

# A Guide to Considering Gluten-free and Casein-free diet for the treatment of ASD

## The theory:

Some people with autistic spectrum disorder (ASD - includes autism and Asperger's syndrome) may have an intolerance to the food proteins gluten and casein. Removal of the foods containing these proteins from their diet can cause improvements in neurological functioning, behaviour, communication and/ or bowel function.

## The evidence:

Unfortunately there is no strong scientific evidence for the use of these diets, although there are many individual reports of people with autism/ ASD finding that cutting out gluten and/ or casein has been beneficial for them.

## What does a gluten and casein-free diet involve?

**Gluten** is a protein contained in wheat, barley and rye. Oats contain a similar protein. Bread, pizza, pasta, pastry, biscuits, some breakfast cereals, and some processed foods such as fish fingers, sauces, processed meat must be avoided. Gluten-free alternatives are widely available.

**Casein** is a protein in cow's milk. There are similar proteins in goat's milk and other mammalian milks. Milk, yogurt, cheese, butter, some margarines, ice-cream, milk chocolate, biscuits, and some processed products such as bread and crisps must be avoided.



## Considerations:

It is not easy to cut all these foods out and still eat a balanced diet. A registered dietitian can help to suggest alternatives to ensure an adequate nutritional intake.

Some families prefer for the whole family to cut these foods out, so the child does not feel singled out.

Cutting out gluten can lead to a diet low in fibre, and possibly low in calories if a child is not willing to eat gluten-free substitutes.

Cutting out casein can cause a low calcium intake, and a low protein intake if your child does not eat other sources of protein such as meat, fish or soya.

Following a restrictive diet can be expensive and time-consuming for a family. Gluten-free products and milk replacements are often more expensive than the regular products (Gluten-free products can only be prescribed to those diagnosed with Coeliac disease or Dermatitis Herpetiformis (life-long gastrointestinal intolerances to gluten which can cause bowel and nutritional problems or skin problems))

If your child has marked food selectivity or is very picky about food or has difficulty eating textures, restricting their diet further could put them at risk of nutritional deficiencies.

## The dietitian's view:

Dietitians do not actively recommend this diet but do recognise that many people wish to try a gluten and casein free diet. Dietitians are therefore able to offer support when following a restricted diet to help ensure optimal nutrition for your child.

It is best to seek a dietitian's support before attempting to restrict your child's diet in any way - They should be able to give you lists of foods to avoid and suitable substitutes for them.

Try to implement the diet in 4 stages:

1. **Baseline** - Monitor your child's behaviour and bowel habit carefully for a couple of weeks on their normal diet - record this in a diary
2. **Exclude gluten and/or casein strictly** - for a set time, e.g. a month. Some researchers suggest that casein should be excluded for at least 3 weeks and gluten for at least 3 months, but carers often say they see change in days to weeks if at all). Continue to keep a diary of behaviour and bowels
3. **Consider** the significance of any changes seen on the diet. Weigh this up carefully with any difficulties you have found in following the diet
4. **Stop** the restriction and reintroduce foods containing casein and then gluten (separately). Again monitor any changes in behaviour and bowels. If there is a clear deterioration in your child's symptoms, reinstate the diet.



If you decide to continue with this dietary restriction long-term, a dietitian can help to ensure that your child's diet is adequate - you probably need to continue seeing a dietitian yearly at least.

**Produced by:** Zoe Connor, Dietitian, June 2006 with help from members of DASIG (Dietitians' Autistic Spectrum Interest Group) and numerous other health and education colleagues. Some information has been adapted from leaflets by Nutrition & Dietetic Department, West Middlesex University Hospital



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