

# Physical activity and diabetes



Diabetes UK has just completed a 12-month research project investigating physical activity. Here, **Neil Gibson**, our Physical Activity Insight Advisor, who led this work, discusses the key findings and the importance of your patients being active. He will also highlight the main recommendations from the new Chief Medical Officers' (CMO) Physical Activity Guidelines<sup>1</sup>, which were published on 7 September 2019

## Physical activity for adult patients can reduce their chances of<sup>1</sup>:

- Type 2 diabetes by **40%**
- cardiovascular disease by **35%**
- falls, depression, etc by **30%**
- joint and back pain by **25%**
- cancers (colon and breast) by **20%**

The CMO guidelines provide separate physical activity information for under-fives, children and young people, adults and older adults. Adults with disabilities, pregnant women and women after childbirth have also been included independently. There are several infographics that you may find useful in your practice. They are fairly simple for patients to understand and consist of the guidelines for the individual groups already mentioned. There are also infographics on health benefits, area of highest impact, intensity of exercise, improvements with different types of activity, and the overall impact of sport and physical activity.

## The benefits of being active for your patients with diabetes include<sup>2</sup>:

- ✓ helping their body use insulin better
- ✓ helping them look after their blood pressure (important because high blood pressure means they are more at risk of diabetes complications)
- ✓ helping lower cholesterol to protect against problems like heart disease
- ✓ helping them lose weight if they need to, and keep the weight off after they have lost it
- ✓ giving them energy and aiding sleep

- ✓ helping their joints and flexibility
- ✓ improving HbA1c for people with Type 2 diabetes through being more active
- ✓ benefiting the mind as well as the body – exercise releases endorphins ('happy hormones'). Being active reduces stress levels and improves low mood.

## Physical activity guidelines for adults<sup>1</sup>

Adults should be active daily, aiming for the weekly goal set out below.

Over a week, activity should add up to at least:



**150**  
minutes

That's 30 minutes of moderate intensity activity on at least five days a week



Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week, or combinations of moderate and vigorous intensity activity. Adults should also undertake physical activity to improve muscle strength on at least two days a week and should minimise the amount of time spent being sedentary (sitting) for extended periods.

Individual physical and mental capabilities should be considered when interpreting the guidelines for your patients.

## Key findings from Diabetes UK's insight research

When analysing all of the Diabetes UK insight gathered over the past 12 months, the three most common themes concerning physical activity barriers and motivators for patients were as follows.

### 1 Education, information, training and awareness

Generally, there was a lack of knowledge for patients with diabetes, healthcare professionals and the physical activity industry (such as instructors and gym staff) about physical activity and diabetes. Furthermore, some did not know the benefits of a physically active lifestyle or how to safely exercise with diabetes. Another considerable problem was that many patients did not know where they could be more active, with limited signposting to activities by healthcare professionals and others.

Patients overwhelmingly wanted information on physical activity from Diabetes UK, as it is seen as a trusted source. Healthcare professionals were also perceived as a reliable source, but could be inconsistent or inaccurate with their physical activity advice. Diabetes education courses, such as DAFNE and DESMOND, were held in high regard, although the physical activity content was limited. Overall, information was most effective when it was personalised and specific to a patient.

### 2 Support: social and psychological

Social support was important for people with diabetes. Support and encouragement from family and friends and having significant others accompany them to a physical activity session helped motivation to continue. Feeling safe during physical activity around knowledgeable, understanding friends was also important. People valued ways of connecting socially to others with diabetes without feeling like they were different, special or attending a self-help group.

Having an intensive, individually tailored period of support was most effective at getting patients to start being active. This included having an individual physical activity programme. However, a considerable barrier to physical activity was the lack of psychological and podiatry support that patients perceived. There needs to be improved access to both of these specialists to increase physical activity levels.

### 3 Fear of hypoglycaemia (mainly for Type 1 diabetes)

The biggest barrier preventing people with Type 1 diabetes from becoming more physically active was the fear of hypoglycaemia. Equally, this was the principal anxiety that parents had for their children being physically active. This fear was not just fright and anxiety, but also embarrassment and a sense of futility. For instance, people thought that it is pointless to exercise, if you then have to consume (more) carbohydrate to counteract a hypo, making physical activity not worth the risk.

## Suggestions for healthcare professionals

- The term 'exercise' has negative connotations for many patients. Try using 'more active' instead.
- Focus on what patients can do, rather than what they cannot. Positivity over negativity.
- Address any limiting beliefs and acknowledge patient achievements.
- The involvement of family and friends, especially those who may be of a similar fitness level or have similar conditions, can be a great motivator. It will make patients feel confident in what they are doing and know that they are not alone. This social interaction and support can also come from joining regular sports clubs and community groups.
- Remember that patients' blood glucose levels can go up or down with exercise.

## Advice for your patients from the CMO Physical Activity Guidelines

- Some physical activity is good, more is better.
- Make a start today; it's never too late.
- Every minute counts.

More information and ideas for getting your patients more active can be found on Diabetes UK's website. Search for 'Diabetes and exercise'.

## REFERENCES

- 1 Department of Health and Social Care (2019). UK Chief Medical Officers' Physical Activity Guidelines. London: [www.gov.uk](http://www.gov.uk)
- 2 Diabetes UK (2019). Diabetes and exercise. [www.diabetes.org.uk/up-exercise](http://www.diabetes.org.uk/up-exercise)

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