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| **Supplemental Digital Content 3. Cardiorespiratory Fitness and Other Cardiometabolic Health Indicators.** | | | | | | | | | | |
| **Study** | **Outcome** | **Unit of measurement** | **Sex** | | **Control group: baseline values**  **Mean (SD) / (range), n** | **Control group: Follow-up values**  **Mean (SD) / (range), n** | **HIIT group: baseline values**  **Mean (SD) / (range), n** | **HIIT group: Follow-up values**  **Mean (SD) / (range), n** | **MICT group: baseline values**  **Mean (SD) / (range), n** | **MICT group: Follow-up values**  **Mean (SD) / (range), n** |
| **Aamot et al. 2014\*** | V̇O2peak | mL/kg/min | M | | 34.5 (4.8), 25 | 36.9 (5.4), 25 | 32.5 (6.8), 22 | 35.9 (6.6),22 | 35.1 (7.5), 27 | 39.4 (8.3), 27 |
| F | | NR | - | 33.5 (2.5), 3 | 36.7 (1.8), 3 | 32.5 (4.8), 5 | 36.5 (6), 5 |
| Age | years | M | | 57.8 (7.4), 25 | - | 58.4 (7.4), 22 | - | 57.1 (8.4), 27 | - |
| F | | NR | - | 55.3 (6.0), 3 | - | 52.4 (8.0), 5 | - |
| BMI | kg/m2 | M | | 28.1 (3.6), 25 | 28 (3.7), 25 | 29.0 (3.2), 22 | 28.7 (2.5), 22 | 27.5 (3.7), 27 | 27.2 (3.7), 27 |
| F | | NR | - | 24.6 (1.0), 3 | 24.7 (1.2), 3 | 25.4 (4.5), 5 | 25.1 (4.6), 5 |
| Body fat | % | M | | 26.5 (5.6), 25 | 25.8 (5.3), 25 | 27.6 (6.0), 22 | 26.9 (4.9), 22 | 25.2 (5.8), 27 | 24.5 (5.7), 27 |
| F | | NR | - | 32.1 (4.5), 3 | 32.9 (5.3), 3 | 37.9 (5.9), 5 | 36.4 (6.5), 5 |
| SBP | mmHg | M | | 139 (17), 24 | 135 (12), 24 | 145 (24), 21 | 139 (16), 21 | 138 (21), 27 | 134 (15), 27 |
| F | | NR | - | 138 (18), 3 | 131 (11), 3 | 130 (14), 5 | 132 (6), 5 |
| DBP | mmHg | M | | 84 (11), 24 | 83 (8), 24 | 90 (12), 21 | 83 (8), 21 | 84 (10), 27 | 81 (9), 27 |
| F | | NR | - | 82 (8), 3 | 83 (5), 3 | 81 (5), 5 | 78 (8), 5 |
| PA levels | METs/ week | M | | 617 (876), 25 | 586 (613), 25 | 834 (750), 22 | 773 (739), 22 | 601 (678), 27 | 519 (675), 27 |
| F | | NR | - | 1205 (174), 3 | 1271 (1010), 3 | 244 (306), 5 | 686 (449), 5 |
| Moderate-intensity PA | METs/ week | M | | 813 (901), 25 | 763 (980), 25 | 790 (781), 22 | 949 (1233), 22 | 443 (576), 27 | 699 (1060), 27 |
| F | | NR | - | 820 (450), 3 | 640 (366), 3 | 168 (196), 5 | 744 (1198), 5 |
| Vigorous-intensity PA | METs/ week | M | | 1213 (1149), 25 | 1379 (1511), 25 | 645 (683), 22 | 982 (834), 22 | 606 (848), 27 | 1327 (1319), 27 |
| F | | NR | - | 880 (970), 3 | 1120 (733), 3 | 352 (455), 5 | 896 (605), 5 |
| **Boidin et al. 2019** | V̇O2peak | mL/kg/min | M | | - | - | 23.5 (5.2), 13 | 24.1 (4.7), 13 | 22.4 (5.3), 16 | 26.3 (6.5), 16 |
| F | | - | - | 16.9 (1.8), 5 | 17.3 (3.7), 5 | 16.6 (2.9), 3 | 18.9 (2.7), 3 |
| L/min | M | | - | - | 1.93 (0.50), 13 | 1.96 (0.44), 13 | 2.00 (0.47), 16 | 2.34 (0.58), 16 |
| F | | - | - | 1.18 (0.08), 5 | 1.22 (0.16), 5 | 1.06 (0.19), 3 | 1.20 (0.26), 3 |
| Age | years | M | | - | - | 60.6 (10.8), 13 | - | 57.6 (9.0), 16 | - |
| F | | - | - | 67.4 (3.6), 5 | - | 70.3 (5.5), 3 | - |
| BMI | kg/m2 | M | | - | - | 28.3 (5.5), 13 | 28.2 (6.0), 13 | 29.5 (4.9), 16 | 29.5 (4.6), 16 |
| F | | - | - | 27.7 (2.9), 5 | 28.08 (3.4), 5 | 26.0 (2.5), 3 | 25.7 (1.6), 3 |
| Body fat | % | M | | - | - | 25.8 (6.8), 13 | 25.3 (7.2), 13 | 31.3 (18.8), 16 | 26.3 (5.2), 16 |
| F | | - | - | 36.9 (3.8), 5 | 38.4 (5.1), 5 | 38.1 (5.1), 3 | 37.2 (4.4), 3 |
| SBP | mmHg | M | | - | - | 119 (17), 13 | 122 (13), 13 | 122 (12), 16 | 118 (14), 16 |
| F | | - | - | 118 (16), 5 | 130 (23), 5 | 133 (21), 3 | 128 (22), 3 |
| DBP | mmHg | M | | - | - | 69 (9), 13 | 68 (8), 13 | 71 (7), 16 | 67 (8), 16 |
| F | | - | - | 63 (4), 5 | 73 (7), 5 | 68 (11), 3 | 71 (4), 3 |
| Fasting Plasma Glucose | mmol/L | M | | - | - | 5.45 (0.65), 13 | 5.32 (0.64), 13 | 5.63 (1.35), 16 | 5.63 (0.62), 16 |
| F | | - | - | 4.98 (0.27), 5 | 5.20 (0.69), 4 | 5.37 (0.75), 3 | 6.10 (1.65), 3 |
| Fasting Plasma Insulin | µlU/ml | M | | - | - | 78.38 (58.8), 13 | 98.23 (92.57), 13 | 94.19 (59.83), 16 | 111.69 (57.13), 16 |
| F | | - | - | 67.40 (26.14), 5 | 45.00 (24.29), 5 | 60.00 (21.17), 3 | 40.00 (17.58), 3 |
| LDL cholesterol | mmol/L | M | | - | - | 1.50 (0.40), 13 | 1.49 (0.28), 13 | 1.61 (0.51), 16 | 1.69 (0.46), 16 |
| F | | - | - | 1.32 (0.35), 5 | 1.36 (0.16), 5 | 1.44 (0.78), 3 | 1.27 (0.56), 3 |
| HDL cholesterol | mmol/L | M | | - | - | 1.04 (0.35), 13 | 1.12 (0.30), 13 | 0.99 (0.17), 16 | 0.97 (0.20), 16 |
| F | | - | - | 1.06 (0.20), 5 | 1.13 (0.25), 5 | 1.07 (0.38), 3 | 1.02 (0.42), 3 |
| Triglycerides | mmol/L | M | | - | - | 1.10 (0.48), 13 | 1.02 (0.57), 13 | 1.12 (0.40), 16 | 1.08 (0.42), 16 |
| F | | - | - | 1.26 (0.26), 5 | 1.15 (0.33), 5 | 1.32 (0.85), 3 | 1.18 (0.51), 3 |
| Total cholesterol | mmol/L | M | | - | - | 3.03 (0.60), 13 | 3.02 (0.43), 13 | 3.10 (0.52), 16 | 3.14 (0.41), 16 |
| F | | - | - | 2.95 (0.52), 5 | 3.01 (0.38), 5 | 3.11 (1.26), 3 | 2.8 (1.0), 3 |
| Total cholesterol/HDL ratio | mmol/L | M | | - | - | 3.1 (0.8), 13 | 2.9 (0.8), 13 | 3.1 (1.0), 16 | 3.2 (1.1), 16 |
| F | | - | - | 2.8 (0.5), 5 | 2.7 (0.3), 5 | 2.9 (0.3), 3 | 2.8 (0.2), 3 |
| **Choi et al. 2018** | V̇O2peak | mL/kg/min | M | | - | - | 32.8 (6.8), 18 | 39.4 (7.3), 18 | 28.0 (9.4), 15 | 30.7 (9.2), 15 |
| F | | - | - | 25.6, 1 | 27.5, 1 | 15.6 (0.6), 2 | 20.5 (1.4), 2 |
| Age | years | M | | - | - | 53.4 (6.7), 18 | - | 56.9 (12.0), 15 | - |
| F | | - | - | 47, 1 | - | 68 (1.4), 2 | - |
| BMI | kg/m2 | M | | - | - | 24.5 (3.41), 18 | - | 25.7 (2.6), 15 | - |
| F | | - | - | 20.9, 1 | - | 26.0 (1.6), 2 | - |
| SBP | mmHg | M | | - | - | 108 (13), 18 | 109 (30), 18 | 109 (19), 15 | 118 (24), 15 |
| F | | - | - | 118, 1 | 120, 1 | 129 (9), 2 | 130 (4), 2 |
| DBP | mmHg | M | | - | - | 77 (9), 18 | 82 (12), 18 | 73 (10), 15 | 74 (17), 15 |
| F | | - | - | 69, 1 | 88, 1 | 76 (9), 2 | 76 (8), 2 |
| LDL | mg/dL | M | | - | - | 100.0 (46.4), 18 | 66.1 (25.1), 18 | 83.5 (37.7), 15 | 67.3 (18.5), 11 |
| F | | - | - | 96.0, 1 | 75.0, 1 | 60.5 (29.0), 2 | 61.00 (38.2), 2 |
| HDL | mg/dL | M | | - | - | 40.7 (12.40), 18 | 42.6 (9.3), 18 | 34.8 (6.0), 15 | 40.7 (7.7), 11 |
| F | | - | - | 54.0, 1 | 50.0, 1 | 41.5 (12.0), 2 | 42.0 (7.1), 2 |
| Triglycerides | mg/dL | M | | - | - | 134.4 (73.7), 18 | 130.7, 73.1, 18 | 165.3 (104.3), 15 | 181.0 (163.5), 11 |
| F | | - | - | 174.0, 1 | 163.0, 1 | 109.5 (44.5), 2 | 132.0 (80.6), 2 |
| Total cholesterol | mg/dL | M | | - | - | 159.7 (57.0), 18 | 123.9 (31.1), 18 | 127.3 (34.5), 15 | 128.5 (28.0), 11 |
| F | | - | - | 172.0, 1 | 143.0, 1 | 112.5 (41.7), 2 | 117.0 (58.0), 2 |
| 6MWT | meters | M | | - | - | 522.3 (79.7), 18 | 611.83 (64.9), 18 | 497.6 (82.5), 15 | 553.5 (81.9), 15 |
| F | | - | - | 371.0, 1 | 502.0, 1 | 365.5 (36.1), 2 | 440.0 (29.7), 2 |
| **Conraads et al. 2015** | V̇O2peak | L/min | M | | - | - | 2.0 (0.5), 81 | 2.4 (0.5), 81 | 2.0 (0.5), 80 | 2.3 (0.5), 80 |
| F | | - | - | 1.4 (0.3), 4 | 1.6 (0.3), 4 | 1.3 (0.3), 9 | 1.5 (0.4), 9 |
| Age | years | M | | - | - | 57.0 (8.7), 81 | - | 59.3 (9.3), 80 | - |
| F | | - | - | 59.8 (9.1), 4 | - | 60.1 (10.0), 9 | - |
| BMI | kg/m2 | M | | - | - | 27.7 (3.9), 81 | 27.9 (3.8), 81 | 28.4 (4.2), 80 | 28.1 (4.0), 80 |
| F | | - | - | 30.6 (7.0), 4 | 30.4 (6.9), 4 | 29.4 (5.6), 9 | 29.7 (5.7), 9 |
| Body fat | % | M | | - | - | 28.2 (5.2), 41 | 28.0 (5.1), 41 | 28.0 (6.4), 40 | 27.4 (6.0), 40 |
| F | | - | - | 40.5 (9.7), 3 | 38.8 (10.3), 3 | 39.0 (3.5), 5 | 38.5 (2.4), 5 |
| Waist to hip ratio |  | M | | - | - | 0.96 (0.06), 41 | 0.96. (0.07), 41 | 0.98 (0.06), 40 | 0.96 (0.07), 40 |
| F | | - | - | 0.88 (0.05), 3 | 0.84 (0.03), 3 | 0.85 (0.07), 5 | 0.84 (0.09), 5 |
| SBP | mmHg | M | | - | - | 119 (16), 81 | 122 (17), 81 | 121 (17), 80 | 118 (13), 80 |
| F | | - | - | 123 (13), 4 | 109 (11), 4 | 128 (23), 9 | 127 (23), 9 |
| DBP | mmHg | M | | - | - | 73 (11), 81 | 76 (11), 81 | 73 (9), 80 | 72 (8), 80 |
| F | | - | - | 74 (5), 4 | 72 (7), 4 | 71 (9), 9 | 75 (13), 9 |
| Fasting Plasma Glucose | mg/dL | M | | - | - | 97.8 (19.0), 80 | 101.2 (25.9), 80 | 95.9 (14.4), 80 | 98.3 (22.9), 80 |
| F | | - | - | 89.0 (7.5), 4 | 92.0 (15.6), 4 | 88.9 (14.8), 8 | 101.8 (33.9), 8 |
| LDL | mg/dL | M | | - | - | 72.8 (20.1), 79 | 75.7 (20.5), 79 | 76.5 (25.2), 80 | 80.5 (25.8), 80 |
| F | | - | - | 68.0 (10.0), 4 | 80.5 (21.7), 4 | 77.0 (29.2), 8 | 67.5 (17.6), 8 |
| HDL | mg/dL | M | | - | - | 43.6 (10.5), 80 | 46.9 (10.0), 80 | 41.7 (10.0), 80 | 46.0 (11.8), 80 |
| F | | - | - | 45.8 (9.5), 4 | 45.8 (11.6), 4 | 52.3 (15.7), 8 | 51.6 (14.0), 8 |
| Triglycerides | mg/dL | M | | - | - | 134.3 (89.2), 80 | 131.3 (80.8), 80 | 113.7 (44.3), 80 | 111.2 (41.9), 80 |
| F | | - | - | 89.8 (35.3), 4 | 107.5 (34.2), 4 | 107.5 (34.0), 8 | 108.0 (40.3), 8 |
| Total cholesterol | mg/dL | M | | - | - | 139.8 (27.8), 80 | 146.0 (29.2), 80 | 138.1 (29.6), 80 | 145.8 (31.0), 80 |
| F | | - | - | 129.3 (8.0), 4 | 146.8 (19.3), 4 | 146.9 (36.1), 8 | 138.0 (21.8), 8 |
| LDL/HDL ratio | mg/dL | M | | - | - | 1.7 (0.6), 79 | 1.7 (0.6), 79 | 1.94 (0.8), 80 | 1.86 (0.7), 80 |
| F | | - | - | 1.5 (0.5), 5 | 1.9 (0.9), 5 | 1.6 (0.7), 8 | 1.4 (0.6), 8 |
| Total Cholesterol/HDL ratio | mg/dL | M | | - | - | 3.3 (0.84), 79 | 3.2 (0.8), 79 | 3.5 (1.0), 80 | 3.3 (0.9), 80 |
| F | | - | - | 2.9 (0.6), 5 | 3.5 (1.1), 5 | 2.9 (0.8), 8 | 2.8 (0.8), 8 |
| Waist circumference | cm | M | | - | - | 99.8 (11.4), 81 | 99.0 (11.2), 81 | 100.4 (10.9), 80 | 98.3 (10.3), 80 |
| F | | - | - | 97.8 (19.0), 4 | 93.8 (17.4), 4 | 91.7 (12.4), 9 | 91.7 (14.8), 9 |
| Waist to hip ratio | - | M | | - | - | 0.96 (0.06), 41 | 0.96. (0.07), 41 | 0.98 (0.06), 40 | 0.96 (0.07), 40 |
| F | | - | - | 0.88 (0.05), 3 | 0.84 (0.03), 3 | 0.85 (0.07), 5 | 0.84 (0.09), 5 |
| **Currie et al. 2013** | V̇O2peak | mL/kg/min | M | | - | - | 20.6 (2.8), 10 | 25.3 (3.9), 10 | 18.8 (6.0), 10 | 22.6 (6.4), 10 |
| F | | - | - | 12.6, 1 | 17.3, 1 | 18.5, 1 | 17.3, 1 |
| Age | years | M | | - | - | 62.9 (10.6), 10 | - | 67.6 (8.1), 10 | - |
| F | | - | - | 50.0, 1 | - | 68.0, 1 | - |
| BMI | kg/m2 | M | | - | - | 28.0 (5.2), 10 | 27.7 (5.1), 10 | 27.6 (4.3), 10 | 27.4 (4.3), 10 |
| F | | - | - | 27.0, 1 | 27.7, 1 | 24.2, 1 | 22.5, 1 |
| SBP | mmHg | M | | - | - | 126 (16), 10 | 122 (9), 10 | 127 (16), 10 | 122 (14), 10 |
| F | | - | - | 107, 1 | 111, 1 | 103, 1 | 77, 1 |
| DBP | mmHg | M | | - | - | 82 (12), 10 | 80 (10), 10 | 77 (9), 10 | 70 (6), 10 |
| F | | - | - | 73, 1 | 68, 1 | 60, 1 | 45, 1 |
| LDL | mg/dL | M | |  |  | 1.5 (0.42), 7 | 1.6 (0.4), 7 | 2.0 (1.0), 7 | 1.6 (0.7), 7 |
| F | | - | - | 2.4, 1 | 2.4, 1 | 1.7, 1 | 1.8, 1 |
| HDL | mg/dL | M | | - | - | 0.9 (0.2), 7 | 1.0 (0.2), 7 | 1.1 (0.2), 7 | 1.1 (0.2) 7 |
| F | | - | - | 1.5, 1 | 1.7, 1 | 1.3, 1 | 1.5, 1 |
| Triglycerides | mg/dL | M | | - | - | 1.2 (0.4), 7 | 1.1 (0.19), 7 | 0.9 (0.2), 7 | 0.9 (0.4), 7 |
| F | | - | - | 2.3, 1 | 1.0, 1 | 1.2, 1 | 1.0, 1 |
| Total cholesterol | mmol/L | M | | - | - | 3.0 (0.4), 7 | 3.1 (0.4), 7 | 3.5 (1.1), 7 | 3.1 (0.8), 7 |
| F | | - | - | 5.0, 1 | 4.5, 1 | 3.6, 1 | 3.7, 1 |
| LDL/HDL | mmol/L | M | | - | - | 1.7 (0.6), 7 | 1.8 (0.7), 7 | 1.7 (0.8), 7 | 1.6 (0.8), 7 |
| F | | - | - | 1.6, 1 | 1.4, 1 | 1.3, 1 | 1.2, 1 |
| Total cholesterol/HDL ratio | mmol/L | M | | - | - | 3.3 (0.8), 7 | 3.3 (0.9), 7 | 3.1 (0.9), 7 | 3.0 (1.0), 7 |
| F | | - | - | 3.3, 1 | 2.7, 1 | 2.7, 1 | 2.5, 1 |
| **Currie et al. 2015** | V̇O2peak | mL/kg/min | M | | - | - | 21.1 (3.3), 9 | 27.2 (6), 9 | 20.0 (7.8), 9 | 25.1 (7.7), 9 |
| F | | - | - | - | - | 18.5, 1 | 16.1, 1 |
| Age | years | M | | - | - | 63.0 (8.0), 9 | - | 66.0 (8.3), 9 | - |
| F | | - | - | - | - | 68.0, 1 | - |
| BMI | kg/m2 | M | | - | - | 28.9 (4.8), 9 | 29.0 (4.5), 9 | 27.7 (4.1), 9 | 27.6 (4.8), 9 |
| F | | - | - | - | - | 24.3, 1 | 21.5, 1 |
| SBP | mmHg | M | | - | - | 123 (8), 8 | 123 (9), 8 | 123 (10), 8 | 125 (14), 8 |
| F | | - | - | - | - | - | - |
| DBP | mmHg | M | | - | - | 61 (3), 8 | 64 (5), 8 | 64 (6), 8 | 66 (6), 8 |
| F | | - | - | - | - | - | - |
| LDL | mmol/L | M | | - | - | 1.4 (0.6), 5 | 1.7 (1.1), 5 | 2.1 (0.8), 8 | 1.9 (0.5), 8 |
| F | | - | - | - | - | - | - |
| HDL | mmol/L | M | | - | - | 1.0 (0.2), 5 | 1.1 (0.2), 5 | 1.2 (0.2), 8 | 1.3 (0.3), 8 |
| F | | - | - | - | - | - | - |
| Triglycerides | mmol/L | M | | - | - | 0.9 (0.2), 5 | 0.9 (0.2), 5 | 0.9 (0.3), 8 | 0.9 (0.3), 8 |
| F | | - | - | - | - | - | - |
| Total cholesterol | mmol/L | M | | - | - | 2.8 (0.6), 5 | 3.2 (1.2), 5 | 3.5 (1.04), 8 | 3.6 (0.6), 8 |
| F | | - | - | - | - | - | - |
| LDL/HDL | mmol/L | M | | - | - | 1.6 (0.9), 5 | 1.7 (1.1), 5 | 1.9 (0.7), 8 | 1.5 (0.6), 8 |
| F | | - | - | - | - | - | - |
| Total cholesterol/HDL ratio | mmol/L | M | | - | - | 3.1 (1.0), 5 | 3.0 (1.1), 5 | 3.2 (0.8), 8 | 2.9 (0.7), 8 |
| F | | - | - | - | - | - | - |
| **Dobraszkiewicz-Wasilewska et al. 2009 \*\*** | V̇O2peak | mL/kg/min | M | 24.7 (4.1), 90 | | 26.8 (4.9), 90 | 22.6 (3.7), 61 | 24.8 (4.2), 61 | - | - |
| V̇O2peak | L/min | M | | 2.10 (0.50), 90 | 2.20 (0.50), 90 | 1.90 (0.40), 61 | 2.10 (0.40), 61 | - | - |
| **Godfrey 2013** | V̇O2peak (3-month follow up) | mL/kg/min | M | | - | - | 34.0, n=1 | 38.0, n=1 | - | - |
| V̇O2peak (10-month follow up) | mL/kg/min | M | | - | - | 34.0, n=1 | 43.0, n=1 | - | - |
| Age | years | M | | - | - | 50.0, n=1 | - | - | - |
| **Jayo-Montoya et al. 2020⸶** | V̇O2peak | mL/kg/min | M | | 26.1 (9.2), 11 | 27.6 (7.7), 9 | 24.0 (5.1), 23 | 28.7 (7.3), 21 | 22.7 (7.8), 24 | 27.2 (7.2), 18 |
| F | | 26.0 (8.4), 2 | 24.5 (2.1), 2 | 16.0 (6.1), 3 | 22.5 (12.0), 3 | 18.5 (6.1), 3 | 23.0 (6.0), 3 |
| Age | years | M | | 56.8 (7.8), 11 | - | 59.1 (7.5), 24 | - | 58.6 (9.6), 23 | - |
| F | | 51.0 (1.4), 2 | - | 57.8 (10.6), 3 | - | 60.7 (10.7), 3 | - |
| BMI | kg/m2 | M | | 28.6 (4.0), 12 | 28.6 (4.1), 12 | 30.4 (4.6), 23 | 29.9 (4.5), 21 | 30.4 (6.7), 24 | 29.9 (6.3), 24 |
| F | | 22.6 (1.0), 2 | 23.2 (1.9), 2 | 32.1 (6.3), 5 | 32.0 (5.6), 5 | 30.6 (8.6), 4 | 30.2 (8.7), 4 |
| SBP | mmHg | M | | 121 (10), 12 | 129 (11), 12 | 133 (8), 23 | 125 (11), 23 | 127 (12), 24 | 126 (11), 24 |
| F | | 114 (12), 2 | 124 (8), 2 | 135 (18), 5 | 128 (18), 5 | 125 (21), 4 | 118 (21), 7 |
| DBP | mmHg | M | | 76 (9), 12 | 77 (7), 12 | 77 (8), 23 | 69 (8), 23 | 78 (7), 24 | 71 (7), 24 |
| F | | 72 (19), 2 | 85 (5), 2 | 90 (7), 5 | 81 (5), 5 | 76 (7), 4 | 66 (9), 4 |
| Waist circumference | cm | M | | 97.2 (9.1), 12 | 95.9 (10.3), 12 | 102.8 (9.4), 23 | 99.4 (7.8), 21 | 103.4 (13.6), 24 | 98.8 (13.6), 18 |
| F | | 74.0 (1.4), 2 | 77.2 (1.8), 2 | 100.1 (15.5), 5 | 89.7 (14.4), 2 | 87.8 (12.8), 4 | 80.5 (5.6), 3 |
| **Keech et al. 2020** | V̇O2peak | mL/kg/min | M | | - | - | 28.4 (8.2), 27 | 31.5 (8.5), 27 | - | - |
| F | | - | - | 26.1, 1 | 28.8, 1 | - | - |
| V̇O2peak | L/min | M | | - | - | 2.3 (0.4), 27 | 2.6 (0.4), 27 | - | - |
| F | | - | - | 1.4, 1 | 1.4, 1 | - | - |
| Age | years | M | | - | - | 53.4 (6.9), 27 | - | - | - |
| F | | - | - | 58, 1 | - | - | - |
| BMI | kg/m2 | M | | - | - | 28.0 (6.8), 28 | 27.8 (6.8), 28 | - | - |
| F | | - | - | 20.5, 1 | 19.7, 1 | - | - |
| Body fat | % | M | | - | - | 29.1 (8.5), 28 | 28.2 (8.8), 28 | - | - |
| F | | - | - | 36.2, 1 | 34.2, 1 | - | - |
| SBP | mmHg | M | | - | - | 133 (11), 28 | 127 (10), 28 | - | - |
| F | | - | - | 164, 1 | 139, 1 | - | - |
| DBP | mmHg | M | | - | - | 80 (6), 28 | 78 (7), 28 | - | - |
| F | | - | - | 98, 1 | 77, 1 | - | - |
| Waist circumference | cm | M | | - | - | 97.3 (15.2), 26 | 95.4 (15.0), 26 | - | - |
| F | | - | - | 71.5, 1 | 70, 1 | - | - |
| **Madssen et al. 2014a** | V̇O2peak | mL/kg/min | M | | 28.4 (5.0), 18 | 29.5 (5.5), 18 | 33.0 (5.6), 18 | 33.6 (5.7), 18 | - | - |
| F | | 26.4 (3.7), 6 | 26.6 (6.0), 6 | 29.4 (7.4), 7 | 30.6 (5.9), 7 | - | - |
| V̇O2peak | L/min | M | | 2.5 (0.5), 18 | 2.7 (0.5), 18 | 2.8 (0.7), 18 | 3.0 (0.7), 18 | - | - |
| F | | 2.0 (0.4), 6 | 2.0 (0.4), 6 | 1.8 (0.4), 7 | 1.9 (0.2), 7 | - | - |
| Age | years | M | | 65.1 (7.8), 18 | - | 57.6 (8.7), 18 | - | - | - |
| F | | 62.3 (10.8), 6 | - | 60.9 (8.6), 7 | - | - | - |
| BMI | kg/m2 | M | | 28.1 (3.6), 18 | 28.8 (4.08), 18 | 26.9 (3.2), 18 | 27.0 (3.2), 18 | - | - |
| F | | 27.8 (4.9), 6 | 28.3 (4.7), 6 | 23.2 (1.5), 7 | 23.7 (1.8), 7 | - | - |
| SBP | mmHg | M | | 132 (14), 18 | 133 (18), 17 | 130 (11), 18 | 138 (11), 18 | - | - |
| F | | 136 (17), 6 | 135 (14), 6 | 134 (23), 7 | 124 (17), 7 | - | - |
| DBP | mmHg | M | | 78 (7), 18 | 80 (8), 17 | 77 (11), 18 | 80 (8), 18 | - | - |
| F | | 81(7), 6 | 76(6), 6) | 70(9), 7 | 70(12), 7 | - | - |
| Fasting plasma glucose | mmol/L | M | | 6.8 (4.2), 16 | 6.5 (2.3), 18 | 6.3 (2.0), 18 | 6.6 (2.7), 18 | - | - |
| F | | 6.4 (1.8), 6 | 6.7 (2.3), 6 | 5.3 (0.3), 7 | 5.2 (0.5), 7 | - | - |
| HbA1c | % | M | | 6.1 (1.2), 17 | 6.1 (0.9), 18 | 6.2 (0.8), 17 | 6.4 (1.6), 18 | - | - |
| F | | 6.2 (1.5), 6 | 6.2 (1.3), 6 | 5.7 (0.3), 7 | 5.7 (0.2), 7 | - | - |
| LDL | mmol/L | M | | 2.4 (1.0), 18 | 2.3 (0.6), 17 | 2.1 (0.4), 18 | 2.2 (0.5), 18 | - | - |
| F | | 1.8 (0.7), 6 | 1.9 (0.9), 6 | 1.8 (0.6), 7 | 1.7 (0.6), 7 | - | - |
| HDL | mmol/L | M | | 1.4 (0.4), 18 | 1.4 (0.38), 17 | 1.3 (0.4), 18 | 1.3 (0.5), 18 | - | - |
| F | | 1.7 (0.4) 6 | 1.8 (0.4), 6 | 1.4 (0.3), 7 | 1.4 (0.3), 7 | - | - |
| Triglycerides | mmol/L | M | | 1.5 (0.9), 18 | 1.2 (0.8), 18 | 1.5 (0.6), 18 | 1.5 (1.2), 18 | - | - |
| F | | 1.1 (0.5), 6 | 1.1 (0.5), 6 | 0.7 (0.3), 7 | 0.8 (0.2), 7 | - | - |
| Waist circumference | cm | M | | 103.5 (11.4), 17 | 105.5 (11.0), 16 | 96.8 (8.1), 18 | 96.8 (7.9), 18 | - | - |
| F | | 97.8 (16.0), 6 | 99.3 (13.5), 6 | 82.0 (4.2), 7 | 83.1 (4.9), 7 | - | - |
| **Madssen et al. 2014b** | V̇O2peak | mL/kg/min | M | | - | - | 31.9 (5.0), 14 | 35.5 (6.2), 14 | 32.06 (8.1), 14 | 34.1 (7.4), 14 |
| F | | - | - | 28.0 (2.1), 2 | 31.6 (4.4), 2 | 27.8 (5.3), 7 | 29.1 (5.5), 7 |
| V̇O2peak | L/min | M | | - | - | 2.8 (0.4), 14 | 3.1 (0.5), 14 | 2.9 (0.7), 14 | 3.0 (0.8), 14 |
| F | | - | - | 1.8 (0.0), 2 | 2.0 (0.1), 2 | 1.9 (0.4), 7 | 2.2 (0.5), 7 |
| Age | years | M | | - | - | 55.4 (9.7), 14 | - | 60.1 (8.4), 14 | - |
| F | | - | - | 60.5 (12.0), 2 | - | 61.3 (6.05), 7 | - |
| BMI | kg/m2 | M | | - | - | 27.8 (3.2), 14 | 27.8 (3.0), 14 | 27.2 (4.3), 14 | 27.1 (4.5), 14 |
| F | | - | - | 23.5 (3.7), 2 | 23.6 (3.3), 2 | 24.9 (2.9), 7 | 25.0 (2.7), 7 |
| Fasting plasma glucose | mmol/L | M | | - | - | 6.8 (3.0), 14 | 6.6 (2.1), 14 | 6.1 (0.7), 14 | 6.1 (0.9), 14 |
| F | | - | - | 5.0 (1.2), 2 | 5.6 (1.2), 2 | 5.4 (0.7), 7 | 5.4 (0.7), 7 |
| HbA1c | % | M | | - | - | 6.2 (1.3), 14 | 6.1 (1.0), 14 | 6.0 (0.5), 14 | 5.9 (0.5), 14 |
| F | | - | - | 5.7 (0.8), 2 | 5.5 (0.8), 2 | 5.7 (0.4), 7 | 5.5 (0.2), 7 |
| Total cholesterol | mmol/L | M | | - | - | 4.1 (0.8), 14 | 4.1 (0.8), 14 | 4.3 (0.5), 14 | 4.3 (0.5), 14 |
| F | | - | - | 4.2 (1.1), 2 | 5.0 (1.6), 2 | 4.5 (0.3), 7 | 4.9 (0.9), 7 |
| LDL | mmol/L | M | | - | - | 2.4 (0.6), 14 | 2.2 (0.6), 14 | 2.5 (0.5), 14 | 2.3 (0.3), 14 |
| F | | - | - | 2.1 (0.5), 2 | 2.5 (1.0), 2 | 2.3 (0.5), 7 | 2.6 (0.7), 7 |
| HDL | mmol/L | M | | - | - | 1.2 (0.2), 14 | 1.2 (0.2), 14 | 1.2 (0.3), 14 | 1.3 (0.3), 14 |
| F | | - | - | 1.5 (0.4), 2 | 1.9 (0.6), 2 | 1.7 (0.4), 7 | 1.8 (0.3), 7 |
| Triglycerides | mmol/L | M | | - | - | 1.3 (0.7), 14 | 1.4 (0.8), 14 | 1.5 (0.7), 14 | 1.6 (0.9), 14 |
| F | | - | - | 1.1 (0.2), 2 | 1.3 (0.2), 2 | 1.0 (0.3), 7 | 1.1 (0.4), 7 |
| Waist circumference | cm | M | | - | - | 100.7 (9.3), 14 | 98.6 (7.5), 14 | 101.9 (10.6), 14 | 99.9 (10.5), 14 |
| F | | - | - | 84.0 (9.9), 2 | 82.5 (12.02), 2 | 92.3 (11.5), 7 | 91.0 (10.8), 7 |
| Waist to hip ratio |  | M | | - | - | 1.04 (0.04), 14 | 1.02 (0.04), 14 | 1.02 (0.05), 14 | 1.00 (0.05), 14 |
| F | | - | - | 0.94 (0.09), 2 | 0.92 (0.12), 2 | 0.92 (0.06), 7 | 0.91 (0.06), 7 |
| **Moholdt et al. 2012a** | V̇O2peak | mL/kg/min | M | | - | - | 26.3 (3.8), 11 | 31.1 (4.1), 11 | 25.5 (4.7), 9 | 29.0 (6.4), 9 |
| F | | - | - | 23.1 (4.4), 3 | 27.2 (4.1), 3 | 18.9 (5.0), 3 | 23.8 (6.2), 3 |
| Age | years | M | | - | - | 65.8 (7.5), 11 | - | 63.6 (7.3), 9 | - |
| F | | - | - | 58.3 (5.5), 3 | - | 56.0 (8.5), 3 | - |
| BMI | kg/m2 | M | | - | - | 25.8 (3.0), 11 | 26.0 (3.0), 11 | 27.5 (4.6), 9 | 27.1 (5.0), 9 |
| F | | - | - | 25.2 (4.9), 3 | 25.6 (5.2), 3 | 32.2 (4.5), 3 | 31.2 (4.8), 3 |
| Fasting plasma glucose | mmol/L | M | | - | - | 5.5 (1.3), 11 | 5.6 (0.7), 11 | 5.6 (0.4), 8 | 5.6 (0.5), 9 |
| F | | - | - | 5.4 (0.6), 3 | 5.3 (0.6), 3 | 6.1 (1.8), 3 | 6.3 (1.8), 3 |
| HbA1c | % | M | | - | - | 5.3 (0.7), 11 | 5.5 (0.4), 11 | 5.4 (0.3), 9 | 5.7 (0.2), 8 |
| F | | - | - | 5.4 (0.2), 3 | 5.6 (0.2), 3 | 6.1 (0.9), 3 | 6.4 (1.4), 3 |
| HDL | mmol/L | M | | - | - | 1.1 (0.3), 11 | 1.3 (0.2), 11 | 1.2 (0.3), 9 | 1.2 (0.3), 8 |
| F | | - | - | 1.1 (0.2), 3 | 1.4 (0.3), 3 | 1.2 (0.1), 3 | 1.2 (0.2), 3 |
| Triglycerides | mmol/L | M | | - | - | 1.0 (0.3), 11 | 1.5 (1.1), 11 | 1.6 (0.6), 9 | 1.3 (0.4), 8 |
| F | | - | - | 2.1 (1.3), 3 | 1.6 (0.8), 3 | 2.0 (0.5), 3 | 1.8 (1.4), 3 |
| Total cholesterol | mmol/L | M | | - | - | 3.9 (1.3), 11 | 4.1 (0.3), 11 | 4.2 (0.6), 9 | 4.2 (0.8), 9 |
| F | | - | - | 5.0 (1.4), 3 | 5.2 (1.2), 3 | 4.1 (0.2), 3 | 4.5 (0.5), 3 |
| **Moholdt et al. 2012b** | V̇O2peak | mL/kg/min | M | | 33.5 (6.3), 48 | 36.1 (7.5), 48 | 33.2 (5.6), 26 | 38.3 (8.5), 26 | - | - |
| F | | 26.4 (4.7), 10 | 27.7 (5.1), 10 | 25.8 (3.2), 5 | 28.3 (4.0), 5 | - | - |
| Age | years | M | | 56.6 (9.3), 48 | - | 57.0 (10.4), 26 | - | - | - |
| F | | 64.2 (5.9), 10 | - | 53.8 (10.1), 5 | - | - | - |
| BMI | kg/m2 | M | | 27.5 (4.0), 48 | 27.5 (3.8), 48 | 26.7 (3.4), 26 | 26.6 (3.8), 26 | - | - |
| F | | 25.4 (3.7), 10 | 25.4 (4.2), 10 | 27.2 (1.8), 5 | 27.4 (2.2), 5 | - | - |
| Fasting plasma glucose | mmol/L | M | | 5.7 (1.0=), 48 | 5.6 (0.5), 47 | 5.7 (0.8), 26 | 5.6 (0.8), 24 | - | - |
| F | | 5.2 (1.0), 10 | 5.5 (0.7), 10 | 7.9 (5.8), 5 | 6.9 (3.2), 5 | - | - |
| Total cholesterol | mmol/L | M | | 3.8 (0.8), 48 | 3.9 (0.8), 46 | 3.8 (0.6), 26 | 3.9 (0.7), 26 | - | - |
| F | | 4.2 (0.8), 10 | 4.4 (0.7), 10 | 4.2 (0.9), 5 | 4.2 (1.2), 5 | - | - |
| LDL | mmol/L | M | | 2.1 (0.7), 48 | 2.2 (0.7), 46 | 2.0 (0.5), 26 | 2.0 (0.5), 26 | - | - |
| F | | 2.2 (0.7), 10 | 2.4 (0.5), 10 | 2.2 (0.6), 5 | 1.9 (0.4), 5 | - | - |
| HDL | mmol/L | M | | 1.2 (0.3), 48 | 1.2 (0.3), 26 | 1.3 (0.3), 26 | 1.3 (0.4), 26 | - | - |
| F | | 1.4 (0.3), 10 | 1.5 (0.3), 10 | 1.3 (0.3), 5 | 1.3 (0.4), 5 | - | - |
| Triglycerides | mmol/L | M | | 1.1 (0.5), 48 | 1.1 (0.5), 46 | 1.2 (0.6), 26 | 1.3 (0.6), 26 | - | - |
| F | | 1.2 (0.4), 10 | 1.3 (0.5), 10 | 1.5 (0.9), 5 | 2.1 (2.2), 5 | - | - |
| Total cholesterol | mmol/L | M | | 3.8 (0.8), 48 | 3.9 (0.8), 46 | 3.8 (0.6), 26 | 3.9 (0.7), 26 | - | - |
| F | | 4.2 (0.8), 10 | 4.4 (0.7), 10 | 4.2 (0.9), 5 | 4.2 (1.2), 5 | - | - |
| **Rognmo et al. 2004** | V̇O2peak | mL/kg/min | M | | - | - | 34.9 (8.7), 6 | 42.0 (11.3), 6 | 33.2 (4.5), 8 | 36.2 (4.2), 8 |
| F | | - | - | 22.4 (1.1), 2 | 25.0 (1.2), 2 | 23.6, 1 | 24.1, 1 |
| V̇O2peak | L/min | M | | - | - | 2.7 (0.6), 6 | 3.2 (0.8), 6 | 2.7 (0.3), 8 | 2.9 (0.3), 8 |
| F | | - | - | 1.8 (0.2), 2 | 2.0 (0.2), 2 | 1.9, 1 | 1.9, 1 |
| Age | years | M | | - | - | 63.2 (12.3), 6 | - | 61.0 (7.8), 8 | - |
| F | | - | - | 62.0 (11.3), 2 | - | 63.0, 1 | - |
| BMI | kg/m2 | M | | - | - | 25.2 (2.8), 6 | 25.0 (2.9), 6 | 26.6 (2.7), 8 | 26.2 (2.4), 8 |
| F | | - | - | 31.3 (5.2), 2 | 31.8 (5.3), 2 | 29.6, 1 | 29.6, 1 |
| **Stein 1976** | V̇O2peak | L/min | M | | 2.7 (NR), 6 | 2.7 (NR), 6 | 2.7 (NR), 16 | 3.1 (NR), 16 | - | - |
| **Taylor et al. 2020** | V̇O2peak | mL/kg/min | M | | - | - | 28.7 (6.1), 38 | 31.7 (6.8), 37 | 28.9 (7.2), 37 | 30.2 (7.3), 37 |
| F | | - | - | 22.23 (1.3), 6 | 24.3 (2.4), 6 | 21.8 (3.2), 6 | 21.7 (3.1), 6 |
| V̇O2peak | L/min | M | | - | - | 2.5 (0.5), 38 | 2.7 (0.6), 37 | 2.6 (0.6), 37 | 2.7 (0.7), 37 |
| F | | - | - | 1.5 (0.2), 6 | 1.6 (0.1), 6 | 1.5 (0.1), 6 | 1.5 (0.1), 6 |
| Age | years | M | | - | - | 64 (8), 38 | - | 64 (8), 37 | - |
| F | | - | - | 69 (3), 6 | - | 69 (5), 6 | - |
| BMI | kg/m2 | M | | - | - | 28.3 (4.3), 38 | 28.2 (4.2), 38 | 28.6 (4.1), 37 | 28.4 (4.3), 37 |
| F | | - | - | 27.2 (3.8), 6 | 27.1 (4.0), 6 | 26.5 (2.8), 6 | 26.5 (2.5), 6 |
| Body fat | % | M | | - | - | 30.8 (5.5), 38 | 30.2 (5.4), 38 | 31.4 (4.4), 37 | 30.3 (4.4), 37 |
| F | | - | - | 39.3 (3.6), 6 | 39.0 (4.1), 6 | 43.1 (4.1), 6 | 43.1 (4.0), 6 |
| SBP | mmHg | M | | - | - | 128 (16), 38 | 131 (12), 38 | 128 (14), 37 | 125 (12), 38 |
| F | | - | - | 128 (8), 6 | 127 (11), 6 | 139 (14), 6 | 133 (12), 6 |
| DBP | mmHg | M | | - | - | 76 (10), 38 | 77 (8), 38 | 74 (10), 37 | 73 (8), 37 |
| F | | - | - | 71 (11), 6 | 71 (9), 6 | 73 (7), 6 | 71 (6.4), 6 |
| Fasting plasma glucose | mmol/L | M | | - | - | 6.0 (1.8), 38 | 5.8 (0.6), 38 | 6.2 (1.2), 37 | 6.2 (1.6), 37 |
| F | | - | - | 5.4 (0.4), 6 | 5.3 (0.3), 6 | 5.7 (0.5), 6 | 5.7 (0.6), 6 |
| Fasting plasma insulin | µlU/ml | M | | - | - | 10.3 (6.0), 38 | 10.11 (6.7), 38 | 8.6 (5.9), 37 | 7.9 (5.3), 37 |
| F | | - | - | 7.3 (2.3), 6 | 7.3 (1.8), 6 | 9.2 (3.6), 6 | 10.0 (4.7), 6 |
| HDL | mmol/L | M | | - | - | 1.3 (0.3), 38 | 1.3 (0.3), 38 | 1.2 (0.3), 37 | 1.2 (0.3), 37 |
| F | | - | - | 1.6 (0.3), 6 | 1.6 (0.3), 6 | 1.7 (0.6), 6 | 1.8 (0.6), 6 |
| LDL | mmol/L | M | | - | - | 2.0 (0.8), 38 | 1.9 (0.8), 37 | 1.9 (0.6), 37 | 1.8 (0.5), 37 |
| F | | - | - | 1.9 (0.4), 6 | 1.8 (0.4), 6 | 2.2 (0.9), 6 | 2.7 (1.8), 6 |
| Triglycerides | mmol/L | M | | - | - | 1.4 (1.6), 38 | 1.2 (0.7), 38 | 1.1 (0.5), 37 | 1.1 (0.4), 37 |
| F | | - | - | 1.0 (0.2), 6 | 0.9 (0.2), 6 | 1.2 (0.6), 6 | 1.1 (0.5), 6 |
| Total cholesterol | mmol/L | M | | - | - | 3.8 (0.9), 38 | 3.6 (0.9), 38 | 3.6 (0.7), 37 | 3.5 (0.6), 37 |
| F | | - | - | 4.1 (0.3), 6 | 4.0 (0.2), 6 | 4.6 (1.0), 6 | 5.0 (1.8), 6 |
| LDL/HDL ratio | mmol/L | M | | - | - | 1.6 (0.6), 38 | 1.5 (0.6), 37 | 1.6 (0.6), 37 | 1.5 (0.6), 37 |
| F | | - | - | 1.3 (0.4), 6 | 1.2 (0.3), 6 | 1.4 (0.7), 6 | 1.7 (1.4), 6 |
| Total Cholesterol/HDL ratio | mmol/L | M | | - | - | 3.1 (0.7), 38 | 2.9 (0.7), 6 | 3.0 (0.7), 6 | 2.9 (0.6), 6 |
| F | | - | - | 2.7 (0.4), 6 | 2.5 (0.4), 6 | 2.8 (0.9), 6 | 3.1 (1.6), 6 |
| Waist circumference | cm | M | | - | - | 101.4 (11.4), 38 | 99.5 (11.2), 38 | 100.7 (11.3), 37 | 98.7 (11.1), 37 |
| F | | - | - | 85.0 (9.9), 6 | 83.9 (9.5), 6 | 89.7 (9.6), 6 | 88.3 (8.8), 6 |
| Abbreviations: BMI, body mass index; DBP, diastolic blood pressure; F, female; HbA1c, glycosylated hemoglobin; HDL, high-density lipoprotein cholesterol; HIIT, high-intensity interval training; LDL, low-density lipoprotein cholesterol; M, male; METs, metabolic equivalents; MICT, moderate to vigorous intensity continuous training; NR, not reported; SBP, systolic blood pressure; V̇O2peak, peak aerobic capacity; 6MWT, six-minute walk test. \*Control group represents home-based HIIT, HIIT represents group-based HIIT and MICT represents treadmill-based HIIT. \*\*Control group represents non-invasive therapy, HIIT represents individuals having undergone coronary artery bypass grafting. Both groups performed HIIT. ⸶ HIIT represents low-volume high-intensity interval training, MICT represents high-volume high-intensity interval training. | | | | | | | | | | |