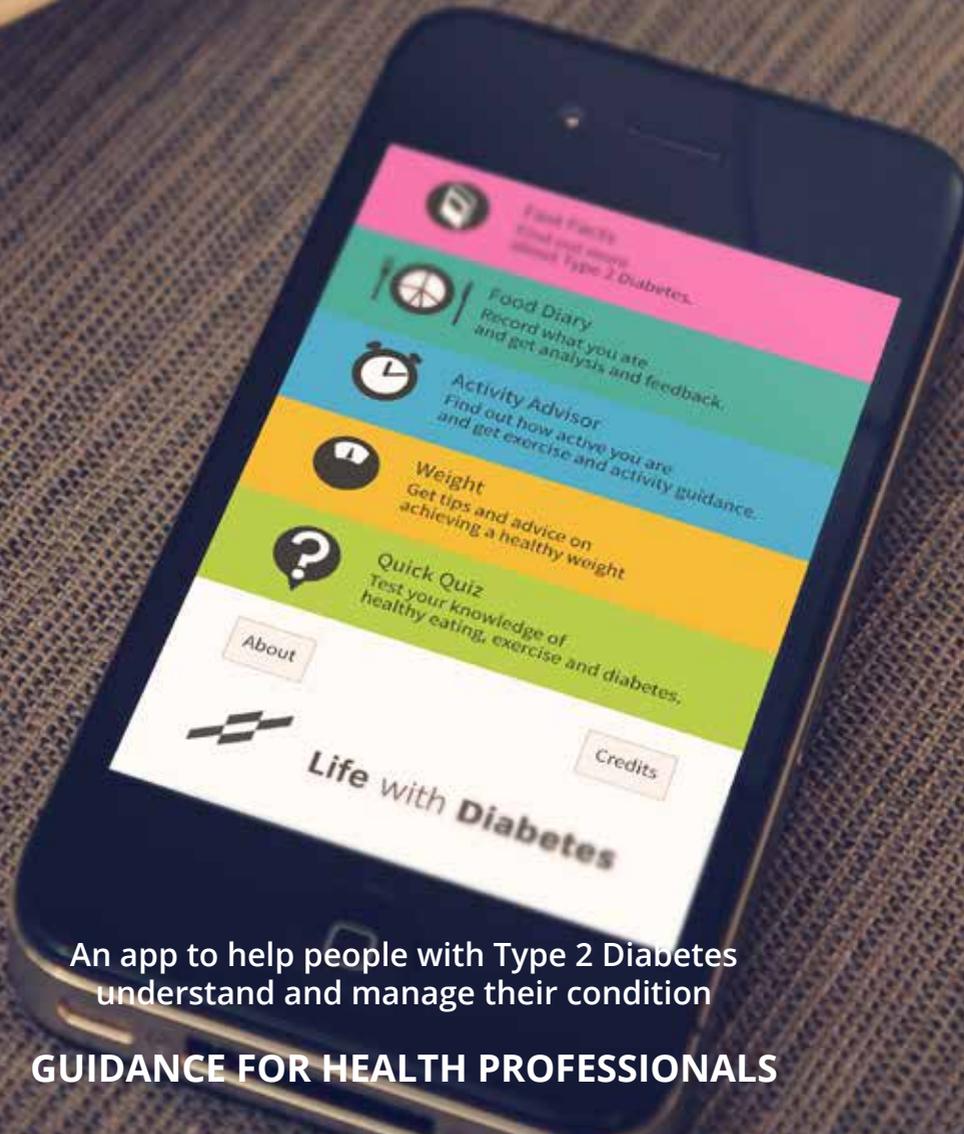




Life with Diabetes



An app to help people with Type 2 Diabetes understand and manage their condition

GUIDANCE FOR HEALTH PROFESSIONALS



About 'Life with Diabetes' (LwD):

Diet and exercise are the cornerstones of the management of type 2 diabetes but modifying these behaviours can be very challenging for patients.

Patients report that they feel overwhelmed by the amount of information they receive when they are diagnosed, they often say they don't know where to start in terms of making appropriate lifestyle changes, and even for those who do attend structured education programmes, many say they struggle to retain all the information they receive.

The LwD program was developed with patients to be an easy-to-understand, accessible resource to help them overcome these difficulties. The aim of LwD is to promote autonomy, self-evaluation, decision-making and self-management skills in relation to diet and physical activity and, so, to

empower people with type 2 diabetes to take ownership of their condition.

It is available as an app for Apple iPhone and iPad, and Android devices. A version can also be downloaded for Windows or Mac.

Patients will be able to access it at their convenience, allowing them to schedule educational activities around their existing lifestyle, in their own time, when they are on the go or in the comfort of their own home.

How can it be used?

LwD is suitable for any patient with type 2 diabetes. It can be used as an adjunct to patient care, for example:

- *filling the 'gap' between diagnosis and receipt of structured diabetes education*
- *for encouraging continued learning, self-monitoring and self-management between check-ups*
- *to aid discussions or reviews with health professionals*

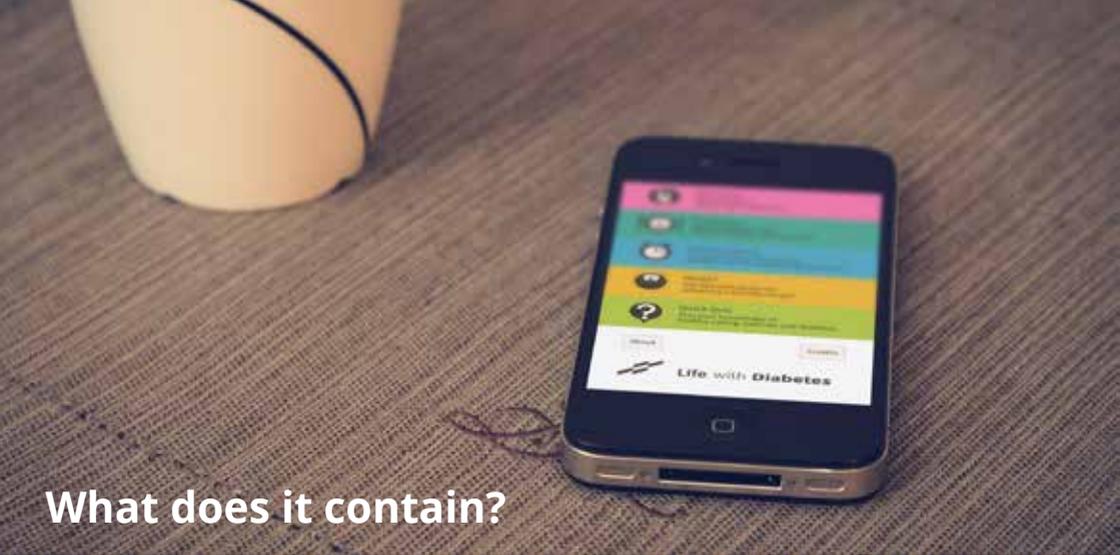
Can it be used in general practice?

Yes, you can mention LwD to patients during consultations and encourage them to use it alongside the advice they receive from you to help self-manage their diet and lifestyle.

Furthermore, as part of one Quality Outcomes Framework^a indicator for Diabetes Mellitus DM007 (The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 59 mmol/mol or less in the preceding 12 months), the NICE clinical guideline on type 2 diabetes identifies that lifestyle and medication therapy should be offered to help achieve and maintain the patient's HbA1c

target. Alongside referral to structured education, LwD can be used to ensure patients receive the dietary education they require and to facilitate dietary review with their health professional as it encourages patients to record and review their diet regularly and set individual goals and targets for continued improvement.

^a 2015/16 General Medical Services (GMS) contract Quality and Outcomes Framework (QOF) Guidance for GMS contract 2015/16 March 2015 . Available to download from www.nhsemployers.org.



What does it contain?

Life with Diabetes has 5 sections:

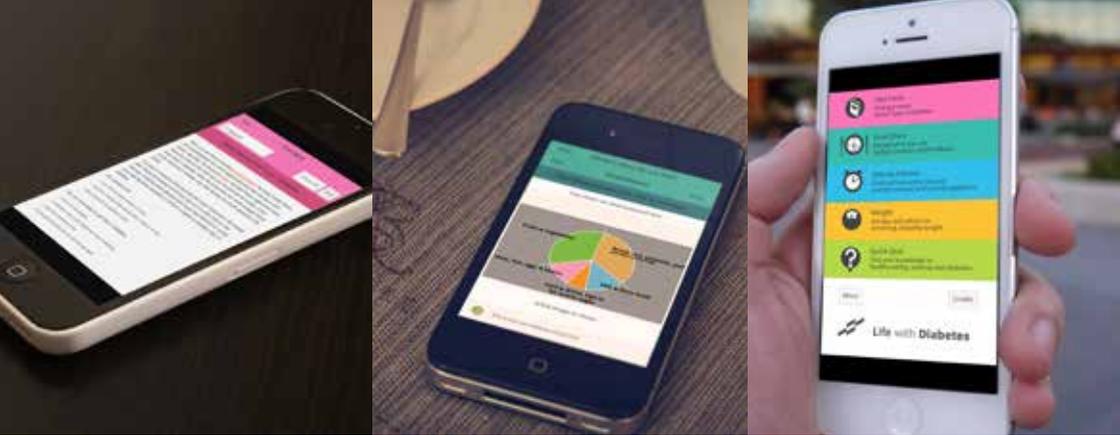


1) The **'Food Diary'** allows patients to record their food and drink intake, receive feedback on the balance of their diet, set goals and save their data so they can revisit and review their goals. It encourages ongoing self-monitoring of diet. The dietary information provided within LwD is based around the Eatwell plate^b, the concept of balance, and the Diabetes UK evidence-based nutrition guidelines for the prevention and management of diabetes^c.



2) An **'Activity Advisor'** assesses current level of moderate and vigorous activity and provides feedback to patients according to the users' stage of behaviour change. The Activity Advisor also encourages patients to self-monitor their physical activity and to set goals to fit more activity into their lifestyle.

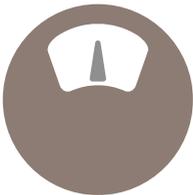
^b The Eatwell plate has now been superseded by the Eatwell Guide but the concept of balance around the food groups remains the same. <http://www.nhs.uk/Livewell/Goodfood/Pages/the-eatwell-guide.aspx>



3) **'Fast Facts'** is a reference section which contains factual information about type 2 diabetes, diet, and physical activity. It is written in lay language in order to make it accessible for patients. The information is presented in a dictionary style and includes a search function.



4) The **'Quick Quiz'** consists of a series of quizzes each composed of 6 multiple choice questions, with immediate feedback. It is designed to allow individuals to assess their levels of knowledge on a range of topics and to address common misconceptions.



5) The **'Weight'** section includes information on the importance of weight management in type 2 diabetes and provides tips to help patients manage their weight as well as signposting them to other weight management services or information sources.

What LwD does not do:

LwD is not intended as a comprehensive medical guide to diabetes, or a technical monitoring app.

The Food Diary does not count calories or give detailed dietary analysis (such as grams of fat or carbohydrate) (there are many smartphone apps already available that patients can use to do this if they wish). Instead it is designed to provide practical, meaningful feedback based around the balance of the food groups.

Similarly, the Activity Advisor does not assess the calorie use of activity, or monitor steps, or heart rate, but rather it helps the user to understand more generally if their activity levels are in the right range and encourages them to get into the habit of planning and monitoring their activity and setting SMART personal goals.

Patients are referred to their healthcare provider for information on medication, eye and foot care and so on.

How was LwD developed?

People with type 2 diabetes were closely involved in the development of the LwD program. They tested and provided feedback on all sections as they were being developed. We then tested the LwD in a 12-week randomised controlled trial. In this trial the LwD program was highly rated and valued by participants and there was a significant improvement in barriers related to 'knowledge and beliefs' about diabetes in the LwD intervention versus control group^d.

Since then, LwD has been refined and updated in order to take on board feedback from people who used it in the trial and also to align the content with the recent Diabetes UK evidence-based nutrition guidelines. For the next stage of testing, LwD was then distributed to experts from the writing group of the 2011 Diabetes UK nutritional guidelines. The feedback received from these health professionals was very positive with the vast majority agreeing that LwD would be a useful adjunct to current patient care. The HPs also provided feedback which was used to further refine LwD.

d Booth AO, Lowis C, Hunter SJ, Dean M, Cardwell CR, McKinley MC. Development and evaluation of a computer-based, self-management tool for people recently diagnosed with Type 2 Diabetes. *Journal of Diabetes Research* 2016; Article ID 3192673, 11 pages.

Behaviour change techniques used in LwD:

The aim of the LwD program is to promote autonomy, self-evaluation, decision-making and self-management skills in relation to diet and physical activity and, thus, to empower people with type 2 diabetes to take ownership of their condition.

Overall, the LwD program focuses on improving knowledge and addressing misconceptions and encourages self-monitoring of dietary intake and physical activity with goal setting used as a means of facilitating behaviour change. This approach was informed by a review of the existing literature on the self-management of lifestyle in type 2 diabetes, together with original qualitative research conducted by QUB^e.

Self-monitoring and goal setting are key behaviour change techniques that are known to help people change their dietary behaviour^f.

The BCTs included in LwD include:

- *providing information on the link between lifestyle and type 2 diabetes*
- *providing information on the consequences of poor self-management of lifestyle*
- *prompting intention formation*
- *prompting specific goal setting for diet and activity*
- *prompting action planning via smart goals*
- *prompting review of behavioural goals*
- *prompting self-monitoring of behaviour*
- *providing feedback on performance*

e Booth AO, Lowis C, Dean M, Hunter SJ, McKinley MC. Diet and physical activity in the self-management of type 2 diabetes: barriers and facilitators identified by patients and health professionals. *Prim Health Care Res Dev.* 2013;14:293-306.

f Michie S, Ashford S, Sniehotta FF, Dombrowski SU, Bishop A, French DP. A refined taxonomy of behaviour change techniques to help people change their physical activity and healthy eating behaviours: the CALO-RE taxonomy. *Psychol Health* 2011;26:1479-98.

Who developed LwD?

LwD was developed by Queen's University Belfast working with experts from Food & Health Communications and Oscillate Studio. People with diabetes were closely involved at all stages of the process to make sure that LwD is as useful and easy to use as possible. Health professionals who specialise in diabetes care were also involved.

Where can I get LwD?

Life with Diabetes is available to download for free, for iPhone and iPad from the Apple App Store and for Android devices from the Google Play Store.

It is also available to download for desktop computers (Windows and Mac).

Find out more at:

www.lifewithdiabetes.org.uk

Android, Google Play, and the Google Play logo are trademarks of Google Inc.

Apple, the Apple logo, iPhone, and iPad are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc.



Queen's University
Belfast

food and health communications

Osc.
OscillateStudio



Download on the
App Store



GET IT ON
Google Play