Coeliac Disease

What’s new and in the news?

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An update:

- Role of genes
- Diagnosis
- GF foods and prescriptions
- Risks
- Treatments
- Gluten sensitivity
Genetic Testing

- Coeliac gene: HLA-DQ2 known for a long time
- 90% express HLA-DQ2, 10% DQ8

Now 40 genes predisposing to or protecting against Coeliac Disease
- overlap with type 1 diabetes/thyroid gene
- probably more to be found

Hope is that we can:
- Predict risk of getting disease
- Predict how disease behaves
- Predict response to treatments
- Design new therapies / treatment strategies
Diagnosis: Adults

1) Small Intestine Biopsy

Normal second part of duodenum (intact villous architecture)

Villous atrophy in Coeliac Disease (flat mucosa with scalloped edge)
Diagnosis Adults

2) Tissue Transglutaminase (tTGIgA) blood test

3) Point of care testing
   • Simtomax
   • Biohit
Diagnosis Children

Symptomatic children in whom the TTGIgA level exceeds 10 times the upper limit of normal, EMA antibodies are positive on a separately taken blood sample, and HLA-DQ2 or HLA-DQ8 are positive, then biopsies do not need to be performed to confirm the diagnosis.

Type 1 Diabetes

Family history
GF Foods

“The gluten-free food price shock
Alternative items cost up to 200% more ... even if standard varieties don’t have any gluten in them!

By Colin Fernandez and Sean Poulter

SUPERMARKETS are ‘exploiting’ shoppers by selling gluten-free products with huge mark-ups even though the regular, cheaper versions do not have any gluten in them either.

In some cases the price difference between the as-stated ‘free from’ products and the standard product can be 200 per cent. About one in 100 people have coeliac disease, an auto-immune condition which can cause sufferers to react if they eat gluten, a protein found in grains such as wheat, barley and rye.

But ‘free from’ food has also become a status symbol for younger people, with supermarkets catering to this market and boosting profit margins. However, healthy and the benefits are said to be limited. Research has also shown that the market for gluten-free foods in the UK is

“Gluten-free products can be three to four times more expensive than their standard counterparts in supermarkets, according to Coeliac UK, a national charity which supports people suffering from the autoimmune disease.

Sarah Sleet, Chief Executive of Coeliac UK, said factors such as higher costs of gluten-free ingredients and additional costs involved in using dedicated factories and production area can contribute to the difference” (Feb, 2016)
Bisto Best Beef Gravy Granules 200G

Best Beef Gravy Granules

Pack Size: 200g

With real meat juices
With a rich flavour
Frosted in freshness

Information

Ingredients:
Maltodextrin, Potato Starch, Salt, Colour [E150], Vegetable Oils (Palm, Rapeseed), Flavour Enhancers (E521, E551), Flavourings, Beef Extract Powder (1%) (Maltodextrin, Beef Extract), Onion Powder, Emulsifier (E471) (contains Soya), Sugar, Black Pepper Extract

Allergy Information:
May Contain: Cereals Containing Gluten, Wheat

Storage:
Gluten-Free foods on Prescription

“GPs 'wasting millions of pounds' prescribing gluten free foods. GPs should stop prescribing gluten-free foods because doing so is “archaic” and costs the NHS millions of pounds in doctors’ time, say experts” (Feb, 2013)

“Earlier this week, there was uproar at reports that gluten-free food on prescription costs the NHS £116 million per year. The implication was that coeliacs are gorging themselves on fast food, at the cost of the taxpayer, and contributing to the obesity epidemic. But we shouldn't be too quick to judge?” (Aug, 2015)
Prescription charge exemptions

- Stoma
- Diabetes
- Epilepsy
- Underactive adrenal gland
- Underactive thyroid
- Underactive parathyroid
- Myasthenia Gravis
- Continuing physical disability
- Cancer treatment
Money flow for prescriptions

- HM Treasury
- Dept. of Health (£107 billion)
- NHS England (£96 billion)
- Clinical Commissioning Groups (£64 billion)
- GPs (10% total spend on prescribing)
Which GF food is your GP Surgery Prescribing?

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<thead>
<tr>
<th>West Hampshire CCG (51) Feb 2016</th>
<th>Southampton City CCG (32) March 2016</th>
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<tbody>
<tr>
<td>Bread</td>
<td>Bread Loaves</td>
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<td>Pasta (specified brands)</td>
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<td>Crackers</td>
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<td>Bread Mix</td>
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<td>Pizza Bases</td>
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Risks

- Bone thinning; bone scan
- **Nutrient deficiency:** Iron, B12, folate, Vit D and calcium levels
- **Sub fertility:** 2.7-3% risk in untreated CD
- Small spleen; vaccinations
- Small bowel cancer 1:2000 pa; **STRICT GF DIET**
Treatments?

- Immusan T’s Nexvax2 – restore immune tolerance & prevent disease relapse
- Alvine ALV003
- Alba AT1001
- Bioline BL-7010

Enzymes; compliment
GF diet not replacement
Non-coeliac gluten sensitivity

- Symptoms akin to coeliac disease
- Absence of coeliac disease on biopsy and blood test
- No long-term complications
- Exempt from GF foods on prescription
Questions?

"Would you like your child be in the gluten-free class, the lactose-free class, or the peanut-allergic class?"