

# Plain Language Summary

Digital prevention programme for people at risk of developing type 2 diabetes | May 2025

# What is type 2 diabetes?

Type 2 diabetes (T2D) is a condition that causes the level of sugar (or glucose) in the blood to be too high. This happens either when the body does not produce enough of a hormone called insulin, or when the body does not react properly to insulin.

T2D is usually a lifelong condition that affects a person's everyday life. It can increase a person's risk of serious health problems, for example, with their eyes, heart and nerves.

T2D is linked to being overweight, having an inactive lifestyle or having a family history of diabetes. People with high blood glucose levels but who do not have diabetes have an increased risk of developing T2D.

# What are digital diabetes prevention programmes?

Digital diabetes prevention programmes (DDPPs) provide information, advice, and support to help people make healthier lifestyle choices using technologies such as smartphone apps, websites, videoconferencing and devices like smartwatches. DDPPs aim to help people make healthier lifestyle choices by changing their behaviours, using tools such as goal setting, action planning and relapse prevention. They may be offered to people at risk of developing T2D to reduce this risk.

## Why is this important?

The number of people being diagnosed with T2D is increasing every year. Having T2D increases a person's risk of developing serious illnesses (for example, heart disease). This also affects a person's quality of life and means that the NHS may need to supply extra treatments.

Poor diet, lack of physical activity and obesity can contribute to the development of T2D. Helping people to make healthier lifestyle choices and change some of their behaviours can prevent or delay the onset of T2D in people at risk.

#### What we did

Diabetes prevention programmes have traditionally been delivered face-to-face within a group setting. In 2023, we assessed whether these programmes work as well when they are delivered using digital technologies like DDPPs within a group setting. We looked for studies that told us how well DDPPs work, and whether they offer good value for money.

In 2025, we searched for any new studies published since our last report to ensure that our knowledge on DDPPs is based on the latest available information.

## What we found

We found more recent studies from England which suggested that DDPPs are as effective as traditional programmes in reducing blood glucose levels and helping people lose weight.

DDPPs helped to slow down how quickly people with high, but non-diabetic, levels of blood glucose go on to develop T2D.

We found that using health coaches and having social support from family and friends both play an essential role in delivering DDPPs. Health coaches are healthcare professionals who support people enrolled in DDPPs. People were more likely to set goals for themselves and engage with the programme if they received support from a health coach in combination with other tools. People found it easier to change their behaviours, and continue making these changes, with help from their family and friends.

Compared with in-person programmes, DDPPs can reach more people and are more accessible to some groups, for example, younger people or people with work or carer commitments. Lifestyle interventions which prevent T2D have generally been found to offer good value for money, and this is expected to be the case for digital programmes as well.

Some more research on DDPPs would be helpful, so that they can be further improved. For example, we need a better understanding of the main factors which encourage people to start and complete DDPPs.

### What is our conclusion?

DDPPs work as well as traditional programmes in helping people make healthier lifestyle changes and reduce their risk of developing T2D. When offered alongside traditional options, DDPPs may be able to reach more people and provide better access to some population groups. Health coach support and social support are key to sustaining engagement and achieving meaningful health outcomes.

When developing DDPPs for use, it is important to understand why people take up and engage with the programme.

#### What next?

This report will be shared with the Accelerated National Innovation Adoption collaborative to support their decision on the potential for a DDPP across Scotland.

This plain language summary has been produced based on SHTG Assessment of digital prevention programme for people at risk of developing type 2 diabetes – update report, May 2025.