

Case Study: Gluten Intolerance

8. Using the case study on pages 218-219 of the 'Food Technology First' textbook, answer the following questions.

- Identify three foods which contain gluten?

- On average, how many people are affected by coeliac disease?

- What happens to the small intestine when gluten is consumed by a person with coeliac disease?

- What happens if gluten is removed from the diet completely?

- Why is eating out difficult for those people with an intolerance to gluten?

- How do the new labelling laws assist the diet of those people who suffer from coeliac disease?

- Identify three suggestions for gluten free eating. Justify your selection.

Case study *Gluten intolerance*

Did you know?

Food intolerance affects 5 to 10 per cent of the adult population, whereas food allergies affect 1 per cent.

Most people do not have any trouble digesting gluten—the protein found in wheat, rye and barley. But for the one in 300 people who have coeliac disease, gluten damages the lining of the small intestine, disabling the absorption of nutrients and minerals from food, leading to deficiencies

in vitamins, iron, folic acid and calcium. Sugars, proteins and fats are often poorly absorbed, too.

The good news is that if you remove all gluten from the diet, the lining of the intestine recovers and these essential nutrients can be absorbed without any problems.

Case study (continued)

However, this means people with coeliac disease must maintain a gluten-free diet for their entire lives.

Wheat flour is a component of bread, biscuits, cakes, pastries and pasta, but other products containing gluten are not always obvious. Beer and malted drinks are a no-no because they are made from barley, while most soy sauces contain traces of wheat.

Eating out can be difficult if you are gluten intolerant because popular fast foods such as pizza, hamburgers, fried chicken and battered fish contain gluten. You will also need to ensure that hot chips haven't been fried in the same fat as battered or crumbed foods.

New labelling laws have made it easier for sufferers of coeliac disease to avoid gluten, because any food ingredient made of wheat, rye or barley must be identified.

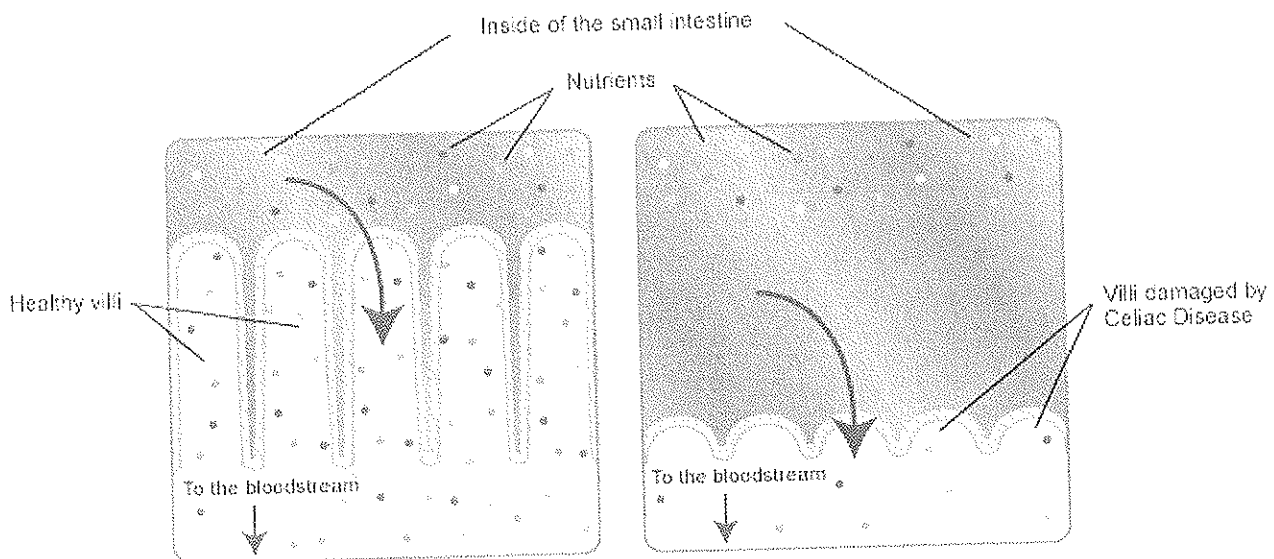
On the plus side, many of the gluten-free foods suitable for consumption are good for you. Here are some suggestions

for gluten-free eating: fresh oysters with lemon; barbecued prawns (make sure that they have not been marinated in wheat-containing sauces); chicken (check for breadcrumbs, flour or inappropriate marinades); ham (ensure the seasoning doesn't contain breadcrumbs or flour); and any fresh vegetables and fruits (check the label to ensure that they are gluten free).

Did you know?

Each year, between ten and twenty people in Australia die from anaphylaxis, an extreme allergic reaction where the mouth, tongue and throat swell and constrict breathing. Many more have severe allergic reactions.

Villi - Small Intestine



A. In a healthy person, nutrients get absorbed by villi in the small intestine and go into the bloodstream.

B. In a person with Celiac Disease, the villi have been damaged by inflammation, so fewer nutrients pass into the bloodstream.