

Look AHEAD Trial in Type 2 Diabetes: Results from Year 1



F. Xavier Pi-Sunyer, MD MPH, representing the Look AHEAD research group, presented the first year results of this large, randomized clinical trial in 5,145 obese patients with type 2 diabetes in the US. The objective is to see if an intensive lifestyle intervention (ILI) to reduce body weight can reduce cardiovascular disease (CVD) and mortality.

The ILI focused primarily on diet (1200-1800 kcal per day based on weight) and exercise (10,000 steps per day, gradual increase to 175 min/week). The control group received routine diabetes support and education (DSE) consisting of 3 to 4 group meetings per year.

The study included 2,570 patients in the ILI group and 2,575 patients in the DSE group. There were no statistically significant differences between the two groups in age, gender, ethnicity, insulin use, BMI, weight, or prior CVD. The ILI group had statistically significant weight loss at one year compared to the DSE group (-8.3% vs. -0.4%; $p < 0.0001$). Within the ILI group, the weight loss was consistent regardless of gender, ethnicity, and insulin use.

Physical fitness was measured using the graded exercise test (GXT) as measured in metabolic equivalents (METs). At one year, the ILI group was better than the DSE group in percent change in fitness from baseline. There was a strong correlation between fitness and physical activity and reduced body weight in both treatment groups.

HbA1c and fasting glucose levels in the ILI group had decreased from baseline compared to the DSE group (-0.64% and -21.5 mg/dl, respectively). In terms of blood pressure, the ILI group had a significant drop from baseline in systolic (-6.8 mmHg) and diastolic (-3.0 mmHg) blood pressure compared to the DSE group. The ILI group also had a significant increase in HDL (+3.4 mg/dl) and a decrease in triglycerides (-30.3 mg/dl); there was no difference in LDL between the two groups. Use of antidiabetic, antihypertensive and lipid lowering medications was similar between the two groups at baseline. At one year, there was a significant drop in the number of diabetes and lipid lowering medications taken in the ILI group vs. the DSE group ($p < 0.0001$ and $p < 0.01$, respectively). "Continued intervention and follow-up will determine whether these changes will be maintained and will reduce future CVD events," concluded Dr. Pi-Sunyer.