

Clinical
| Management
of Coeliac
Disease

Anna Richards

Dietitian



Stories to start

- 27 yr woman
- PCOS (under care endocrinologist)
- Weight gain (? PCOS, insulin resistance)
- Intermittent acute abdominal pain – ED presentation (several ultra-sounds diagnosed burst ovarian cysts)
- Hx bloating and not feeling great with wheat – doesn't everyone?
- Hx poor energy (extreme personal stress)
- Presented to GP with dizziness (? Low iron)

Samantha

Strongly positive coeliac serology

Biopsy diagnosed

..... I missed it in my daughter

What a
difference a
year makes!



Florence

5 yr girl

Mother biopsy diagnosed coeliac disease
(presented 6-7 years prior requiring weight gain
as unable to conceive)

November – behaviour 'off' - ? Big kid at kindy,
friends going off to school

Screened CD – normal titres

Florence

May (4 yrs 11mo) – behaviour horrendous, teary, tantrums

Retested at mothers request (and GP agreement) – strongly positive serology

Biopsy diagnosed CD

Would you have ticked the box ?



Would you have ticked the box??

TTG IgA Ab: < 0.5 U/mL (< 15.0)
Deaminated Gliadin Peptide IgG: 0.4 U/mL (< 15.0)
IgA: 0.4 g/L (0.3 - 1.6)
Coeliac disease unlikely provided the patient is on a gluten-containing diet. Duodenal biopsy is the gold standard. HLA testing can exclude coeliac disease and is not diet-dependent.

DOB: 11 Jun 2012
Date: 11 Jul 2016

TTG IgA Ab: > 250.0 U/mL (< 15.0) **HH**
Deaminated Gliadin Peptide IgG: 106.0 U/mL (< 15.0) **HH**
IgA: 0.5 g/L (0.3 - 1.6)
Endomysial Antibodies: Positive **A**
Serology consistent with coeliac disease. Duodenal biopsy is the gold standard.

DOB: 11 Jun 2012
Date: 10 May 2017

Violet

First child, normal pregnancy, emergency c-section

Breastfed to 6 mo, supplementary formula from 8 weeks

Growth tracking p50 for ht and wt to 12mo

12mo – grumpy, grizzly, random vomiting, loose BM - ? Teething, ? Daycare

GP ref paed concerned about wgt at 13mo

Wgt incr 100g in 6 mo

Paediatrician

Poor iron status

Positive coeliac serology

Would you have ticked the box???

What made you tick the box?

Something was off

Checking for iron anyway so easy to do

Why not?





Dietitian

63%

Gastroenterologist

57.1%

GP

35.7%

Pharmacist

22.7%

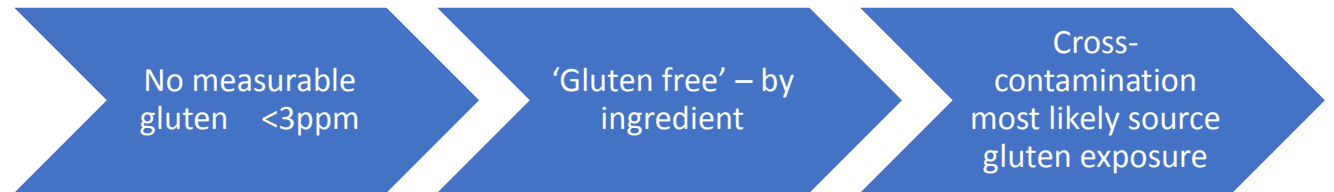
Ref: Dig Dis
Sci,2008
Jun;53(6):1573-
1581

Adequate sources of information
from healthcare providers



Mainstay of management of CD is
the gluten free diet

Dietary management of coeliac disease



PLANNING and
preparing foods in
advance

LEARNING about
coeliac disease and
effective
management

UTILIZING SOCIAL
SUPPORTS; family,
friends and
community

ADDRESSING any
associated
environmental or
behavioural concerns

Have appealing
GLUTEN FREE
ALTERNATIVES
available

ADVOCATING FOR
STRUCTURAL AND /
OR ACADEMIC
SUPPORTS

Supporting Adherence to a GF diet

Factors influencing adherence to GF diet

1

Married

2

Diagnosis <4 yrs of
age

3

Presence food
intolerances

4

Understanding

5

Knowledge

6

Ref: Dig Dis Sci,2008
Jun;53(6):1573-
1581

Factors increasing adherence

Factors
increasing
compliance
to a gluten free
diet



Understanding of the GFD

Membership of a coeliac disease advocacy group

Perceived ability to maintain adherence despite travel or changes in mood or stress

NB Adherence estimated 45-80%

Ref: Dig Dis Sci, 2008 Jun; 53(6):1573-1581

No correlation
with
compliance

- Demographic factors – gender, age, time GFD, education, employment
- Symptoms
- Presence other auto-immune disorders
- Cost
- Finding GF foods outside the home

- Ref: Dig Dis Sci,2008 Jun;53(6):1573-1581

Clinical Implications

Psychological state
affects impact
compliance

Biochemical effects
of disease

Patients subjective
perception of
disorder and diet

Healthcare
professionals –
psychological
burden of CD



Patient perception
of their disease is
a major
factor in
compliance



Emphasize the
positive

- health benefits
- financial benefits
- psychological benefits
- access to safe foods

Mind the head

Undiagnosed/poorly managed coeliac disease

- Anxiety
- Depression
- Fatigue
- QOL factors
- Fear factor





Major nutrition concerns

Fibre

Increased fat


Increased sugar

B vitamins (low grain) – esp folate

Calcium (dairy free) – osteoporosis, teeth

Iron

Vitamin D deficiency



Secondary issues

Lactose intolerance \neq dairy free

Generally resolves

6 mo

Lacteeze (pharmacy)



Lactose content dairy products

Regular milk, 250mL	15.8 g
Cheddar cheese, 40g	0.04
Swiss style cheese, 40g	0.04
Parmesan cheese, 40g	0
Brie, 40g	0.04
Ricotta cheese, low fat, 20g	0.4
Cream cheese, 22g	0.6
Yogurt (natural), 200g	9.6*
Ice cream, 50g	2.9
Butter, 18g (1 tblspn)	0
Cream, 20g (1 tblspn)	0.4

- * The lactose content in yogurt decreases each day, even while it sits in the fridge, because its natural bacteria use lactose for energy.

Source: NUTTAB 2010 (Food Standards Australia New Zealand); The University of New South Wales; Professor Heather Greenfield and co-workers at the University of New South Wales; Tables of composition of Australian Aboriginal Foods (J Brand-Miller, KW James and PMA Maggioro).

Persistent
gastrointestinal
symptoms

- FODMAPs
- When to consider?
- Persistent gastrointestinal symptoms – altered bowel motions, bloating, flatulence, nausea
- In the absence of non-compliance
- And – lactose intolerance has been considered and addressed
- Dietitian-delivered FODMAP diet (ref Peter Shepherd article)
- Short term intervention ? 3 or 6-8 weeks?
- Rechallenge protocol – not ad hoc introduction of foods

Teeth

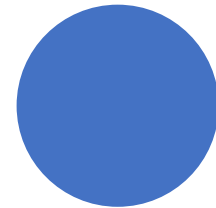
Thumb sucking

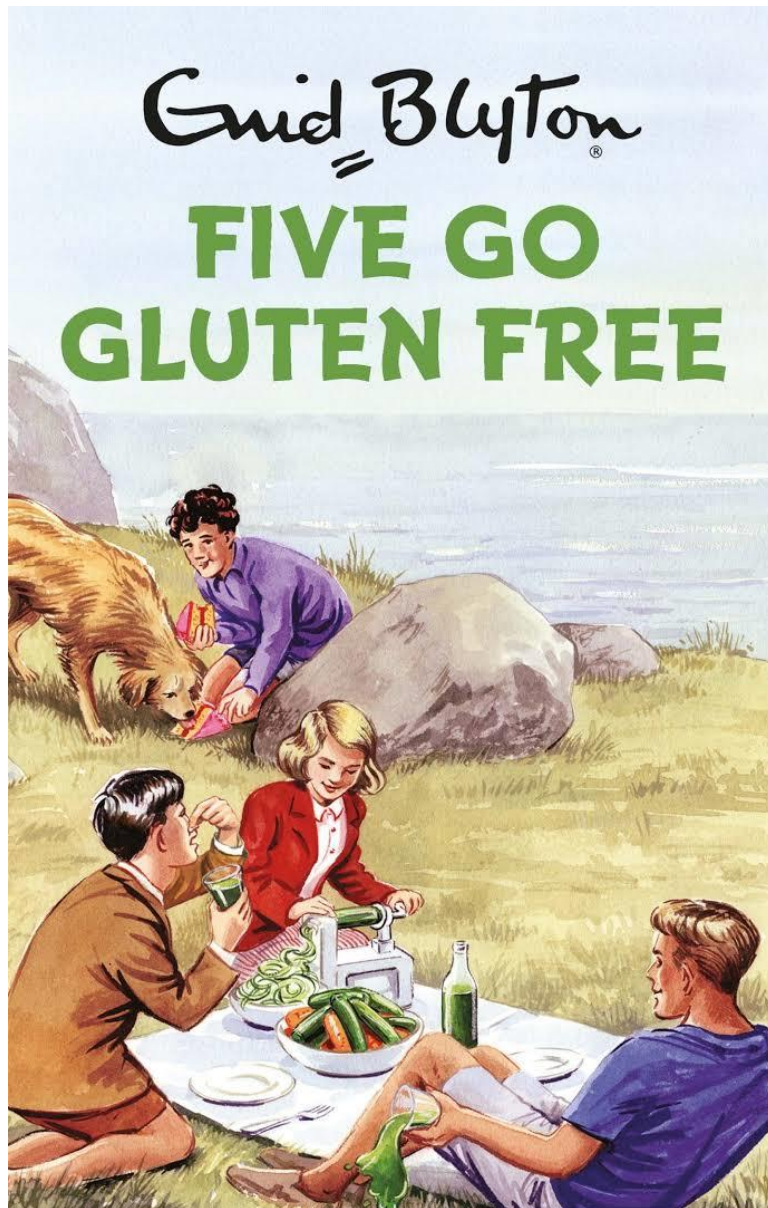
Playdough and craft activities

Lack of supervision and
understanding in care

Catch up growth

Paediatric issues





A time trusted
author....friend or foe?

Can consumers trust web- based information about coeliac disease?

- 47% provided specific information < 95% accurate
- 52% contained less than 50% of the core CD information considered important
- Academic websites less transparent
- Type of website publisher did not predict website accuracy, comprehensiveness or overall website quality
- Only 4% achieved an overall score of 80% or more (set as minimum score for website to be judged trustworthy and reliable)

Ref: Interact J Med Res,2012 Apr 4;1(1):ie1



Credible Sources of information
Coeliac NZ
Other Coeliac Organisations
Stay connected

thank you!