## GLUTEN FREE LIVING

## Review Draft for Comment

This draft resource is being prepared by specialist dietitians for people living with coeliac disease and/or dermatitis herpetiformis (DH). It should be issued with the support of a dietitian to help people build knowledge to self-manage their coeliac disease and/or DH.

The content is draft text-only. Before being published, it will be updated based on feedback from professional peers and relevant patients, and then go through full graphic design, including the inclusion of relevant images/illustrations.

## Learning outcomes

The reader (patient or carer) will:

- understand their condition and symptoms (including neurological symptoms)
- understand the long-term complications of non-compliance with diet and related guidelines
- understand secondary complications of coeliac disease and/or DH and how to reduce risks
- understand how to identify suitable foods, and read and interpret food labels to choose gluten-free options
- understand how to avoid cross-contamination during food preparation
- know where and how to access further information and support.

We welcome all feedback to help inform updates to the range, and we are seeking responses on clarity of key messages, suitability for purpose, length and amount of detail given. Please provide feedback by email (info@ndr-uk.org) and/or by asking patients to respond via the questionnaire provided to download or access and complete electronically via the QR code below.


We would be grateful for any comments and feedback by Friday 26/04/24.

## A guide to gluten free living

For people with coeliac disease and/or dermatitis herpetiformis (DH)

## <insert contents page>

## What is Coeliac Disease?

Coeliac disease is an autoimmune condition where the body's immune system attacks its own tissues.

This reaction is triggered by gluten. Gluten is a protein found in wheat, barley and rye.

Energy and nutrients from the food we eat are absorbed through the villi in the small bowel.


When people with coeliac disease eat gluten, an immune reaction occurs. This damages the villi in the small bowel by causing inflammation.

Coeliac disease can develop at any age and symptoms vary - you may have no symptoms at all. Common symptoms include:

- Not gaining weight or growing slowly (faltering growth) in children
- Persistent unexplained abdominal or gastrointestinal symptoms including nausea, vomiting, chronic or intermittent diarrhoea, constipation, abdominal pain, cramping or bloating
- Unexpected weight loss
- Feeling tired all the time
- Unexplained iron, vitamin B12 or folate deficiency
- Severe or persistent mouth ulcers
- Lactose intolerance
- Fertility problems

After being diagnosed with coeliac disease, a gluten free diet should help to relieve, if not resolve, most symptoms. Even if you have not experienced any symptoms, a strict gluten free diet is the only treatment to limit long-term risks. If you have an associated autoimmune condition such as type 1 diabetes, it can also help you to manage it.

If gluten is not removed from the diet, villi in the small bowel become damaged due to inflammation. This means that nutrients from the food you eat are not absorbed properly (see picture below).

## What is Dermatitis Herpetiformis (DH)?

Dermatitis herpetiformis ( DH ) is the skin's manifestation of coeliac disease and is less common than coeliac disease, but it is also triggered by eating gluten. It causes an itchy blistering skin rash and typically affects the elbows, knees and buttocks, but it can affect any part of the body.


## Risks and Related Conditions

Living with undiagnosed coeliac disease and/or DH or not excluding gluten from your diet may increase your risk of developing some complications.

## Risks

- Osteoporosis or weakened bones

This can happen due to poor absorption of calcium due to damage to the villi in the small bowel. Bone health will usually improve after starting a gluten free diet. When children with coeliac disease follow a gluten free diet, their long-term bone health should be unaffected.

- Children may not reach their full growth potential

As with bone health, strict adherence to the gluten free diet is the most effective way to ensure that a child's growth is not affected in the long-term. By following a gluten free diet after diagnosis, children's healthy weight gain and growth rate should be achieved.

- Neurological problems

Nerve pain (peripheral neuropathy) and impaired coordination (ataxia) may be experienced - this is more commonly seen within adults. Following a gluten free diet can make a difference to these.

- Lymphoma and small bowel cancer

Undiagnosed coeliac disease is associated with a very small increased risk of developing certain types of cancer. Following a gluten free diet reduces this increased risk of developing cancer.

## A Gluten Free Diet <br> Why should I have a gluten free diet once diagnosed?

A gluten free diet is the only way to treat coeliac disease and DH. Once you start a gluten free diet, your symptoms should gradually improve, and your small bowel will start to heal.

- DH symptoms can take a while to improve upon starting a gluten free diet, so medication may be needed to help control the rash at first.

It is important to follow a strict gluten free diet for life. Eating even small amounts of gluten can trigger the inflammation that damages the small bowel's villi, affecting nutrient absorption and neurological functioning.

> Making the odd mistake will not cause long-term damage, although you may experience some symptoms.
> Remember - a strict gluten free diet is essential for your long-term health.

## Foods that naturally don't contain gluten

There are many staple foods that naturally don't contain gluten. Using these will help you to make affordable, accessible and nutritious food choices. In addition, more and more gluten free alternative foods are widely available.

The lists below are a quick guide to help you make simple gluten free choices.

| Foods that naturally don't contain gluten | Gluten free alternatives | Processed foods without gluten-containing ingredients |
| :---: | :---: | :---: |
| - Meat <br> - Fish <br> - Chicken <br> - Eggs <br> - Cheese with no added ingredients <br> - Milk <br> - Yoghurt <br> - Fruit <br> - Vegetables <br> - Potatoes <br> - Rice | - Gluten free flour and products made with it, such as gluten free: <br> - Bread <br> - Pasta <br> - Pizzas <br> - Cakes <br> - Biscuits <br> - Gluten free breakfast cereals | Check food labels for suitable varieties, such as: <br> - Ready meals <br> - Soups <br> - Baked beans |

Always check food labels to make sure foods are suitable for a gluten free diet. The guidance on pages 6-7 provides more information on labelling.

For an extended list of foods that are suitable and those that must be avoided, go to <insert ndruk.org page details and QR code when published - see appended sheet for guidance details> to view and download more information.

## Oats

Oat and oat products often become contaminated with wheat, rye or barley during processing, making them unsuitable for a gluten free diet. However, pure, uncontaminated oats are gluten free. These add variety and nutritional benefits to your diet. Research shows that most people with coeliac disease and/or DH can enjoy these uncontaminated oats and oat products. However, oats contain a gluten-like protein called avenin - in rare cases, people with coeliac disease may be sensitive to this.

Gluten free oats can be introduced to the diet at any stage, however if you have concerns speak to your healthcare team for personalised guidance.

## Where can I buy gluten free alternatives?

Major supermarkets, chemists and health food shops generally have a good range of gluten free alternatives. Online shops often have tools to help you search for products that are suitable for people following a gluten free diet. If shopping is difficult for you, ask a friend or family member to help.

Coeliac UK has additional information available on sourcing gluten free products and tips on budgeting on their website (www.coeliac.org.uk).


Remember, if you are medically diagnosed with coeliac disease or DH, some staple foods such as bread and flour mixes may be available on prescription - check with your dietitian or GP about what you may be able to access (see page 13 for more information).

## Notes:

## Food labelling

Checking and understanding food labelling is very important when you are managing coeliac disease and/or DH.

In the UK and EU, all food labels of packaged, pre-packed for direct sale, and loose foods must state if any of the 14 most common food allergens are present. This includes any gluten-containing cereals (wheat, rye, barley) or oats that are deliberately used in production.

Allergens must be emphasised in the ingredients list, for example in bold or coloured lettering as shown below.

## Crackers

Wheat flour, rye flour, vegetable oil, egg, skimmed milk powder, glucose syrup, raising agents, salt, yeast.

## Homestyle roast potatoes

Potato (91\%), palm oil, batter (wheat flour; dextrin; salt; modified tapioca starch; skimmed milk powder; dextrose; turmeric; paprika extract)

Making 'free-from' claims for foods requires strict controls of ingredients, how they are handled and how they are prepared. Any product labelled gluten free would contain 20ppm or less of gluten, which is suitable for everyone with coeliac disease and/or DH.

Food can carry a Gluten free certified trademark known as the 'Crossed grain trademark' (by Coeliac UK) or you can check foods for 'no gluten' containing ingredients.
<INSERT LABEL WITH CROSSED GRAIN LABEL>
If there are no gluten-containing ingredients in a food, but the manufacturer believes there is a risk that it could be contaminated with gluten, you may see an allergy advice panel that says it could/may contain wheat, rye, barley or oats because of contamination - this is not compulsory. Current advice for people with coeliac disease and/or DH is, do not to consume foods with a 'may contain' statement for cereals containing gluten in the UK. This is based on the guidance that the relevant government agencies (FSA/FSS) provide to food businesses.

Always check the ingredients list to make sure products do not contain any gluten. For more information, speak to your dietitian, check the Coeliac UK Food and Drink Guide and/or Live Well Gluten Free app, or contact the manufacturer directly.

## Foods without packaging and eating out

When providing or serving loose foods e.g. bakeries, cafés, restaurants and takeaways, businesses must be able to provide you with information in writing or orally on any allergens, including any cereals containing gluten or oats, in all the dishes they serve.

Go to page 8 for more information and tips when eating out or away from home.

## Do not take risks:

- Always check labels to make sure food is suitable for a gluten free diet.
- Ask staff for more information - if you have any doubts, avoid the foods.

For more information, visit www.coeliac.org.uk and follow the links through 'information and support' to 'Living gluten free' and click on 'The gluten free diet'.


## Gluten Free Living

## Cross contamination

Even very small traces of gluten can be enough to damage the villi in the small bowel and cause other symptoms such as mouth ulcers and headaches. Cross contamination can be a problem for people with coeliac disease and/or DH - it can occur via shared foods, preparation areas, utensils and equipment.

To minimise this risk:

- Use a separate toaster for gluten free breads or toaster bags in shared toasters and sandwich machines.
- Have separate spreads like butter, margarine or jam to avoid crumbs.
- Thoroughly clean kitchen utensils, equipment and preparation areas before preparing and/or serving gluten free foods - this includes chopping boards, knives, spoons and colanders.


## Eating out or away from home and takeaways

It is helpful to tell family and friends that you have coeliac disease and/or DH. This lets everyone learn about a gluten free diet together and means support with suitable meals can be provided.

A little forward planning before you eat out or buy a takeaway is valuable.

- When visiting friends or going to a party, explain your gluten free diet to the host and if necessary, provide some of your own gluten free foods. This may be especially helpful for children's parties.
- Book in advance. Tell the restaurant about your dietary requirements - look at their menu online or ask before you go to help them prepare and prevent any confusion when you arrive.
- Takeaways can be suitable. Always check menus and when ordering ask how food is prepared to make sure it is suitable, for example if different oil is used to fry chips and battered products. Also ensure that the food you receive is labelled or marked as being gluten free.
- Coeliac UK provides a list of over 3,000 venues that cater gluten free. Go to www.coeliac.org.uk and follow the link from, 'Information and support' to their 'Eating out Venue Guide'.
- Coeliac UK offer GF accreditation to organisations adhering to their standards. Where you see this GF trademark on menus, websites, brochures and other marketing materials, you can trust your gluten free needs will be catered for.

If you are travelling, tell the travel company and your accommodation that you need gluten free meals and check that they will be able to provide suitable options.

Finding gluten free products varies from country to country. Taking some gluten free bread, biscuits or crackers with you can make eating easier when things are less familiar than at home.

Coeliac UK produce travel guides for 50 different countries for its members. It may also be useful to search for helpful organisations in your destination country or contact the relevant embassy for further help and information.


## Cooking tips

Normal recipes can be easily adapted by using gluten free alternatives. Baking foods such as bread, cakes and biscuits may take some practise. These gluten free varieties may require additional moisture, so experiment to get the recipes to work for you. Xanthan gum often helps improve the texture of gluten free products. This can be found in most supermarkets or health food shops.

Coeliac UK's website (www.coeliac.org.uk) has additional information, recipes and recipe books.

Your dietitian will be able to provide information on useful recipes to try.


## Other Dietary Considerations

You should still enjoy a healthy diet when you are following a gluten free diet. However, as foods that contain gluten are valuable sources of energy, fibre, B vitamins, calcium and other minerals, it is important to make sure that you get enough of these nutrients from gluten free alternatives.

Gluten free starchy foods are an essential part of a healthy diet and should make up about a third of the food you eat. Suitable choices include rice, potatoes, alternative grains (e.g. corn, rice or gram flour, millet and polenta) and gluten free bread, pasta and cereals. Try to choose high-fibre varieties whenever you can.

The information over the following pages should help you manage any other diet and health issues linked to coeliac disease and/or DH.

## Osteoporosis

Osteoporosis is a condition where the bones become thinner with an increased risk of breaking. People with coeliac disease and/or DH are at increased risk of developing osteoporosis. Risk varies depending on factors such as how long you were living with undiagnosed coeliac disease, your age at diagnosis, gender and adherence. For children with coeliac disease, a gluten free diet results in normal bone health in adulthood.

After being diagnosed with coeliac disease and/or DH, you may be offered a bone density scan called a DEXA scan. This very simple procedure will detect osteoporosis or the less severe condition, osteopenia, where the bones are thinner than normal. DEXA scans are only offered to children if other tests or indicators suggest that there may be cause for concern.

Following a gluten free diet will help to heal the small bowel, improve calcium absorption and reduce the risk of osteoporosis. Adults with coeliac disease are advised to have more calcium than the general population. Use the information on the next page to make sure that you have enough calcium in your diet.

## Calcium

Calcium requirements for people with coeliac disease and/or DH:

| Age group (years) |  |
| :--- | :--- |
| Children | Daily calcium requirement (mg) |
| $<1$ | 525 |
| $1-3$ | 350 |
| $4-6$ | 450 |
| $7-10$ | 550 |
| $11-18$ (female) | 800 |
| $11-18$ (male) | 1000 |
| Adults |  |
| Adults | At least 1000* |

* Your dietitian will provide personalised guidance for your individual needs, for example if you are breast-feeding, post-menopausal or a man over 55 years of age.

Calcium-rich foods include dairy foods, milk, cheese and yoghurt, and fortified alternatives. Other non-dairy sources of calcium are listed below.

- Tofu (tofu naturally does not contain gluten, however marinated tofu may contain it, so check your product)
- Fortified gluten free bread and rolls
- Canned sardines (with the bones)

The table below shows how much calcium is in a typical portion of some common foods.

| Food | Portion | Calcium (mg) |
| :---: | :---: | :---: |
| Dairy and alternatives |  |  |
| Cow's milk | 200ml glass | 240 |
| Kefir | 200ml glass | 220 |
| Soya milk fortified with calcium | 200 ml glass | 250 |
| Custard/rice pudding pot | 150 ml pot | 140 |
| Plain or fruit yoghurt | 125 g pot | 175-250 |
| Plain or fruit soya yoghurt fortified with calcium | 125 g pot | 150 |
| Hard cheese, for example Cheddar, Edam | 30g | 240 |
| Fish |  |  |
| Sardines in oil | 60g | 300 |
| Pilchards (canned in tomato sauce) | 60 g | 150 |
| Fruit \& vegetables |  |  |
| Broccoli (boiled) | 100 g | 40 |
| Orange | 1 average | 70 |
| Unsweetened orange juice (from concentrate) | 200ml glass | 70 |

There are many types of food that can be good calcium sources. However, the amount of calcium may vary a lot depending on the variety or brand. Therefore, always check packet labels for product specific information, for example:

- Different animal milks e.g. goat, sheep etc.
- Low-lactose/lactose-free milks
- Plant-based milks (always choose fortified varieties)
- All varieties of yoghurt
- Fortified gluten-free breads
- Steamed tofu

Including these foods in your diet will help you get the calcium that you need. If you are not getting enough calcium from your food alone, then you may need a calcium supplement. Speak to a member of your healthcare team about this.

## Vitamin D

Vitamin $D$ helps your body to absorb calcium. You can get a limited amount from your diet, but most is made by the skin by exposure to the sun.

Foods that contain vitamin D include eggs, oily fish or fortified foods like spreads.
In spring and summer, most people in the UK can get enough vitamin $D$ through sunlight on the skin and a healthy, balanced diet. During autumn and winter, it is very difficult for people in the UK to meet their daily needs by diet and the limited sunlight alone.

Current UK advice recommends that adults and children over the age of four should consider taking a daily supplement containing 10 micrograms ( $\mu \mathrm{g}$ ) of vitamin D , during autumn and winter. You can buy these from supermarkets or chemists. Some people are at increased risk of vitamin D deficiency and should consider taking a 10 microgram supplement all year. This includes children aged one to four years, people with darker skin, breastfeeding women and people who spend most of their time indoors. All babies from birth to one year of age should have an intake of between 8.5 to $10 \mu \mathrm{~g}$ per day. This should be as a daily supplement, unless the baby is having more than 500 ml of formula a day, because formula milk is already fortified with vitamin $D$.

When choosing a supplement, the amount of vitamin D may be described in International Units (IU).

- 1 microgram $(1 \mu \mathrm{~g})$ is equal to 40 IU
- 10 micrograms $(10 \mu \mathrm{~g})$ is equal to 400 IU

Speak to your healthcare team for specific advice on how best to meet your vitamin $D$ needs.
Your bones will also improve by:

- Following general healthy eating guidelines
- Doing regular weight-bearing exercise and muscle strengthening exercise. Speak to your local healthcare team for specific advice
- Not smoking
- Only drinking alcohol in moderation


## Iron-deficiency anaemia

Many people with coeliac disease and/or DH have iron deficiency anaemia when they are first diagnosed. This is because they have not been able to absorb sufficient iron due to their damaged villi.

Your small bowel will heal, and your iron absorption will improve once you have been following a gluten free diet. Your doctor or dietitian will discuss iron supplements with you, if needed.

People with coeliac disease and/or DH require the same amount of iron in their diet as those in the general population.

Good sources of iron are listed below.

- Red meat and offal such as liver

Do not have liver or liver products during pregnancy as their high vitamin A content may harm your baby.

- Leafy green vegetables, pulses, chickpeas, lentils*, dried fruit, nuts and seeds
- Fortified gluten free breakfast cereal

Iron from meat is absorbed better than iron from non-meat sources. However, to boost the effect of iron from all the food you eat, have them with foods that contain vitamin C. Choices rich in vitamin C include fruit and fruit juice especially citrus fruits, fresh leafy green vegetables, tomatoes and potatoes.

For more information on daily iron recommendations and the amount of iron found in common iron-rich foods, go to <insert ndr-uk.org page details and QR code when published - see appended sheet for details>

## Vegetarian or vegan diets

People with coeliac disease and/or DH can successfully follow a gluten free vegetarian or vegan diet. However, the risk of iron, calcium, vitamin B12 and folic acid deficiencies is increased. Your dietitian can help you adapt your gluten free diet to ensure that you get all the nourishment you need.

When meat and fish are removed from your diet, it is important to include protein from other sources. Try to have 2 to 3 servings of protein-rich foods every day. The list below suggests good vegetarian, gluten free sources of protein.

- Dairy foods such as milk and yoghurt
- Eggs
- Textured vegetable protein and tofu (marinated products may contain gluten, so check your product to ensure it is suitable)
- Beans and pulses like chickpeas and lentils*
- Nuts and seeds


## Pregnancy

Dietary advice for women who followed a gluten free diet before conception is the same as other pregnant women. However, a higher level of 5 milligrams (mg) folic acid a day is recommended for women with coeliac disease and/or DH as a precaution in case of ongoing malabsorption - discuss this with your GP.

All the information you need for healthy eating during pregnancy is available via NHS websites.

- In England, visit NHS Choices (www.nhs.uk)
- In Scotland, visit NHS Inform (www.nhsinform.scot)
- In Wales, visit NHS 111 Wales (www.111.wales.nhs.uk)
- In Northern Ireland, visit HSCNI Public Health Agency (www.publichealth.hscni.net)


## Prescriptions

In Scotland, Wales and Northern Ireland, and in some areas of England, gluten free food is available on prescription if you have a confirmed diagnosis of coeliac disease or DH.

Your GP and pharmacist should follow local guidelines when prescribing gluten free foods - they will consider your age and gender to ensure that you receive appropriate quantities.

Prescriptions can be used to access gluten free bread and flour mixes in England; in the rest of the UK, bread, flour mixes, pasta, breakfast cereals and crackers are available.

- In Scotland your dietitian or GP can invite you to register you on the gluten free food service (GFSS). They'll support you to complete a form, which you can take to your pharmacy to access your monthly allocation of gluten free foods on prescription.
- In England, if you pay for your prescriptions, it may be easier to buy a prescription prepayment certificate (PPC) which covers the cost of all prescriptions. Speak to your pharmacist or visit www.nhsbsa.nhs.uk for more information.

As some pharmacies may not always have the items you want, reorder your prescription before you finish your previous batch. This makes sure that you do not run out of products.

Several gluten free manufacturers will also provide you with a starter pack which contains gluten free samples of their products. A current list of gluten free foods available on prescription appears at the front of the Coeliac UK food \& Drink Guide. Ask your dietitian for details.

## Medicines

The vast majority of medicines prescribed by your doctor are gluten free.
Non-prescribable medications that have a Product Licence (PL) on the packet are also gluten free.
If you are concerned about this, please check with your doctor or pharmacist.

## Vaccinations

Some adults (but very few children) with coeliac disease will have reduced spleen function - this is called splenic dysfunction.

This is a condition that increases infection risk. For the latest vaccination recommendations for people with coeliac disease, visit www.coeliac.org.uk/vaccinations or ask your GP or healthcare team.

## Managing Stress and Anxiety

When you receive a diagnosis and/or are living with a long-term condition such as coeliac disease and/or DH, you may feel anxiety and stress. This may be triggered by changing your lifestyle, adapting to new habits and/or managing symptoms and risks. You may find peer-support from others with experience of living with coeliac disease and/or DH helpful. There are also many routes for direct guidance and/or treatment to help improve your mental wellbeing.

Speak to your GP, dietitian or healthcare team for more guidance about local options.


## Additional Information

Coeliac UK is the charity for people who need to live without gluten. They are one of the largest funders of research into coeliac disease and gluten related conditions and everything they do is powered by experts.

Members have access to all their independent expertise and support:

- Find suitable foods with their quick scan app - the Live Well Gluten Free app has information on over 150,000 products, with a handy barcode scanner and dietary preference filters.
- Eat out with confidence - the Venue Guide on the app recommends around 3,000 venues with Coeliac UK's Gluten Free accreditation, as well as others recommended by their community.
- Delicious gluten free recipes - hundreds of inspiring, tried and tested recipes you can trust.
- The UK's only gluten free lifestyle magazine - the Live Well Gluten Free magazine is packed with news, updates and the latest research.
- Expert advice from registered dietitians - expert dietitians host online diet and health workshops, create downloadable fact sheets and support their dedicated Helpline.
- Community support - local meet ups and groups, social media and Member2Member services are available to ensure you never feel alone.


## Contact details:

Helpline: 0333332 2033, open Monday to Friday 10am to 4pm Website: www.coeliac.org.uk

## Foods To Choose, Check \& Avoid

## Guidance to support NDR-UK's Gluten Free Living (ref: 9144)

The tables below provide guidance on common foods to help you make informed choices about what to include in your gluten free diet.
Bread, rice, potatoes, pasta and other starchy food.

|  | Choose | Check labels or Food \& Drink Guide | Avoid |
| :---: | :---: | :---: | :---: |
|  | Corn, rice. <br> Corn, gram, potato, soya and urd/urid flours. <br> Amaranth, arrowroot, buckwheat, cassava, modified starch, millet, potato starch, rice flour, teff, sorghum, polenta (cornmeal), sago, tapioca. <br> All flours and flour mixes labelled 'glutenfree'. | Quinoa <br> Flavoured, savoury rice products. | Wheat, bulgar wheat, durum wheat, wheat bran, wheat rusk, wheat starch, wheat flour, modified wheat starch. <br> Semolina and couscous. <br> Barley, barley malt and barley flour. <br> Rye and rye flour. <br> Triticale, Khorasan wheat (sometimes sold commercially as Kamut ${ }^{\oplus}$ ), spelt. |
| $\begin{aligned} & \overline{0} \\ & \stackrel{\pi}{\infty} \end{aligned}$ | Gluten-free breads and rolls |  | All breads, rolls, muffins, chapattis made from wheat, rye or barley flour. |
|  | All products labelled gluten-free including millet porridge, muesli, rice, porridge, oats*. | Corn, millet rice and buckwheat-based breakfast cereals and those that contain barley malt extract. | Wheat-based breakfast cereals, muesli. <br> Oats not labelled gluten-free. |
|  | All products labelled gluten-free including corn (maize) pasta, quinoa pasta, rice noodles, rice pasta, and gluten-free pizza bases. | - | Pizza bases made from wheat, rye or barley flour. <br> Fresh, dried and canned wheat pasta or noodles. |
| ¢ ¢ \# Q | All plain potatoes, baked, boiled or mashed. | Potato products - chips (deep-fried, oven, microwave and frozen), instant mash, waffles. | Potatoes products in batter, breadcrumbs or containing flour. |

* Gluten-free oats can be included from diagnosis. You should receive individual advice from your healthcare team.

Meat, fish, eggs, beans and other non-dairy sources of protein

|  | Choose | Check labels or Food \& Drink Guide | Avoid |
| :---: | :---: | :---: | :---: |
|  | All fresh meats and poultry, smoked meats, cured pure meats, plain cooked meats. All fresh, smoked, kippered and dried fish, fish canned in oil, brine or water, shellfish. | Meat pastes, pâtés*, sausages, burgers, marinated meat or meat in sauce. Fish in sauce, fish pastes and pâtés. | Meat and poultry cooked in batter or breadcrumbs, faggots, rissoles, haggis, breaded ham. <br> Fish in batter or breadcrumbs, fish cakes, taramasalata and fish fingers. |
|  | Plain tofu. <br> All plain and salted nuts. | All pulses (beans, peas and lentils). Quorn, marinated tofu, dried soya mince, vegetarian burgers and sausages, vegetarian ready meals. Pulses in sauce such as baked beans. Dry roasted nuts. |  |
| $\begin{aligned} & \text { no } \\ & \text { ن口 } \\ & \text { n } \end{aligned}$ | All plain eggs. |  | Scotch eggs. |

*Liver and liver products are not recommended for pregnant women because of the high vitamin A content.

## Fruit and vegetables

|  | Choose | Check labels or Food \& Drink Guide | Avoid |
| :---: | :---: | :---: | :---: |
| - | All fresh, frozen, canned, juiced and dried pure fruits. | Fruit pie fillings. | Fruit pie, sponge or crumble. Fruit in batter, for example fritters. |
| $$ | All fresh, frozen, canned and juiced vegetables. | Ready-made or prepacked, for example coleslaw. <br> Vegetables in sauce or gravy, for example cauliflower cheese. <br> Vegetables pickled in barley malt vinegar.** | Vegetables in batter, breadcrumbs or dusted with flour, for example vegetable pasties, onion rings. |

**To find out more about barley malt vinegar, visit www.coeliac.org.uk.
Milk, dairy and alternatives

|  | Choose | Check labels or Food \& Drink Guide | Avoid |
| :---: | :---: | :---: | :---: |
|  | Plain milk - animal and fortified soya. <br> Plain yoghurt and fromage frais. <br> All cream (single, double, whipping, clotted, soured and crème fraiche). <br> Buttermilk. <br> Cheese with no added ingredients. | Coffee and tea whiteners, condensed milk, dried milk. <br> Flavoured yoghurt, fromage frais or soya desserts. <br> Rice, nut and oat* milk. <br> Cheese varieties with added ingredients such as caboc. | Milk with added fibre. Yoghurt and fromage frais containing muesli or cereals. |

* Gluten-free oats can be included from diagnosis. You should receive individual advice from your healthcare team.

Foods high in fat and/or sugar - Try to limit these foods

|  | Choose | Check labels or Food \& Drink Guide |  |
| :--- | :--- | :--- | :--- |
| Butter, margarine, lard, cooking oils, | Suet. |  |  |
| ghee, reduced and low-fat spreads. |  |  |  |

Other

|  | Choose | Check labels or Food \& Drink Guide | Avoid |
| :---: | :---: | :---: | :---: |
|  | Tomato and garlic purée. Individual and mixed herbs and spices, ground pepper, mint sauces, vinegars (balsamic, cider, sherry, spirit, white wine and red wine varieties). | Barley malt vinegar.** <br> Gravy granules and stock cubes. <br> Canned or packets soups. <br> Packet and jarred sauces and mixes. <br> Tamari (Japanese soy sauce). <br> Worcestershire sauce. | Soups containing barley or broth mixes, noodles or croutons. <br> Chinese soy sauce. <br> Stuffing mix. |
| $\stackrel{\text { U }}{\sim}$ | Artificial sweeteners, glucose syrup, icing sugar. <br> Gelatine, bicarbonate of soda, cream of tartar, fresh yeast. <br> Complan or Meritene. | Ready to use icing, cake decorations, marzipan. <br> Baking powder. <br> Dried yeast. | Ice cream cones and wafers. |

## Drinks

|  | Choose | Check labels or Food \& Drink Guide | Avoid |
| :---: | :---: | :---: | :---: |
|  | Water. <br> Tea, coffee, cocoa. <br> Fruit juice <br> Squash. | Drinking chocolate <br> All fizzy drinks. <br> Vending machine hot chocolate. | Malted milk drinks. Barley waters/squash. |
|  | Wine, sherry, port. <br> Spirits including malt whisky, cider. Liqueurs. <br> Gluten free beers and lagers. | , | Beer, lager, ales, stouts. |

## Daily Iron Intake recommendations and examples of common iron-rich foods

## Guidance to support NDR-UK's Gluten Free Living (ref: 9144)

After being diagnosed with coeliac disease and/or DH, following a gluten-free diet and eating ironrich foods can help you limit your risk of iron-deficiency anaemia.

People with coeliac disease and/or DH require the same amount of iron in their diet as those in the general population. Your doctor or dietitian will discuss iron supplements with you, if needed.

Table 1: Age-related daily iron intake recommendations

| Age | Daily iron needs |
| :--- | :---: |
| 10 to 12 months | 7.8 mg |
| 1 to 3 years | 6.9 mg |
| 4 to 6 years | 6.1 mg |
| 7 to 10 years | 8.7 mg |
| Males aged 11-19 years | 11.3 mg |
| Females aged 11-50 years (pre-menopause) | 14.8 mg |
| Males aged 19+ years | 8.7 mg |
| Females aged 50+ (post-menopause) | 8.7 mg |

The approximate values given in the table 2 below aim to help you ensure that your intake is appropriate for your needs.

Fortified foods such as gluten free bread/rolls, gluten free breakfast cereals, spreads etc. can also be useful, but values vary a lot, so always check the packet label for product specific details.

Table 2: Examples of common iron rich foods

| Food | Approx Iron Content |
| :--- | :---: |
| Lamb's liver* (100g) | 7.5 mg |
| Lean minced beef (100g) | 2.7 mg |
| Lean beef steak (100g) | 2.0 mg |
| Half a standard tin of baked beans (200g) | 2.8 mg |
| 2 tbsp cashew nuts (25g) | 1.5 mg |
| 1 tbsp sesame seeds (12g) | 1.25 mg |
| One handful of almonds (30g) | 1.1 mg |
| Dried red lentils (uncooked, 50g) | 3.5 mg |
| Dried yellow split peas/pigeon dahl (uncooked, 50 g ) | 1.4 mg |
| Dried mung dal (uncooked, 50g)** | 2.75 mg |
| One handful of dried figs/apricots (30g) | 1.25 mg |
| One large egg (65g) | 1.2 mg |
| Mature spinach/spring greens (boiled, 100g) | 1.5 mg |

*Liver and liver products are not recommended for pregnant women because of their high vitamin A content.
**Lentils/dal naturally don't contain gluten, but like oats, may have increased risk of cross contact with gluten-containing grains.
Always check packet labels, as described on pages 6-7 of the Gluten Free Living resource, to ensure that you choose suitable varieties.

