



InDependent Diabetes Trust

Coeliac Disease and Diabetes

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Both diabetes and coeliac disease are autoimmune diseases and there are increasing amounts of research to show that there is a link between the two in adults, children and adolescents. Increasingly there are views that more attention should be given to this link and

that tests for coeliac disease should be routinely carried out in both adults and children with Type 1 diabetes.

Coeliac disease maybe the cause of vague abdominal symptoms and may cause hypoglycaemia due to impaired carbohydrate absorption in the gut.



What is coeliac disease?

- It is a condition in which the lining of the small intestine is damaged by gluten. Gluten is a protein found in rye, wheat, barley and possibly oats.
- This damage causes foods to not be absorbed properly by the

small intestine and so before diagnosis there is weight loss and possibly malnutrition.

- Treatment is a gluten free diet.
- It is prevalent in the UK although estimates of incidence vary from 1 in 1000 to 1 in 300 people.
- It can be diagnosed at any age but mostly it is finally diagnosed in adulthood between the ages of 30-45.
- Many other cases may remain undiagnosed or may be falsely diagnosed as irritable bowel syndrome and only a third of cases are ever diagnosed as coeliac disease and treated with a gluten free diet.
- Certain groups are at greater risk of developing coeliac disease – people with Type 1 diabetes, Downs syndrome, thyroid disease and osteoporosis.



Diabetes and coeliac disease

Both diabetes and coeliac disease are autoimmune diseases and there are increasing amounts of research to show that there is a link between the two both in adults, children and adolescents.

In the general population about 0.75% of people suffer from coeliac disease, but it rises to 2-10% in those with Type 1 diabetes. Therefore the NICE guidelines recommend that all children and adults with Type 1 diabetes are screened for coeliac disease.

Coeliac disease maybe the cause of vague abdominal symptoms and may cause hypoglycaemia due to impaired carbohydrate absorption in the gut.



What are the symptoms of coeliac disease?

- Coeliac disease can cause people to be acutely and severely ill with weight loss, vomiting and diarrhoea or symptoms may be chronic and seem unimportant, such as tiredness, lethargy and breathlessness. Usually the symptoms are somewhere between the two but some people are diagnosed without having any symptoms.
- Adults may have a history of abdominal discomfort or they may develop coeliac disease at any time. Anaemia, mouth ulcers and weight loss are common signs.
- Babies are fit and well until the introduction solid foods that contain gluten when the baby becomes pale, bulky, has offensive-smelling stools and may be lethargic and miserable.

All these symptoms could apply to other conditions so it is important that you do not assume that you have coeliac disease but seek medical help.



Diagnosis

Coeliac disease is nearly always diagnosed by a gastroenterologist. Until recently coeliac disease could only be detected after years of symptoms and an intestinal biopsy. The new test measures antibodies in the blood to gluten and gliadin in the diet and damaged endomysial muscle in the bowel. The anti-gliadin antibodies disappear with a gluten free diet but the endomysial antibodies persist in all people with untreated and treated coeliac disease and so it is an excellent screening test although not 100% accurate.



Treatment

A strict gluten free diet is the only treatment that puts the intestine back to normal.

Diabetes requires a well balanced diet with plenty of carbohydrate but once coeliac disease has been diagnosed, providing carbohydrate becomes more difficult as many of the carbohydrates we eat and enjoy, such as bread, pasta, cereal, pastry, crackers, biscuits and cakes, contain gluten which has to be avoided. This is particularly difficult for children. These foods can be replaced with gluten-free products, some of which are available on the NHS in the UK. But as there is no gluten in the flour, the products do not have the same consistency and taste and are often not so delicious.

Here are just some of the difficulties:

- There is a lack of choice.
- Pre-prepared foods are much more difficult to obtain because many of them contain gluten eg the flour used to thicken sauces contains gluten.
- It takes time to become familiar with the 'hidden' gluten eg wheat flour is often used as a carrier for flavouring in such things as crisps.
- Buying gluten-free products is very expensive.
- Note – some products are available with a gluten-free symbol.

Gluten Free Diets – An Update

By Dr Mabel Blades, Freelance Dietitian and Nutritionist

On 1st January 2012 the rules about making claims as regards which foods are gluten free changed.

What is gluten free?

In the past as long as foods did not contain wheat, rye, barley or any products derived from them they could generally be described as

gluten free.

With the realisation of the sensitivity of some to gluten and how little contamination is required to cause a problem, it was decided that only foods which contain no more than 20 parts gluten in a million parts of food can be labelled as gluten free. This legislation came into effect on 1st January 2012. Now the only foods which can be described as gluten free are:

- Specially made foods for people with gluten intolerances such as pasta made from rice instead of wheat flour
- Everyday foods such as soup made only from vegetables which would contain less than 20 parts per million

No gluten containing ingredients

To assist people with coeliac disease caterers and food businesses can make a factual statement to let customers know it does not contain any gluten containing ingredients. So look out for this on foods and menus.

Extra information

Additional information on this can be obtained from the Food Standards Agency, <http://www.food.gov.uk/> and also Coeliac UK, <http://www.coeliac.org.uk/>

The experiences of a family living with diabetes and coeliac disease

As a family we have learnt to cope with coeliac disease and diabetes, but it is not easy. As we know, children hate being different and believe it or not some find living with coeliac disease more difficult than living with diabetes. Coeliac disease makes a child more obviously different from their friends and family and it can bring emotional and behavioural problems that can be difficult to deal with.

There can be arguments about which foods can and cannot be eaten. Always being different from their brothers, sisters and friends and going out for a MacDonalds or a pizza can turn into a nightmare when your child, yet again, cannot eat all the yummy things available.

This can result in bad behaviour, temper tantrums and refusal to eat at all and this in turn affects diabetic control. Yes, living with diabetes and coeliac disease does bring its stresses and strains to family life and these should not be underestimated.

All this sounds pretty horrendous and it can be overwhelming at the beginning but I know from experience, that once you have got used to the idea of your child having coeliac disease and diabetes, it is possible to survive!

Here are just a few tips we have learnt along the way:

Eating Out

This can seem like just another obstacle to overcome, but it can be so don't give up. Fast foods are enjoyed by children and we discovered that with a bit of forward planning they can still be part of our life.

- Pizzas – we've discovered that most pizza bars are happy to put a topping on a gluten-free pizza base so you can always make your own base and take it with you.
- Pasta – you can take your own gluten-free pasta with you and ask to have it cooked.
- Burgers – MacDonalds etc are always keen to oblige and will put a burger inside a gluten-free roll.
- Fish - can be fried without batter.

We always go armed with gluten-free bread and insulin wherever we go!

Holidays

Again it is a matter of 'be prepared' and we've discovered that time spent on forward planning is well worth it, whether holidaying in this country or abroad. If you are going abroad it is worth taking all your gluten-free products with you. If flying we have found that airlines will provide a gluten-free diet if ordered 3-4weeks in advance but, of

course, there is never enough carbohydrate so we have to take extra.

School

School kitchens are usually very accommodating and are happy to provide a gluten-free diet but there may not be enough carbohydrate. I've found that catering staff are very willing to help once I have spent time with them explaining my son's needs, although it is often easier and a safer bet for younger children and the newly diagnosed to have packed lunches.

An expensive tip!

We've invested in an automatic bread maker and it makes delicious home made bread and prepares dough for pizzas, doughnuts, buns and pastry etc. It has brought a greater variety and freshness to the gluten-free diet and, even better, it has given my son a real interest in making his own recipes.



Information sources

Coeliac UK, PO Box 220, High Wycombe. Bucks HP11 2HY
Tel 01494 437278 Helpline 0870 4448804 or visit their website www.coeliac.co.uk

Another useful website is www.allergy.co.uk/coeliac_disease.htm

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