**Table 6a. Strength of evidence of studies among adults with cancer**

|  |  |  |
| --- | --- | --- |
| **Number of Studies, Participants** | **Domains Pertaining to Strength of Evidence** | **Strength of evidence****Range of mean differences between groups** |
|  | **Risk of Bias** | **Consistency** | **Directness** | **Precision** |  |
| **BMI change** |  |  |
| Self-management1 Observational study (n=1867) 1 | ModerateAccounted for confounding and losses to followup | Not applicableOne study | IndirectSubstudy of a colorectal cancer registry | PreciseStatistically significant, but no meaningful between group difference | LowLess than 5 hours per day television viewing associated with a 0.6 kg/m2 greater BMI 31 months after colorectal cancer diagnosis than viewing less than 3 hours per day. Borderline meaningful between group. |
| Diet |  |  |  |  | Insufficient |
| Physical activity |  |  |  |  | Insufficient |
| Combination1 trial (2,164 analyzed)2 | ModerateNo blinding of outcome assessors | Not applicableOne study | IndirectGoal of study to prolong relapse-free survivial | PreciseClinically and statistically meaningful. | LowSelf-management and dietary intervention had a 1.1 kg/m2 lower BMI at 5 years. |
| **Weight change** |  |  |
| Self-management |  |  |  |  | Insufficient |
| Diet1 trial (97 analyzed)3 4  | ModerateNo blinding of outcome assessors | Not applicableOnly one trial | IndirectTrial not designed to prevent weight gain | ImpreciseStandard errors not reported for difference in weight change | LowNo meaningful between group difference between interventions and control. |
| Physical activity1 trial (N=101 analyzed)5 | ModerateNo blinding of outcome assessors | Not applicableOne trial | DirectThe intervention had a weight maintenance goal | Precise | ModerateAerobic and resistance exercise performed at home prevented weight gain over 5 years. |
| Combination1 trial (2,164 analyzed)2 | ModerateNo blinding of outcome assessors | Not applicableOne study | IndirectGoal of study to prolong relapse-free survivial | PreciseClinically and statistically meaningful. | LowSelf-management and dietary intervention lost 2.9 kg compared to 0.2 kg weight gain in controls. |
| **Waist circumference** |  |  |
| All approaches |  | Insufficient |
| **Adherence** |  |  |
| Self-management |  |  |  |  | Insufficient |
| Diet1 trial (97 analyzed)3 4  | ModerateNo blinding of outcome assessors | Not applicableOnly one trial | IndirectTrial not designed to prevent weight gain | ImpreciseFewer than 400 participants analyzed | Low60-90% adherence among intervention groups. |
| Physical activity1 trial (N=101 analyzed)5 | ModerateNo blinding of outcome assessors | Not applicableOnly one trial | DirectThe intervention had a weight maintenance goal | ImpreciseFewer than 400 participants | Low65-79% adherence to intervention at 1 year. |
| Combination1 trial (2,164 analyzed)2 | ModerateNo blinding of outcome assessors | Not applicableOne study | IndirectGoal of study to prolong relapse-free survivial | PreciseGreater than 400 participants. | LowIntervention group reduced calories from fat through 5 years of followup. |
| **Adverse events** |  |  |
| Self-management |  |  |  |  | Insufficient |
| Diet |  |  |  |  | Insufficient |
| Physical activity |  |  |  |  | Insufficient |
| Combination1 trial (2,164 analyzed)2 | ModerateNo blinding of outcome assessors | Not applicableOne study | IndirectGoal of study to prolong relapse-free survivial | ImpreciseNo event occurred. | LowNo adverse events associated with dietary and self-management intervention. |

**References**

 1. Wijndaele K, Lynch BM, Owen N, et al. Television viewing time and weight gain in colorectal cancer survivors: a prospective population-based study. Cancer Causes Control 2009; 20(8):1355-62.

 2. Chlebowski RT, Blackburn GL, Thomson CA et al. Dietary fat reduction and breast cancer outcome: Interim efficacy results from the women's intervention nutrition study. J. Natl. Cancer Inst. 2006; 98(24):1767-76.

 3. Chen G, Heilbrun LK, Venkatramanamoorthy R et al. Effects of low-fat and/or high-fruit-and-vegetable diets on plasma levels of 8-isoprostane-F2alpha in the Nutrition and Breast Health study. Nutr Cancer 2004; 50(2):155-60.

 4. Djuric Z, Poore KM, Depper JB et al. Methods to increase fruit and vegetable intake with and without a decrease in fat intake: Compliance and effects on body weight in the nutrition and breast health study. Nutr. Cancer 2002; 43(2):141-51.

 5. Schwartz AL, Winters-Stone K. Effects of a 12-month randomized controlled trial of aerobic or resistance exercise during and following cancer treatment in women. Phys Sportsmed 2009; 37(3):62-7.