

## The psychological impact of type 1 diabetes: eating disorders in young patients



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**T**he management of diabetes, both type 1 and type 2, has increasingly focused on meeting targets and ticking boxes. It is very easy for a consultation to revolve around a discussion of the technicalities of glucose control. We may forget, or choose to disregard, that this is a chronic condition, which in most cases cannot be cured, and the individual has to cope with it on a day-to-day basis. It is often easier and certainly quicker to discuss the HbA<sub>1c</sub> than to enquire about the impact of diabetes on day-to-day life. But diabetes must always have some psychological impact to a greater or lesser extent.

Although as diabetes clinicians psychology is not our primary area of expertise, it is an area which we all have to deal with. Eating disorders are one of the problems that we must recognise as there

will be direct consequences on weight, glucose control and the risk of long-term diabetic complications. This paper by Colton and colleagues, a group of Canadian psychiatrists, has studied the frequency of eating disorders in a group of girls between the ages of nine and 14 years. Although the paper is written following the principle that you should never use one word if three will do, the final message is relatively simple: eating disorders are significantly more common in young girls with type 1 diabetes. It is reassuring that at this age disturbed eating behaviour appeared to have little impact on glycaemic control, although the authors make the point that this may lead to more serious eating disorders in later life. An interesting side-issue of the paper is that 30 minutes of exercise five times a week was defined as 'intense and excessive' and considered to be an abnormal behavior. The general message of the paper is that diabetes has psychological consequences that we ignore at our peril.

### DIABETES CARE



## Eating disorders in preteen and young teenage girls

Readability	✓
Applicability to practice	✓✓✓✓✓
WOW! factor	✓✓✓✓✓

**1** In teenage girls disturbed eating behaviour is very common. A research meta-analysis showed disturbed eating behaviour and eating disorder to be more common in females with type 1 diabetes.

**2** This study aimed to compare rates of eating disorders and disturbed eating behaviour in preteen and young teenage girls with and without type 1 diabetes.

**3** In this cross-sectional case-controlled study, 404 girls aged nine to 14 completed a Children's Eating Disorder Examination interview. One-hundred-and-one of the girls had diabetes.

**4** The variables assessed by chi-squared analyses were body mass index (BMI), diabetes-related factors, exercise and socioeconomic status.

**5** Girls with diabetes, compared to those without, had significantly lower socioeconomic status. BMI was similar between the groups.

**6** Disturbed eating-related behaviours, subthreshold eating disorders, excessive exercise for weight control, and binge eating were all significantly more common in girls with diabetes compared to those without. Eating behaviour and metabolic control were not linked.

**7** In preteen and early teenage girls with type 1 diabetes, eating disturbances, although mostly mild, were significantly more common so prevention and screening should begin at a young age in this high-risk group.

Colton P, Olmsted M, Daneman D, Rydall A, Rodin G (2004) Disturbed eating behavior and eating disorders in preteen and early teenage girls with type 1 diabetes. *Diabetes Care* **27**: 1654-59

### DIABETIC MEDICINE



## Hypoglycaemia with insulin aspart in type 1 diabetes

Readability	✓✓✓✓✓
Applicability to practice	✓✓✓✓✓
WOW! factor	✓✓✓

**1** This article aimed to compare the effect of insulin aspart (a rapid-acting insulin analogue) and human soluble insulin (HSI) on hypoglycaemia and glycaemic control when injected immediately before meals as part of intensive insulin therapy.

**2** Patients with type 1 diabetes (n=155; HbA<sub>1c</sub> <8%) were randomised to a 16-week period on each insulin, separated by a 4-week washout period. The insulins were injected 0-5 minutes before eating.

Basal NPH insulin was given 1-2 times daily and adjusted regularly to maintain tight glycaemic control.

**3** Compared to HSI, the nocturnal hypoglycaemia rate was 72% lower in those on insulin aspart. Total major hypoglycaemia event rate did not significantly differ between insulins. A significant reduction in minor event rate (7%) was seen with insulin aspart. Overall glycaemic control was maintained at just below 7.7% in both treatments.

**4** With insulin aspart, significant reductions in major nocturnal hypoglycaemia rate were achieved without any loss of glycaemic control in patients with tightly controlled type 1 diabetes, providing a strong indication for rapid-acting insulin analogue use in intensive insulin therapy.

Heller SR, Colagiurit S, Vaaler S, et al (2004) Hypoglycaemia with insulin aspart: a double-blind, randomised, crossover trial in subjects with type 1 diabetes. *Diabetic Medicine* **21**: 769-75