

# managing the highs and lows of diabetes

Dietitians are the only nutrition professionals to be statutorily regulated, and have an ethical code that ensures the highest work standards. Dietitians are up-to-date with current research, public health and translate the science behind research and guidance into manageable, practical information to enable people to make appropriate lifestyle and food choices.

The UK is facing a huge increase in the number of people with diabetes. There are 3.1 million adults with diabetes and it is anticipated that by 2020 an estimated 3.8 million adults, (8.5% of the adult population) will have diabetes and by 2030 could rise to 4.6 million. Half of this rise is attributed to obesity and half to changes in age and ethnic profile of the population.<sup>[1]</sup>

## Problems related to diabetes

For adults with diabetes it is estimated that 10% have Type 1 diabetes and 90% have Type 2 diabetes. Of all long term conditions, Type 2 diabetes has the strongest association with obesity which is linked to increasing diabetes-related complications including heart disease, kidney disease and nerve damage.

For the majority, diabetes is a lifestyle disease and dietitians have a key role to make nutrition and lifestyle information accessible and implementable, preferably as part of a specialist multi-disciplinary team (MDT) and working within a care pathway which incorporates structured education.

## Diabetes Specialist Dietitian

Having well controlled diabetes is down to managing nutrition, lifestyle and medications effectively. Dietitians have a key role to make nutrition information accessible and practical. They work as part of a specialist multidisciplinary team and within a care pathway that incorporates structured education <sup>[2]</sup>.

Evidence-based research strongly suggests that dietetic therapy provided by a registered dietitian who is experienced in the management of diabetes is clinically effective<sup>[3]</sup>.



### Fact 1

**In addition to type 1 and 2, gestational diabetes affects up to 5% of all women during pregnancy <sup>[4]</sup>. Women who are overweight or obese are at a higher risk of gestational diabetes and the lifetime risk of developing type 2 after gestational diabetes is 30% <sup>[5]</sup>.**

**Furthermore, any child whose mother has had gestational diabetes whilst carrying them is also at increased risk of developing type 2 diabetes in later life <sup>[6]</sup>.**

Diabetes Specialist Dietitians are uniquely skilled to perform various roles and provide advice and teaching on a range of areas and in a number of settings, which might include:

- a lead role in the development and delivery of structured patient education programmes in both Type 1 and Type 2 diabetes, as described by the National Institute for Health and Clinical Excellence;
- providing education on carbohydrate counting and supporting individuals with Type 1 diabetes to adjust their insulin, manage their pump therapy and this might include hypoglycaemia awareness therapy;
- providing specialist care to priority groups such as young people, pregnant women, in-patients with complex needs and those with co-morbidities;

- providing assessment prior to insulin transfer for people with Type 2 diabetes and offering support during the process, especially with regard to glycaemic control and weight; [2]
- education, training and supervision of primary care and other staff providing diabetes care;
- leading lifestyle diabetes prevention programmes including evidence-based community weight management support services.

### Fact 3

10% of the NHS budget is spent on diabetes [9] Diabetes prescribing now accounts for 7% of all prescription costs [10]. Ten percent of NHS expenditure is related to diabetes with 15% of hospital beds occupied by someone with diabetes. [11]

## Dietitians

**Take a holistic approach** and take into account other aspects of lifestyle or other conditions when providing nutritional therapy to a person with diabetes.

**Are experts in behaviour change skills** and use a range of approaches to encourage long term positive health behaviour change in a client-centred way.

**Are a professional resource;** they provide high quality training, mentoring and support of other health care staff to enable diabetes care to be cost effective and of high quality.

**Provide culturally appropriate advice** including an understanding of different health risk profiles.

**Are involved in research** to ensure they continue to strive for the best evidence based treatments for their clients and publish their results in peer-reviewed journals.

**Work effectively as a member of the multidisciplinary team;** across care pathways from prevention to the support and management of Type 1, 2 (both adult and children) and gestational diabetes.

**Audit and evaluate their practice** to measure a range of outcomes.

*Dietitians' expertise, holistic understanding, evidence-based practice and communication skills are essential in tackling diabetes.*

### Fact 2

An unhealthy diet has been inextricably linked to the risk of developing diabetes [7]. Good diabetes management, including diet and lifestyle, has been shown to reduce the risk of complications [8] including heart disease, stroke, blindness, kidney disease, nerve damage and amputations leading to disability and premature mortality.

E.g. People with diabetes have an increased risk of cardiovascular disease (CVD). Research shows that the risk of developing CVD can be reduced by improved dietary habits and managing weight [9].

### Case Study

*Dietitians have taken lead roles in development of structured education programmes (X-PERT and DESMOND) and are also key members of the educator team that delivers education to patients with diabetes. Structured education programmes have been shown to be clinically effective in improving outcomes for patients and increasing confidence in self-management of diabetes [12, 13].*

### Case Study

*Dietitians at Northumbria have implemented a "pre insulin assessment" process which is now part of the local stepped approach in the glycaemic management of people with type 2 diabetes. A local audit of this dietetically led intervention demonstrated that only half of those referred for insulin therapy actually required this after the "pre insulin assessment". And for those who commenced insulin there were lower levels of weight gain than expected [14].*

### Fact 4

The amount of dietetic hours given to patient care for diabetes is being reduced. [2] The most recent workforce survey shows dietetic staffing below Diabetes UK recommended minimum. [1]

#### References

- (1) Diabetes UK (2010) Diabetes in the UK 2010: Key statistics on diabetes.
- (2) Diabetes UK (2010) Commissioning Specialist Diabetes Services for Adults with Diabetes.
- (3) Green J. et al, The evidence for the effectiveness of medical nutrition therapy in diabetes management. Diabetes Care, volume 25, number 3, pp 608-613 March 2002.
- (4) Lancet (2008), The Global challenge of diabetes. The Lancet 371 9626; 1723.
- (5) Girling J. and Dornhorst A. (2004), Pregnancy and diabetes mellitus, in Pickup J.C. and Williams G. (ed) Textbook of Diabetes, (3rd edition), Oxford: Blackwell Science.
- (6) Scottish Intercollegiate Guidelines Network (Mar 2010), Management of Diabetes.
- (7) Goff L.M. and Duncan A. Diet and Lifestyle in the prevention of the rising diabetes pandemic, Editorial, Journal of Human Nutrition and Dietetics, volume 23, issue 4, pp 333-335 August 2010.
- (8) Stratton I.M. et al (2000), Association of glycaemia with macrovascular and microvascular complications of type 2 diabetes (UKPDS 35): prospective observational study, BMJ 321: 405-412.
- (9) UK Prospective Diabetes Study (UKPDS) Group (1998), Tight blood pressure control and risk of macrovascular and microvascular complications in type 2 diabetes: (UKPDS 38), BMJ 317: 703-713.
- (10) Department of Health (2006), Turning the corner improving diabetes care. www.dh.gov.uk/en/Publicationsandstatistics/Publications/PolicyAndGuidance/DH\_413614
- (11) Yorkshire and Humber Public Health Observatory (2007). Prescribing for diabetes in England: analysis of volume expenditure and trends.
- (12) NHS Diabetes. (2010) National Diabetes Inpatient Audit 2010.
- (13) Deakin T.A (2011) The Diabetes Pandemic: is structured education the solution or an unnecessary expense? Practical Diabetes International 28 (8)
- (14) Davies M.J et al(2008) Effectiveness of the diabetes education and self-management for on-going and newly diagnosed (DESMOND) programme for people with newly diagnosed type 2 diabetes. BMJ 336 : 491
- (15) Oliver L.E (2009) Diabetes UK Annual Professional Conference Poster Presentations. Outcomes for people with Type 2 diabetes on maximum tolerated oral therapy who have pre-insulin assessment with a dietitian.

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To know about nutrition*

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