Appendix E. Evidence Tables

**Table 1. Characteristics of studies on populations with no specific diseases or conditions**

| **Author, year****Study Location** | **Years of Recruitment** | **Single or Multicenter** | **Recruitment Setting**  | **Study Design** | **Inclusion Criteria** | **Study’s stated goal is weight maintenance** | **Control****Active Intervention** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Trials** |
| Bhargava, 20021United States | 1991-Not reported | Multicenter | Community/geographicClinical  | Randomized intervention | Female onlyAge: 50-79Not greater than 165% of ideal weight as judged by the 1983 Metropolitan Life Insurance Weights tables for a medium framePost-menopausalRepresentative of 1990 Census for recruitment areaInclude if consume >36% of energy from fat as reported in food frequency questionnaireNo history of any cancer other than effectively treated non melanoma skin cancer or carcinoma in-situ of the cervixNo history of stroke or coronary artery diseaseNo history of disease that might make two-year survival questionableNo use of physician-prescribed drugs to alter blood lipids, including > 1 g per day of niacin No history of insulin-dependent diabetes mellitus or uncontrolled hyperglycemiaNo evidence of unstable mental disease, alcoholism, or substance abuse; No likelihood of being unavailable for a significant portion of the 2-year follow-up period; Not eating > 10 meals a week not prepared at home; Not greater than 165% of ideal weight as judged by the 1983 Metropolitan Life Insurance Weights tables for a medium frame; Able to provide reliable dietary information during the pre-randomization period or did not completed 4 day food recall during pre-randomization period;Ability or willingness to sign the Informed Consent Form.Pass medical screening | No | Diet related education materialsDiet |
| Burke, 20032Australia | Not Reported | Unclear | Community/geographic | Randomized intervention | Couples in Perth,Western Australia, cohabiting for the first time, not living together for more than 2 years, intending to reside in Perth for the length of the study, and not planning a pregnancy during the time of the intervention. No illnesses such as heart disease, diabetes, or severe asthma. | No | No interventionCombination of Diet and Physical Activity (Two active arms with different levels of intensity) |
| Fortmann, 19813United States | 1972 | Multicenter | Community | Non-randomized intervention | Age 35-59 yearsResident of Watsonville, Gilroy, or Tracey, CAEnglish or Spanish speaking | No | No interventionTwo combination interventions Mass media & direct mail educational campaigns on diet and physical activitySmall group instruction + mass media & direct mail educational campaigns on diety and physical activity |
| French , 20114United States | Not Reported | Multicenter | SchoolCommunity/geographicClinical  | Randomized intervention | Age: >12At least one child ages ≥5 years and two household members ages ≥12 yearsResidence in a private house or apartment within 20 miles of the universityHousehold TV viewing weekly average of ≥10 h per personNo household members with dietary, medical, psychological, or physical limitations that would prevent their participation in intervention activitiesWillingness to be randomized to active intervention or control group. | Yes | No interventionCombination of Self-management, Diet, Physical Activity |
| Howard, 200656United States | 1993-1998 | Multicenter | Community | Randomized intervention with self-selected control group | Female onlyAge: 50-79Post-menopausalFat intake of at least 32% of daily total caloriesExpectation of being resident in the study recruitment area for at least 3 years following enrollment No competing risks (invasive cancer in the past 10 years; breast cancer at any time or suspicion of breast cancer at baseline screening; acute myocardial infarction, stroke, or transient ischemic attack in the previous 6 months; known chronic active hepatitis or severe cirrhosis) No safety concerns (blood counts indicative of disease; severe hypertension; or currently use of oral corticosteroids) No adherence or retention concerns (unwillingness or inability to complete baseline study requirements)Not found to have femoral neck bone mineral density of more than three standard deviations below the corresponding age-specific mean No medical conditions predictive of a survival time of less than 3 yearsNot known to have conditions or characteristics inconsistent with study participation and adherence (alcoholism, drug dependency, mental illness, dementia)Not active participants in another randomized controlled clinical trialNo special dietary requirements that were incompatible with the intervention programNot eating 10 or more main meals per week that were prepared outside the homeNot unable to complete satisfactorily a 4-day food recordNo having been diagnosed with colon cancer, type I diabetes mellitus, or gastrointestinalconditions that contraindicated a high-fiber dietNo history of having a bilateral prophylactic mastectomy(some inclusion criteria abstracted from 6) | No | Diet and health related education materialsDietary pattern low in fat with increased fruits, vegetables and grain intake. |
| Lamb, 20027Europe | Not Reported | Single | Clinical  | Randomized intervention | Age: 40-70include if take less than 120 minutes of moderate intensity exercise per weekInclude if no serious medical problemNo recent history of an illness likely to interfere with the ability to walk one mile safely, including serious cardiac or respiratory diagnoses, lower limb fractures in the last year, blindness, rheumatoid arthritis, chronic neurological, terminal or significant mental illness. No doctor’s restrictions on exercise. | No | Advice on Physical ActivityGroup Physical Activity Sessions |
| Levine, 20078United States | Not Reported | Unclear | Work placeCommunity/geographic | Randomized intervention | Female onlyAge: 25-44BMI: 21-30In good health according to a self-report questionnaireNot pregnant in past yearNot in a weight loss programNot receiving treatment for a psychiatric disorderNot taking medication affecting body weight during past 3 monthsNot planning to relocate within next 36 monthsAble to engage in moderate physical activity or make change to diet | Yes | Printed materialsCombination of Self-management, Diet, Physical Activity delivered in personCombination of Self-management, Diet, Physical Activity delivered by mail |
| Lombard, 20109 | 2006 | Multicenter | School of children | Randomized intervention | Female onlyBMI >18.4Mothers of children 5-12Not pregnant, Not breastfeeding infants under 6 months of ageNot taking prescribed weight control medicationsNo wish to gain weight No serious physical or psychological condition that might affect their ability to complete outcome measures or to participate fully | Yes | Single educational sessionCombination of Self-management, Diet and Physical Activity |
| Muscari, 201010Europe | 2003 | Single | Community/geographic | Randomized intervention | Age: >65BMI: >18-32Include if resident of Pianoro municipality (northern Italy)Include if Mini Mental State Examination (MMSE)score >24Include if systolic blood pressure <180 or >110 mmHgInclude if diastolic bloodpressure <110 mmHgInclude if resting heart rate >60/minInclude if hemoglobin >11 g/dlNo malignancy; No moderate or severe respiratory insufficiency;No severe arthritis, No recent fractures, No palsy or relevant neuro-motor deficits; No use of beta-blockers, digitalis or other heart rateLimiting drugs.No Resting echocardiogram with ischemic changes, frequent premature beats, II or III degree atrioventricular block, left bundle branch block, atrial ﬁbrillation or other tachyarrhythmia, artiﬁcial pacemaker, echocardiographic demonstration of moderate or severe valvular stenosis or regurgitation, aortic root dilatation, hypertrophic cardiomyopathy non-secondary to hypertension, left ventricular ejection fraction <50%, abdominal ultrasound demonstration of aortic aneurism >3.5 cm.No previous cardiovascular diseases | No | Educational materials aboutsuggestions to improve lifestyle, including individualizedself-administered programs to increase physicalactivityPhysical Activity  |
| Petrella, 200311Europe | 1998 | Multicenter | Clinical  | Randomized intervention | Age: >65Include if healthy, community dwellingInclude if no formal participation in a regular exercise training program Include if agreed to obtain their usual medical care at the clinic from which the intervention was delivered for the duration of the study (which may have been different than recruitment clinic).No presence of unstable medical conditions that would preclude safe participation in regular exercise, including myocardial infarction or stroke in the past 6 months,No evidence of ischemia during baseline exercise testing, New York Heart Association class 2 to 4 congestive heart failure, severe chronic obstructive pulmonary disease, active treatment of cancer, uncontrolled diabetes mellitus, severe systemic or musculoskeletal disease, or major psychiatric diseaseAbility to walk on a treadmill without assistanceNot currently living in a long-term care facility. | Yes | Advice,Printed Materials, list of facilitiesPhysical Activity |
| Schmitz, 200712United States | 2002-2003 | Multicenter | Community/geographic | Randomized intervention | Female onlyAge: 25- 44BMI: 25- 35<10% change in body weight during past yearPre-menopausalSedentary or only modestly physically active (<=3 weekly sessions of moderate aerobic physic activity)Non-smokerNot participating in a weight-loss programNo physician-diagnosed menstrual irregularities or significant gynecologic conditionsNo positive response on the Physical Activity Readiness QuestionnaireNo history of strength training in the past 6 monthsNo medical conditions or medications that could limit participation in the exercise program or affect study measurements (including cholesterol-lowering medications, psychiatric medications at dosages known to alter weight, appetite suppressants)Not currently or recently pregnantNot currently or recently lactatingNo uncontrolled hypertension (systolic > 160 or diastolic > 99)No history of cancer within the past 5 yearsNo plans to be out of town for >3 consecutive weeks during the study | Yes | Printed MaterialsPhysical Activity |

| **Author, year****Study Location** | **Years of recruitment** | **Single or Multicenter** | **Recruitment setting**  | **Study Design** | **Inclusion criteria** | **Original cohort’s stated goal is weight maintenance** | **Exposures of interest** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Observational Studies** |
| Adair, 201113United States | 1982-1984 | Multicenter | Community | Prospective cohort | WomenPregnant when recruitedResiding in metropolitan Cebu, Phillipines | NoOriginal goal was regional health and nutrition monitoring | DietOccupational physical activity |
| Berry, 201014Canada | 2002 | Multicenter | Community | Prospective longitudinal | Age: ≥18 yearsLiving within Edmonton city limitsDid not move between 2002 & 2008Completed survey in 2002 & 2008 | NoOriginal goal to assess and monitor heath issues, health determinants, and risk factors | Neighborhood walkabilityTrafficPhysical activityFruits and vegetables |
| Bes-Rastrollo, 200815Spain | 1999 | Single center | Graduates of an university | Prospective cohort | Not on extreme low or high values for total energy intakeNot with diagnosis of CVD, diabetes or cancer at baselineNot pregnantWeight not >170kgUniversity graduate | Yes | Consumption of meals outside the home |
| Lee, 201116United States | 1992 | Multicenter | Subanalysis of trial among female health professionals | Subanalysis of RCT | Females onlyHealthcare professionalNo coronary heart disease, cerebrovascular disease, cancer (except nonmelanoma skin cancer), and other major chronic illnesses | NoTrial of low-dose aspirin and vitamin E to prevent cardiovascular disease and cancer | MET hours per week |
| Lewis 199717United States | 1985-1986 | Multicenter | Community based or membership in a prepaid healthcare plan | Prospective cohort | 18 to 30 years old | NoStudy the determinants and evoluation of cardiovascular risk factors among young adults | Calories from fatChange in exercise duration during treadmill test |
| Mozaffarian 201118United States | 1976-1986 | Multisite | Membership in health professionals organization | Prospective cohort | Age: ≤65 yearsNo obesity, diabetes, cancer, cardiovascular, pulmonary, renal or liver disease at baselineNo missing data on baseline lifestyle habitsNo implausible energy intakeNo more than nine missing responses on diet questionnaireNot pregnant during followupFemale nurse or male health professional | NoOriginal goals to study long-term effects of oral contraceptives; oral contraceptives, diety and lifestyle risk factors; and nutritional factors related to serious illnesses like cancer, heart disease and other vascular diseases | Consumption of fruits, vegetables, nuts, whole-fat dairy foods (butter, cheese, whole-fat milk), low-fat dairy foods (low-fat or skim milk, yogurt), potato chips, potatoes (French fried, boiled, baked or mashed), whole grains, refined grains, sugar-sweetened beverages, 100% fruit juice, diet soda, sweets or desserts, processed meats, unprocessed red meats, trans fat, fried foods (consumed at home, consumed away from home)Physical activity (MET hours/week)Total hours of daily sleepTotal hours of daily television watching |
| Pereira 200519United States | 1985-1986 | Multicenter | Community based or membership in a prepaid healthcare plan | Prospective cohort | 18 to 30 years oldAttended examination at 15 yearsNo missing data on fast food, bodyweight or important covariates at baseline or followupNot pregnant or breastfeeding at baseline or within 180 days of year 15No suspected type 1 diabetes based on insulin treatment | NoOriginal goal to study risk factors for cardiovascular disease | Number of times per week ate fast foodChange in number of days per week at fast food between baseline and year 15 |
| Purslow 200820United Kingdom | 1993-1997 | Multisite | Community/geographic | Prospective cohort | Attended a health checkHad a measure of weight changeNo history of stroke, cancer or heart attack at baselineComplete food diary data | NoOriginal goal to study nutritional risk factors for cancer | Percent of daily energy intake consumed at breakfast |
| Schulz 200521Germany | 1994-1998 | Multisite | Community/geographic | Prospective cohort | No exclusions | NoOriginal goal to study nutritional risk factors for cancer | Quintile of high-fiber/low-fat eating pattern |
| Vioque, 200722Spain | 1994 | Multisite | Community/geographic | Cross-sectional | Alive during follow-up periodNot pregnant | NoOriginal goal was a cross-sectional health and nutrition survey | Quartiles of fruits and vegetable consumption based on responses to food frequency questionnaires |

BMI = Body Mass Index; CVD = Cardiovascular Disease; g/dl = grams per decliter;Kg = kilogram; MET = Metabolic equivalent of task; mmHg = millitre of mercury (blood pressure measurement unit; MMSE = Mini Mental State Examination; RCT = Randomized Clinical Trials

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