

# Move away from prediabetes

Move Away from Prediabetes (MAP) is an exemplar innovative, structured behaviour change programme helping participants diagnosed with prediabetes to 'move away' from developing Type 2 diabetes. **Farhat Hamid**, registered dietitian and Head of Nutrition and Dietetics Brent, London North West Healthcare NHS Trust, shares her experiences of the MAP programme in preventing diabetes in the most culturally diverse borough in the UK

**O**ver the past four years, Brent NHS dietitians have helped over 400 people at high risk pull back from developing Type 2 diabetes and move away from the prediabetes state through the MAP programme. As one of our participants put it: "Don't go down that road if you can prevent it, I'd rather make changes to my diet and lifestyle now, when I have

a choice, than when I become diabetic and have no choice."

In 2011, Nutrition and Dietetics Brent was commissioned to design and deliver a lifestyle intervention programme for the local population with intermediate hyperglycaemia. The MAP programme was designed to improve glycaemic control among the population through self-care, so that progression to Type 2 diabetes would be prevented or delayed.

Initially, MAP was commissioned by Public Health, Brent Primary Care Trust. I was approached to design an evidenced-based intensive lifestyle intervention to assist those identified as having prediabetes through their NHS Health Check. As part of this screening programme, prediabetes can be identified, through HbA1c or oral glucose tolerance tests. In Brent, the MAP programme, now commissioned



by the local authority and delivered by Nutrition and Dietetics Brent, has demonstrated an effective collaborative partnership, with demonstrable reductions in prediabetes prevalence and improved self-management.

## About Brent

The London Borough of Brent, situated in North West London, lies between Westminster, Harrow, Barnet and Camden and is the most ethnically diverse borough in the UK. The most recent Census indicated that 64 per cent of Brent's population comprised Black, Asian and Minority Ethnic groups, higher than the national average figures. It follows that the diversity of Brent, with the corresponding genetic make-up, increases the risk of developing Type 2 diabetes among the borough's population. Therefore, the prevalence of diabetes in Brent is 10.5 per cent, the highest in the UK (and this prevalence is expected to reach 15 per cent by 2030). Furthermore, there are areas within the borough that have a high level of deprivation, which links to ill health.

My task was to create a programme specific to the needs of Brent's residents. The challenge was to design an evidence-based programme that could address the health and cultural needs of such a diverse population. Diet is key and specific to different cultures and religions. If we were going to be effective in achieving our goal, it would therefore be really important for practitioners to develop cultural competence to deliver appropriate services to the diverse communities. As a dietetic team, our practices are already multicultural in their approach – and MAP was not going to be any different.

## Background to MAP

Move Away from Prediabetes is a unique and pragmatic programme in a real-life setting, with a research base derived from randomised controlled trials from the United States (The Diabetes Prevention Programme). The MAP programme is also in keeping with the relevant National Institute for Health and Care Excellence guidance on prevention of Type 2 diabetes.

When it came to naming our programme, we felt that the concept of 'moving away' was very motivating. It actually sent out the right message that participants were moving away from ill health and towards better health. The programme is largely based in leisure centres for the group physical activity and dietary advice sessions. We wanted to shift away from delivering a wellness programme from an ill health-related setting, like a hospital, GP clinic or health centre. Our thinking is that it is more beneficial to provide a programme like MAP in an environment that is more conducive to promoting and improving health.

## The MAP journey

With every cohort, a motivated group of Brent residents is ready to start their journey towards better health. The patient journey through MAP includes four one-to-one sessions with dietitians over six months, and six group sessions involving both dietary advice and physical activity over a seven-week period.

The MAP programme uses many approaches to ensure it is fully inclusive of everyone within the borough. The content is culturally appropriate, ensures that all dietary patterns and choices are incorporated and that efforts are made to overcome any barriers to increasing physical activity. Unlike many group education programmes, which cannot facilitate interpreting, where required, an

interpreter is provided when English is not the first language. Some participants prefer to bring a family member with them to their sessions, a practice fully encouraged to help promote lifestyle changes at home and, since diabetes is linked to family history, an opportunity for more participants to benefit from preventing diabetes at an early stage.

The underpinning philosophy of MAP is self-management, and this resonates throughout the programme. Participants can expect to be supported by specialist dietitians and exercise specialists, who are trained in behaviour change and equipped both to engage and motivate individuals with self-management skills. The service aims to help participants achieve:

- a healthy weight
- a more active lifestyle
- healthy eating
- improved blood pressure, blood glucose and cholesterol.

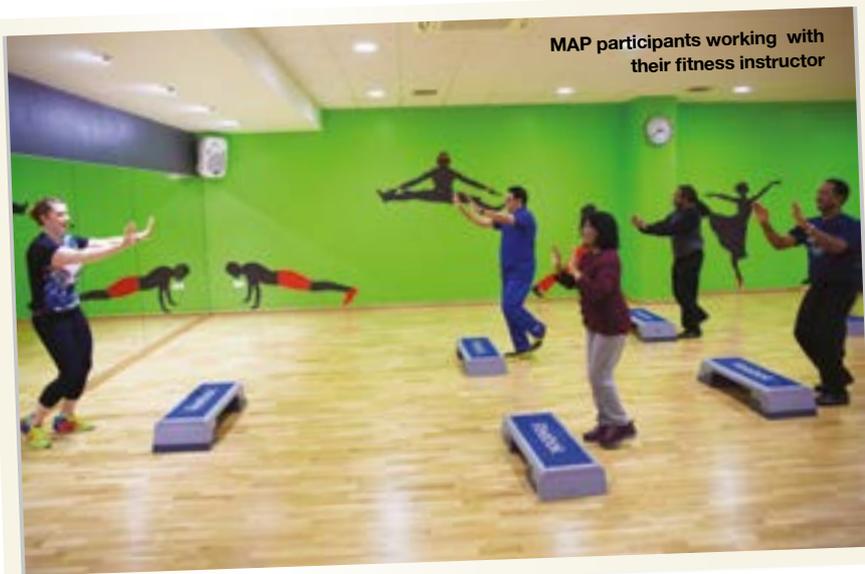
At an initial individual session with the dietitian, participants are provided with the blood test results from their GP, which have diagnosed their prediabetes. Their weight, height, waist circumference, body fat percentage and blood pressure are all measured. All results are explained and the diagnosis of prediabetes is fully discussed with the participant, who is provided with these measures within a written profile.

The profile that emerges from these early discussions in MAP becomes the foundation for participants to self-manage their own health monitoring. This means they may ask for a repeat HbA1c blood test, be able to interpret the results, identify changes in these parameters and know when health measurements should be reviewed. This session also enables the dietitians to ensure that the participant has identified their personal SMART (specific, measurable, achievable, realistic, timed) goals at an early stage, and that fears and challenges are acknowledged. A commitment to attend the programme sessions and take part

“ We had three months of free gym membership ”  
– MAP participant

## DIABETES UK SAYS

Diabetes UK is working with NHS England and Public Health England to develop and roll out a National Diabetes Prevention Programme. The aim is that programmes like MAP, for people at high risk of Type 2 diabetes, will be available over the whole of England in the next few years.



in activities of self-monitoring for diet and exercise is formalised through a written agreement at the outset.

### Getting together, getting moving

Group sessions are fun, motivating and an excellent opportunity for participants to meet others with the same concerns and enhance motivation. Often, friendships are forged and participants achieve their goals with the support of their new-found friends and the MAP team.

Structured weekly physical activity sessions are led by qualified fitness instructors, trained in behaviour change, who increase the confidence of the participants in improving physical activity levels. The instructors are able to adapt activities for those with mobility issues, and those who are new to exercise, providing inspiring and realistic ideas for everyone to get active.

To further stimulate interest in physical activity, participants are provided with three months of free membership to the leisure centre. They are encouraged by the named exercise specialist to use the centre outside of the structured sessions to work towards activity goals of at least 150 minutes of exercise per week and consolidate activities from the group sessions. They are also signposted to other local authority initiatives, such as outdoor gyms and walking groups.

### Mindful eating

Weekly interactive group sessions include education about prediabetes, reading labels and portion sizes. A behavioural change approach is fostered throughout the programme,

with all the dietitians having had training in behaviour change communication, enabling the individual to make these preliminary changes themselves, giving them ownership. Mindful eating encompasses the general principles of eating with intent and attention. A group session dedicated to mindful eating, coupled with patient-led activities to monitor their own mindfulness, enables participants to consider their eating behaviours and evaluate the role emotion may play in their eating habits.

### Personalisation

One-to-one sessions during the programme enable personal attention to setting SMART goals and monitor progress. The one-to-ones are an opportunity to address individual challenges, barriers to change and enable us to tailor the advice participants were getting from group sessions to their own way of life.

A final session with the dietitian enables a recheck of all the clinical assessments initially measured on

commencing the programme, to re-evaluate their diabetes risk. MAP dietitians are trained to carry out the point-of-care testing of blood pressure, cholesterol and HbA1c.

An opportunity to reflect on individual changes made and future plans after the programme ends is central to MAP and the goal of moving participants away from prediabetes. Participants are encouraged to attend regular follow-ups, over two years, to review successes as well as for supportive

group discussion about the barriers to maintaining dietary change and physical activity changes longer term.

### Outcomes

The MAP programme includes robust clinical assessment, which has shown excellent outcomes over four years. With a 72 per cent completion rate, MAP motivated and inspired remarkable changes. At six months, 60 per cent of participants moved out of prediabetes, while 82 per cent have improved glycaemic control, and reduced waist circumference and weight. At 12 months, 43 per cent remain out of prediabetes.

The programme is an excellent example of patient-centred care and collaboration between community health services, the clinical commissioning group, local authority and leisure services. According to Robert Chesters, Innovation Lead, Medical Directorate, NHS England: "The MAP programme is an exemplar initiative aimed at the prevention of Type 2 diabetes. It's a really innovative approach to making existing services work more effectively together to deliver significant patient benefits."

### The future of MAP

I have won two bids to develop new programmes, namely MAP Hounslow (diabetes prevention) and Fit4Life Brent (cardiovascular disease and diabetes

prevention). These will help thousands more, by addressing all the issues of the NHS Health Checks, thereby preventing not just diabetes, but also its associated health conditions – heart

disease, stroke and kidney disease.

In conclusion, MAP is clinically effective, cost-effective and scalable. Moreover, the innovative methodologies used in MAP can be recreated to benefit other long-term conditions. It has been successful in consistently helping participants to lower their HbA1c and move away from prediabetes over the last four years. As one MAP participant concluded: "It was one of the best programmes and I have benefited to the full – it's life changing."

“I feel great – before I could not run, but now I can!”  
– MAP participant