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, 20021  United States | 1991-Not reported | Multicenter | Community/geographic  Clinical | Randomized intervention | Female only  Age: 50-79  Not greater than 165% of ideal weight as judged by the 1983 Metropolitan Life Insurance Weights tables for a medium frame  Post-menopausal  Representative of 1990 Census for recruitment area  Include if consume >36% of energy from fat as reported in food frequency questionnaire  No history of any cancer other than effectively treated non melanoma skin cancer or carcinoma in-situ of the cervix  No history of stroke or coronary artery disease  No history of disease that might make two-year survival questionable  No 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 hyperglycemia  No 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 materials  Diet |
| Burke, 20032  Australia | 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 intervention  Combination of Diet and Physical Activity  (Two active arms with different levels of intensity) |
| Fortmann, 19813  United States | 1972 | Multicenter | Community | Non-randomized intervention | Age 35-59 years  Resident of Watsonville, Gilroy, or Tracey, CA  English or Spanish speaking | No | No intervention  Two combination interventions  Mass media & direct mail educational campaigns on diet and physical activity  Small group instruction + mass media & direct mail educational campaigns on diety and physical activity |
| French , 20114  United States | Not Reported | Multicenter | School  Community/geographic  Clinical | Randomized intervention | Age: >12  At least one child ages ≥5 years and two household members ages ≥12 years  Residence in a private house or apartment within 20 miles of the university  Household TV viewing weekly average of ≥10 h per person  No household members with dietary, medical, psychological, or physical limitations that would prevent their participation in intervention activities  Willingness to be randomized to active intervention or control group. | Yes | No intervention  Combination of Self-management, Diet, Physical Activity |
| Howard, 20065  6United States | 1993-1998 | Multicenter | Community | Randomized intervention with self-selected control group | Female only  Age: 50-79  Post-menopausal  Fat intake of at least 32% of daily total calories  Expectation 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 years  Not 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 trial  No special dietary requirements that were incompatible with the intervention program  Not eating 10 or more main meals per week that were prepared outside the home  Not unable to complete satisfactorily a 4-day food record  No having been diagnosed with colon cancer, type I diabetes mellitus, or gastrointestinal  conditions that contraindicated a high-fiber diet  No history of having a bilateral prophylactic mastectomy  (some inclusion criteria abstracted from 6) | No | Diet and health related education materials  Dietary pattern low in fat with increased fruits, vegetables and grain intake. |
| Lamb, 20027  Europe | Not Reported | Single | Clinical | Randomized intervention | Age: 40-70  include if take less than 120 minutes of moderate intensity exercise per week  Include if no serious medical problem  No 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 Activity  Group Physical Activity Sessions |
| Levine, 20078  United States | Not Reported | Unclear | Work place  Community/geographic | Randomized intervention | Female only  Age: 25-44  BMI: 21-30  In good health according to a self-report questionnaire  Not pregnant in past year  Not in a weight loss program  Not receiving treatment for a psychiatric disorder  Not taking medication affecting body weight during past 3 months  Not planning to relocate within next 36 months  Able to engage in moderate physical activity or make change to diet | Yes | Printed materials  Combination of Self-management, Diet, Physical Activity delivered in person  Combination of Self-management, Diet, Physical Activity delivered by mail |
| Lombard, 20109 | 2006 | Multicenter | School of children | Randomized intervention | Female only  BMI >18.4  Mothers of children 5-12  Not pregnant,  Not breastfeeding infants under 6 months of age  Not taking prescribed weight control medications  No 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 session  Combination of Self-management, Diet and Physical Activity |
| Muscari, 201010  Europe | 2003 | Single | Community/geographic | Randomized intervention | Age: >65  BMI: >18-32  Include if resident of Pianoro municipality (northern Italy)  Include if Mini Mental State Examination (MMSE)score >24  Include if systolic blood pressure <180 or >110 mmHg  Include if diastolic blood pressure <110 mmHg  Include if resting heart rate >60/min  Include if hemoglobin >11 g/dl  No 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 rate  Limiting 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 about  suggestions to improve lifestyle, including individualized  self-administered programs to increase physical  activity  Physical Activity |
| Petrella, 200311  Europe | 1998 | Multicenter | Clinical | Randomized intervention | Age: >65  Include if healthy, community dwelling  Include 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 disease  Ability to walk on a treadmill without assistance  Not currently living in a long-term care facility. | Yes | Advice,Printed Materials, list of facilities  Physical Activity |
| Schmitz, 200712  United States | 2002-2003 | Multicenter | Community/geographic | Randomized intervention | Female only  Age: 25- 44  BMI: 25- 35  <10% change in body weight during past year  Pre-menopausal  Sedentary or only modestly physically active (<=3 weekly sessions of moderate aerobic physic activity)  Non-smoker  Not participating in a weight-loss program  No physician-diagnosed menstrual irregularities or significant gynecologic conditions  No positive response on the Physical Activity Readiness Questionnaire  No history of strength training in the past 6 months  No 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 pregnant  Not currently or recently lactating  No uncontrolled hypertension (systolic > 160 or diastolic > 99)  No history of cancer within the past 5 years  No plans to be out of town for >3 consecutive weeks during the study | Yes | Printed Materials  Physical 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, 201113  United States | 1982-1984 | Multicenter | Community | Prospective cohort | Women  Pregnant when recruited  Residing in metropolitan Cebu, Phillipines | No  Original goal was regional health and nutrition monitoring | Diet  Occupational physical activity |
| Berry, 201014  Canada | 2002 | Multicenter | Community | Prospective longitudinal | Age: ≥18 years  Living within Edmonton city limits  Did not move between 2002 & 2008  Completed survey in 2002 & 2008 | No  Original goal to assess and monitor heath issues, health determinants, and risk factors | Neighborhood walkability  Traffic  Physical activity  Fruits and vegetables |
| Bes-Rastrollo, 200815  Spain | 1999 | Single center | Graduates of an university | Prospective cohort | Not on extreme low or high values for total energy intake  Not with diagnosis of CVD, diabetes or cancer at baseline  Not pregnant  Weight not >170kg  University graduate | Yes | Consumption of meals outside the home |
| Lee, 201116  United States | 1992 | Multicenter | Subanalysis of trial among female health professionals | Subanalysis of RCT | Females only  Healthcare professional  No coronary heart disease, cerebrovascular disease, cancer (except nonmelanoma skin cancer), and other major chronic illnesses | No  Trial of low-dose aspirin and vitamin E to prevent cardiovascular disease and cancer | MET hours per week |
| Lewis 199717  United States | 1985-1986 | Multicenter | Community based or membership in a prepaid healthcare plan | Prospective cohort | 18 to 30 years old | No  Study the determinants and evoluation of cardiovascular risk factors among young adults | Calories from fat  Change in exercise duration during treadmill test |
| Mozaffarian 201118  United States | 1976-1986 | Multisite | Membership in health professionals organization | Prospective cohort | Age: ≤65 years  No obesity, diabetes, cancer, cardiovascular, pulmonary, renal or liver disease at baseline  No missing data on baseline lifestyle habits  No implausible energy intake  No more than nine missing responses on diet questionnaire  Not pregnant during followup  Female nurse or male health professional | No  Original 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 sleep  Total hours of daily television watching |
| Pereira 200519  United States | 1985-1986 | Multicenter | Community based or membership in a prepaid healthcare plan | Prospective cohort | 18 to 30 years old  Attended examination at 15 years  No missing data on fast food, bodyweight or important covariates at baseline or followup  Not pregnant or breastfeeding at baseline or within 180 days of year 15  No suspected type 1 diabetes based on insulin treatment | No  Original goal to study risk factors for cardiovascular disease | Number of times per week ate fast food  Change in number of days per week at fast food between baseline and year 15 |
| Purslow 200820  United Kingdom | 1993-1997 | Multisite | Community/geographic | Prospective cohort | Attended a health check  Had a measure of weight change  No history of stroke, cancer or heart attack at baseline  Complete food diary data | No  Original goal to study nutritional risk factors for cancer | Percent of daily energy intake consumed at breakfast |
| Schulz 200521  Germany | 1994-1998 | Multisite | Community/geographic | Prospective cohort | No exclusions | No  Original goal to study nutritional risk factors for cancer | Quintile of high-fiber/low-fat eating pattern |
| Vioque, 200722  Spain | 1994 | Multisite | Community/geographic | Cross-sectional | Alive during follow-up period  Not pregnant | No  Original 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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