

Gluten-Free food- an Insight on What to eat and what to avoid

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Abstract: Dining out is one of life's simple pleasures that most of us take for granted. However, for your patience with celiac disease, it can be an overwhelming task. The simple act of ordering off the menu becomes a complex challenge to achieve a safe, gluten-free meal. Many individuals are on the gluten-free diet and are apprehensive about eating out, which may leave them with reoccurring celiac symptoms if not taken care. However, few ventures out to eat and communicate their dietary restriction with the dining area personnel. Giving the patient confidence to eat away from home will increase their quality of life and improve compliance with the diet free of gluten.

Keywords- *gluten-free diet, Indian food*

Introduction

The diet with zero or minimal gluten requires non-consumption of all forms of food prepared from wheat, barley and rye and their derivatives. This article reviews the diet's specifics, including recommendations regarding the use of pure, uncontaminated oats. The gluten-free diet might lack vital nutrients, but these may be obtained from nutrient-dense Gluten-Free foods and supplements if needed. To fully implement and comply with the strict regime of the gluten-free diet, individuals need to be aware of the gluten food and possible areas of contamination with gluten on in unsuspected food items. They must read the food labels well and make themselves aware of the various benefits obtained from the FSSAI laws regarding food labels. Comprehensive diet plan with in-depth information and regular check-up with a registered well-experienced dietitian is vital in the successful management of gluten intolerance leading to celiac disease.

Gluten is a type of protein found in various cereals like wheat, rye, and spelt. Its name is derived from the Latin word for "glue," as it gives the flour a sticky consistency as it binds the flour when moisture is added. This property helps gluten create a network that gives bread its characteristic texture and flavour. However, there are quite a few who are intolerant to gluten and suffer from discomfort if they consume food with gluten. The most severe reaction due to this intolerance is known as celiac disease.

It is best to get tested for celiac disease before trying a gluten-free diet. Few individuals might not have celiac disease. However, they might feel they are sensitive to gluten and may try a strict gluten-free diet for a short period to check if their symptoms have improved or not. Be sure to seek assistance from a doctor or dietitian. After a few weeks, you can reintroduce foods that might contain gluten into one's diet

and test for symptoms. If the gluten-free diet does not help lower the symptoms, something else is likely causing your digestive problems.

The reaction of Gluten for Some People- Possible symptoms

Most people can eat gluten without experiencing side effects. However, people with gluten intolerance or celiac disease cannot tolerate it. People with other disorders like wheat allergy and non-celiac gluten sensitivity also frequently avoid gluten. People who have the celiac disease often might experience stomach pain, mild to severe diarrhoea, constipation, might develop skin rashes, flatulence, some weight loss, anaemia, severe tiredness and at times depression. Interestingly, some people with celiac disease do not experience digestive symptoms. Instead, they may experience other symptoms like fatigue, depression and anaemia. However, these symptoms are also common in many other medical conditions, making the celiac disease difficult to diagnose.

Gluten Sensitivity - Non-Celiac

People classified as suffering from non-celiac gluten sensitivity do not test positive for celiac disease or a gluten allergy. However, they still might feel discomfort post eating gluten-rich food. Symptoms of both non-celiac gluten sensitivity and celiac disease are very similar as mentioned earlier

Foods to Avoid

Altogether avoiding gluten can be challenging. This is because it is found in many common ingredients that are added to foods. These are the primary sources of gluten in the diet:

- wheat and its various parts/ processed varieties in the market like bran, flour, spelt, durum, Kamut, semolina etc.
- Malt and food products containing malt
- Barley- in any form
- Rye- in any form
- Brewer's yeast- to be avoided
- Triticale- to be avoided as it might contain gluten strands

Below are some foods that at time contain gluten as its ingredient added to them:

- **Bread prepared from wheat.**
- **Pasta as it is commonly prepared with durum wheat.**
- **Cereals might contain strands of gluten.**
- **Baked goods for the texture.**
- **Snack foods for flavour and volume.**

- Few **proprietary Sauces such as** bottled Soy sauce, canned/bottled teriyaki sauce, canned/bottled hoisin sauce, marinades, salad dressings.
- **Alcoholic /nonalcoholic beverages like** Beer, flavoured alcoholic beverages.
- **Other foods such as** Couscous, broth cubes (unless labelled gluten-free).

The easiest way to avoid gluten is to eat food which is not processed or/and prepared from single-ingredient food. Otherwise, one should always ensure that they read the [food labels](#) when purchasing.

Oats are, [by nature, are gluten-free](#). However, it has been found that they are often mixed with gluten, as they might be processed in the same factory as wheat-based foods.

There are many Indian preparations which are gluten-free. However, the concern will be of cross-contamination, and it is essential to ask and understand whether or not the same oil is used for frying unsafe foods, like samosas.

Below are a few gluten-free dishes:

1. Poha

With breakfast included in our guesthouses, many catered to Western tastes, and the staff seemed confused about my refusal of the bread they had on offer. I quickly learned that a fast and easy alternative was poha, a dish made from flattened rice fried with turmeric, chilli powder, onions, mustard seeds and more. Easy to make and satisfying, it goes quite well with eggs.

2. Bajra Roti or Makki ki Roti

While traditional roti is made with wheat, we saw millet growing along with the long drives in Rajasthan, a staple food I tend to forget about when I am home. Pre-made bajra (the word for millet) rotis are not advised as often wheat is mixed in the batter. However, many guesthouses and restaurants were more than happy to make a pure bajra roti, which I could then use to soak up my sauce from dinner. The bread is a dense and slightly tricky to digest alternative to the lighter wheat version but went quite well with, the more sauce-based curries and stews.

In addition to millet, some Punjabi restaurants and the occasional street vendor will also make Makki ki roti, corn-based bread that is also gluten-free. NOTE: Occasionally, vendors will dust the finished product with wheat flour — or so I was warned.

3. Dosa, Beloved Dosa (Also Found in N India)

Yes, dosas are customarily associated with South India. They are slim spongy 'crepes' made from lentil and rice batter and spread thin like a pancake and grilled, either with a filling or without. For those concerned about eating street food and getting sick, the chutneys that accompany this dosa on the street should be avoided as many are uncooked sauces. The dosa itself, however, makes for a great meal. Despite travelling in the North, there were often South Indian restaurants in town for a sampling. Besides, in Jaipur and Jodhpur and Bikaner's markets, I found small dosa stalls on the street, making a potato-masala filled masterpiece for only 50 cents.

Note that one type of dosa, Rava dosa, is made with wheat flour included in the batter and must be avoided for celiacs.

4. Papadum

This crispy lentil or black gram crackers taste great when dipped in tamarind or mint and cilantro chutneys, and have long been a staple in my kitchen, no matter where I am in the world.

In Northern India, they were found at the occasional breakfast table, but usually accompanying a curry or sauce-based meal or atop a plate of thali (see below). Gluten-free, they are the perfect opposite to a fiery main dish, crunchy mixed with soft and savoury.

5. Pakora (And Other Chickpea Flour Snacks)

While many of the street snacks were off-limits, pakora was found in most of Rajasthan, and was occasionally the only available item on the menu that was, as the group started calling it, "Jodi-friendly." Made by taking vegetables or paneer and coating them in spice-filled chickpea (gram) flour and then deep-frying, they were cheap and abundant. While not the healthiest (nothing deep-fried is), they were an easy alternative when we stopped for snacks or in-between main meals.

Pakorras or other chickpea snacks (like the fried dal balls below) were primarily found on the appetizer list at restaurants or chaat (savory snack) vendors on the street.

As always, it is essential to ask about cross-contamination! The good thing about street stalls is that they often serve one or two foods, and thus it is a higher chance of uncontaminated, wheat-y oil.

Dal moth gluten-free India

6. Thalīs

Vegetarian thalīs were a great option too, a metal tray filled with small metal cups containing a vegetable dish, yoghurt curd, dal (lentils), rice and pickled vegetables. Depending on the style of thali (Bengali versus Punjabi versus Rajasthani and so many more) your options will vary, but overall a very safe choice for my stomach. Keep in mind, too, that even if the dish comes with chapati or roti, you can almost always ask for extra rice or a papadum instead.

7. Lassi

Lassi, a delicious yoghurt drink served savoury or sweet, was highly recommended by friends who had travelled to India as both a refreshing snack and a way to ensure my intestines stayed full of the right bacteria. From the cardamom and lemon version I tried in Jodhpur (THE BESTEST) to the saffron and almond iteration on Old Delhi's streets, lassis are everywhere.

8. Bhujia

I devoted a full section of my Northern India overview post to bhujia, and with good reason. This spiced chickpea flour snack made famous in the city of Bikaner was both addictive and filling and kept my hunger at bay between meals. While I always asked if it was 100% chickpea (gram) flour, the answer never wavered. Pre-packaged bhujia is also available throughout the region in foil bags, and it too was wheat-free. As always, be sure to verify!

9. Biryani and Pulaos

Not limited to India, biryanis are found and consumed in many different countries, a fragrant, sautéed spiced rice with a recipe that differs depending on location. While pulao is also made from spiced rice and meat or vegetables, there is a difference between them. Paraphrasing from a chef I met in India, generally biryani contains much more spices and involves boiling the rice separately and then layering the meat and vegetables and cooking it together once again. In contrast, pulao is made with fewer spices and meat, but the rice is added uncooked, a milder version than in biryani. Besides, pulaos are usually wetter as an excess liquid after cooking is not drained.

10. Dal

Dal, filling saucy lentil, are manifold in India, and there are far too many dal dishes to try to list here. Readers have asked if dal means one dish – but it does not. Many many dals for the tasting!

Suffice it to say that my favourite afternoon snack was dal tadka, yellow lentils with spices, and jeera rice, rice spiced with dry cumin seeds. Simple and delicious. Other tempting dal options include dal makhani, made with black lentils instead of the lighter yellow version.

No matter the menu, dal was a go-to saviour. When we stopped in at a midday truck stop, and only wheat options were listed, I asked for dal and rice and was rewarded with a flavourful and cheap snack. I saved this for last because it is so ubiquitous that you can usually get a plate even when not seemingly on offer. It kept me full in a pinch, gave me protein, and was also so much tastier than I expected.

What to Avoid: Unsafe Foods for Celiacs

Despite the large variety of snacks and dishes to choose from, snack foods are predominantly wheat-based. Below is a list of foods that should be avoided for celiac disease, even though they look delicious.

Bread: rotis, chappatis, naan, parathas, puris are all off-limits. Pani puri, tamarind water served in a thin, curved wheat puff, is everywhere on the streets and was hard to resist.

Chapati not gluten-free. DO NOT EAT, PEOPLE! (Even though it looks delicious)

Hing, or asafoetida: hing, known in the west as asafoetida, is a strong spice made from the root of a herb called Ferula. Unfortunately, after it is ground, it is commonly mixed with wheat flour. Also, unfortunately, it is used quite commonly in Indian food. Always helpful to ask if there is hing in the chutneys or soups.

Samosas: Found throughout the day on the streets and in restaurants, with wheat flour triangle dumpling hosting a paneer or vegetarian (potatoes and peas and spices).

Pav Bhaji: The bhaji part of this fast food dish — a spicy tomato and vegetable stew — is safe, but it is served with pav, a white flour bread resembling a hamburger bun that is used to sop up the stew. Solution for me was to just ask for the bhaji, to the confusion of the street vendors.

Kachori: A crispy fried snack filled with mung beans, the outside of kachori is wheat-based and must be avoided.

Dal Baati Churma: A popular snack made from lentils, a baked wheat ball and a sweet powdered cereal, this is off-limits but available in many Rajasthani cities Jaipur.

Jalebi and Imarti: Round, bright orange desserts made with fried dough, both are off-limits (though they looked so good). For desserts, I mostly ate fresh fruit or more lassi.

Ingredients to use

Whole Grains

It is essential to double-check food labels when purchasing whole grains. Even gluten-free whole grains might be contaminated with gluten. Usually, it happens when they are usually processed in a factory where gluten-containing foods are processed.

For example, oats are often processed in facilities that also process wheat, leading to cross-contamination. For this reason, one should always confirm that the oats purchased are certified as gluten-free.

Few Gluten-Free Whole Grains readily available in the market are unprocessed Quinoa, Brown organic rice, Wild organic rice, organic Buckwheat, Sorghum, organically produced Tapioca, Millet, Amaranth, Teff, fresh Arrowroot and Oats.

Fruits and Vegetables

Some processed fruits and vegetables like canned/preserved/processed may contain strands of gluten usually added for as a thickener.

Fruits and Vegetables to Double-Check before purchasing are

Canned/processed fruits and vegetables, packaged frozen fruits and vegetables, processed dried fruits and vegetables, Pre-cut fruits and vegetables in preservative.

Proteins

At times gluten-containing processed food items such as different ready to use sauces and malt vinegar are often used for marination or adding flavourings. They are added to a variety of proprietary sauces, marinade spice rubs and marinades.

Proteins to Double-Check

Few food items that might contain gluten are

- Processed meats, such as various sausages, salami and bacon. Meat substitutes, such as genetically modified food, cold cuts, minced meats
- Proteins that have been combined with sauces or seasonings,
- Ready-to-eat proteins, especially that are microwavable,

- Any meat, poultry or fish that has been crumbed,
- Proteins that may be combined with flour-based soy sauce, Seitan

Dairy Products to Double-Check before purchase are

Artificially flavoured milk and yoghurts, Processed cheese products, frozen desserts such as milk-based Ice cream, which is gluten-based additives, Malted milk drinks

Fats and Oils

Fats and oils are naturally gluten-free; however, obtaining viscosity additives that are being used may contain gluten.

Fats / Oils to Double-Check before purchasing like Cooking sprays, Oils with added flavours or spices

Beverages

Few alcoholic/ nonalcoholic beverages contain gluten due to the nature of the ingredient used such as malt; barley needs to be avoided.

Few Gluten-Free Beverages are potable water, fresh fruit juice, Tea/ Coffee, some alcoholic beverages, including wine, hard ciders and beers made from gluten-free grains, such as buckwheat sorghum, Sports drinks, soda and energy drinks, Lemonade and few others.

While these beverages are gluten-free, most of them are best consumed in moderation due to their added sugar and alcohol contents.

Beverages to Double-Check

Any beverage with added flavourings or mix-ins, such as coffee coolers

Distilled liquors, such as vodka, gin and whiskey — even when labelled gluten-free, as they are known to trigger a reaction in some people

Pre-made smoothies

Beverages to Avoid

Beers, ales and lagers made from gluten-containing grains

Non-distilled liquors

Other malt beverages, such as wine coolers

Spices, Sauces and Condiments

Spices, sauces and condiments often contain gluten but are commonly overlooked.

Although most spices, sauces and condiments are naturally gluten-free, gluten-containing ingredients are sometimes added to them as emulsifiers, stabilizers or flavour enhancers.

Some common gluten-containing ingredients added to spices, sauces and condiments include modified food starch, maltodextrin, malt and wheat flour.

Few Spices, Sauces and Condiments which do not have gluten are Tamarind, kokum, fresh Coconut milk, White wine /synthetic vinegar and cider vinegar,

Spices, Sauces and Condiments to Double-Check are tomato Ketchup and bottled mustard, bottled Worcestershire sauce, canned Tomato sauce, bottled Relish and pickles, canned/bottled Barbecue sauce, pre-made vegetable Mayonnaise, various Salad dressing, canned/bottled Pasta sauce, packets of Dry spices, preserved Salsa, pre-made Stock and bouillon cubes, bottled/canned Marinades, frozen/dry/paste of Gravy and stuffing mixes, bottled Rice vinegar,

Spices, Sauces and Condiments to Avoid

Flour -based sauces, Malt vinegar and teriyaki sauce

Ingredients to Look Out For

Here is a list of ingredients and food additives that may indicate that an item contains gluten.

- Modified food starch and maltodextrin (if made from wheat, it will be specified on the label)
- Malt-based ingredients, including malt vinegar, malt extract and malt syrup
- Gluten stabilizer
- Soy or teriyaki sauce
- **Emulsifiers** (will be specified on the label)
- If you are unsure if a product contains gluten, it is good to contact the manufacturer to double-check.

Conclusion.

Many healthy foods in our Indian cuisine are naturally gluten-free, which include a variety of unprocessed and natural fruits, organic vegetables, freshly butchered meat, fish from fishmonger and freshly processed poultry, unprocessed dry/fresh legumes, individual whole grains and a variety of dairy products including fats/oils.

Food ingredients such as wheat and products prepared from wheat, rye are to be avoided for a diet for individuals with gluten intolerance or celiac symptoms. With the advent and changing lifestyles and trends, gluten is often used to process various food preparations, such as canned /bottled /packaged and boxed items. Success with a gluten-free diet will require an utmost understanding of the ingredients' correct understanding and knowledge usually comes down carefully checking food labels. Our Indian cuisine is vibrant and contains a rich array of dishes/preparations that are gluten-free and rich in their nutrient content. There are many festivals, such as Navratras where consumption of food containing gluten is strictly prohibited.

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