

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

SCOPE

1 Guideline title

Coeliac disease: recognition, assessment and management of coeliac disease

1.1 *Short title*

Coeliac disease

2 The remit

The Department of Health has asked NICE: 'To prepare a guideline on the recognition and assessment of coeliac disease (2008) and management of coeliac disease (2012)'.

This guideline is a full replacement of [Coeliac disease](#) (NICE clinical guideline 86).

3 Clinical need for the guideline

3.1 *Epidemiology*

- a) Coeliac disease is an autoimmune condition associated with chronic inflammation of the small intestine, which can lead to malabsorption of nutrients. Dietary proteins, known as glutes, that are present in wheat, barley and rye activate an abnormal mucosal immune response. Clinical and histological improvements usually follow when gluten is excluded from the diet.
- b) Coeliac disease can present with a wide range of clinical features, both gastrointestinal (such as indigestion, diarrhoea, abdominal pain, bloating, distension or constipation) and non-gastrointestinal (such as fatigue, dermatitis herpetiformis, iron deficiency, anaemia,

osteoporosis, reproductive problems, short stature, neuropathy, ataxia or delayed puberty). Although some people present with typical symptoms, others have few or no symptoms. Also symptoms may be misdiagnosed as other conditions, notably irritable bowel syndrome (IBS).

- c) Coeliac disease is a common condition. Population screening studies suggest that in the UK 1 in 100 people are affected. The complications of coeliac disease (which may be present at diagnosis) can include osteoporosis, ulcerative jejunitis, malignancy (intestinal lymphoma), functional hyposplenism, vitamin D deficiency and iron deficiency.
- d) People with autoimmune conditions such as type 1 diabetes and autoimmune thyroid disease, or those with a first-degree family history of coeliac disease, have an increased likelihood of coeliac disease.
- e) There is evidence that coeliac disease is underdiagnosed, particularly when it presents in primary care and other non-specialist settings. Delayed diagnosis is a concern because of the possible long-term effects of undiagnosed coeliac disease.

3.2 Current practice

- a) Currently, people with symptoms and/or signs suggestive of coeliac disease are investigated by serological tests, for example, IgA tissue transglutaminase (tTGA) and IgA endomysial antibodies (EMA), with further referral to a gastrointestinal specialist for endoscopic intestinal biopsy to definitively confirm or exclude coeliac disease. There is emerging evidence on the clinical utility of other tests and diagnostic strategies, such as deamidated gliadin peptides (DGP), point of care tests and the use of combined serological tests to definitively diagnose coeliac disease without carrying out endoscopic intestinal biopsy.

- b) The treatment of coeliac disease is a lifelong gluten-free diet. Adherence to a gluten-free diet has repeatedly been shown to be poor, with 20% to 80% of people with coeliac disease admitting to either occasional or prolonged lapses. Specific education and information, such as advice and education on alternative foods in the diet to maintain a healthy and varied intake, which could be provided by a dietitian with experience in coeliac disease, may increase the likelihood of adherence and a positive prognosis. Access to specialist dietetic support is currently poor within the UK.
- c) People with coeliac disease are at risk of complications and may have other co-existing conditions. The follow-up care of people with coeliac disease after the diagnosis varies widely within the UK; ranging from follow-up care in specialist clinics to being discharged back to the community without any provision of a follow-up service.
- d) The majority of people with coeliac disease report a rapid clinical improvement after starting a gluten-free diet. However, 5% to 30% do not report symptomatic improvement after starting treatment, and some will still have persisting symptoms after 6 to 12 months. There is currently no conclusive guidance on differential diagnosis of non-responsive coeliac disease, such as refractory coeliac disease, infective gastroenteritis, intestinal bacterial overgrowth, lactose intolerance, Crohn's disease, Zollinger-Ellison syndrome, intestinal lymphoma, and other immunodeficiency conditions. Approximately 10% of people with non-responsive coeliac disease will have true refractory coeliac disease. The management of people with refractory coeliac disease currently varies widely within the UK.

4 The guideline

The guideline development process is described in detail on the NICE website (see section 6, 'Further information').

This scope defines what the guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health.

The areas that will be addressed by the guideline are described in the following sections.

4.1 *Population*

4.1.1 Groups that will be covered

- a) Children, young people and adults with symptoms or signs suggestive of coeliac disease.
- b) Children, young people and adults with confirmed coeliac disease.
- c) Children, young people and adults considered to be at high risk of coeliac disease. This includes people with autoimmune conditions such as type 1 diabetes and autoimmune thyroid disease, or those with a first-degree family history of coeliac disease.
- d) Specific subgroups in whom the investigation and management of coeliac disease is known to be different.

4.1.2 Groups that will not be covered

- a) Children, young people and adults with other gastrointestinal disorders (the guideline will only cover differential diagnosis of non-responsive coeliac disease).
- b) People with non-coeliac disease gluten sensitivity.

4.2 *Healthcare setting*

- a) All settings that provide NHS care.

4.3 *Clinical management*

4.3.1 Key clinical issues that will be covered

Recognition, assessment and diagnosis

- a) Recognition, assessment and investigation of people with presenting symptoms and/or signs, either gastrointestinal or non-gastrointestinal, that are suggestive of coeliac disease, including:
- presenting features, history (including family history) and examination
 - purpose, timing, accuracy and diagnostic value of serological tests and other tests
 - purpose, timing, accuracy and diagnostic value of the human leukocyte antigen (HLA) DQ2 and DQ8 immunological test
 - appropriate use and frequency of repeat serological testing and other testing
 - testing for IgA deficiency.
- b) Indications for referral for endoscopic biopsy.

Management of coeliac disease

- c) Dietary management strategy and advice for people with coeliac disease, including the use of calcium, vitamin D and vitamin B12.
- d) The role of oats in the dietary management of people with coeliac disease.
- e) Monitoring and follow-up of people with coeliac disease including:
- monitoring of people at risk of complications such as osteoporosis, ulcerative jejunitis, malignancy (intestinal lymphoma), functional hyposplenism, vitamin D deficiency and iron deficiency
 - follow-up strategies.

Management of non-responsive and refractory coeliac disease

- f) Definition, investigation and differential diagnosis of non-responsive coeliac disease, including refractory coeliac disease, IBS, small bowel bacterial overgrowth, functional disorders, lactose intolerance, pancreatic exocrine dysfunction, microscopic colitis and common variable immunodeficiency.
- g) Management of refractory coeliac disease, for example, corticosteroids with azathioprine, cyclosporin, infliximab, cladribine, autologous stem cell transplant, and nutritional support.

Note that guideline recommendations will normally fall within licensed indications; exceptionally, and only if clearly supported by evidence, use outside a licensed indication may be recommended. The guideline will assume that prescribers will use a drug's summary of product characteristics to inform decisions made with individual patients.

Information, education and support

- h) Information and support for people and their family members or carers (as appropriate) before testing, after confirmation of diagnosis and throughout the management of coeliac disease.
- i) Information, education and support to improve adherence to a gluten-free diet.

4.3.2 Clinical issues that will not be covered

- a) Population-based screening for coeliac disease.
- b) Accuracy and use of self-diagnosis kits.
- c) Efficacy of a gluten-free diet.
- d) Management of other gastrointestinal disorders, including conditions identified from differential diagnosis of non-responsive coeliac disease.

- e) Management of co-existing conditions that are associated with coeliac disease.
- f) The role of pharmacological agents in the management of coeliac disease (other than in the management of refractory coeliac disease).

4.4 *Main outcomes*

- a) Health-related quality of life.
- b) Mucosal recovery.
- c) Contact with healthcare professionals.
- d) Resolution of gastrointestinal and non-gastrointestinal symptoms.
- e) Complications of coeliac disease, such as osteoporosis, ulcerative jejunitis, malignancy (intestinal lymphoma), functional hyposplenism, vitamin D deficiency and iron deficiency.
- f) Serological response.
- g) Dietary adherence.
- h) Impact on carers.
- i) Growth in children and young people.
- j) Resource use and costs.

4.5 *Review questions*

Review questions guide a systematic review of the literature. They address only the key clinical issues covered in the scope, and usually relate to interventions, diagnosis, prognosis, service delivery or patient experience. Please note that these review questions are draft versions and will be finalised with the Guideline Development Group.

4.5.1 Recognition, assessment and diagnosis

- a) Which signs and symptoms (both gastrointestinal and non-gastrointestinal) indicate a possible diagnosis of coeliac disease?
- b) Which co-existing conditions or specific subgroups are associated with an increased risk of coeliac disease? Should active case-finding be implemented in people with co-existing conditions or specific subgroups that are associated with an increased risk of coeliac disease?
- c) What is the sensitivity and specificity of the serological tests for coeliac disease? Are the sensitivity and specificity results different in any specified subgroups?
- d) Which serological test is the most appropriate to diagnose coeliac disease? Depending on test results, should more than 1 test be used and, if so, what should be the sequence of testing? Following which sequence of tests and test results is it appropriate to refer onwards for endoscopic intestinal biopsy?
- e) What are the possible long-term consequences of undiagnosed coeliac disease?
- f) What are the referral indications for endoscopic intestinal biopsy?

4.5.2 Management of coeliac disease

- g) What dietary management strategy and advice (including the use of calcium, vitamin D and vitamin B12) should be given to people with coeliac disease? Should the advice include avoiding oats as part of the exclusion diet?
- h) How should people with coeliac disease be monitored? Particularly people with coeliac disease who are at risk of developing complications.

- i) What follow-up strategy should be in place for people with coeliac disease?

4.5.3 Management of non-responsive and refractory coeliac disease

- j) What are the clinical utilities of different definitions and investigative procedures for differential diagnosis of non-responsive coeliac disease, including refractory coeliac disease, IBS, small bowel bacterial overgrowth, functional disorders, lactose intolerance, pancreatic exocrine dysfunction, microscopic colitis and common variable immunodeficiency?
- k) What is the effectiveness of pharmacological treatments for people with refractory coeliac disease?
- l) What is the effectiveness of nutritional management or nutritional support for people with refractory coeliac disease?
- m) What is the effectiveness of autologous stem cell transplant for people with refractory coeliac disease?

4.5.4 Information, education and support

- n) What information do people (and their family members or carers, as appropriate) need to help them decide whether to undergo serological testing? If people are to undergo serological testing, what dietary information do they (or their family members or carers) need before testing to ensure that test results are as accurate as possible?
- o) What information, education and support do people with coeliac disease (and their family members or carers, as appropriate) need to improve self-management of their condition and adherence to a gluten-free diet?

4.6 *Economic aspects*

Developers will take into account both clinical and cost effectiveness when making recommendations involving a choice between alternative interventions. A review of the economic evidence will be conducted and analyses will be carried out as appropriate. The preferred unit of effectiveness is the quality-adjusted life year (QALY), and the costs considered will usually be only from an NHS and personal social services (PSS) perspective. Further detail on the methods can be found in 'The guidelines manual' (see 'Further information').

4.7 *Status*

4.7.1 *Scope*

This is the final scope.

4.7.2 *Timing*

The development of the guideline recommendations will begin in May 2013.

5 *Related NICE guidance*

5.1 *Published guidance*

5.1.1 *NICE guidance to be updated*

This guideline is a full replacement of the following NICE guidance:

- [Coeliac disease](#). NICE clinical guideline 86 (2009).

5.1.2 *NICE guidance to be incorporated*

There is no specific guidance to be incorporated.

5.1.3 *Other related NICE guidance*

- [Fertility](#). NICE clinical guideline 156 (2013).
- [Crohn's disease](#). NICE clinical guideline 152 (2012).
- [Osteoporosis fragility fracture](#). NICE clinical guideline 146 (2012).
- [Colorectal cancer](#). NICE clinical guideline 131 (2011).

- [Patient experience in adult NHS services](#). NICE clinical guideline 138 (2012).
- [Colonoscopic surveillance for prevention of colorectal cancer in people with ulcerative colitis, Crohn's disease or adenomas](#). NICE clinical guideline 118 (2011).
- [Food allergy in children and young people](#). NICE clinical guideline 116 (2011).
- [Constipation in children and young people](#). NICE clinical guideline 99 (2010).
- [Rheumatoid arthritis](#). NICE clinical guideline 79 (2009).
- [Irritable bowel syndrome in adults](#). NICE clinical guideline 61 (2008).
- [Chronic fatigue syndrome / Myalgic encephalomyelitis](#). NICE clinical guideline 53 (2007).
- [Nutrition support in adults](#). NICE clinical guideline 32 (2006).
- [Type 1 diabetes](#). NICE clinical guideline 15 (2004).

5.2 Guidance under development

NICE is currently developing the following related guidance (details available from the [NICE website](#)):

- [Type 1 diabetes](#). NICE clinical guideline. Publication date to be confirmed.
- [Diabetes in children and young people](#). NICE clinical guideline. Publication date to be confirmed.
- [Faecal calprotectin diagnostic tests for inflammatory diseases of the bowel](#). NICE diagnostics guidance. Publication expected October 2013.

6 Further information

Information on the guideline development process is provided in the following documents, available from the NICE website:

- [How NICE clinical guidelines are developed: an overview for stakeholders the public and the NHS](#)
- [The guidelines manual](#).

Information on the progress of the guideline will also be available from the [NICE website](#).