

BROMLEY ANNUAL PUBLIC HEALTH REPORT 2017

Diabetes Prevention

Foreword

As the Director of Public Health it is my responsibility to monitor the health of the population in Bromley and implement prevention services and interventions where possible to improve the health of our residents now and in the future. All Directors of Public Health produce an annual Public Health report to raise the profile of emerging health issues or to highlight an area of particular interest to a wide variety of audiences.

This year I have chosen Type 2 Diabetes. Type 2 diabetes is one of the most significant public health challenges of our time and is a national and local priority. This report will focus on prevention and the pro-active steps we can all take to prevent diabetes. Throughout this report we will communicate to 'you', the reader, to help us spread the message of diabetes prevention as we all know someone who either has diabetes, or is at risk.

We hope you enjoy reading the report.

Nada Lenic

Dr Nada Lemic Director of Public Health London Borough of Bromley

You can read previous Annual Public Health Reports here

Contents

| Contributors | 4 |
|-------------------------------------------------------|----|
| Introduction | 5 |
| What is diabetes? | 5 |
| What are the signs and symptoms of diabetes? | 7 |
| Diabetes Prevalence | |
| National Context – Diabetes Prevalence in the UK | |
| Local Context - Diabetes Prevalence in Bromley | |
| The Impact of Diabetes on Individuals & Communities | 13 |
| Diabetes Risk Factors | 14 |
| Risk factors for diabetes in Bromley | |
| Have you had an NHS health check? | |
| Why have an NHS Health Check? | |
| What if you are not eligible for an NHS Health Check? | |
| The National Diabetes Prevention Programme | |
| Walking Away From Diabetes | |
| Other Local Support to Improve Health and Wellbeing | |
| Mobile phone apps | |
| References | |

Contributors

Carolyn Piper Gillian Fiumicelli Helen Buttivant Laura Austin Croft

Susan Mubiru

Introduction

Diabetes is a major cause of poor health and premature death. Both the incidence and prevalence of diabetes are rising dramatically, globally, nationally and locally in Bromley. The evidence for reducing the risk of type 2 diabetes (T2D) is well established, making it often a preventable disease. This report will explain what diabetes is, how common it is, what factors influence the risk of developing diabetes and what we can do to reduce our risk. Whilst this report will focus on the prevention of T2D it will also signpost readers to information on the management of the condition and sources of further support for those diagnosed with T2D.

What is diabetes?

Diabetes is a serious health condition that occurs when the amount of glucose (sugar) in the blood is too high because the body cannot use it properly. Diabetes is a risk factor for cardiovascular disease and should be considered as part of the risk spectrum for cardiovascular disease alongside hypertension (high blood pressure) and hypercholesterolemia (high cholesterol).

If left untreated, high blood glucose levels can cause serious health complications hence the early diagnosis of diabetes is extremely important. Poor management of blood sugar levels (glycaemic control) is linked to poor health outcomes such as; damage to vision (retinopathy), poor circulation (peripheral arterial disease (PAD)) and neuropathy) and damage to kidney function (chronic kidney disease (CKD)). It is estimated that the risks of other cardiovascular diseases (CVD) such as coronary heart disease (CHD) and stroke are more than five times greater in diabetic individuals than non-diabetic individuals and life expectancy for those with diabetes is on average 10 years shorter than for those without the disease.

There are two main types of diabetes: Type1 and Type 2. They are different conditions but are both about how insulin is used in the body, they are both serious and need to be treated and managed appropriately¹.

However, this report will focus on the incidence and prevention of Type 2 Diabetes.

| Table 1 | | | | |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | Type 1 Diabetes (T1D) | Type 2 Diabetes (T2D) | Non-Diabetic Hyperglycaemia (NDH) | |
| What is this type of diabetes? | Type 1 diabetes T1D is an autoimmune condition where the body attacks and destroys insulin-producing cells, meaning no insulin is produced. This causes glucose to quickly rise in the blood. | In T2D, the body doesn't make enough insulin, or the insulin it makes doesn't work properly, meaning glucose builds up in the blood. | Non-diabetic hyperglycaemia NDH (also known as pre- diabetes or impaired glucose tolerance) indicates raised blood glucose levels that are lower than the diabetic range but put the individual at high risk of developing T2D. | |
| What causes diabetes? | Nobody knows exactly why this happens, but science tells us it's got nothing to do with diet or lifestyle. | T2D is caused by a complex interplay of genetic and environmental factors. Up to 58% of T2D cases can be delayed or prevented through a healthy lifestyle. | | |
| Which type is most common? | About 10 per cent of people with diabetes have Type 1T1D. | About 90 per cent of people with diabetes have T2D. | The vast majority of people with Non-diabetic hyperglycaemia will go onto develop T2D if no lifestyle changes are made. | |

Source: NICE, 2012²

What are the signs and symptoms of diabetes?

Unfortunately it is common for people with diabetes to live with the condition, undiagnosed, for many years³. This is because the symptoms of the disease may initially be unnoticeable. As the disease progresses the symptoms become more apparent but, as they are common to many other conditions, it may still be some time before an individual seeks medical advice.

Some of the common symptoms experienced in the later stages of the disease are shown below:

The common symptoms of diabetes Numbness Vaginal Always hungry and tingling infections (especially after eating) of feet Blurred Frequent Sexual vision urination (be sure your eye doctor knows you dysfunction (especially during nite) (difficulty with erection) have diabetes; glasses may not be the answer) Wounds that **Crave** extra Always tired won't heal liquids (more than 10 glasses/day) Unexplained

Weight loss Modified from Diabetesdebate.com, 2017⁴

I have some diabetes symptoms. What now?

If you have any of symptoms of diabetes, you should contact your GP. It doesn't necessarily mean you have diabetes, but it's worth checking – early diagnosis, treatment and good control are vital for good health and reduce the chances of developing serious complications.

And keep reading!... This report will cover elements of T2D diagnosis and most importantly prevention. Within this report you can also learn how to find out your current risk of Type 2 diabetes and practical steps you can take to control your risk.

Diabetes Prevalence

National Context – Diabetes Prevalence in the UK

Large numbers of the UK population are affected by diabetes, it is estimated that around 3.5 million people are currently diagnosed with diabetes (Type 1 and 2) in the UK⁵. For all adults and children, it is estimated that 10% have Type 1 diabetes and 90% have Type 2.

The prevalence is increasing dramatically with the number of diagnosed more than doubling in the past twenty years. A new diagnosis of T2D is made every two minutes in the UK⁶.

Local Context - Diabetes Prevalence in Bromley

Levels of diagnosed and undiagnosed Diabetes

When considering the prevalence of a disease in a local population it is important to consider those with both diagnosed and undiagnosed disease.

Diagnosed disease refers to a measure of the number of people diagnosed with a disease that are in contact or known by local health services.

Undiagnosed disease is an estimate of the number of people who may be living with the disease without having been diagnosed or receiving treatment.

Statistics on rates of diagnosed diabetes in Bromley are obtained from a GP dataset known as the Quality Outcomes Framework (QOF).

Figure 1 shows the percentage of people with a diagnosis of diabetes out of the total population of people, aged 17 and over, registered with a GP in Bromley. This shows that, although Bromley GPs have a lower percentage of patients on their diabetes registers compared to London and England (5.5% compared to 6.5% and 6.7% respectively), there has been a consistent rise in the proportion of patients with diabetes locally, nationally and regionally over the last 5 years.

Some of this increase is likely to be due to system factors such as better detection through screening programmes, such as NHS Health Checks and better recording of the condition on health care computerised systems. However a large proportion will also be the result of patient factors. These include; improvements in awareness of the symptoms of diabetes leading to individuals seeking medical advice earlier and also increasing risk factors, such as a high Body Mass Index, increasing age and low levels of physical activity.



Age

Figure 2 shows the age-spectrum of people diagnosed with diabetes in Bromley. The majority of people with diabetes are aged over 65 (59%) however a high proportion are also of working age (39% are aged 40-64). Individuals who experience the potentially serious complications of diabetes may find it challenging to remain in employment which has socio-economic consequences for both the individual and the community.

In addition the proportion of older people in Bromley (aged 65 and over) is expected to increase gradually from 17.7% of the population in 2016 to 18.2% by 2021 and 19.1% by 2026⁷. This gradual increase in the older population may result in increased incidence of diabetes and hence, if there is no change in population structure, this has implications for planning diabetes care.





Children and Young people with diabetes in Bromley

T2D is no longer confined to the adult population; it's increasingly prevalent in children⁸. Children who develop T2D will require treatment for the majority of their life and are at risk of developing complications earlier.

118 Children and Young People with diabetes received treatment at the Princess Royal University Hospital in 2014-2015⁹. 95% of these patients had Type 1 diabetes. However, that means that 5% had already developed T2D.

Estimates of diabetes prevalence and predictions for the future

Public Health England (PHE) has used data from a range of sources to create estimates of the total prevalence of diabetes in people aged 16 and over (including both known and unknown cases) across local authorities in England.

Further information on the methods used to create these estimates can be found <u>here</u>¹⁰.

In 2017 (the year the statistics were produced) there were estimated to be 22,024 people in Bromley living with diabetes. This represents 8.3% of the total population of Bromley age 16 and over¹¹.

Figure 3 shows that, according to these estimates, Bromley has the 12th lowest prevalence of all 33 London Boroughs and is below the England average of 8.6%.



This estimated prevalence is considerably higher than the known prevalence of diabetes taken from GP surgery registers around the same time period (8.3%, 22,024 compared to 5.5%, 15,107). Caution should be taken in interpreting the

accuracy and significance of this difference as the data covers a slightly different age range. However it suggests that further work is needed in Bromley to raise awareness of the symptoms of diabetes and encourage individuals to seek medical advice in order to increase the number of people who are correctly diagnosed with diabetes, have access to treatment and support and avoid the potential complications associated with untreated disease.

Predictions of future prevalence of diabetes in Bromley

PHE have also calculated estimates of future trends in the prevalence of diabetes over the next 20 years.

Table 2 shows that the number of people in Bromley living with diabetes is predicted to increase by 35% over the next 20 years. That represents an extra 7500 people living with diabetes in Bromley by 2035.

| Year | Number | Prevalence (age 16 and over) |
|------|--------|---------------------------------|
| 2015 | 21,436 | 8.3% |
| 2016 | 21,690 | 8.3% |
| 2017 | 22,024 | 8.3% |
| 2018 | 22,263 | 8.3% |
| 2019 | 22,578 | 8.3% |
| 2020 | 22,921 | 8.4% |
| 2025 | 24,871 | 8.6% |
| 2030 | 26,927 | 8.8% |
| 2035 | 29,009 | 9% |

Table 1: Diabetes prevalence predictions for Bromley 2015-2035

Source: PHE- National Cardiovascular Intelligence Network, 2017

The drivers of this increase in prevalence in Bromley are multiple and include; an aging population, increases in certain ethnic groups at higher risk of diabetes, increasing levels of obesity and low levels of physical activity.

As with all modelled data, there is a degree of uncertainty associated with these estimates, therefore they should be considered indicative only.

How many people in Bromley are at high risk of developing diabetes?

People with Non-Diabetic Hyperglycaemia (NDH, raised blood glucose levels that are below the diabetes diagnostic criteria) are at high risk of developing T2D.

The vast majority of people with NDH will go onto develop T2D if no lifestyle changes are made. Measuring the number of people with NDH in a population therefore gives an indication of the potential future burden of disease and highlights areas where diabetes prevention initiatives could be focused.

NHS England estimates that there are 29,872 people in Bromley at high risk of developing diabetes (Non Diabetic Hyperglycaemia, NDH), equal to 11.5% of the adult population¹². This is slightly higher than the rate for England (11.4%).

Although the proportion of people estimated to be currently living with diabetes in Bromley is lower than the England average (8.2% compared to 8.6%¹³), the proportion of people at high risk of developing diabetes in Bromley is higher than the England average. This emphasizes the importance of increasing access to diabetes prevention information and support for the people of Bromley to maximise the opportunities for early detection and to prevent future disease.





Source: PHE- National Cardiovascular Intelligence Network, 2017

Figure 4 shows the prevalence of NDH and T2D per ward in Bromley. Wards with high levels of NDH but low levels of diagnosed T2D most likely represent younger populations who are risk of developing the disease as they age. It is these areas which should be targeted with prevention programmes to ensure as many people as possible take positive action to avoid developing the disease.



Source: Bromley Primary Care Data, 2015. The data is published later than the collection and analysis period

The Impact of Diabetes on Individuals & Communities

Diabetes increases the likelihood of developing other diseases and has an impact on life expectancy. It is likely to have a negative impact on the quality of life for individuals and potentially limits their capacity to make a positive contribution to their community.

Poor glucose control can contribute to blindness, kidney failure, cardiovascular disease and poor mental health¹⁴. It also can lead to foot complications and is the most common cause of lower limb amputations¹⁵.

There are a number of conditions associated with diabetes, these include; thyroid disease, polycystic ovary syndrome, muscular conditions, and dental health complications. Diabetes could also be associated with poor emotional well-being. People with diabetes are more likely to have depression than people without diabetes¹⁶.

People with a dual-diagnosis of diabetes and depression can find it harder to comply with treatment and make the lifestyle changes needed to improve prognosis. This can lead to long term complications and increase the risk of dying from a diabetes-related condition¹⁷.

Diabetes Risk Factors

Some of these risk factors for diabetes are non-modifiable, that is they cannot be changed by the individual. Non-modifiable risk factors include age, ethnicity and a family history of diabetes. However some risk factors can be modified by making changes to our lifestyle. These modifiable risk factors include; being overweight, a sedentary lifestyle, an unhealthy diet or having high blood pressure. We want to maximise the opportunities to prevent diabetes by reducing the risk factors for the disease.



Modified from Abdullah A, et al. (2010)¹⁸

Every individual has an opportunity to reduce their risk of developing diabetes and avoiding the associated complications, by making small changes to their lifestyle, such as eating a healthier diet and being more physically active. Making these changes can also reduce the likelihood of developing many other diseases such as heart disease, stroke, certain types of cancer, high blood pressure, liver disease, pregnancy complications and kidney disease¹⁹.

The statistics on the "undiagnosed prevalence" of diabetes, presented earlier in this report, are an indication that it is possible to live with the disease without realising. This is because the symptoms may initially be imperceptible or non-specific. It can sometimes take up to 10 years for the symptoms of diabetes to become apparent²⁰.

It is therefore important that every individual considers their own risk factors for diabetes so they can identify positive steps they can take to minimise the risk of developing the disease as well as maintaining awareness of the disease symptoms so they can seek medical advice for an early diagnosis and access to treatment to minimise the impact of the disease on their long-term health and wellbeing.

Risk factors for diabetes in Bromley

Age and ethnicity, as combined non-modifiable risk factors for diabetes, are likely to be driving some of the predicted increases in diabetes locally.

Age

The risk of developing type 2 diabetes increases with age; the older the person is the greater the risk. The proportion of older people in Bromley (aged 65 and over) is expected to increase gradually from 17% of the population in 2017 to 18 % by 2022 and 19% by 2027.

| | 201 | 7 | 202 | 22 | 202 | 27 | 20 | 32 |
|----------------------|---------|-----------------|---------|---------|---------|---------|---------|-----|
| Total Population | 330,9 | 330,909 342,548 | | 351,841 | | 360,298 | | |
| 0 - 4 yrs (%) | 21,601 | 7% | 21,536 | 6% | 21,079 | 6% | 20,635 | 6% |
| 5 - 10 yrs (%) | 26,693 | 8% | 26,729 | 8% | 26,348 | 7% | 25,925 | 7% |
| 11 - 18 yrs (%) | 30,134 | 9% | 34,092 | 10% | 35,986 | 10% | 35,264 | 10% |
| Working age (%)* | 205,749 | 62% | 211,147 | 62% | 215,178 | 61% | 217,005 | 60% |
| Post Retirement (%)¥ | 57,815 | 17% | 60,795 | 18% | 66,724 | 19% | 74,564 | 21% |
| 80+ (%) | 17,284 | 5% | 18,223 | 5% | 21,690 | 6% | 24,709 | 7% |

Table 2

Source: GLA 2016-based Population Projections Housing-led Model (Accessed November 2017)

* Working age =16 to 64y for males and females

¥ Post retirement = Over 64y males and females

Ethnicity

- Type 2 diabetes is up to 6 times more likely in people of South Asian descent.
- Type 2 diabetes is up to three times more likely in African and Africa-Caribbean people ²¹

Furthermore, diabetes affects different ethnic groups in different ways.

The latest (2017) GLA population projection estimates show that 19.8% of the population in Bromley is made up of Black and minority ethnic (BME) groups with the Black African community experiencing the greatest increase of all groups.



Weight

Being overweight or obese is the main modifiable risk factor for T2D. In England, the rising prevalence of obesity in adults is one of the main driving factors behind the rising prevalence of $T2D^{22}$.

Approximately 90% of people with type 2 diabetes are overweight or obese and approximately 12.5% of people who are obese have T2D. The risk of developing T2D increases with incremental increases in body weight in early adulthood and the longer a person is obese the greater the risk²³.

In England it is estimated that:

More than 7 out of 10 men are overweight or obese (66.8%)



More than 6 out of 10 women are overweight or obese (57.8%)



Adults (aged 16+) overweight and obesity: BMI≥ 25kg/m² Health Survey for England 2013-2015 (three year average)²⁴ Overweight and obesity prevalence in adults in England is predicted to reach 70% by 2034²⁵

Prevalence of obesity and overweight in Bromley

In 2013/15 it was estimated that 64.1% of the population of Bromley aged 16 and over were either overweight or obese²⁶. This equates to over 200,000 adults living with excess weight in Bromley.

Bromley has the sixth highest prevalence of excess weight out of all 33 London Boroughs (**Figure 6**). This is considerably higher than boroughs with a similar population profile to Bromley, such as Richmond Upon Thames and Kensington and Chelsea.



The proportion of the population either overweight or obese in Bromley has remained relatively stable over the two time periods, 2012/14 and 2013/15 at 63.8% and 64.1% respectively²⁷.

Statistics on the number of patients recorded as obese on GP registers can provide an indication of the variation in obesity levels between different areas of the Borough. It should however be noted that the recording of obesity status itself will vary by practice and therefore this data should be interpreted with caution and considered indicative only.





Some practices show a high level of obesity and a high level of diabetes prevalence, thus demonstrating the link between excess weight and risk of diabetes (for example Anerley, Broomwood, Cross Hall, Derry Downs and Robin Hood practices).

However other practices have a high prevalence of obesity but the levels of T2D are not as high in comparison. For instance St Mary Cray GP Practice currently has the highest recorded levels of adult obesity but ranks 22nd out of 45 practices for prevalence of T2D in its adult population. The explanations for these differences are manifold. It could be indicative of a younger practice population, adults who are currently living with excess weight but have the potential to develop T2D in the future or it could be related to variations in diagnostic practices between different GPs. Regardless of the explanation, analysing rates of obesity helps to identify the populations who would benefit from targeted diabetes prevention support.

Estimating the impact of obesity on diabetes prevalence

PHE have produced projections of the impact of future changes in the levels of obesity on the prevalence of diabetes at a local level. Further details about the method used to produce these projections can be found via the web-link in the reference list²⁸.

Considering the prevalence of excess weight in Bromley has increased by 1.5% over the previous 5 years, 3 different future scenarios are presented based on differing trends in obesity levels:

- 1. Obesity levels rising by 1% every 5 years
- 2. Obesity levels rising by 2% every 5 years
- 3. Obesity levels reducing by 1% every 5 years

An increase of 1% in obesity rates every five years from now would result in an additional 500 people with diabetes in Bromley by 2035. This is the number of new cases specifically as a result of the predicted increase in obesity prevalence in Bromley and doesn't include the expected overall rise in diabetes driven by changes in other factors such as the age and ethnic profile of the population. Overall the number of people diagnosed with diabetes in Bromley, when accounting for changes in all relevant population factors, is predicted to rise by over 8000 by 2035 (from 21,450 to 29,500). This represents a significant additional disease burden both for the individual and for health and care services for the whole population of Bromley.

Accordingly, an increase in obesity rates of 2% every 5 years would result in additional 1000 people with diabetes in Bromley by 2035.

Conversely a reduction of 1% in obesity rates in Bromley every 5 years would result in 500 fewer people living with diabetes in Bromley by 2035.

So what can we do about weight?

The good news is that, scientific evidence shows, even losing a relatively small amount of weight, can lower your risk of developing Type 2 Diabetes²⁹.

In England, the advisory body NICE (the National Institute for Health and Clinical Excellence) recommends that losing between 5-10% of your body weight, over the course of a year, can significantly reduce your risk of developing T2D as well as reducing your risk of developing a range of other health conditions³⁰. **Table 3** below demonstrates the range of weight you should aim to lose, based on your starting weight, to achieve this benefit.

| A person's starting weight | Weight loss range needed to significantly reduce risk of diabetes (5-10% weight reduction) | | |
|----------------------------|--------------------------------------------------------------------------------------------------|----------------|--|
| 17st (108kg) | 12.0 – 24.0 lbs | (5.5 – 11.0kg) | |
| 15st (95kg) | 10.5 – 21.0 lbs | (5.0 – 10.0kg) | |
| 13st (83kg) | 9.0 – 18.0 lbs | (4.0 – 8.0kg) | |
| 11st (70kg) | 7.5 – 15.0 lbs | (3.5 – 7.0kg) | |

Table 3

Childhood obesity - the future generations

A recent study in the UK found that children who were obese were four times more likely to be diagnosed with T2D by age 25 than children who had a body mass index in the normal range³¹.

The National Child Measurement Programme (NCMP) measures the BMI of children when they start Primary School (Reception Year aged 4 to 5 years) and in their final year of Primary School (Year 6 aged 10 to 11 years).

The latest data demonstrates that obesity rates vary considerably across London (**Figures 10 and 11**). Obesity rates for children in both Reception Year and Year 6 in Bromley are currently significantly below the average for London and England.





National figures show rates of obesity among children are highest for those living in the most deprived areas of England³². **Figure 11** below compares the relationship between the prevalence of obesity by ward in Bromley to a measure called the Index of Deprivation Affecting Children (IDACI). The fact that most data points are clustered around the straight line indicates a positive relationship in Bromley i.e. as the levels of deprivation affecting children end suggests that the prevalence of childhood obesity rates. This supports the national evidence and suggests that the prevalence of childhood obesity is higher in the more deprived wards of the borough.



IDACI: Percentage of children 0-15 living in income deprived households

Analysis of trends in childhood obesity rates (Figure 12) indicates that the prevalence of obesity in reception children has remained fairly stable over the years but the rates in Year 6 children have continued to rise. However there is no evidence of any sustained reduction in child obesity levels overall. Current levels of childhood obesity represent serious long-term risks to health for those children. Evidence shows that children who are overweight are more likely to be overweight as adults and thus more at risk of a range of diseases including type 2 diabetes as well as a number of other long term health conditions³³.

Parents, families, teachers and healthcare professionals need to be aware of this trend and take positive action during the primary school years to reduce the likelihood of children gaining excess weight and help them to grow into healthy adults.



Figure 12

OUR CHALLENGE

As we have highlighted, Type 2 Diabetes is a preventable disease. There are steps that EVERYONE can take to reduce their risk, whatever their current state of health.

The Bromley Public Health Team and their partners would like to help YOU to identify and reduce your risk of developing this disease and encourage others to do the same.

We encourage you to use this online tool to assess your personal risk of developing diabetes: CLICK HERE

It will only take a few minutes but could be the most important thing you do today.

To complete the tool you will need to know your waist size, height, weight & Body Mass Index (BMI).

<u>CLICK HERE</u> for guidance on how to accurately measure your waist (it's not your belt size!)

CLICK HERE to use your height and weight to calculate your BMI

Once you know your own risk, please encourage your family and friends to use the tool to calculate theirs. You could then take steps together to reduce your risk.

Have you had an NHS health check?



An NHS Health Check is a free service available via your GP, for people aged 40-74 (without any pre-existing health conditions).

It involves a short consultation, usually with a nurse and is designed to spot early signs of diseases including; diabetes, kidney disease, heart disease, stroke or dementia,

According to the results of the check you may be advised to have further tests to assess your risk of disease, you may be recommended treatment or medication to help maintain your health or you may be offered support to make changes to reduce your risk of developing disease.

You can find out more about NHS Health Checks in Bromley HERE.

You may already have received an invitation letter from your GP to have an NHS Healthcheck. If you received a letter but didn't take up the offer or if you think you're eligible but haven't been invited please contact your GP to check your eligibility and arrange an appointment.

Why have an NHS Health Check?

This **<u>short video</u>** explains why going for an NHS Health Check is important and the impact that the results had on one resident in Bromley.

What if you are not eligible for an NHS Health Check?

If you are not eligible for an NHS Health Check there is an online tool (endorsed by Public Health England) that anyone can use to assess their current health and wellbeing.



The **ONE YOU** tool starts with a quick quiz to evaluate your current lifestyle habits and then provides specific advice, based on your answers, on how to make small changes in your lifestyle to make a big difference to your health and wellbeing immediately and in the future.

CLICK HERE TO TAKE THE QUIZ TODAY.

The National Diabetes Prevention Programme



Bromley was the first area in Europe to pilot a local Diabetes Prevention Programme.

The programme aimed to support people achieve a healthier weight and get more physically active as we know these are two of the most effective ways of reducing the risk of developing diabetes,

A summary of the local pilot in Bromley, including a video of one person's experience of the programme, can be found by <u>CLICKING HERE</u>

The successful results achieved by people completing this programme were recently highlighted in the national media: <u>CLICK HERE</u> & <u>HERE</u> for examples of the coverage.

The findings from this pilot in Bromley have helped shape the development and implementation of the National Diabetes Prevention Programme.

The National Diabetes Prevention Programme, called HEALTHIER YOU, has now been rolled out across the country, including in Bromley.

Here are details of how you can access the new HEALTHIER YOU programme in this area.

Reduce your risk of Type 2 diabetes with the **Healthier You: NHS Diabetes Prevention Programme**

Your local Healthier You: NHS Diabetes Prevention Programme service is free to all those at risk of Type 2 diabetes, who are registered with a GP in our supported areas.

Those referred to the service will receive tailored, personalised support to reduce their risk of Type 2 diabetes including education on healthy eating, weight management guidance and free physical activity sessions, all of which together have been proven to reduce the risk of developing the disease.

Contact us today for more information or to join your local programme.



0333 577 3010





preventing-diabetes.co.uk



To book your place on Healthier You CLICK HERE

Walking Away From Diabetes



This programme offers people in Bromley an alternative to the national Healthier You programme.

It involves attending a one-off 3.5 hour group session, run by trained healthcare professionals. The session focusses on assessing your own risk of developing diabetes, learning ways to reduce this risk by increasing your physical activity and improving your diet and exploring local opportunities to access support to make these changes.

Find further information about walking away from Diabetes in Bromley HERE.

Other Local Support to Improve Health and Wellbeing

In addition to the programmes highlighted above, which are focussed specifically on reducing the risk of diabetes, there are many other opportunities available to support you to make changes that will improve your overall health and wellbeing.

Further information on the range of support available can be found on the **<u>Bromley</u>** <u>MyLife website</u>.

Mobile phone apps

There are also some easy to use mobile phone apps, which have been evaluated and endorsed by Public Health England, to support you to monitor and change your lifestyle behaviours. You can find a range of Apps available <u>HERE</u>.



IN CLOSING... Thank you for reading this Annual Public health report on the prevention of diabetes. We hope you are now more aware of:

- The causes and consequences of type 2 diabetes
- How you can assess your personal risk of developing diabetes
- The steps you can take to reduce your risk of diabetes
- Local opportunities to receive support to make lifestyle changes. We would recommend that the next steps for you are: 1. Find out your risk of getting Type 2 diabetes

If you do one thing as a result of reading this report, we would urge you to go online to the Diabetes UK website and use the <u>Diabetes Risk Assessment Tool</u> to assess your own risk of developing diabetes and encourage your friends and family to do the same.

2. Plan how to reduce your risk of developing diabetes by:

- Eating better
- Moving more
- Reducing your weight if you are overweight
- 3. Get support

To increase your chances of success we recommend using the available support to help you achieve your goals.

Don't delay, take action TODAY.

References

¹ Diabetes UK. (2016). *Facts and stats*. [online] Available at <u>https://diabetes-resources-production.s3-eu-west-1.amazonaws.com/diabetes-</u> <u>storage/migration/pdf/DiabetesUK_Facts_Stats_Oct16.pdf</u> [Accessed 31/11/2017].

² NICE. (2012). *Diabetes*. [online] Available at: <u>https://www.nice.org.uk/guidance/conditions-and-diseases/diabetes-and-other-endocrinal--nutritional-and-metabolic-conditions/diabetes#technology-appraisal-guidance</u> [Accessed 03/11/2017].

³ Harris, M., Klein, R., Welborn, T. and Knuiman, M. (1992). *Onset of NIDDM occurs at least* 4-7 yrs before clinical diagnosis. Diabetes Care, 15, 815-819.

⁴ Diabetesdebate.com. (2017). [online] Available at <u>http://diabetesdebate.com/wp-content/uploads/2014/12/symptom-of-diabetes-6.jpg</u> [Accessed 03/11/2017].

⁵ Diabetes UK. (2016). *Facts and stats*. [online] Available at <u>https://diabetes-resources-production.s3-eu-west-1.amazonaws.com/diabetes-storage/migration/pdf/DiabetesUK_Facts_Stats_Oct16.pdf</u> [Accessed 31/11/2017].

⁶ Diabetes UK. (2016). *Facts and stats*. [online] Available at <u>https://diabetes-resources-production.s3-eu-west-1.amazonaws.com/diabetes-storage/migration/pdf/DiabetesUK Facts Stats Oct16.pdf</u> [Accessed 31/11/2017].

⁷ London Borough of Bromley. (2016). *Bromley Joint Strategic Needs Assessment 2016*. [online] Available at: <u>https://bromley.mylifeportal.co.uk/media/20397/final-report-jsna-2016.pdf</u> [Accessed 03/11/2017].

⁸ Fagot-Campagna, A. (2001). *Type 2 diabetes in children*. BMJ, 322, 377-378.

⁹ The Royal College of Paediatrics and Child Health. (2016). *National paediatrics diabetes audit, 2014/15*. [online] Available at: https://www.rcpch.ac.uk/sites/default/files/page/NPDA%20Report%202014-

15%20v5.2%20sent%20to%20HQIP%2025.05.2016.pdf [Accessed 31/10/2017].

¹⁰ Public Health England. (2015). Technical document for the diabetes prevalence estimates. [online] Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/612307/Diabet esprevalencemodeltechnicaldocument.pdf [Accessed 31/10/2017].

¹¹ Public Health England. (2015). *Diabetes prevalence estimates for local populations*. [online] Available at: <u>https://www.gov.uk/government/publications/diabetes-prevalence-estimates-for-local-populations</u> [Accessed 30/10/2017].

¹² Public Health England. (2015). *Analysis of non-diabetic hyperglycaemia prevalence in England*. [online] Available at: <u>https://www.gov.uk/government/publications/nhs-diabetes-prevention-programme-non-diabetic-hyperglycaemia</u> [Accessed 30/10/2017].

¹³ Public Health England. (2015). *Diabetes prevalence estimates for local populations*. [online] Available at: <u>https://www.gov.uk/government/publications/diabetes-prevalence-estimates-for-local-populations</u> [Accessed 30/10/2017]. ¹⁴ NHS England. (2014). *Action for Diabetes*. [online] Available at: <u>https://www.england.nhs.uk/rightcare/wp-content/uploads/sites/40/2016/08/act-for-diabetes-31-01.pdf</u> [Accessed 06/11/2017].

¹⁵ Diabetes UK. (2016). *Facts and stats*. [online] Available at <u>https://diabetes-resources-production.s3-eu-west-1.amazonaws.com/diabetes-storage/migration/pdf/DiabetesUK Facts Stats Oct16.pdf</u> [Accessed 31/11/2017].

¹⁶ NHS Digital. (2014). Adult psychiatric morbidity survey: survey of mental health and wellbeing, England, 2014. [online] Available at: <u>http://content.digital.nhs.uk/catalogue/PUB21748/apms-2014-full-rpt.pdf</u> [Accessed 19/12/2017].

¹⁷ Holt, R., de Groot, M. and Golden, S. (2014). *Diabetes and depression. Current Diabetes Reports*, 14, 491.

¹⁸ Abdullah A., Peeters, A., De courtern, M. and Stoelwinder, J. et al. (2010) *The magnitude of association between overweight and obesity and the risk of diabetes: a meta- analysis of prospective cohort studies.* Diabetes Research and Clinical Practice, 89, 309-319.

¹⁹ NHS UK. (2017). Obesity-NHS Choices. [online] Available at <u>https://www.nhs.uk/Conditions/Obesity/Pages/Introduction.aspx</u> [Accessed 1/11/2017]

²⁰ Harris, M., Klein, R., Welborn, T. and Knuiman, M. (1992). Onset of NIDDM occurs at least 4-7 yrs before clinical diagnosis. Diabetes Care, 15, 815-819.

²¹ Stratton, I. (2000). Association of glycaemia with macrovascular and microvascular complications of type 2 diabetes (UKPDS 35): prospective observational study. BMJ, 321, 405-412.

²² Adeniyi, O., Longo-Mbenza, B. and Ter Goon, D. (2015). Female sex, poverty and globalization as determinants of obesity among rural South African type 2 diabetics: a cross-sectional study. *BMC Public Health*, 15.

²³ Adeniyi, O., Longo-Mbenza, B. and Ter Goon, D. (2015). *Female sex, poverty and globalization as determinants of obesity among rural South African type 2 diabetics: a cross-sectional study. BMC Public Health*, 15.

²⁴ Public Health England (2017). *Patterns and trends in adult obesity*. [online] Available at: <u>https://www.slideshare.net/PublicHealthEngland/patterns-and-trends-in-adult-obesity</u> [Accessed 7/11/2017].

²⁵ UK Health Forum (2014). Risk factor based modelling for Public Health England. [online] Available at:

http://nhfshare.heartforum.org.uk/RMAssets/Modelling/PHEReport_JULY2014_final_peerrev iew.pdf [Accessed 14/11/2017]

²⁶ Public Health England. (2017). *Public Health Outcomes Framework*. [online] Available at: <u>https://fingertips.phe.org.uk/profile/public-health-outcomes-framework</u> [Accessed 7/11/2017].

²⁷ Public Health England. (2017). *Public Health Outcomes Framework*. [online] Available at: <u>https://fingertips.phe.org.uk/profile/public-health-outcomes-framework</u> [Accessed 7/11/2017].

²⁸ Public Health England. (2017). *Diabetes prevalence estimates for local populations*. [online] Available at <u>https://www.gov.uk/government/publications/diabetes-prevalence-estimates-for-local-populations [Accessed 1/11/2017]</u>.

²⁹ Magkos, F., Fraterrigo,G., Yoshino, J., Luecking, C., Kirbach., Kelly,S., de las Fuentes, L., He, S., Okunade, A., Patterson, B. and Klein, S. (2017). *Effects of moderate and subsequent progressive weight loss on metabolic function and adipose tissue biology in humans with obesity.* Cell Metabolism, 23, 591-601.

³⁰ NICE. (2012). *NICE public health guideline PH38: type 2 diabetes: prevention in people at high risk*. [online] Available at: <u>https://www.nice.org.uk/guidance/ph38</u> [Accessed 7/11/2017].

³¹ Abbasi, A., Juszczyk, D., Van Jaarsveld, C. and Gulliford, M. (2017). *Body Mass Index and incident type 1 and type 2 diabetes in children and young adults: a retrospective cohort study*. Journal of the Endocrine Society, 1, 524-537.

³² NHS Digital. (2017). *National Child Measurement Programme- England, 2013-14*. [online] Available at: <u>http://digital.nhs.uk/catalogue/PUB16070</u> [Accessed 7/11/2017].

³³ Singh, A.S., Mulder, C., Twisk, J.W., van Mechelen, W. and Chinapaw, M.J. (2008). *Tracking of childhood overweight into adulthood: a systematic review of the literature. Obesity Reviews*, 9, 474-88.