

Diabetes — Is It Preventable?

Objective:

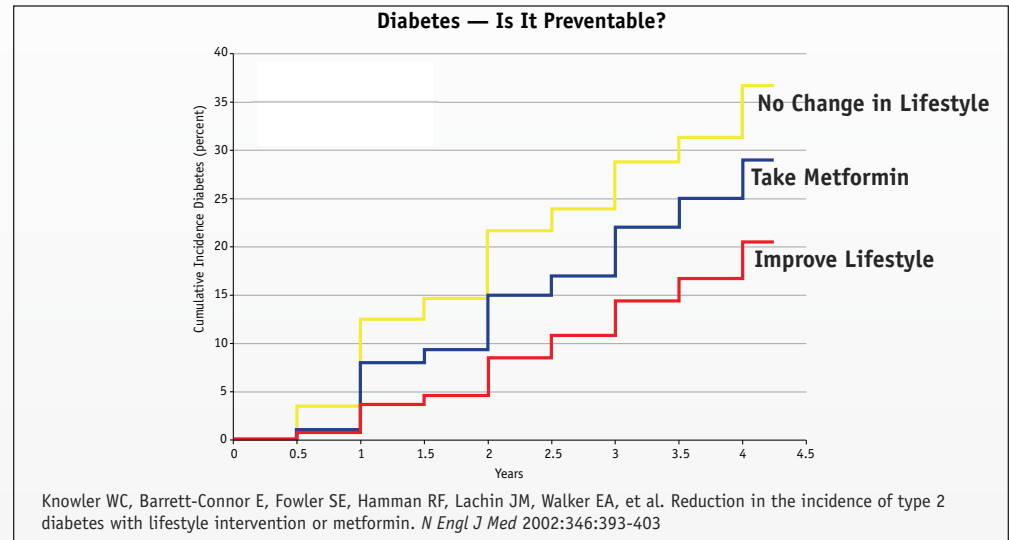
Suggest methods to reduce risk of developing diabetes.

Key messages:

- Lifestyle modification with weight loss and physical activity is effective at reducing risk of progression to diabetes in individuals with impaired fasting glucose and impaired glucose tolerance.
- Metformin may be considered for individuals with IFG and IGT and other risk factor (details below).
- These interventions also improve other aspects of the metabolic syndrome.

Additional information:

Impaired fasting glucose (IFG) and impaired glucose tolerance (IGT) represent intermediate states of abnormal glucose regulation and have been associated with increased risk of developing diabetes and cardiovascular disease. Individuals who are older, overweight, and have other diabetes risk factors are more likely to progress to diabetes. IFG is currently defined as fasting glucose of 100 to 125 mg/dl, although there is some recent evidence that individuals with fasting glucoses in the range of 95 to 99 mg/dl also have increased risk of developing diabetes. IGT is defined as a plasma glucose of 140 to 199 mg/dl 2-hours after a standard 75-gm oral glucose tolerance test.



Treatment recommendations for individuals with IFG, IGT, or both.

Population	Treatment Suggestions
IFG or IGT	Lifestyle modification: Healthful diet, 5 to 10% weight loss, and moderate to vigorous intensity physical activity for at least 150 min/week (at least 30 min/session with no more than 2 consecutive days without activity).
IFG and IGT and any of the following: <ul style="list-style-type: none"> • <60 years of age • BMI ≥ 35 kg/m² • First degree relative with diabetes • Elevated triglycerides • Reduced HDL cholesterol • Hypertension • A1C >6.0% 	Lifestyle modification as above and/or metformin (850 mg twice a day).

Recommendations adapted from ADA consensus statements: Impaired fasting glucose and impaired glucose tolerance: implications for care. *Diabetes Care*. 2007 Mar;30(3):753-9. PMID: 17327355 and Physical activity/exercise and type 2 diabetes. *Diabetes Care*. 2006 June;29(6):1433-8. PMID: 16732040.