Food for thought: Maintaining diet and exercise in children and young people with diabetes



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in Paediatric & Adolescent Diabetes, Warrington, Merseyside t is now a major public health concern that only 34% of adult men and 39% of adult women have a normal BMI. Even more worryingly, in 2011, 31% of children aged 2–15 years were classed as overweight and 28% were obese. This figure shows that only 41% of children have a normal BMI (Health & Social Care Information Centre, 2013). These numbers suggest that there is a surprisingly high proportion of the population who potentially have a negative relationship with either food or physical activity or both that could be detrimental to their physical and mental health.

Although we may not like to admit it, we all have a relationship with food: a favourite meal or place to eat, likes and dislikes that are often modelled on the behaviours of those around us, whether that be a celebrity chef or our families. Many of us have tried the latest diet but most of us will struggle to keep to the diet day in, day out. Yet, this is an expectation that some healthcare professionals may have when working with children and young people with diabetes.

Relationship with food

Diabetes can indeed affect people's relationship with food (García-Mayor and Larrañaga, 2011). Good diabetes control requires the person with diabetes to have an expert knowledge of food and its effects on their own blood glucose, taking into account an ever-increasing amount of complicated factors. We, as healthcare professionals, teach carbohydrate counting, glycaemic index, glycaemic load and complicated calculations surrounding fats and protein and these can be confusing for the person with diabetes (Pañkowska et al, 2012).

Diabetes is an imposed journey in life and it is extremely hard for our young people to influence what goes into the household's shopping basket. If we consider that, nationally, 61–66% of adults who influence this shopping have raised BMI (Health & Social Care Information Centre, 2013) then we need to take a "whole family approach" when educating people to make the necessary changes in diet.

Furthermore, it is important that we all reflect and consider the following: Could we stick to all the rules of the diabetes diet if we had to? What is our own BMI? Could we put time aside each day to calculate carbohydrate? Do we snack between meals? And would we inject for snacks if we had to? Finally, do we know the guideline daily amounts for carbohydrates for both males and females?

I recently visited a young man, aged 11 years, who regularly consumed 350–450 g carbohydrates per day according to his pump download. Would you consider that to be excessive? We ourselves need to be able to apply this complex recipe for health if we are to expect the people we look after to do the same.

Eating disorders in children and young people with diabetes

In the first article in our supplement this month, Ursula Philpott discusses the frighteningly high percentage of adolescents with diabetes who have an eating disorder and provides us with a valuable validated screening tool. It has been suggested that it could be the perceived dietary restraints imposed, along with the person's relationship with food, coupled with maladaptive coping strategies and high body image dissatisfaction that contributes to eating disorders in some young people with diabetes (García-Mayor and Larrañaga, 2011). "Diabulimia" is a new term and, although not a recognised medical term, it is used to describe the deliberate manipulation of insulin in order to lose weight.

Diabetes UK provide some useful information on eating disorders, with links to additional

resources (http://bit.ly/rNlKV3). The registered charity Diabetics with Eating Disorders (www.diabeticswitheatingdisorders.org.uk) also provides some helpful information, including a symptom checker which describes many of the people with high HbA₁, that we see in our clinics. The website also provides support via Facebook forums and advocacy for people to access specialist support. The article on eating disorders in our supplement suggests that early recognition and treatment is paramount, with establishment of regular insulin and a reduction in dietary restrictions.

Physical activity

In our second article, Francesca Annan discusses the health benefits of physical activity for young people with diabetes. This comprehensive article provides management strategies that can be taught to young people to enable them to participate in sport safely. This participation in sport not only contributes to the physical health of young people with diabetes but also can improve their emotional wellbeing.

Managing exercise in people with diabetes

involves taking a recipe of insulin manipulation and consumption of varying types of carbohydrate depending on the timing and type of activity. The skill for both the person with diabetes and the healthcare professional is being willing to individualise these factors to make it work.

The diabetes journey is a complicated recipe and the various management strategies available should give us food for thought.

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