

Type II Diabetes

Physical activity is a cornerstone of all diabetes care. It helps not just with the diabetes, but all the complications of it, such as heart disease.

The beneficial effects of physical activity in diabetes happen whether you lose weight or not. If you are overweight, it is even better if you can lose weight too.

Prevention

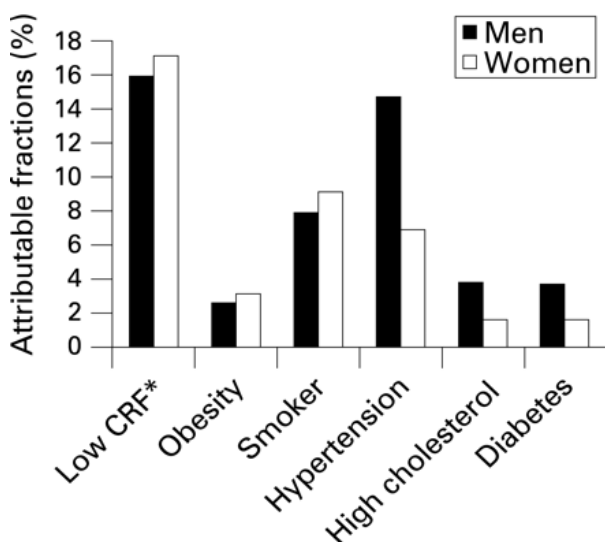
Regular physical activity reduces the risk of getting diabetes by up to 60% ([FDPSG 2001](#); [DPPRG 2009](#))

By combining aerobic and resistance exercise you can reduce your risk of developing diabetes: up to 59% ([Grøntved, 2012](#))

Too much time spent sitting is also a risk factor for diabetes however much physical activity you do ([Wilmot, 2011](#))

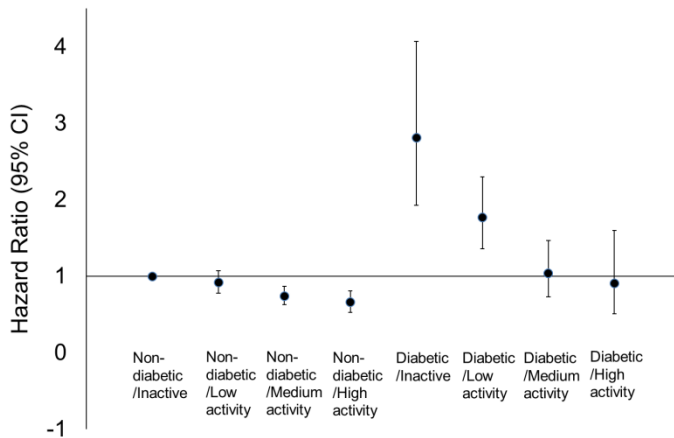
If you have pre-diabetes you can reduce your chance of developing full-blown diabetes by 50% with only small increases in your physical activity levels ([PHE 2015](#)). This is further improved by changing your diet too.

In fact, if you are diabetic, exercise is more important than obesity, smoking, high blood pressure and high cholesterol in reducing risk of heart attacks ([Blair 2009](#))



Treatment

If you are diabetic and do no physical activity your risk of illness and death is high. Regular physical activity reduces this risk, and if you can get up to a high level of activity you can even bring the risk down to where it would be if you did not have diabetes ([Moe, 2013](#))

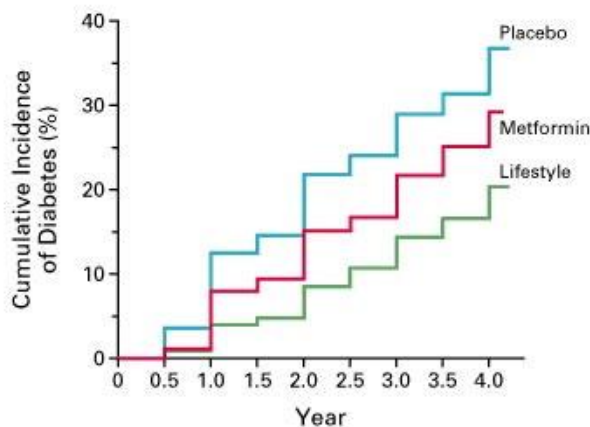


Physical activity does the following to help treat your diabetes:

- better control of your sugars and, cholesterol and blood pressure ([NEJM 2013](#); [Umpierre 2011](#))
- over 30% reduced chance of complications such as cardiovascular disease, blindness, kidney failure, amputation and death ([De Lemos 2012](#); [ACSM 2010](#); [Williamson 2009](#))
- 42% reduction in the chance of dying from your diabetes ([UKPDS](#))

Comparisons

If you have pre-diabetes, physical activity and weight loss programmes reduce your chance of diabetes by twice as much as the common medication metformin without any of the side effects ([DPPRG](#))



Advice

Although a single exercise session can help your blood sugar control for up to 72 hours, regular exercise is needed to achieve long term gains ([Helmrick 1991](#))

Exercise more than one to two hours after a meal and more than one hour after taking your insulin ([FYSS](#))

You may need to reduce your insulin or medication dose if you start exercising. Monitor your blood sugar closely and eat some carbohydrate before exercise ([ACSM 2010](#))
Avoid very high intensity activity; this can be a risk due to nerve problems and managing your body temperature ([FYSS](#))

Check your feet for blisters and sores before and after exercise; a blister can be very serious if you are diabetic ([Bowman 2008](#))

Do balance and coordination exercises twice per week as well as regular exercise and strength training.

Further resources for Healthcare Professionals

[Motivate to Move – Metabolic Health](#)
[FYSS – Type II Diabetes Mellitus](#)