**Table 5d Adherence outcomes among intervention studies among adults in the general population**

| **Author,**  **Year** | **Arm** | **Outcome defined** | **Baseline N** | **Baseline Adherence, mean** | **Final measure** | **N at final measure** | **Adherence, final measure, mean** | **Change from BL** | **Measure of association** | **Between group differences** | **Variables adjusted for** | **Comment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Physical activity intervention** |  |  |  |  |  |  |  |  |  |  |  |  |
| Schmitz, 20072 |  | Percentage adherence to the protocol of twice-weekly strength training (Only for Arm 2) |  |  |  |  |  |  |  | For arm 2, mean adherence in year 2 was significantly lower than in year 1, with a P < 0.0001  75% adherence in year 1, 61% in year 2, over 71% |  | Loss to follow-up 19% at 2 years. Greater in non treatment (23.2%) compared to tx (14.6%). |
| Petrella, 20033 | 1 | Compliance defined as number of exercise sessions at the prescribed training heart rate/total number of sessions possible over the time period at 3 or more sessions per week. Deﬁned as 80% of prescribed sessions recorded in the diary. Never give N compliant, but say more improvement in vo2max with increasing compliance. |  |  |  |  |  |  | Adherence to walks  # patients with one or more events : 129 |  |  |  |
|  | 2 |  |  |  |  |  |  |  | # patients with one or more events : 43 |  |  |  |
| Lamb, 20024 |  | In the health walks group, participants were encourage and invited to the health walks program. All patients had to go to advice session before randomized. |  |  |  |  |  |  |  |  |  |  |
| **Combination intervention** |  |  |  |  |  |  |  |  |  |  |  |  |
| French, 20116 |  | Adherence to at least 4 of 6 group sessions and half of the home activities. In intervention group only. |  |  |  |  |  |  | Adherence to at least 4 of 6 group sessions and half of the home activities. In intervention group only.  N=45  % patients with one or more events : 76 |  |  | 20% had perfect attendance and home goal completion rates. |
| Levine, 20077 | 1 | The proportion of women completing the study across the three intervention approaches |  |  |  |  |  |  |  |  |  | Overall, 78% completed a weight assessment at Year 1, 74% completed an assessment at Year 2, and 72% completed an assessment at Year 3. |
|  | 2 | Clinic group ADHERENCE: attendance at the group meetings |  |  |  |  |  |  |  |  |  | Overall, 78% completed a weight assessment at Year 1, 74% completed an assessment at Year 2, and 72% completed an assessment at Year 3. |
|  | 3 | Arm 3 Adherence: Returning homework assignments with self-reported weight |  |  |  |  |  |  |  |  |  | On average, attendance at the group meetings was 50.3% across the 15 sessions. |
| Burke, 20038 | 1 | Adherence to physical activity. | 43 |  | 12 mo | Only total was reported N=78 |  |  |  |  |  |  |
|  | 2 |  | 47 |  | 12 mo |  |  |  |  |  |  |  |
|  | 3 |  | 47 |  | 12 mo |  |  |  |  |  |  |  |
| Burke, 20038 | 1 | Adherence to dietary interventions; nutrient intake | 43 |  | 12 mo |  |  |  |  |  |  |  |
|  | 2 |  | 47 |  | 12 mo |  |  |  |  |  |  |  |
|  | 3 |  | 47 |  | 12 mo |  |  |  |  |  |  |  |
| Burke, 20038 | 1 | Adherence to diet; fiber intake | 43 |  | 12 mo |  |  |  |  |  |  |  |
|  | 2 |  | 47 |  | 12 mo |  |  |  |  |  |  |  |
|  | 3 |  | 47 |  | 12 mo |  |  |  |  |  |  |  |
| Burke, 20038 | 1 | Adherence to diet; consumption of high fat foods. | 43 |  | 12 mo |  |  |  |  |  |  |  |
|  | 2 |  | 47 |  | 12 mo |  |  |  |  |  |  |  |
|  | 3 |  | 47 |  | 12 mo |  |  |  |  |  |  |  |
| Burke, 20038 | 1 | Adherence to diet; Fruit and vegetable consumption. | 43 |  | 12 mo |  |  |  |  |  |  |  |
|  | 2 |  | 47 |  | 12 mo |  |  |  |  |  |  |  |
|  | 3 |  | 47 |  | 12 mo |  |  |  |  |  |  |  |

N = Sample Size; tx = treatment

**References**

1. Howard BV, Manson JE, Stefanick ML et al. Low-fat dietary pattern and weight change over 7 years: the Women's Health Initiative Dietary Modification Trial. JAMA 2006; 295(1):39-49.

2. Schmitz KH, Hannan PJ, Stovitz SD, Bryan CJ, Warren M, Jensen MD. Strength training and adiposity in premenopausal women: strong, healthy, and empowered study. Am J Clin Nutr 2007; 86(3):566-72.

3. Petrella RJ, Koval JJ, Cunningham DA, Paterson DH. Can primary care doctors prescribe exercise to improve fitness? The Step Test Exercise Prescription (STEP) project. Am J Prev Med 2003; 24(4):316-22.

4. Lamb SE, Bartlett HP, Ashley A, Bird W. Can lay-led walking programmes increase physical activity in middle aged adults? A randomised controlled trial. Journal of Epidemiology and Community Health 2002; 56(4):246-52.

5. Muscari A, Giannoni C, Pierpaoli L et al. Chronic endurance exercise training prevents aging-related cognitive decline in healthy older adults: A randomized controlled trial. International Journal of Geriatric Psychiatry 2010; 25(10):1055-64.

6. French SA, Gerlach AF, Mitchell NR, Hannan PJ, Welsh EM. Household Obesity Prevention: Take Action-a Group-Randomized Trial. Obesity (Silver Spring) 2011.

7. Levine MD, Klem ML, Kalarchian MA et al. Weight gain prevention among women. Obesity (Silver Spring) 2007; 15(5):1267-77.

8. Burke V, Giangiulio N, Gillam HF, Beilin LJ, Houghton S. Physical activity and nutrition programs for couples: a randomized controlled trial. Journal of Clinical Epidemiology 2003; 56(5):421-32.

9. Bhargava A, Guthrie JF. Unhealthy eating habits, physical exercise and macronutrient intakes are predictors of anthropometric indicators in the Women's Health Trial: Feasibility Study in Minority Populations. The British Journal of Nutrition 2002; 88(6):719-28.

10. Fortmann SP, Williams PT, Hulley SB, Haskell WL, Farquhar JW. Effect of health education on dietary behavior: the Stanford Three Community Study. Am J Clin Nutr 1981; 34(10):2030-8.

11. Adair LS, Gultiano S, Suchindran C. 20-year trends in Filipino women's weight reflect substantial secular and age effects. J Nutr 2011; 141(4):667-73.

12. Berry TR, Spence JC, Blanchard C, Cutumisu N, Edwards J, Nykiforuk C. Changes in BMI over 6 years: the role of demographic and neighborhood characteristics. Int J Obes (Lond) 2010; 34(8):1275-83.

13. Bes-Rastrollo M, Basterra-Gortari F, S+ínchez-Villegas A, Marti A, Mart+¡nez J, Mart+¡nez-Gonz+ílez M. A prospective study of eating away-from-home meals and weight gain in a Mediterranean population: the SUN (Seguimiento Universidad de Navarra) cohort. Public Health Nutrition 2010; 13(9):1356-63.

14. Lee I, Djouss+\_ L, Sesso H, Wang L, Buring J. Physical activity and weight gain prevention. JAMA: Journal of the American Medical Association 2010; 303(12):1173-9.

15. Lewis C, Smith D, Wallace D, Williams O, Bild D, Jacobs DJr. Seven-year trends in body weight and associations with lifestyle and behavioral characteristics in Black and White young adults: the CARDIA Study. American Journal of Public Health 1997; 87(4):635-42.

16. Mozaffarian D, Hao T, Rimm EB, Willett WC, Hu FB. Changes in Diet and Lifestyle and Long-Term Weight Gain in Women and Men: New England Journal of Medicine. N Engl J Med 2011; 364(25):2392-404.

17. Pereira MA, Kartashav AI, Ebbeling CB et al. Fast-food habits, weight gain, and insulin resistance (the CARDIA study): 15-year prospective analysis. The Lancet 2005; 365(9453):36-42.

18. Purslow LR, Sandhu MS, Forouhi N et al. Energy intake at breakfast and weight change: prospective study of 6,764 middle-aged men and women. Am J Epidemiol 2008; 167(2):188-92.

19. Schulz M, Nothlings U, Hoffmann K, Bergmann MM, Boeing H. Identification of a food pattern characterized by high-fiber and low-fat food choices associated with low prospective weight change in the EPIC-Potsdam cohort. J Nutr 2005; 135(5):1183-9.

20. Ballor DL, Harvey-Berino JR, Ades PA, Cryan J, Calles-Escandon J. Contrasting effects of resistance and aerobic training on body composition and metabolism after diet-induced weight loss. Metabolism 1996; 45(2):179-83.