

**Table G3.A7. Randomized Controlled Trials Assessing Effects of Physical Activity Alone on Preventing Diabetes**

Author, Year	Population	Intervention	Results
Pan et al., 1997 (1)	DaQing IGT and Diabetes Study, China 577 25+ year olds with IGT by WHO criteria, randomized by clinic, followed for 6 years. Outcome: diabetes	Diet (n=130): lower fat, alcohol, higher vegetables; weight loss in those with BMI $\geq$ 25 Exercise (n=141): increase by 1 U/day (local scales) Diet + exercise (n=126) Control (n=133): information only	Diet: 10.0/1000 PY RR* = 0.69 (P=0.028), ARR = 5.7/1000 PY Exercise: 8.3/1000 PY RR* = 0.54 (P=0.000), ARR = 7.4/1000 PY Diet + exercise: 9.6/1000 PY RR* = 0.58 (P=0.001), ARR = 6.1/1000 PY Control: 15.7/1000 PY RR* = 1.0 *Adjusted for FPG, BMI at baseline
Eriksson et al., 1999 (2); Tuomilehto, 2001 (3)	Diabetes Prevention Study (DPS) Finland: 5 centers 522 men and women aged = 55 years, BMI = 31, WHO IGT x 2; follow-up 3.2 years. Outcome: diabetes by WHO criteria.	Intervention (n=265) Diet, exercise, weight loss in 7 sessions in year 1, then 4 times per year Control (n=257): annual information	Lifestyle incidence rate = 3.2/100 PY vs. Control = 7.8/100; HR = 0.4 (0.3-0.7) for incident diabetes; ARR = 4.6/100 PY; 58% reduction.
Diabetes Prevention Program Research Group, 2002 (4)	Diabetes Prevention Program (DPP) 27 US centers, 3,234 men and women; IGT with elevated FPG; 5% non-Caucasian; age = 51 years, BMI = 34; follow-up 2.8 years. Outcome: diabetes by ADA criteria.	Intensive Lifestyle (ILS) (n=1,079) 16 session curriculum on diet, activity, weight loss; at least monthly contact with coach. Placebo (n=1,082) Annual meeting with written material on lifestyle.	ILS incidence rate = 4.8/100 PY vs. Placebo = 11.0/100 PY; 58% reduction in incidence; similar in both genders, all ethnic groups, all ages; ARR = 6.2/100 PY

ADA, American Diabetes Association; ARR adjusted relative risk; BMI, body mass index; FPG, fasting plasma glucose; HR, hazard ratio; IGT, impaired glucose tolerance; PY, person years; RR, relative risk; WHO, World Health Organization. Adapted from Hamman and Dabelea, 2008 (5)

## Reference List

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