**Table5a. Strength of evidence of studies among adults with or at risk for cardiovascular disease or diabetes mellitus**

| **Number of Studies, Participants** | **Domains Pertaining to Strength of Evidence** | **Strength of evidence** |
| --- | --- | --- |
|  | **Risk of Bias** | **Consistency** | **Directness** | **Precision** |  |
| **BMI change** |
| **Self-Mangement interventions** |  |  |  |  |  |
| 2 RCTs196 | Moderate based on lack of reporting on masking of outcome assessors and lack of adequate reporting | Consistent | Indirect (weight maintenance not stated goal) | Imprecise based on lack of reporting on variability  | LowRange: -1.76 kg/m2 |
| **Diet interventions** |  |  |  |  |  |
| 1 RCT1551 | Moderate based on lack of reporting on masking and lack of internal validity based on q14-27 | Not applicable (one study) | Indirect (weight maintenance not stated goal) | Imprecise (no measure of variability) | LowRange: not available |
| **Physical activity interventions** |  |  |  |  |  |
| 2 controlled trials166 | Moderate based on lack of reporting on masking of outcome assessors and completers analysis for 1 study | Inconsistent (based on different signs for between group differences) | Indirect | Imprecise | LowRange: -0.2 to -0.7 kg/m2 |
| **Combination interventions** |  |  |  |  |  |
| 4 RCTs384 | Moderate based on lack of reporting on masking and lack of internal validity based on q14-27 | Consistent | Indirect (weight maintenance not stated goal) | Imprecise based on lack of reporting on variability and width of CI > 0.8 units when provided | LowRange: -0.39 to -0.71 kg/m2 |
| **Weight change** |
| **Diet intervention** |  |  |  |  |  |
| 2 controlled trials767 | High based on lack of randomization, lack of reporting on masking, and lack of internal validity by q14-27 | Consistent | Indirect (weight maintenance not stated goal in one study but was in the other) | Imprecise (don’t have enough measures of variability) | LowRange: -0.11 to -0.84 kg |
| **Physical activity intervention** |  |  |  |  |  |
| 2 controlled trials166 | Moderate based on lack of reporting on masking of outcome assessors and completers analysis for 1 study | Inconsistent | Indirect | Imprecise (on cusp with one study being imprecise and one not based on 2.5 kg width of CI) | LowRange: -0.3 to -2.0 kg |
| **Combination intervention** |  |  |  |  |  |
| 4 controlled trials1719 | Moderate based on lack of masking | Consistent | Indirect | Imprecise | LowRange: -0.1 to -1.26 kg |
| **Waist circumference** |
| Self-Mangement interventions | Risk of Bias | Consistency | Directness | Precision |  |
| 2 RCTs196 | Moderate based on lack of reporting on masking of outcome assessors and lack of adequate reporting | Consistent | Indirect (weight maintenance not stated goal) | Imprecise based on lack of reporting on variability and width of CI > 2 cm when provided | LowRange: -3.87 cm |
| **Diet intervention** |  |  |  |  |  |
| 1 controlled trials187 | Moderate based on lack of reporting on masking of outcome assessors and lack of adequate reporting | Not applicable (one study) | Indirect (weight maintenance not stated goal) | Imprecise based on CI >2cm | LowRange: -0.34 to -0.74 cm |
| **Physical activity intervention** |  |  |  |  |  |
| 1 controlled trial92 | Moderate risk of bias based on lack of masking of outcome assessors | Not applicable (one study) | Indirect | Imprecise | LowRange: -2.8 cm |
| **Combination intervention** |  |  |  |  |  |
| 1 RCT68 | Moderate risk of bias based on lack of reporting on masking of outcome assessors | Not applicable (one study) | Indirect | Imprecise | LowRange: -2.38 cm |
| **Adherence** |
| Physical activity intervention |  |  |  |  |  |
| 1 controlled trial92 | Moderate risk of bias based on lack of masking of outcome assessors | Not applicable (one study) | Indirect based on lack of external validity | Imprecise (N<400) | LowRange: 57% |
| **Combination** |  |  |  |  |  |
| 3 RCT191 | Moderate based on lack of reporting on masking and lack of internal validity based on q14-27 | Inconsistent (by magnitude since is adherence, sign is not applicable) | Indirect (weight maintenance not stated goal) | Imprecise (N<400) | LowRange: 46% to 100% |
| **QOL** |
| **Combination intervention** |  |  |  |  |  |
| 1 controlled trial68 | Moderate risk of bias based on lack of masking of outcome assessors | Not applicable (one study) | Indirect | Imprecise | LowRange: Not available |

CI = Confidence Interval; QOL = Quality of Life; RCT = Randomized Controlled Trial

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