**Table X. GRADE quality of evidence of included studies and relevant outcomes**

| **Certainty assessment** | | | | | | | **№ of patients** | | **Effect** | | **Certainty** | **Importance** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **№ of studies** | **Study design** | **Risk of bias** | **Inconsistency** | **Indirectness** | **Imprecision** | **Other considerations** | **Recreational football** | **other exercise and control** | **Relative (95% CI)** | **Absolute (95% CI)** |
| Systolic blood pressure in MEN (follow up: range 12 weeks to 12 weeks; Scale from: 110 to 151) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 238 | 194 | - | MD **6.5 mmHg lower** (10.6 lower to 2.4 lower) | ⨁⨁⨁◯ MODERATE |  |
| Systolic blood pressure in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 113 to 142) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 307 | 291 | - | MD **0.5 mmHg lower** (4.2 lower to 3.3 higher) | ⨁⨁⨁◯ MODERATE |  |
| Systolic blood pressure with MILD HYPERTENSION (follow up: range 12 weeks to 54 weeks; Scale from: 138 to 151) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 74 | 43 | - | MD **7.8 mmHg lower** (1.7 lower to 1.1 higher) | ⨁⨁⨁◯ MODERATE |  |
| Systolic blood pressure with NORMOTENSIVE (follow up: range 12 weeks to 54 weeks; Scale from: 111 to 125) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 333 | 308 | - | MD **2.9 mmHg lower** (7.6 lower to 1.7 higher) | ⨁⨁⨁◯ MODERATE |  |
| Systolic blood pressure with PREHYPERTENSIVE (follow up: range 12 weeks to 54 weeks; Scale from: 130 to 139) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 138 | 134 | - | MD **3.2 mmHg lower** (7.2 lower to 0.7 higher) | ⨁⨁⨁◯ MODERATE |  |
| Systolic blood pressure in > 65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 125 to 136) | | | | | | | | | | | | |
| 17 | randomised trials | serious b | serious c | not serious | not serious | publication bias strongly suspected a | 18 | 17 | - | MD **7.1 mmHg lower** (7.8 lower to 4.8 higher) | ⨁◯◯◯ VERY LOW |  |
| Systolic blood pressure in 19-45 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 111 to 136) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 164 | 139 | - | MD **1.6 mmHg lower** (7.4 lower to 4.1 higher) | ⨁⨁⨁◯ MODERATE |  |
| Systolic blood pressure in 46-65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 113 to 151) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 294 | 259 | - | MD **4.7 mmHg lower** (8.1 lower to 1.2 lower) | ⨁⨁⨁◯ MODERATE |  |
| Systolic blood pressure <12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 111 to 134) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 134 | 159 | - | MD **3 mmHg lower** (7 lower to 1.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Systolic blood pressure >12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 111 to 151) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 386 | 341 | - | MD **3.1 mmHg lower** (8 lower to 0.3 lower) | ⨁⨁⨁⨁ HIGH |  |
| Systolic blood pressure <2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 111 to 153) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 246 | 206 | - | MD **5.3 mmHg lower** (10.7 lower to 0.3 higher) | ⨁⨁⨁⨁ HIGH |  |
| Systolic blood pressure >2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 111 to 142) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 299 | 279 | - | MD **2.2 mmHg lower** (4.5 lower to 0.2 higher) | ⨁⨁⨁◯ MODERATE |  |
| Diastolic blood pressure in MEN (follow up: range 12 weeks to 54 weeks; Scale from: 58 to 96) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 209 | 174 | - | MD **4.4 mmHg lower** (7.2 lower to 1.5 lower) | ⨁⨁⨁⨁ HIGH |  |
| Diastolic blood pressure in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 60 to 97) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 369 | 348 | - | MD **0.3 mmHg lower** (3.5 lower to 2.8 higher) | ⨁⨁⨁⨁ HIGH |  |
| Diastolic blood pressure with MILD HYPERTENSION (follow up: range 12 weeks to 54 weeks; Scale from: 87 to 97) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 74 | 43 | - | MD **6.7 mmHg lower** (17.4 lower to 3.9 higher) | ⨁⨁⨁⨁ HIGH |  |
| Diastolic blood pressure with NORMOTENSION (follow up: range 12 weeks to 54 weeks; Scale from: 58 to 78) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 390 | 365 | - | MD **1.4 mmHg lower** (4.1 lower to 1.4 higher) | ⨁⨁⨁⨁ HIGH |  |
| Diastolic blood pressure with PREHYPERTENSION (follow up: range 12 weeks to 54 weeks; Scale from: 86 to 88) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 114 | 114 | - | MD **1.7 mmHg lower** (5.8 lower to 2.5 higher) | ⨁⨁⨁⨁ HIGH |  |
| Diastolic blood pressure in > 65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 74 to 74) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 18 | 17 | - | MD **3.5 mmHg lower** (4 lower to 2.3 higher) | ⨁⨁⨁⨁ HIGH |  |
| Diastolic blood pressure in 19-45 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 68 to 88) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 197 | 176 | - | MD **1.1 mmHg lower** (5.2 lower to 3.2 higher) | ⨁⨁⨁⨁ HIGH |  |
| Diastolic blood pressure in 46-65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 73 to 97) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 294 | 259 | - | MD **2.8 mmHg lower** (6.3 lower to 0.58 higher) | ⨁⨁⨁⨁ HIGH |  |
| Diastolic blood pressure <12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 60 to 88) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 205 | 195 | - | MD **2.1 mmHg lower** (4.3 lower to 0.2 higher) | ⨁⨁⨁⨁ HIGH |  |
| Diastolic blood pressure >12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 58 to 97) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 373 | 327 | - | MD **2.3 mmHG lower** (5.6 lower to 1.02 higher) | ⨁⨁⨁⨁ HIGH |  |
| Diastolic blood pressure <2h per week (follow up: range 12 weeks to 54 weeks; Scale from: 60 to 97) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 279 | 243 | - | MD **2.8 mmHg lower** (6.8 lower to 1.3 higher) | ⨁⨁⨁⨁ HIGH |  |
| Diastolic blood presure >2h per week (follow up: range 12 weeks to 54 weeks; Scale from: 58 to 88) | | | | | | | | | | | | |
| 17 | randomised trials | not serious | not serious | not serious | not serious | none | 299 | 279 | - | MD **1.7 mmHg lower** (3.8 lower to 0.5 higher) | ⨁⨁⨁⨁ HIGH |  |
| Resting heart rate in MEN (follow up: range 12 weeks to 54 weeks; Scale from: 61 to 79) | | | | | | | | | | | | |
| 15 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 169 | 124 | - | MD **3.8 bpm lower** (7.8 lower to 0.8 lower) | ⨁⨁⨁◯ MODERATE |  |
| Resting heart rate in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 61 to 77) | | | | | | | | | | | | |
| 15 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 185 | 172 | - | MD **7.2 mmHg lower** (11.6 lower to 2.9 lower) | ⨁⨁⨁◯ MODERATE |  |
| Resting heart rate in >65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 64 to 64) | | | | | | | | | | | | |
| 15 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 18 | 17 | - | MD **2 bpm lower** (2.7 lower to 2.3 lower) | ⨁⨁⨁◯ MODERATE |  |
| Resting heart rate in 19-45 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 61 to 77) | | | | | | | | | | | | |
| 15 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 178 | 154 | - | MD **4.9 bpm lower** (8.4 lower to 1.4 lower) | ⨁⨁⨁◯ MODERATE |  |
| Resting heart rate in 46-65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 73 to 79) | | | | | | | | | | | | |
| 15 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 158 | 125 | - | MD **7.6 bpm lower** (13.6 lower to 2.3 lower) | ⨁⨁⨁◯ MODERATE |  |
| Resting heart rate <12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 59 to 74) | | | | | | | | | | | | |
| 15 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 76 | 63 | - | MD **5.8 bpm lower** (10.8 lower to 3.3 higher) | ⨁⨁⨁◯ MODERATE |  |
| Resting heart rate >12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 54 to 80) | | | | | | | | | | | | |
| 15 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 278 | 234 | - | MD **5.7 bpm lower** (8.6 lower to 2.8 lower) | ⨁⨁⨁◯ MODERATE |  |
| Resting heart rate <2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 61 to 79) | | | | | | | | | | | | |
| 15 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 175 | 140 | - | MD **3.1 bpm lower** (5.7 lower to 0.4 lower) | ⨁⨁⨁◯ MODERATE |  |
| Resting heart rate >2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 61 to 80) | | | | | | | | | | | | |
| 15 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 179 | 156 | - | MD **6.2 bpm lower** (13 lower to 4.6 lower) | ⨁⨁⨁◯ MODERATE |  |
| Body mass index in MEN (follow up: range 12 weeks to 54 weeks; Scale from: 22.6 to 30.7) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 212 | 183 | - | MD **0.6 kg/m2 lower** (1 lower to 0.2 lower) | ⨁⨁⨁⨁ HIGH |  |
| Body mass index in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 22.5 to 35) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 251 | 238 | - | MD **0.1 kg/m2 lower** (0.3 lower to 0.2 higher) | ⨁⨁⨁⨁ HIGH |  |
| Body mass index in >65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 26 to 28.3) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 62 | 57 | - | MD **0.5 kg/m2 lower** (1 lower to 0.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Body mass index in 19-45 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 22.5 to 27) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 198 | 184 | - | MD **0.3 kg/m2 lower** (0.8 lower to 0.2 higher) | ⨁⨁⨁⨁ HIGH |  |
| Body mass index in 46-65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 24.4 to 35) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 203 | 180 | - | MD **0.3 kg/m2 lower** (0.7 lower to 0.2 higher) | ⨁⨁⨁⨁ HIGH |  |
| Body mass index <12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 22.5 to 35) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 190 | 176 | - | MD **0.5 kg/m2 lower** (1.2 lower to 0.2 higher) | ⨁⨁⨁⨁ HIGH |  |
| Body mass index >12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 22.5 to 35) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 273 | 245 | - | MD **0.25 kg/m2 lower** (0.49 lower to 0.01 lower) | ⨁⨁⨁⨁ HIGH |  |
| Body mass index <2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 22.5 to 35) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 252 | 225 | - | MD **0.2 kg/m2 lower** (0.5 lower to 0 ) | ⨁⨁⨁⨁ HIGH |  |
| Body mass index >2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 22.5 to 35) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 211 | 196 | - | MD **0.5 kg/m2 lower** (1.1 lower to 0.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Body mass in MEN (follow up: range 12 weeks to 54 weeks; Scale from: 72 to 100) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 222 | 190 | - | MD **1.7 kg lower** (1.8 lower to 0.5 lower) | ⨁⨁⨁⨁ HIGH |  |
| Body mass in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 64 to 82) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 333 | 312 | - | MD **0.6 kg lower** (1.3 lower to 0 ) | ⨁⨁⨁⨁ HIGH |  |
| Body mass in >65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 75 to 84) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 62 | 57 | - | MD **1.3 kg lower** (3 lower to 0.3 higher) | ⨁⨁⨁⨁ HIGH |  |
| Body mass in 19-45 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 64 to 88) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 208 | 191 | - | MD **1 kg lower** (2.3 lower to 0.3 higher) | ⨁⨁⨁⨁ HIGH |  |
| Body mass in 46-65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 69 to 100) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 285 | 254 | - | MD **1.3 kg lower** (2 lower to 0.6 lower) | ⨁⨁⨁⨁ HIGH |  |
| Body mass <12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 68 to 88) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 190 | 176 | - | MD **1.5 kg lower** (3.5 lower to 0.6 lower) | ⨁⨁⨁⨁ HIGH |  |
| Body mass >12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 66 to 100) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 365 | 326 | - | MD **1 kg lower** (1.6 lower to 0.6 lower) | ⨁⨁⨁⨁ HIGH |  |
| Body mass <2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 64 to 100) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 262 | 232 | - | MD **0.8 kg lower** (1.5 lower to 0.2 lower) | ⨁⨁⨁⨁ HIGH |  |
| Body mass >2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 68 to 88) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 293 | 270 | - | MD **1.6 kg lower** (2.9 lower to 0.3 lower) | ⨁⨁⨁⨁ HIGH |  |
| Lean body mass in MEN (follow up: range 12 weeks to 54 weeks; Scale from: 52 to 67) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 240 | 209 | - | MD **0.8 kg higher** (0.4 higher to 1.7 higher) | ⨁⨁⨁⨁ HIGH |  |
| Lean body mass in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 38 to 47) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 333 | 312 | - | MD **0.5 kg higher** (0.2 higher to 0.8 higher) | ⨁⨁⨁⨁ HIGH |  |
| Lean body mass in >65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 52 to 59) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 83 | 77 | - | MD **0.4 kg lower** (1.4 lower to 0.4 higher) | ⨁⨁⨁⨁ HIGH |  |
| Lean body mass in 19-45 year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 38 to 67) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 208 | 191 | - | MD **0.3 kg higher** (0.5 lower to 1.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Lean body mass in 46-65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 41 to 63) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 282 | 253 | - | MD **0.3 kg higher** (0.1 lower to 0.7 higher) | ⨁⨁⨁⨁ HIGH |  |
| Lean body mass <12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 46 to 65) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 200 | 183 | - | MD **0.2 kg higher** (1.2 lower to 1.2 higher) | ⨁⨁⨁⨁ HIGH |  |
| Lean body mass >12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 38 to 67) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 373 | 338 | - | MD **0.2 kg higher** (0.2 lower to 0.6 higher) | ⨁⨁⨁⨁ HIGH |  |
| Lean body mass <2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 38 to 67) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 259 | 231 | - | MD **0.04 kg higher** (0.4 lower to 0.5 higher) | ⨁⨁⨁⨁ HIGH |  |
| Lean body mass > 2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 41 to 63) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 314 | 290 | - | MD **0.3 kg higher** (0.5 lower to 1.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Fat mass in MEN (follow up: range 12 weeks to 54 weeks; Scale from: 21 to 31) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 243 | 210 | - | MD **1 kg lower** (1.5 lower to 0.6 lower) | ⨁⨁⨁⨁ HIGH |  |
| Fat mass in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 22 to 38) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 333 | 312 | - | MD **1 kg lower** (1.6 lower to 0.5 lower) | ⨁⨁⨁◯ MODERATE |  |
| Fat mass in >65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 21 to 30) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 83 | 77 | - | MD **0.5 kg lower** (1.2 lower to 0.2 higher) | ⨁⨁⨁⨁ HIGH |  |
| Fat mass in 19-45 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 19 to 29) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 208 | 191 | - | MD **1.1 kg lower** (1.6 lower to 0.5 lower) | ⨁⨁⨁⨁ HIGH |  |
| Fat mass in 46-65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 22 to 38) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 285 | 254 | - | MD **1.2 kg lower** (1.9 lower to 0.6 lower) | ⨁⨁⨁◯ MODERATE |  |
| Fat mass <12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 19 to 37) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 190 | 176 | - | MD **1.1 kg lower** (1.8 lower to 0.4 lower) | ⨁⨁⨁⨁ HIGH |  |
| Fat mass >12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 19 to 38) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 386 | 346 | - | MD **1 kg lower** (1.5 lower to 0.6 lower) | ⨁⨁⨁◯ MODERATE |  |
| Fat mass <2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 19 to 37) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 262 | 232 | - | MD **0.8 kg lower** (1.3 lower to 0.3 lower) | ⨁⨁⨁⨁ HIGH |  |
| Fat mass >2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 19 to 38) | | | | | | | | | | | | |
| 19 | randomised trials | not serious | not serious | not serious | not serious | none | 314 | 290 | - | MD **1.3 kg lower** (1.9 lower to 0.8 lower) | ⨁⨁⨁⨁ HIGH |  |
| Muscular fitness in MEN (follow up: range 12 weeks to 54 weeks; Scale from: 11.5 to 49.4) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 217 | 190 | - | MD **3.3 cm higher** (1.2 higher to 5.3 higher) | ⨁⨁⨁◯ MODERATE |  |
| Muscular fitness in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 21.4 to 28.3) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | serious b | not serious | not serious | publication bias strongly suspected a | 172 | 165 | - | MD **0.3 cm higher** (1.3 lower to 2 higher) | ⨁⨁◯◯ LOW |  |
| Muscular fitness in >65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 11.5 to 17.3) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | none | 103 | 97 | - | MD **3.6 cm higher** (0.1 higher to 7 higher) | ⨁⨁⨁⨁ HIGH |  |
| Muscular fitness in 19-45 - year-olds (follow up: range 12 weeks to 54; Scale from: 26.1 to 49.4) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | none | 129 | 110 | - | MD **2.2 cm higher** (0.2 lower to 4.6 higher) | ⨁⨁⨁⨁ HIGH |  |
| Muscular fitness in 46-65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 21.4 to 29.2) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 148 | 140 | - | MD **0.4 cm lower** (1 lower to 1.2 higher) | ⨁⨁⨁◯ MODERATE |  |
| Muscular fitness <12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 21.4 to 49.4) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 169 | 148 | - | MD **1.3 cm higher** (1.5 lower to 4.2 higher) | ⨁⨁⨁◯ MODERATE |  |
| Muscular fitness >12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 11.5 to 44.2) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 220 | 207 | - | MD **3.1 cm higher** (1 higher to 5.2 higher) | ⨁⨁⨁◯ MODERATE |  |
| Muscular fitness <2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 11.6 to 44.2) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 91 | 84 | - | MD **1.4 cm higher** (0.7 lower to 3.5 higher) | ⨁⨁⨁◯ MODERATE |  |
| Muscular fitness >2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 11.5 to 49.4) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | publication bias strongly suspected a | 298 | 271 | - | MD **3 cm higher** (0.7 higher to 5.2 higher) | ⨁⨁⨁◯ MODERATE |  |
| Low density lipoproteins in MEN (follow up: range 12 weeks to 54 weeks; Scale from: 2.7 to 3.7) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | none | 109 | 74 | - | MD **0.3 m/mol lower** (0.5 lower to 0.5 higher) | ⨁⨁⨁⨁ HIGH |  |
| Low density lipiproteins in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 2.5 to 3.7) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | none | 82 | 63 | - | MD **0.2 m/mol lower** (0.5 lower to 0.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Low density lipoproteins in 19-45 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 2.5 to 3.7) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | none | 120 | 79 | - | MD **0.4 m/mol lower** (0.5 lower to 0.3 lower) | ⨁⨁⨁⨁ HIGH |  |
| Low density lipoproteins in 46-65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 3.2 to 3.7) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | none | 135 | 118 | - | MD **0.08 m/mol lower** (0.3 lower to 0.2 higher) | ⨁⨁⨁⨁ HIGH |  |
| Low density lipoproteins >12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 2.5 to 3.7) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | none | 263 | 207 | - | MD **0.2 m/mol lower** (0.4 lower to 0.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Low density lipoproteins <2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 2.5 to 3.5) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | none | 182 |  | - | MD **0.3 m/mol lower** (0.4 lower to 0.1 lower) | ⨁⨁⨁⨁ HIGH |  |
| Low density lipoproteins >2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 3.1 to 3.7) | | | | | | | | | | | | |
| 10 | randomised trials | not serious | not serious | not serious | not serious | none | 40 | 32 | - | MD **0.2 m/mol lower** (0.3 lower to 0 ) | ⨁⨁⨁⨁ HIGH |  |
| Total cholesterol in MEN (follow up: range 12 weeks to 54 weeks; Scale from: 3.7 to 5.9) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 87 | 63 | - | MD **0 m/mol**  (0.31 lower to 0.23 higher) | ⨁⨁⨁⨁ HIGH |  |
| Total cholesterol in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 4.3 to 5.8) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 164 | 140 | - | MD **0.2 m/mol lower** (0.5 lower to 0.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Total cholesterol in >65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 3.2 to 3.7) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 18 | 17 | - | MD **0.2 m/mol lower** (2.7 lower to 2.3 higher) | ⨁⨁⨁⨁ HIGH |  |
| Total cholesterol in 19-45 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 4.0 to 5.2) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 98 | 68 | - | MD **0.1 m/mol lower** (0.3 lower to 4 higher) | ⨁⨁⨁⨁ HIGH |  |
| Total cholesterol in 46-65 - year-olds (follow up: range 12 weeks to 54 weeks) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 135 | 118 | - | MD **0.1 m/mol lower** (0.6 lower to 0 ) | ⨁⨁⨁⨁ HIGH |  |
| Total cholesterol >12 weeks (follow up: range 12 weeks to 54 weeks) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 241 | 196 | - | MD **0.1 m/mol lower** (0.3 lower to 0.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Total cholesterol <2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 3.2 to 5.9) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 211 | 171 | - | MD **0.1 m/mol higher** (0.3 lower to 0.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Total cholesterol >2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 4.9 to 5.7) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 40 | 32 | - | MD **0 m/mol**  (0.2 lower to 0.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Triglycerides in MEN (follow up: range 12 weeks to 54 weeks; Scale from: 0.9 to 2.1) | | | | | | | | | | | | |
| 8 | randomised trials | not serious | not serious | not serious | not serious | none | 63 | 43 | - | MD **0.006 m/mol higher** (0.2 lower to 0.2 higher) | ⨁⨁⨁⨁ HIGH |  |
| Triglycerides in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 0.7 to 3.7) | | | | | | | | | | | | |
| 8 | randomised trials | not serious | not serious | not serious | not serious | none | 164 | 140 | - | MD **0.2 m/mol higher** (0.4 lower to 0 ) | ⨁⨁⨁⨁ HIGH |  |
| Triglycerides in >65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 0.9 to 1.2) | | | | | | | | | | | | |
| 8 | randomised trials | not serious | not serious | not serious | not serious | none | 9 | 9 | - | MD **0.2 m/mol lower** (0.8 lower to 0.5 higher) | ⨁⨁⨁⨁ HIGH |  |
| Triglycerides in 19-45 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 0.7 to 1.6) | | | | | | | | | | | | |
| 8 | randomised trials | not serious | not serious | not serious | not serious | none | 74 | 48 | - | MD **0.04 m/mol lower** (0.2 lower to 0.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Triglycerides in 46-65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 0.9 to 3.7) | | | | | | | | | | | | |
| 8 | randomised trials | not serious | not serious | not serious | not serious | none | 118 | 135 | - | MD **0.1 m/mol lower** (0.5 lower to 0.2 higher) | ⨁⨁⨁⨁ HIGH |  |
| Triglycerides >12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 0.7 to 3.7) | | | | | | | | | | | | |
| 8 | randomised trials | not serious | not serious | not serious | not serious | none | 217 | 176 | - | MD **0.1 m/mol lower** (0.3 lower to 0 ) | ⨁⨁⨁⨁ HIGH |  |
| Triglycerides <2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 0.7 to 3.7) | | | | | | | | | | | | |
| 8 | randomised trials | not serious | not serious | not serious | not serious | none | 187 | 151 | - | MD **0 m/mol**  (0.1 lower to 0.1 higher) | ⨁⨁⨁⨁ HIGH |  |
| Triglycerides >2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 0.7 to 3.7) | | | | | | | | | | | | |
| 8 | randomised trials | not serious | not serious | not serious | not serious | none | 40 | 32 | - | MD **0.4 m/mol lower** (1.2 lower to 0.9 higher) | ⨁⨁⨁⨁ HIGH |  |
| Fasting glucose in MEN (follow up: range 12 weeks to 54 weeks; Scale from: 4.8 to 8.8) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 93 | 63 | - | MD **0.2 m/mol lower** (0.9 lower to 0.5 higher) | ⨁⨁⨁⨁ HIGH |  |
| Fasting glucose in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 4.8 to 5.7) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 152 | 130 | - | MD **0.1 m/mol higher** (0.1 lower to 0.3 higher) | ⨁⨁⨁⨁ HIGH |  |
| Fasting glucose in >65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 5.0 to 5.7) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 18 | 17 | - | MD **0.1 m/mol lower** (0.7 higher to 0.6 higher) | ⨁⨁⨁⨁ HIGH |  |
| Fasting glucose in 18-45 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 4.8 to 5.7) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 83 | 58 | - | MD **0.1 m/mol higher** (0.3 lower to 0.4 higher) | ⨁⨁⨁⨁ HIGH |  |
| Fasting glucose in 46-65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 4.8 to 8.8) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 144 | 118 | - | MD **0.2 m/mol lower** (1.1 lower to 0.8 higher) | ⨁⨁⨁⨁ HIGH |  |
| Fasting glucose >12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 4.8 to 8.8) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 235 | 186 | - | MD **0 m/mol**  (0.4 lower to 0.4 higher) | ⨁⨁⨁⨁ HIGH |  |
| Fasting glucose <2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 4.8 to 8.8) | | | | | | | | | | | | |
| 9 | randomised trials | not serious | not serious | not serious | not serious | none | 226 | 181 | - | MD **0.1 m/mol lower** (0.5 lower to 0.3 higher) | ⨁⨁⨁⨁ HIGH |  |
| Glucose tolerance in MEN (follow up: range 12 weeks to 54 weeks; Scale from: 24 to 64) | | | | | | | | | | | | |
| 5 | randomised trials | not serious | not serious | not serious | not serious | none | 52 | 36 | - | MD **32.9 m/mol higher** (15.7 higher to 50 higher) | ⨁⨁⨁⨁ HIGH |  |
| Glucose tolerance in WOMEN (follow up: range 12 weeks to 54 weeks; Scale from: 50 to 69) | | | | | | | | | | | | |
| 5 | randomised trials | not serious | not serious | not serious | not serious | none | 64 | 42 | - | MD **52.7 m/mol higher** (30.9 higher to 74.4 higher) | ⨁⨁⨁⨁ HIGH |  |
| Glucose tolerance in >65 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 24 to 48) | | | | | | | | | | | | |
| 5 | randomised trials | not serious | not serious | not serious | not serious | none | 17 | 17 | - | MD **26.5 m/mol higher** (5.3 lower to 58.3 higher) | ⨁⨁⨁⨁ HIGH |  |
| Glucose tolerance in 19-45 - year-olds (follow up: range 12 weeks to 54 weeks; Scale from: 33 to 69) | | | | | | | | | | | | |
| 5 | randomised trials | not serious | not serious | not serious | not serious | none | 86 | 52 | - | MD **47 m/mol higher** (25.7 higher to 68.3 higher) | ⨁⨁⨁⨁ HIGH |  |
| Glucose tolerance >12 weeks (follow up: range 12 weeks to 54 weeks; Scale from: 33 to 69) | | | | | | | | | | | | |
| 5 | randomised trials | not serious | not serious | not serious | not serious | none | 116 | 78 | - | MD **41.4 m/mol higher** (28.4 higher to 54.3 higher) | ⨁⨁⨁⨁ HIGH |  |
| Glucose tolerance <2 times per week (follow up: range 12 weeks to 54 weeks; Scale from: 33 to 69) | | | | | | | | | | | | |
| 5 | randomised trials | not serious | not serious | not serious | not serious | none | 116 | 78 | - | MD **41.4 m/mol higher** (28.4 higher to 54.3 higher) | ⨁⨁⨁⨁ HIGH |  |

**CI:** Confidence interval; **MD:** Mean difference

#### Explanations

a. Significant result (P<0.10) of Egger's test for funnel plot asymmetry

b. Publication with follow up

c. Assumption of large heterogenity