | 18.3 | 9 | 25.1 | 2.90 | 42.5 | 89 |
| Output - Cadet 1 | 81 kg | 18.4 | 9 | 25.0 | 2.98 | 42.4 | 85 |
| End of training | No changes | + 0.1 | No changes | -0.1 | + 0.08 | - 0.1 | - 80m |
| Input - Cadet 2 | 78 kg | 16.0 | 7 | 19.3 | 3.12 | 41.1 | 91 |
| Output - Cadet 2 | 79 kg | 16.1 | 7 | 19.5 | 3.22 | 41.3 | 90 |
| End of training | + 1kg | + 0.1 | No changes | + 0.2 | +0.10 | + 0.2 | - 20m |

**Table 11**. **Experimental couple – 24 training units 4 x 20 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Swimming** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 77 kg | 14.2 | 5 | 18.9 | 2.62 | 42.8 | 83 |
| Output - Cadet 1 | 77 kg | 14.4 | 5 | 19.1 | 2.89 | 42.8 | 83 |
| End of training | No changes | + 0.2 | No changes | + 0.2 | + 0.27 | No changes | No changes |
| Input - Cadet 2 | 83 kg | 16.5 | 7 | 24.5 | 3.12 | 44.1 | 84 |
| Output - Cadet 2 | 82.5 kg | 16.7 | 7 | 24.4 | 3.21 | 40.0 | 83 |
| End of training | - 0.5 | + 0.2 | No changes | - 0.1 | + 0.11 | - 0.1 | - 20m |

**Table 12.** **Reference couple – 12 training units - 2 x 40 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Bicycle** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 75 kg | 13.6 | 5 | 23.1 | 3.04 | 41.6 | 86 |
| Output - Cadet 1 | 75 kg | 13.5 | 5 | 22.9 | 3.11 | 41.8 | 87 |
| End of training | No changes | - 0.1 | No changes | -0.2 | + 0.7 | + 0.2 | + 20m |
| Input - Cadet 2 | 70 kg | 15.1 | 4 | 21.6 | 2.51 | 43.2 | 78 |
| Output - Cadet 2 | 69 kg | 15.0 | 4 | 21.0 | 2.48 | 43.1 | 79 |
| End of training | - 1kg | - 0.1 | No changes | - 0.6 | -0.3 | - 0.1 | +20m |

**Table 13**. **Experimental couple – 24 training units 4 x 20 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Bicycle** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 85.5 kg | 16.7 | 6 | 25.2 | 3.53 | 44.3 | 89 |
| Output - Cadet 1 | 84.0 kg | 16.5 | 6 | 24.9 | 3.60 | 44.6 | 90 |
| End of training | - 1.5 kg | -0.2 | No changes | -0.3 | + 0.7 | + 0.3 | + 20m |
| Input - Cadet 2 | 78 kg | 19.5 | 7 | 23.7 | 2.79 | 40.5 | 81 |
| Output - Cadet 2 | 78 kg | 19.3 | 7 | 23.5 | 2.83 | 40.5 | 80 |
| End of training | No changes | - 0.2 | No changes | - 0.2 | +0.4 | No changes | +20m |

**Table 14.** **Reference couple – 12 training units - 2 x 40 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Eliptic simulator** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 79 kg | 19.6 | 8 | 24.3 | 2.90 | 43.6 | 82 |
| Output - Cadet 1 | 80 kg | 19.7 | 8 | 24.5 | 2.87 | 43.5 | 83 |
| End of training | + 1 kg | + 0.1 | No changes | + 0.2 | - 0.3 | - 0.1 | + 20m |
| Input - Cadet 2 | 81 kg | 20.3 | 9 | 26.1 | 2.74 | 45.1 | 78 |
| Output - Cadet 2 | 80 kg | 20.0 | 9 | 26.0 | 2.80 | 45.1 | 80 |
| End of training | - 1 kg | - 0.3 | No changes | - 0.1 | + 0.6 | No changes | + 40m |

**Table 15.** **Experimental couple – 24 training units 4 x 20 min per week**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Eliptic simulator** | **Weight** | **% fat** | **Visceral fat** | **BMI** | **W 170** | **% fat** | **Test 20x20** |
| Input - Cadet 1 | 78 kg | 16.5 | 6 | 23.0 | 2.95 | 42.8 | 86 |
| Output - Cadet1 | 78 kg | 16.4 | 6 | 23.2 | 2.91 | 43.0 | 87 |
| End of training | No changes | - 0.1 | No changes | + 0.2 | - 0.4 | + 0.2 | + 20m |
| Input - Cadet 2 | 88 kg | 19.8 | 8 | 26.3 | 2.65 | 44.3 | 76 |
| Output - Cadet 2 | 86 kg | 18.9 | 8 | 25.5 | 2.71 | 44.1 | 79 |
| End of training | - 2 kg | - 0.9 | No changes | - 0.8 | + 0.6 | - 0.2 | + 60m |