



Gluten-free guide for caterers

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Disclaimer:

This e-brochure contains advice relating to gluten-free diet and gluten-free living but it doesn't replace medical advice from your doctor, dietitian, or any other specialist.



Foreword

This brochure will help catering professionals to increase their competences in preparing dietary meals for their guests who do not tolerate gluten. It will help them understand basic facts about celiac disease and other gluten-related disorders and about harmful effects of gluten. It will help them detect the pitfalls of the preparation of gluten-free meals by providing many tips and tricks provided directly by doctors, dietitians and people on gluten-free diet. Additionally, it will eventually help them to improve the quality of service, not only for celiacs but for all other customers who will appreciate a reliable and responsible catering service of high quality.

People with celiac disease and other gluten-related disorders, such as wheat (gluten) allergy and non-celiac gluten sensitivity, must follow a strict gluten-free diet in order to prevent serious consequences to their health.

Following such a diet can be very demanding as wheat and other gluten-containing cereals (e.g., rye and barley) are major components in every kitchen around the world. Therefore, it is very important that all the people involved in food preparation are aware of principles of preparing a safe gluten-free meal. This is especially true for catering professionals who carry a great responsibility when preparing food for people with any of the gluten-related disorders. Even minimal contamination with gluten during food processing could be harmful, and great care has to be taken to avoid such events even if they are completely unintentional.

Jernej Dolinšek, MD, PhD

Opportunities and benefits for caterers

It is expected from caterers to be attentive and to be especially meticulous about food safety. Although there are restaurants that offer special menus such as for example vegan, kosher, etc., there are still very few "gluten-free restaurants" where staff are familiar with the rules of a gluten-free diet and where people with celiac disease can get a meal prepared under safe conditions and from safe, gluten-free ingredients. This can be a business opportunity for those willing to put some effort into new services which could attract not only celiacs but also their family members, friends, and everybody interested in trying something new and tasty, prepared under the highest hygienic standards.

In this modern world, we are all facing the fast pace of life and lack of time for family obligations and socializing. Celiacs already spend a lot of time to prepare gluten-free meals at home, so having restaurants that would offer safe, gluten-free food would make their daily lives much easier. In addition, safe eating in a restaurant, accompanied by family, friends or business partners would give celiacs a sense of belonging to the community and a sense that they are not isolated or special, which would certainly positively affect their self-confidence.

Restaurants that decide to prepare gluten-free dishes can certainly count on certain benefits - especially gluten-free offer, since it is rarely found in restaurants, it would certainly be a good advertisement and would contribute to these restaurants becoming more visible, more prominent than the competition. Over the recent years, not only people with celiac disease and their families have shown interest in gluten-free diet, but also many who wish to eat a healthy and varied diet, to try new fla-

vors and new dishes. Thus, a gluten-free offer would affect the image of the restaurant, and attract those visitors who follow modern trends and needs of a modern man. It should not be forgotten that the commitment of employees to prepare gluten-free meals would mean personal professional development and staff development that would learn a lot of new facts about gluten-free foods and the conditions of preparation and serving gluten-free meals. Preparation of a new gluten-free menu would certainly awaken the enthusiasm and creativity of the employees, and thus raise functioning of the restaurant to a higher level.

Furthermore, dedication to the hygiene protocols and food safety, such as the one practiced during gluten-free food preparation, generally brings peace, trust and satisfaction to the consumers, especially now in pandemic times. Restaurants willing to introduce the practice of gluten-free food preparation show maturity and professionalism. Research conducted by Deloitte,

focused on key trends that are shaping consumption patterns among restaurant guests, says that restaurants of the future will have to pay special attention to food safety. Four out of five respondents said they are more inclined to restaurants where they know what measures have been taken in terms of hygiene, food safety, and guest safety and that they are willing to pay 10 percent more. As many as 87 percent of respondents said they want their surfaces cleaned after each use, and similar percentages are when it comes to official certification of cleanliness as well as the safety and health of staff*.

*<https://www2.deloitte.com/us/en/pages/consumer-business/articles/restaurant-future-survey-technology-customer-experience.html>

Celiacs, their family members and friends are the most loyal customers once their trust is gained. They are ready to drive significantly further, they are willing to pay more, and they keep coming back again and again.

In order for restaurants to successfully create a new, gluten-free offer, they can expect help and support from national celiac associations. In addition to certification of gluten-free restaurants, the associations organize trainings and provide continuous information on safe food.



About celiac disease and gluten-free diet

Celiac disease is an autoimmune systemic disorder caused by ingestion of gluten and related proteins found in wheat, rye, barley, and in some cases also in oats in genetically predisposed individuals. It is one of the most common chronic diseases among children and adults and affects about 1% of the population in Europe. However, many celiacs remain undiagnosed.

In celiacs, ingestion of gluten triggers chronic damage of the small intestine. The consequence of the morphological changes in the intestinal lining is its weakened function with symptoms of malabsorption. Manifestations of malabsorption can be clearly visible and are caused by involvement of one or more organic systems (digestive system, reproductive system, neurological system, etc.), or can be silent, without any symptoms, but with great risks for permanent health deterioration.

The only possible way to treat celiac disease is a very strict gluten-free diet, which improves the overall patient's health. If there is no gluten in the diet, there is nothing the immune system can react against, and symptoms usually resolve. However, just because symptoms disappear, this does not mean that the disease is cured. As soon as gluten is ingested again, immune cells would immediately start reacting, leading again to a systemic reaction.

Following a strict lifelong diet is also the only way to prevent the development of serious long-term effects of the disease. The most significant risk factor for long-term complications is

inadequate gluten-free diet compliance. **Your role in providing truthful food information and responsible approach while preparing a strict gluten-free meal will help celiacs mitigate that risk and protect their health.**

How strict should the gluten-free diet be?

It is now widely accepted that the maximum level of gluten in foods may not exceed 20mg/kg (usually referred to as 20 parts per million (ppm)), which is equivalent to a half of a grain of wheat per kg of rice.

Celiacs should not be confused by the terms “safe” or “low” amount of gluten in food. There is no such thing as safe amount of gluten, and every effort should be made to assure the complete elimination of gluten from the celiac diet.

Gluten exposure can have multiple causes. **Unintentional exposure is mostly due to cross-contamination taking place during food preparation or meals with other people eating gluten at the same time. It can also be due to insufficient labelling of food products or inadequate reading of these labels.**

Cross-contamination

Cross-contamination can occur during any stage of food processing - from the initial harvest to the final food preparation and food consumption, and is difficult to avoid. Unintentional cross-contamination can be an important problem for celiacs and might lead to health deterioration, especially in the long term.

Cross-contamination can happen at any place, especially in restaurants where regular gluten-containing food is prepared. Anyone preparing gluten-free food should be able to identify “hot-spots” of possible cross-contamination, and try to avoid them or prevent them from happening.

If a person with celiac disease eats contaminated food, he/she may or may not have symptoms. That doesn't mean that an autoimmune reaction didn't occur and that the person can safely proceed with gluten ingestion.

Other gluten-related medical conditions

Lately, it has become clear that in addition to people with celiac disease and wheat allergy there are also people who react to gluten without proven allergic or autoimmune mechanisms.

Wheat allergy

Wheat is one of the most common allergens and wheat allergy is an undesirable immune response to wheat proteins (albumin,

globulin, gliadin, and glutenin) which results in the development of respiratory or gastrointestinal symptoms or sometimes even systemic reactions.

Wheat allergy is a condition different from celiac disease. Gluten allergy is an allergy to wheat since gluten is a protein specific for wheat. If a person allergic to wheat eats food that contains wheat, reactions can be sometimes life threatening.

Wheat allergy is treated by avoiding wheat in the diet. Note that certain gluten-free products contain wheat from which gluten has been technologically removed. These products are not suitable for persons who suffer from wheat allergy.

Non-celiac gluten sensitivity

This condition is also referred to as non-celiac hypersensitivity to gluten or simply gluten hypersensitivity/ intolerance. The disease may resemble celiac disease or wheat allergy and may present with several intestinal and/or extraintestinal symptoms that occur shortly after ingestion of food with gluten, and improve with introducing a gluten-free diet. There is no specific test to diagnose gluten intolerance.

Non-celiac gluten sensitivity is treated with gluten-free diet.

About gluten

Gluten (meaning glue in Latin) is the common name for a protein complex that can be found in grains of certain types of cereals.

Gluten is mostly found in the endosperm of grains (larger inner part of grains) such as wheat, rye, barley, spelt, triticale, khorasan wheat (kamut), emmer, einkorn. Gluten can also be found in products usually made from wheat, such as bulgur, couscous, udon noodles, panko, tempura flour, sago, and kritharaki.

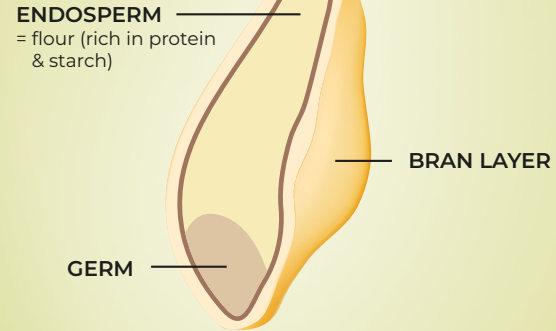
Gluten-containing grains to avoid

Barley	Faro	Spelt
Barley malt/ extract	Graham flour	Triticale
Bran	Kamut	Udon
Bulgur	Matzo flour/ meal	Wheat
Couscous	Orzo	Wheat bran
Durum	Panko	Wheat germ
Einkorn	Rye	Wheat starch
Emmer	Seitan	
Farina	Semolina	

Oats are less closely related to wheat, rye and barley, and the prolamin fraction of the oat (called avenin) is sufficiently different. This is the reason why a significant % of people with celiac

ANATOMY OF A GRAIN

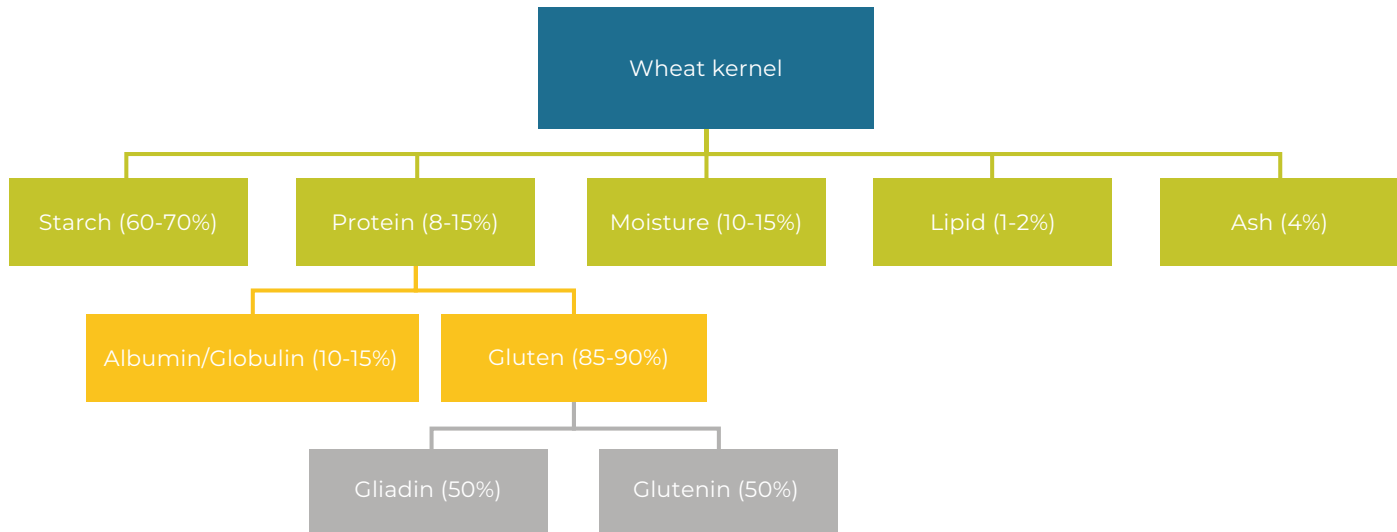
(wheat, rye, barley...)



disease can tolerate oats very well as long as cross-contamination with gluten-containing grains is excluded.

But in public kitchens, the use of any type of oats (even certified) is not allowed. After all, caterers do not know whether their users tolerate oats or not.

Gluten is a complex mixture of proteins. Main classes of proteins are prolamins and glutelins (glutenine). Prolamins are the main component of cereals responsible for the development of symptoms in celiac disease. The prolamine fraction in wheat is called gliadin. Prolamins of different gluten-containing grains differ from each other, but in grains closely related to wheat, these proteins - secaline in rye and hordein in barley - differ only slightly and are collectively referred to as gluten.



Approximate breakdown of wheat components.

Gluten functions and usages

Gluten gives wheat flour its unique properties. When wheat flour is mixed with water to obtain dough, gluten proteins form a continuous network, with gliadin responsible for the viscosity and extensibility of dough, and glutenins responsible for the dough's strength (or resistance to extension) and its elasticity.

Thus, gluten matrix and its functions are essential for determining the dough quality of hard wheat varieties, such as bread, pasta, and pretzels. For soft wheat products, such as cakes and cookies, the gluten network-forming properties are not as crucial, nevertheless, gluten is believed to contribute to final product structure and texture.

Gluten in processed food

Gluten is commonly used as an additive in processed foods for improved texture, flavor, and moisture retention, as it is heat stable and has the capacity to act as a binding and extending agent. Therefore, **less obvious sources of gluten** include processed meat, reconstituted seafood, and vegetarian meat substitutes. It can also be present as thickeners, emulsifiers, or gelling agents in candies, ice cream, butter, seasonings, stuffing, marinades and dressings, and also as fillers and coatings used in medications or confectionary. In addition, gluten is increasingly separated from wheat (known as "vital wheat gluten") or modified for specific uses (known as "isolated wheat proteins") to improve the structural integrity of industrial bakery products and to fortify low-protein flours. The vital wheat gluten is used to improve the quali-

ty of ice cream, coffee creamer, instant pudding, soups, sauces, ketchup, marinades, and dressing due to its water-binding and thickening properties.

Gluten being added to certain products in the form of hidden gluten in naturally gluten-free foods, inadequate labeling, and poor knowledge are important factors that compromise the health of celiacs. Always check the labels of the processed ingredients and products that you use to prepare the dishes or ask the supplier for written manufacturer's documentation (declarations/specifications) clearly stating that the food does not contain gluten either in the form of ingredients or in the form of traces!

Gluten replacement

Imitating the cohesiveness and elasticity of a gluten-containing dough was attempted using a wide range of alternative raw ingredients and/or additives. Gluten-replacing ingredients include:

- **Starches:** cassava, tapioca, corn, potato, bean, and rice;
- **Gluten-free cereals flours** sorghum, rice, corn, teff, and millet;
- **Pseudocereals flour:** amaranth, buckwheat, chia, and quinoa;
- **Legume flour:** chickpea, pea, carob germ, carob, marama bean, and soy;
- **Chestnut flour;**
- **Dietary fibers:** β -glucan, inulin, oligofructose, linseed mucilage, apple pomace, carob fiber, bamboo fiber, polydextrose, and resistant starch

- **Hydrocolloids:** xanthan gum and hydroxypropyl methyl cellulose;
- **Non-gluten proteins: from legume, egg, dairy, and non-gluten cereal proteins.**

Other ingredients are added to help build and strengthen gluten-free dough and bread structure. **Enzymes** (e.g., transglutaminase, glucose oxidase, tyrosinase, and laccase) ensure better rheological properties, improved gas retention during baking, and increased overall product quality; and **emulsifiers** (e.g., diacetyl tartaric esters of monoglycerides, mono- and di-acylglycerol, lecithin and sodium stearoyl-2-lactylate) are used to establish better interactions between the different ingredients.

In addition to replacing ingredients and/ or additive choice, the gluten-free flours can also be processed in a particular way to change their rheological behavior in dough-like systems. There are numerous different strategies that have been explored in this direction, such as corn flour milled in various instruments, germination of brown rice as a pre-treatment to alter the functionality, sourdough fermentation of teff flour products, phosphorylation of rice flour, pre-gelatinization of the starch, heat treatment, extrusion of rice flour, particles of whey protein mixed with starch, etc.

Nevertheless, the quality, nutritional profiling and palatability of gluten-free products are often not comparable to gluten-containing products, but, with a little practice, we can achieve equivalent results with gluten-free products as well.

Biesiekierski JR. What is gluten? *J Gastroenterol Hepatol.* 2017;32 Suppl 1:78-81.

Mefleh M, Conte P, Fadda C, et al. From ancient to old and modern durum wheat varieties: interaction among cultivar traits, management, and technological quality. *J Sci Food Agric.* 2019;99(5):2059-2067.

El Khoury D, Balfour-Ducharme S, Joye I J. *A Review on the Gluten-Free Diet: Technological and Nutritional Challenges.* *Nutrients.* 2018;10(10):1410.

Horvath K, Cureton P. *Gluten-Free Diet Guide for Families,* CDHNF, NASPGHAN, 2006

Wieser H, Segura V, Ruiz-Carnicer Á, Sousa C, Comino I. *Food Safety and Cross-Contamination of Gluten-Free Products: A Narrative Review.* *Nutrients.* 2021;13(7):2244.

The preparation of a gluten-free meal in a public kitchen or restaurant

Gluten-free foods (hereinafter GF) are, by law, strictly foods for which the total gluten content does not exceed 20 mg/kg (20ppm), including "non-prepacked" foods. In celiacs, traces of unintentional gluten can cause serious complications. The following steps should be considered when preparing gluten-free food:

CHOOSING INGREDIENTS

All the information about the allowed, risky and forbidden food can be found in the table below.

Firstly, choose ingredients from the group OF **ALLOWED FOODS** that are naturally GF and were not contaminated during their preparation or packaging (e.g., fresh fruit and vegetables, fresh unprocessed and untreated meat, fish, milk and natural dairy products without any additives, eggs, salt, sugar, and fresh herbs).

RISKY foods are foods that are made from **gluten-free natural ingredients** but have been processed, packaged, or processed in such a way that contamination with gluten is possible (with ingredients and additives containing gluten or due to contamination during processing). For these foods, the supplier must request and provide you with written manufacturer's documentation (declarations/specifications) clearly stating that the food does not contain gluten either in the form of ingredients or in the form of traces (also applies to "non-prepacked" foods). If you are buying GF food at retail, be sure to choose one that is labeled "gluten-free".

Foods that contain ingredients from otherwise **naturally gluten-free cereals (e.g., flour, meals, pasta, cereals, and bread)**


are considered **HIGH-RISK**. Such foods are often heavily contaminated with gluten already during field production or due to grinding in the same mills as gluten-containing cereals. When using these foods, you need to request manufacturer's documentation or check the AOECs certificate, which confirms that the food does not contain gluten. If you are buying high-risk foods at retail, be sure to choose one that is labeled with the gluten-free crossed-grain trade mark that includes the certificate registration number.

*Oats are considered risky because small proportion of celiacs don't tolerate oat and because those who do tolerate it may use only certified oats. **In public kitchens, the use of any type of oats (even certified) is not allowed.** Caterers do not know whether their users tolerate oats or not.

FORBIDDEN FOODS are foods that are made from gluten-containing ingredients: wheat, rye, barley, spelt, oats,* and their crucified species or products of such ingredients. This group also includes food that is gluten-containing according to the declaration and all foods in the **"RISKY foods"** group that have not been further checked.



SI-XXX-XXX

FOOD GROUP	ALLOWED FOODS	RISK FOODS	FORBIDDEN FOODS
<p>Flour, groats, bread, biscuits, pastries, breadcrumbs, breakfast cereals, pasta</p>	<p>AOECS certified foods which are purposed for special diet needs and marked with a Crossed Grain Trademark.</p>  <p>SI-XXX-XXX</p>	<p>If the food is not AOECS certified, ask for the manufacturer's documentation to search for proof that it in fact does not contain gluten or traces of gluten*.</p>	<p>Conventional cereal products contain gluten (wheat, rye, barley, spelt and their cross-breeds or cereal products). Use of products that are made from naturally GF cereals and prepared in establishments where gluten-containing foods are also produced, is forbidden.</p> <p>Oats: In public kitchens, the use of any type of oats (even certified) is not allowed. After all, caterers do not know whether their users tolerate oats or not.</p>
<p>Cereals and pseudo-cereals in grain, seeds, nuts</p>	<p>Rice, wild rice, buckwheat, millet, quinoa, amaranth, seeds, and nuts if purchased at retail is rarely marked with the "gluten-free" label.</p>	<p>Rice, wild rice, buckwheat, millet, quinoa, amaranth, seeds, nuts - there is a risk of contamination during the packaging process. The supplier/manufacturer should provide you with documentation that shows that contamination is not possible. * Be sure to wash them well before use.</p>	<p>Gluten-containing cereals: wheat, spelt, rye, barley, Kamut, durum. Ordinary rice, wild rice, buckwheat, millet, quinoa, amaranth - if the manufacturer's documentation or declaration indicates that there is a risk of gluten contamination during production or packaging.</p> <p>Oats: In public kitchens, the use of any type of oats (even certified) is not allowed. After all, caterers do not know whether their users tolerate oats or not.</p>

FOOD GROUP	ALLOWED FOODS	RISK FOODS	FORBIDDEN FOODS
Milk and milk products	Milk (fresh, pasteurized, UHT (ultra-high temperature), sterilized, lactose-free - without added vitamins, flavors, and other ingredients), naturally fermented products (natural yogurts, kefir, sour milk - containing only milk and lactic acid bacteria), cheeses (fresh, semi-hard and hard - prepared only from milk, rennet, and salt), natural cream (fresh, pasteurized - without additives).	Milk-based beverages (cocoa, chocolate milk), milk powder, fruit yogurts, cottage cheese, ice cream, light yogurts and cottage cheese with thickeners, dairy desserts with additives, processed cheeses, herb cheeses, and cottage cheeses. *	Yogurts and cottage cheeses with the addition of gluten-containing cereal flakes, muesli, or biscuits. All dairy products for which it is evident from the manufacturer's documentation or the declaration that they contain gluten-containing ingredients or that there is a risk of contamination (traces of gluten) during processing or packaging.
Meat and meat products, fish, and eggs	All kinds of fresh meat, fish, non-processed seafood, eggs in eggshells, without any additives and washed before use.	Minced meat - there is a possibility of gluten contamination during mincing. Meat products with additives (salami, sausages, hot dogs, etc.). Frozen seafood and seafood mixtures containing "surimi", canned fish with added additives or other ingredients. Egg substitutes, egg powder, tofu cheese, soy meat.*	Classically breaded meat and fish, meat and fish in gluten-containing sauces, meat products containing HVP (hydrolyzed vegetable proteins), all products for which the manufacturer's documentation or declaration shows gluten-containing ingredients or where there is a risk of contamination (traces of gluten) during processing or packaging.
Fruit, vegetables, mushrooms, spices/herbs	All fresh fruit, fresh vegetables, and herbs without any additives and washed before use.	Processed fruit, vegetables, or spices and spice mixtures (frozen, dried, ground, strained, concentrated, pickled, preserved). Soup stock cubes and all fruit and vegetable-based foods with supplements or vitamins. *	Dried fruit sprinkled with wheat flour, oat flour, or starch. Processed fruit and vegetables where the manufacturer's documentation or declaration indicates that they contain gluten-containing ingredients or that there is a risk of contamination (traces of gluten) during processing or packaging.

FOOD GROUP	ALLOWED FOODS	RISK FOODS	FORBIDDEN FOODS
Fats	Butter, vegetable oils (sunflower, pumpkin, olive), lard - without additives and spices.	Margarine, butter with additives ("light butter"), salad dressings and mayonnaise, lard with additives, and spices. *	Béchamel sauces, salad dressings, mayonnaise, and other products for which the manufacturer's documentation or declaration indicates that they contain gluten-containing ingredients or that there is a risk of contamination (traces of gluten) during processing or packaging.
Liquids	Natural and mineral water, freshly squeezed fruit juices, wine. Black, green and herbal teas and simple black coffee without any flavors, sugar, milk, additives added before packaging .	Instant hot chocolate, cocoa, instant coffee, instant teas, flavored teas, soy and rice milk, fruit juices, and nectars with additives, syrups, and other instant beverages (instant coffee or instant tea). *	Instant blend with coffee substitute extract with barley, wheat, and barley beer. Beverages for which the manufacturer's documentation or declaration indicates that they contain gluten ingredients or that there is a risk of contamination (traces of gluten) during processing.
Sweeteners, salt, vinegar	Crystal sugar, honey without additives, salt, apple, or wine vinegar.	Ground sugar, artificial sweeteners, honey with additives, balsamic vinegar. *	All products for which it is clear from the manufacturer's documentation or the declaration that there is a risk of contamination (traces of gluten).

* Before using all foods in the risk foods group you should ask the supplier to provide written documentation from the manufacturer (declarations/specifications/analytical report) where it is clearly stated that the food does not contain gluten either in the form of ingredients or in the form of traces (also applies to "non-prepacked" foods).

Healthy cereals and pseudo-cereals that can be used in gluten-free food preparation:



AMARANTH - Contains high amounts of amino acids and is rich in calcium, fiber, and iron. It is an excellent source of protein and iron, and only one grain contains twice as much calcium as milk and three times as much fiber as wheat.



MILLET - Rich in magnesium and iron it is an excellent source of protein (100 g contains 10 g protein), calcium, phosphorus, zinc, nickel, vitamin E, and vitamin B complexes. Millet is an alkaline cereal easy to digest.



SOY - It contains a very high percentage of fat - 19.9%, carbohydrates - 30.2%, proteins - 36.5% and vitamins A and B.



BUCKWHEAT - This is an excellent source of high-quality and easily digestible proteins. Also, buckwheat is rich in two amino acids - lysine and arginine that have important functions in heart health and the immune system. This food has a remarkable health effect and it contains a range of minerals, such as iron, magnesium, phosphorus, and fiber.



QUINOA - This is a great source of magnesium, iron, copper, phosphorus, and amino acid lysine that stimulates the growth and recovery of tissues. Quinoa also contains riboflavin (vitamin B), which stimulates metabolism in brain and muscle cells.



TAPIOCA - Is a very useful type of starch as it stimulates the growth of good bacteria in the intestines. Vitamin B complexes that give energy and improve immunity are present in tapioca flour. They also contain a large number of minerals - iron, zinc, calcium, magnesium, potassium, and manganese (important for tissue binders and joint health).



MAIZE - Is abundant with dietary fiber that lowers cholesterol levels, folic acid that keeps the bloodstream system healthy, vitamin B1 that is important for good brain function, and carbohydrates that give us fast available energy.



RICE - Brown or wholegrain rice is much more valuable nutritionally than white rice. It keeps the part of the coating and slice, which is why it contains more nutrients. Brown rice contains 3.5-times more magnesium, four times more vitamin B1 and fiber, five times more nicotinic acid, and 1.6-times more folic acid than white rice. The cup contains vitamin E, while the envelope is rich in almost all B vitamins.



TEFF - A grain the size of a poppy seed that hails from Ethiopia, teff is naturally high in minerals and protein. It has more calcium and vitamin C than almost any other grain. It is high in protein and iron, and much of its fibre is a type known as resistant starch, which has been linked in studies to health benefits such as improved blood sugar.

STORAGE OF INGREDIENTS:

The gluten-free ingredients should be stored in a well-sealed and marked packaging (preferably separated by color) and separately from gluten-containing ingredients. The food/ingredient can also be stored in its original packaging. If you transfer gluten-free products to another food-storage container, be sure to properly mark it and store the original labels with the listed

ingredients. GF foods and ingredients should be kept on the highest shelves to prevent potential contamination with other gluten-containing foods/ingredients.

CLEANING:

Work surfaces and utensils should be cleaned with a separate cleaning kit (cloths, sponges), water, and detergent. Even after

being washed in the dishwasher before each use, the utensils should be carefully inspected to ensure that there are no gluten-containing food residues. DO NOT use wooden cutting boards or utensils where gluten can be retained in the cracks.

AIR CONDITIONING AND VENTILATION:

In artificially air-conditioned rooms and rooms with strong air-flow ventilation, the GF food preparation area should be designated to a place where there is no possibility of blowing and transferring of gluten-containing particles from other areas where gluten-containing food is prepared.

UTENSILS:

You should use separate and clearly marked utensils and accessories that should not come in contact with gluten-containing ingredients/foods/dishes. Processing devices (stick mixers, choppers, grinding machines) should only be used if they are exclusively used for processing GF food, as they cannot be cleaned thoroughly enough. If you do not have GF dedicated processing devices, all the processing should be performed manually.

DISH PREPARATION:

GF dishes should be prepared in a physically separate, gluten-free space (in a special room, or on a special counter) or after thorough cleaning, preferably not at the same time as preparing gluten-containing dishes. Where physical separation is not possible, gluten-containing ingredients (especially powdered) should be in general replaced with gluten-free ones whenever possible (for example wheat flour should be replaced with GF rice flour). Before the start of preparing a GF dish staff should put on clean protective clothing and wash hands. During preparation of GF meal, no gluten ingredients should be used and no gluten meals should be prepared at the same time. Special attention has to be put in utensils used for food preparation.

SERVING, TRANSPORT, AND DISTRIBUTION:

To avoid contamination and serving mistakes (serving gluten-containing dishes instead of GF dishes), GF food should be served separately and stored in marked containers. Do not carry gluten-containing and GF meals with the same hand. Use a different colored plate to avoid any mistakes. For serving, use utensils that are only used for GF food. Buffet offer of gluten-containing and GF dishes in the same room is not acceptable. During transport, containers with GF food must be tightly closed, clearly marked, and separated from containers with a gluten-containing food.

EMPLOYEES (STAFF):

Before the start of preparing a GF dish, staff should put on clean protective clothing and wash hands. Procedures and prescriptions must be in writing. Improvisation and substitution of ingredients (even just changing brands) is not allowed without re-checking each ingredient for possible gluten content. It is mandatory to train new staff and periodically update the knowledge of all employees, from procurement to service.

SUPERVISION:

The adequacy of cleaning work surfaces, utensils, and cooking equipment should be checked with convenient quick tests (swabs), if available, which are easy to use and quickly detect the presence of gluten. It is advisable to regularly check the adequacy of meal preparation by taking food samples. Samples should be taken under regular operating conditions and submitted for analysis on gluten content.

It is recommended to integrate all critical points and mitigation measures listed here into the already implemented HACCP (Hazard Analysis and Critical Control Point) system. Good practice example from CHZ (Children hospital Zagreb) kitchen can serve you as an example (see the “Good practices” chapter).

Understanding food declarations - Food labels

EU regulation No. 1169/2011 on the provision of food information to consumers, defines the 14 most common causes of allergies and other food sensitivities, which have to be stated on the food label. Gluten and gluten-containing cereals are one of them.

Non-prepacked food

Non-prepacked food is food that is placed on the market in non-prepacked form or which is packaged at the point of sale at the request of the consumer or which is prepacked for direct sale or which is offered at the point of sale for immediate consumption. Examples are meals served in restaurants, food sold in bakeries and confectioneries, prepared food delivered to the consumer at home, food packaged in the same place where it is sold, in minimally protective packaging (e.g., bread, pastries, slices, cakes or sandwiches) or beverages served poured into glasses or cups.

Double chocolate cookies

NUTRITION INFORMATION

	Per 100 g	Per Piece (25 g)
Energy kJ/kcal	2123 kJ (508 kCal)	531 kJ (127 kCal)
Fat	26 g	7 g
- Of which saturates	14 g	4 g
Carbohydrates	61 g	15 g
- Of which sugars	39 g	10 g
Protein	5,9 g	2 g
Salt	0,57 g	0,14 g

ALLERGY ADVICE
For allergies, including cereals containing gluten, see ingredients in bold.

INGREDIENTS
Sugar, **wheat flour**, whole milk chocolate, dark chocolate, palm oil, cocoa, cocoa butter, **milk powder**, lactose, **wheat gluten**, aroma, emulsifiers (E741), **lecithin (soy)**, sodium carbonate, diphosphate, salt, **egg**

ALLERGENS
Contains: Cereals containing gluten (wheat flour, wheat gluten), Milk products (milk powder), Soy products (lecithin), Eggs (egg)

EUROPEAN FOOD REGULATION

This is a voluntary information the manufacturer can provide. "May contain" is another voluntary declaration that can be used. If the product consists only a single ingredient, it might say "contains gluten".

Here, all major allergens, including gluten-containing cereals, have to be listed and highlighted.

Note that all gluten-containing cereals have to be declared (not gluten itself!). That is why you have to know which cereals are the ones that contain gluten.

Allergens may not be hidden in the form of numbers. If additives contain gluten, it must be highlighted in the same manner as for the main ingredients.

Example of packed food labeling. Allergens must be clearly mentioned.

When it comes to ingredients that can cause allergies, intolerance or celiac disease for that matter, the same applies to non-prepacked food as to prepacked food: information on the presence of these allergens must be given to the consumer. As most non-prepacked foods are not required to list the ingredients, the information is provided by stating the word "contains" followed by the names of the allergens present, e.g., wheat, barley, soy, and eggs.

How to display information on allergens/gluten in non-prepacked foods?

Information on allergens must be displayed at the point of sale in the vicinity of the food to which it relates (or on the packaging if the food is kept in it at the point of sale), in writing, easily visible and clearly legible. For example, they can be found on labels near the food to which they refer, in catalogs, booklets, menus, on boards, plates, electronic devices and the like.

Communicate to the consumer! FOOD INFORMATION IS OBLIGATORY!

Exceptionally, allergen information may be provided in other ways, including menu communication. This is the case when the retailer or manufacturer does not have the option to place information on the food label or near the food at the point of sale. In such a situation, the information may be located elsewhere in the facility, but it is mandatory to place an easily visible, clearly legible notice that will direct the customer to where the information is located.

Another possibility is to place a notice in a visible place inviting consumers to contact people for information on the presence of allergens. In this case, the staff must not guess or answer "by heart" at the consumer's request, but must check the information on the presence of allergens in the documented records. These records may be in written or electronic form and must be available to the consumer upon request.

For example, the menu or poster in a restaurant may contain a notice: "For information on the presence of substances or products that cause allergies or intolerances in the food you consume, feel free to contact our staff who will be happy to help you." In this case, the service staff must be adequately trained to provide all necessary information to the user.

Unintentional contamination

Business entities are obliged to consider the possibility of cross-contamination of food (transfer of a harmful substance from one food to another) as part of their preventive procedures. Therefore, all employees working with food should be familiar with internal allergen control procedures. If the subject cannot avoid cross-contamination with a particular allergen, he should inform the customer that he cannot provide him with an allergen-free product!

Other claims about gluten are forbidden!

Regulation (EU) No. 828/2014 prescribes the exact text of the statement on the absence of gluten in food: "Gluten-free". Food producers of prepacked and non-prepacked food may put a statement on the absence of gluten only in those words. In this way, using clearly prescribed "gluten-free" (up to 20 ppm) statements allow consumers to know exactly what statement means and what the maximum amount of gluten in that product is.

The food producer's versions of the statements are not permitted, e.g., "Ingredients without gluten", "Naturally gluten-free" or other similar statements.

Be aware that celiacs may consume only gluten-free!

Recipes

Even though you already have plenty of experience in food preparation, here are some suggestions and steps to more easily achieve a gluten-free meal.



Rice with vegetables and meat in sauce



Preparation

Cook the rice in fresh salted water. Wash and cut the cauliflower, broccoli, and bell pepper. Peel the carrots and cut as desired. Cook the cauliflower, broccoli, and carrots in fresh salted water. In a separate pan, heat the oil, add the onions, and fry gently until golden brown. Add bell peppers, cooked vegetables, and spices. Fry for about 5 minutes and then add cooked rice. Fry everything together for another 5 minutes.

Wash the steaks under running water and dry both sides. Season with salt and pepper. Wash the onion under running water and chop finely. Heat the oil in a frying pan and fry the steaks on both sides. Remove cooked steaks from the frying pan, place them on the plate and cover with a lid. Add the onions to the pan and fry over low heat until soft and golden brown. Add salt and gluten-free stock. When the sauce boils, add the steaks. Cover and cook for about 30 minutes.



Nutrition values

nutrition value/100 g	kcal	carbohydrate	fat	protein
Rice with vegetables	180	40 g	1 g	4 g
Meat in sauce	115	2 g	6 g	12 g



Ingredients

RICE WITH VEGETABLES

- 200 g rice
- 2 carrots
- 1 small red bell pepper
- ¼ head of cauliflower
- ¼ head of broccoli
- Salt
- Pepper (if do not have a verified one, skip it)
- Fresh basil
- Fresh parsley

MEAT IN A SAUCE

- 4 beef steaks
- 2 tsp oil
- 1 large onion
- Salt
- 150 ml stock, such as beef, chicken, vegetable (if it is not verified, replace it with water)
- Pepper (if you do not have a verified one, skip it)



Thoroughly clean work surfaces and make sure all kitchen utensils are clean. Use a freshly cleaned apron, wash your hands and prepare clean kitchen towels. A gluten-free meal must be prepared at a suitable distance from other dishes to prevent any potential contamination.

RICE: is naturally gluten-free, but there is a possibility of contamination during the packaging process. Wash the uncooked rice in a strainer under running water – make sure that the strainer is clean before use.

ONION: Use fresh onions, as pre-fried onions usually contain flour and gluten. Wash fresh onions under running water and cut on a clean plastic board with a clean knife.

BELL PEPPERS, CARROTS, CAULIFLOWER, and BROCCOLI: Use fresh vegetables, wash them under running water, and cut them on a clean board with a clean knife. Frozen, pickled, dried, sliced, mashed vegetables pose a risk. If you use any processed vegetables, make sure to request documentation from the supplier that the products do not contain gluten (not even in traces) and that the contamination is not possible.

SALT: is naturally gluten-free, but be careful to use clean uncontaminated salt (e. g. open a new package). Be careful - in the kitchen, the same spoon is often used for scooping salt and flour.

PARSLEY AND BASIL: Use fresh herbs, wash them under running water, dry them with a paper towel, and cut them with a clean knife. If you do not have all the herbs available fresh, use the ones you have.

PEPPER: Pepper is naturally gluten-free but there is a risk of contamination during grinding or packaging, you must obtain documentation from the supplier which shows that their products do not contain gluten (not even in trace amounts) and that contamination is not possible.

BEEFSTEAKS: Meat is naturally gluten-free, but there is a possibility of contamination during the cut. Wash the meat under running water and dry them with a clean paper towel. Cut it into steaks on a clean plastic board with a clean knife.

STOCK: Industrially prepared stocks, stock cubes or concentrates are processed products and pose a higher risk than soups prepared from fresh meat and/or vegetables. If you use industrially prepared stocks, you should require documentation from the supplier that the product does not contain gluten (not even in traces) and that contamination is not possible. If fresh meat and/or vegetables are used, wash them and cut them on a clean plastic board with a clean knife. The soup stock prepared in this way can be frozen in clean marked containers. If you do not have a suitable stock base, use water instead.

OIL: Vegetable oils are naturally gluten-free. Use simple oils, without spices and herbs.

Grilled meat cubes on skewers with fried potato and cucumber salad



Preparation

Wash the meat and cut it into 3–4 cm large pieces. Wash, dry and chop garlic, parsley, and oregano. In a large bowl, mix the yoghurt, lemon juice, chopped herbs, garlic, salt, and pepper. Stir the meat into the prepared sauce, cover the bowl and marinate for about 1 hour. String the meat on disposable wooden sticks. Heat the oil in a frying pan and add the meat cubes on skewers.

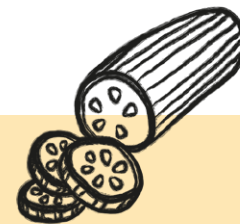
Peel, cut, and fry the potatoes in a deep-frying pan.

Peel the cucumber, cut it in half, scoop out the seeds with a spoon, and cut the cucumber thinly. Peel, wash, and finely chop the garlic. Wash the mint and chop the leaves. Mix all ingredients with salt and pepper. Add lemon juice, olive oil, yoghurt, and chopped mint. Place in the refrigerator for half an hour to cool.



Nutrition values

nutrition value/100 g	kcal	carbohydrate	fat	protein
Grilled meat cubes on skewers	93	1,2 g	1,7 g	18 g
Fried potato	300	41 g	15 g	3,4 g
Cucumber salad with yoghurt	28	2,8 g	1,4 g	1,1 g



Ingredients

GRILLED MEAT CUBES ON SKEWERS

- 700 g CHICKEN or PORK
- 200 g plain yoghurt (natural yoghurt without additives)
- 1 spring of oregano
- 2 springs of parsley
- 2 cloves of garlic
- 2 tsp of lemon juice
- Salt
- Pepper (if you do not have a verified one, skip it)
- oil for frying

FRIED POTATO

- 5 large potatoes
- oil for frying

CUCUMBER SALAD WITH YOGHURT

- 4 cucumbers
- 1 clove of garlic
- 200 g plain yoghurt (natural yoghurt without additives)
- Salt
- Pepper (if you do not have a verified one, skip it)
- 1 tsp of lemon juice
- few mint leaves



Clean work surfaces and make sure all kitchen utensils are clean. Use a freshly cleaned apron, wash your hands and prepare clean kitchen towels. A gluten-free meal must be prepared at a suitable distance from other dishes to prevent any potential contamination. The risk of contamination is posed by the grill where the buns are heated or dishes containing starch or crumbs are prepared, as well as fryers, ovens, and already used frying oil. Therefore, meat and potatoes should be fried in a clean pan, containing fresh oil.

MEAT: The meat is naturally gluten-free, but there is a possibility of contamination when cut, so we prepare chicken skewers ourselves. Cut the meat on a clean plastic board with a clean knife and stung the pieces on disposable wooden sticks.

NATURAL YOGHURT: Natural yoghurt without additives is naturally gluten-free and does not represent a risk for contamination.

OIL: Vegetable oils are naturally gluten-free.

OREGANO, PARSLEY, MINT: Use fresh herbs, wash them under running water, dry them with a paper towel, and cut them on a clean plastic board with a clean knife.

PEPPER: Pepper is naturally gluten-free but there is a risk of contamination during grinding or packaging, you must obtain documentation from the supplier that shows that their products do not contain gluten (not even in trace amounts) and that contamination is not possible.

GARLIC: Use fresh garlic, because dry ground garlic may contain gluten. Fresh garlic should be washed under running water and chopped on a plastic board with a clean knife.

LEMON JUICE: Squeeze the juice of fresh clean lemon. If you use industrially prepared juice or concentrates you have to obtain documentation from the supplier that the product does not contain gluten (not even in traces) and that the contamination is not possible.

SALT: Salt is naturally gluten-free but be careful to use clean uncontaminated salt (e.g., open a new package). Be careful - in the kitchen, the same spoon is often used for scooping salt and flour.

POTATOES: Use fresh potatoes, peel, wash under running water, and cut them on a clean board with a clean knife. Frozen pre-prepared potatoes may contain gluten. If used, you must obtain documentation from the supplier that the product does not contain gluten (not even in traces) and that the contamination is not possible.

CUCUMBERS: Use a fresh cucumber, wash it under running water and cut it on a clean plastic board with a clean knife.

Fish and swiss chard with potatoes



Preparation

Wash the fish under running water, dry it with a paper towel and add salt. Use butter, garlic, and parsley for stuffing inside of the fish. Pre-heat the oil in a pan. Fry the fish on both sides until cooked.

Peel the potato, cut it into cubes and cook it in fresh salted water until soft. Drain it and store it in a warm place.

Wash the swiss chard under running water. If it has large leaves and broad fibrous stalks, cut and cook them separately. If you have young swiss chard blanch or quick boil it in a small amount of fresh water and drain it. Cook the stems of the older swiss chard for a few minutes and add the softer leaves at the very end only to blanch them.

Mix the swiss chard and potatoes, add the chopped garlic, salt, pepper and olive oil, and stir until the potatoes are half crushed. If you want a less dense dish, dilute it with water in which swiss chard was cooked.



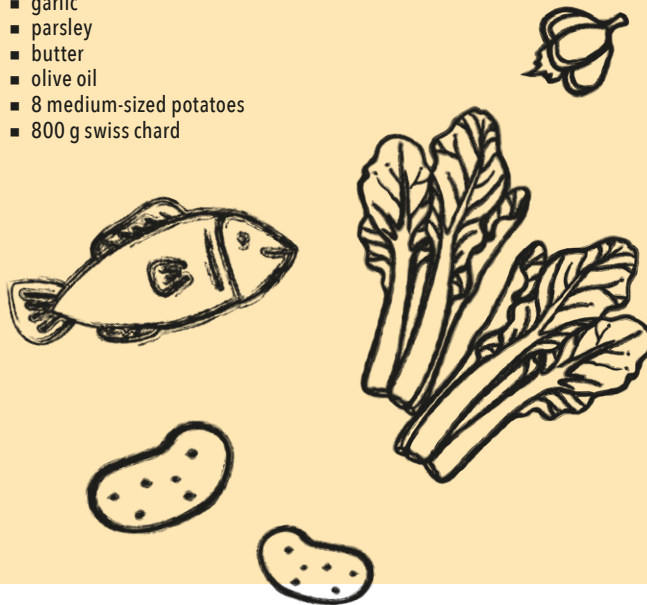
Nutrition values

nutrition value/100 g	kcal	carbohydrate	fat	protein
Fish	120	0 g	5 g	19 g
Swiss chard with potatoes	80	11,5 g	2,7 g	2,5 g



Ingredients

- 4 trouts or other fish of your choice
- salt
- garlic
- parsley
- butter
- olive oil
- 8 medium-sized potatoes
- 800 g swiss chard



Clean work surfaces and make sure all kitchen utensils are clean. Use a freshly cleaned apron, wash your hands and prepare clean kitchen towels. A gluten-free meal must be prepared at a suitable distance from other dishes to prevent any potential contamination. Use fresh oil and a clean pan to fry the fish. The use of already used filtered oil and fryers is not permitted.

FISH: Fish is naturally gluten-free. You should use fresh fish because when freezing and packing fish, there is a possibility of contamination due to gluten-containing additives. Wash the fish under running water and dry it with a paper towel. If you use frozen fish, you must obtain documentation from the supplier that the product does not contain gluten (not even in traces) and that contamination is not possible.

SALT: Salt is naturally gluten-free, but be careful to use clean uncontaminated salt (e.g., open a new package). Be careful - in the kitchen, the same spoon is often used for scooping salt and flour.

GARLIC: Use fresh garlic, peel it, wash it under running water, and mince it on a clean plastic board with a clean knife. Dried grounded garlic can be contaminated with gluten during processing. If you use dry grounded garlic, you must obtain documentation from the supplier that the product does not contain gluten (not even in traces) and that contamination is not possible.

PARSLEY: Use fresh parsley, wash it under running water, dry it with a paper towel and cut it on a clean plastic board with a clean knife.

BUTTER: Natural butter without all additives is naturally gluten-free.

OLIVE OIL: This product is naturally gluten-free.

POTATOES and SWISS CHARD: Use fresh potatoes and swiss chard, wash them under running water, and cut them on a clean plastic cutting board with a clean knife. Frozen, dried, pre-sliced, and mashed vegetables pose a greater risk for contamination than fresh vegetables. If you use any processed vegetables, you must obtain documentation from the supplier that the product does not contain gluten (not even in traces) and that contamination is not possible.

Apple strudel



Preparation

Mix water with olive oil and salt. Add flour and knead well. The dough can be kneaded by hand or in a food processor. If you opt for the classic kneading by hand, place the dough on a well-cleaned and floured (use the declared gluten-free flour!) kitchen counter and knead for a good 10 minutes or until the dough becomes completely homogeneous and pliable. Roll out the dough thinly into a rectangular shape. After the dough is rolled out, spread the apple filling evenly. Roll everything together softly and place in a baking dish. Bake the apple strudel at 175 ° C for 40 minutes. Leave it in the baking dish to cool until lukewarm. Sprinkle it with powdered sugar before serving.



Nutrition values

nutrition value/100 g	kcal	carbohydrate	fat	protein
Apple strudel	120	24 g	2 g	1 g



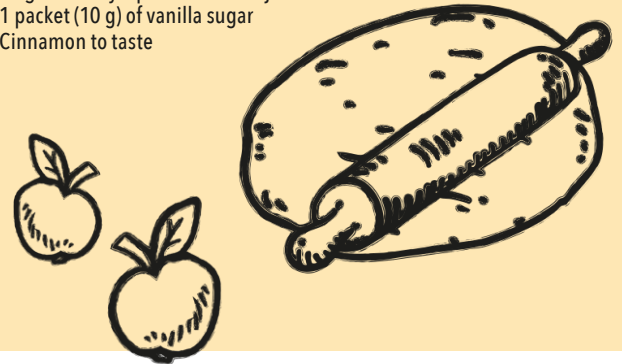
Ingredients

DOUGH

- 0.5 kg of flour SCHAR mix B,
- 450 ml of water
- 50 g of olive oil
- A pinch of salt

APPLE FILLING

- 2 kg of apples
- 30 g of granulated sugar
- 15 g of freshly squeezed lemon juice
- 1 packet (10 g) of vanilla sugar
- Cinnamon to taste



Thoroughly clean work surfaces, inspect all kitchen utensils to make sure they are clean. Change your aprons, wash your hands and prepare clean kitchen towels and tablecloths. Countertops, food processors, rollers, baking trays, and the oven pose a risk of contamination. If you do not have a separate counter for preparing GF dishes for kneading, use a clean, large board, which is used only for GF dough. Keep the board protected from contamination when not in use. The food processor should be used only for GF foods, otherwise kneading is preferred by hand. The roller should only be used for rolling GF dough. Whenever possible use a baking pan that is only used for GF foods. Otherwise, check that it is really clean, that it has no cracks and edges where baked gluten-containing leftovers could linger, and line it with baking paper. If you do not have a separate oven that is used only for GF foods, turn off the ventilation before baking GF dishes. Bake in the highest position.

FLOUR: It is a high-risk product. The use of dedicated declared gluten-free flour is mandatory. Request the manufacturer's documentation and an analytical report or certificate confirming this from the supplier. If you buy flour in retail, choose from products with the inscription "gluten-free" and marked with a registered sign crossed out cereals. Check that the product does not contain gluten-free oats, as some celiacs also react in the same way to gluten-free oats as they do to gluten-containing oats.

OLIVE OIL: Vegetable oils are naturally gluten-free.

SALT and SUGAR: SALT: Salt and sugar are naturally gluten-free, but be careful to use clean uncontaminated salt and sugar (e.g., open a new package). Be careful - in the kitchen, the same spoon is often used for salt/sugar and flour.

APPLES: Use fresh fruit that is naturally gluten-free. Wash it under running water, peel, and cut on a clean board and with a clean knife. Grate the apples with a thoroughly washed grater, which you do not use to grate gluten-containing dishes (the grater should be used exclusively for gluten-free foods). Frozen, pickled, dried, sliced, and mashed fruit pose a higher risk than fresh. If you use any processed (e.g., frozen, pickled) fruit, require

documentation from the supplier that it does not contain gluten (not even in traces) and that contamination is not possible.

LEMON JUICE: Squeeze the juice of fresh lemons. If you use industrially prepared juice or concentrates, require documentation from the supplier that it does not contain gluten (not even in traces) and that contamination is not possible.

VANILLA SUGAR: Flavored sugars (vanilla, rum) and flavorings in powder or liquid pose a risk of contamination during production and packaging. You must obtain documentation from the supplier that they do not contain gluten (not even in trace amounts) and that contamination is not possible. If you buy it in retail, choose only those products that are labelled "Gluten-free". You can also make vanilla sugar yourself. Wash vanilla sticks, which are naturally gluten-free, under running water, dry them with a clean paper towel, cut them in half, put them in a dry clean glass with sugar, and wait for the sugar to absorb the aromas.

CINNAMON: is naturally gluten-free but there is a risk of contamination during the packaging. You must require documentation from the supplier that it does not contain gluten (not even in traces) and that contamination is not possible.

Fruit salad with whipped cream



Preparation

Peel the fruit, cut into pieces and sweeten to taste. Whip the cream and add to the fruit salad right before serving.

Optional: You can also add a scoop of GF ice cream to the fruit salad. Be sure to use verified GF ice cream!



Ingredients

- Use any fresh seasonal fruit (apples, cherries, pears, strawberries, bananas, oranges)
- Natural whipping cream (without additives)
- Sugar



Nutrition values

nutrition value/100 g	kcal	carbohydrate	fat	protein
	125	23,5 g	3,4 g	1,5 g

Thoroughly clean work surfaces and make sure all kitchen utensils are clean. Use a freshly cleaned apron, wash your hands and prepare clean kitchen towels. Be sure that the hand mixer, which will be used for whipping cream, is completely clean.

CREAM: Natural whipped cream without additives is naturally gluten-free and poses no risk. If you use whipped cream with additives or aerosol whipped cream that contains various additives, you must require documentation from the supplier that the product does not contain gluten (not even in trace amounts) and that contamination is not possible.

FRUIT: Use fresh fruit that is naturally gluten-free. Wash it under running water, peel, and cut on a clean board and with a clean knife. Frozen, pickled, dried, sliced, and mashed fruit pose a higher risk than fresh. If you use any processed (e.g., frozen, pickled) fruit, require documentation from the supplier that the product does not contain gluten (not even in traces) and that contamination is not possible.

SUGAR: Sugar is naturally gluten-free but be careful to use clean uncontaminated sugar (e.g., open a new package). Be careful - in the kitchen, the same spoon is often used for scooping sugar and flour.

ICE CREAM: Ice cream is a processed dairy product that may contain gluten. It can only be used if you can obtain the manufacturer's documentation that the product does not contain gluten (not even in trace amounts) and that contamination is not possible. If you buy it in retail choose one that is labelled "gluten-free".

Good practices

Access to gluten-free dieting and meals meeting strict criteria can be especially difficult for celiacs in institutions such as hospitals, schools, kindergartens or nurseries, but also while socializing or traveling, in hotels or restaurants. Here are some good practice examples which will, hopefully, inspire you to make necessary changes and become one more good practice example.

RESTAURANTS

Gluten-free restaurant Cojzla (Slovenia, Ljubljana)

Cojzla is a place where celiacs and all those on a strict gluten-free diet can enjoy a safe and high-quality gluten-free diet without any fear.

Cojzla is the first 100% gluten-free restaurant in Slovenia. Igor Mihelič, owner and head chef of the restaurant Cojzla, faced the world of the gluten-free diet when a family member was diagnosed with celiac disease. He realized that people with celiac disease are deprived of many gourmet pleasures, especially in restaurants, as gluten-free food is only available in 100% gluten-free establishments due to the possibility of contamination. For the caterer, by education and in heart, with years of experience in top restaurants, even those with a Michelin star, the opening of the gluten-free deli was a natural step forward, and this is how Cojzla was created. Cojzla is a place where celiacs and all those on a strict gluten-free diet can enjoy a safe and high-quality gluten-free diet without any fear.

Deli Cojzla in BTC Ljubljana is a combination of nostalgic, almost forgotten ways of preparing dishes and modern mentality and food preparation techniques. Recipes were created thoughtfully

and with the help of every hearty guest. A variety of gluten-free dishes is available in Cojzla, from 100% buckwheat noodles to "steam-cooked" falafel wrapped in a fermented buckwheat pancake. For those who want a trendy burger, there are also quite a few different options. Cojzla team is always looking for new and exciting dishes. Among the first challenges was an apple





Gluten-free restaurant Maša (Serbia, Belgrade)

How gluten-free food can be both safe and attractive.

The MAŠA restaurant was founded almost five years ago in Belgrade, and the idea of opening came from the personal needs of the owners and own experience with celiac disease.

The harsh reality of not being able to enter a bakery, a restaurant or one of the famous fast food chains and eat a meal that does not contain gluten, significantly complicates and limits everyday life. We have been driven by the desire to make it easier for some people and bring gluten-free diets closer to the others, so we created a restaurant concept that serves gluten-free meals prepared from quality ingredients in a strictly controlled environment. The biggest challenge we faced at the very beginning was overcoming prejudice about gluten-free foods and the fact that such a diet does not imply giving up safe and tasty meals.

Our mission was to introduce people to the fact that all favorite and famous specialties taste surprisingly good if prepared from gluten-free foods. The MAŠA restaurant is the only 100% gluten-free restaurant in our country.

Now five years since it has opened, we are proud to point out that we have become an unavoidable place for those who have celiac disease, as well as for real hedonists who simply enjoy excellent food. In addition to salty specialties, we have become recognizable with gluten-free treats that win at the first bite. Positive comments on social media and a great overall rating on Google show that this kind of restaurant concept was needed. It is also one of the indicators that what we are doing is good, and we believe that we have contributed to a better quality of life for people with celiac disease. We pay special attention to quality control and we carefully choose the ingredients from which we prepare our meals. We created new approaches and we improved our culinary knowledge so that people with celiac disease can enjoy their favorite dishes without any worries.

pie without added sugar, a little later there was fermented 100% buckwheat pancakes with mozzarella and vegetables, followed by red lentils with chia seeds and psyllium, and not long ago unique loaves of bread with yeast and lees – there are even ones with chocolate. Cojzla offers a gourmet experience for all those who are not allowed to eat gluten for various reasons and for any other person who dares to try something different and delicious.

Igor Mihelič, who follows innovations in the field of gluten-free products, is well acquainted with the requirements of a gluten-free diet and is constantly educating himself in this field. He transfers his expertise and skills to employees who learn and expand their knowledge with his practical and theoretical support. They are always ready to share their work, pitfalls, problems, and examples of good practice with other providers of gluten-free food - chef staff. The main mission of the Cojzla team is to transfer a small part of their energy to the guests through food. They also make sure that a visit to Cojzla celiacs is pleasant, carefree, and full of good tastes. (Authors: Simona Kalšan Kildenfoss and Igor Mihelič).



Therefore, aware of the importance of such a restaurant existence, we continue to work dedicatedly to maintain high quality standards and improve our offer.

(Author of the text: Danka Drobnjak)

Gluten-free restaurant L'Amande (Romania, Bucharest)

Desserts sans gluten, first gluten-free franchise from Romania

L'Amande – Desserts sans gluten story began in 2016. The beginning was very difficult because the raw materials producers and distributors did not know the concept and meaning of gluten-free raw material. We started with only one type of flour brought from Hungary and only a few products, such as cookies and cakes. Adapting the recipes was not easy either, because, as we know, gluten-free flour behaves completely differently than wheat flour.

Step by step, with perseverance and education of our distributors, we managed to increase the range of products with bread, pizza, pastries, doughnuts, croissants, their taste being particularly good, surpassing gluten-free products. The success of the recipes consists in a lot of work, many failures, with a lot of wasted raw material as collateral damage.

At the same time, we managed to obtain more and more dis-

tributors who did everything possible to find gluten-free raw material for us, but also raw material without milk protein or egg traces; many of our products are prepared that they can be safely consumed by persons with other allergies and intolerances.

The fact that the Romanian Association for Gluten Intolerance (ARIG) was with us from the beginning brought us the trust of the celiac community from all over the country, and together, we brought a lot of joy, especially among children, in events and workshops organized over the years.

What we have learned in these five and a half years: that you can do wonderful things if you have people by your side who understand what a “need” means, but also what passion and joy you can bring to those around you through your work means. We are happy that we are the first accredited gluten-free cake shop in Romania, but also that we are considered one of the best cake shops in Bucharest, even if we are gluten-free.

L'Amande - desserts sans gluten is the first gluten-free franchise in Romania, which currently has one location in Bucharest, one franchise in Bacau, and one franchise in Timisoara.

Author of the text: Daniela Alecse



Pizzeria Viitorului (Romania, Bucharest)

First mixed location in Bucharest

My name is Mihai, and since 2016 I have owned a pizzeria in Bucharest.

Having a beautiful experience in the gluten-free area in Italy, in 2018 I added to the menu of my pizzeria some gluten-free options. Later I started collaborating with the Celiac Association in Romania (ARIG) and in 2019 my pizzeria was the first gluten-free mixed location in Bucharest official by joining the Eating Out program.



From the very beginning, we had a separate flow for preparing gluten-free pizza and the strictest measures to avoid contamination. Gluten-free pizza was and still is prepared only by me. The pizzeria staff is very well prepared so we serve gluten-free pizza under the safest conditions.



The collaboration with ARIG and their Eating Out program increased my visibility in the celiac community in Bucharest but also outside the city, so that in short time, I became very well known to the community.

All these years I have learned how hard it is to gain the trust of celiac customers. That's why I'm the only one who makes gluten-free pizza, and my customers rely on that.

During the pandemic, my gluten-free products helped me survive when many others closed businesses, large and small restaurants around me. My clients understood and supported me throughout this period and their constant orders of gluten-free pizza provided me with the necessary income to keep the pizzeria open.

For people with celiac disease, it is extremely important to know that they can have a safe location where they can enjoy a gluten-free dish with their loved ones. If every restaurant would make the effort to include at least 2-3 safe gluten-free dishes in their menu, it would ensure a new category of grateful and eager customers to support them, which might even help them to get over this difficult period.

Author of the text: Mihai Sterie

NURSERIES AND KINDERGARTENS (Bulgaria, Varna)

Introduction-Description of the initial practice

In the town of Varna, Bulgaria, several steps have been undertaken to assess the situation, implement the necessary organizational and regulation interventions and create availability of gluten-free and milk-free diet for children who need a special diet at the age of 1 to 7 years attending daycare centers.

Before the implementation of this good practice, nurseries and kindergartens were facing several difficulties providing gluten-free meals. Nation-wide legislation has been present for years. According to these regulations, the menu in children's institutions needed to meet the requirements for dietary nutrition depending on the child's disease. However, that legislation did not come into effect.

Organizational difficulties included training of the staff on the Requirements and process of specialized nutrition preparation

and mandatory avoidance of any contamination and fulfillment of dietary requirements of children by replacing different types of foods. Further difficulties were that meal preparation and feeding in daycare centers in the town of Varna is carried out by 2 different municipal enterprises that had to be educated separately.

The range of food used for daycare centers in Bulgaria is regulated through public procurement, and changes or adding „special foods“ is complex and difficult. Financial difficulties add on top, as guaranteed high quality - specialized gluten-free foods are expensive and require additional financial resources.

Parties involved

Activities to solve these Problems began in 2014 when a study conducted by the municipality of Varna assessed the number of children requiring special nutrition and their needs.

Several workshops, discussions and tutorials were organized. Included stakeholders were the municipality of Varna, the Bulgarian society of pediatric gastroenterology, hepatology and nutrition (BULSPGHAN), the Regional health inspection, The University hospital St. Marina, Varna, The Bulgarian agency for food safety- region Varna, patient organization "National Alliance of People with Rare Diseases", and association "Celiac disease", as well as leading pediatricians and nutritionists and parents of children with special dietary needs. Companies providing nutrition for nurseries and kindergartens were involved as well.

Procedure, changes that have been made

The need for regulations and protocols led to the establishment of a committee for the evaluation of dietary regimens for children. The committee consisting of nutritionists and pediatric subspecialists and employees of the municipality of Varna resulted in the creation of several regimes for those with food susceptibility, including celiac disease. Special diets and menus of

children were assessed for 2 additional years by a trained nutritionist. The 4 dietary regimes included a gluten-free menu, a milk-free menu, a combined milk- and gluten-free regime, and a menu free of all major allergens: gluten, milk, fish, and eggs. These regimes will be available from 04/01/2022 for infants and small children who do not attend daycare centers in Varna.

Those Achievements and the awareness created led to several practical enhancements in nurseries and kindergartens with an ongoing benefit.

Internal rules for companies providing nutrition and special instruction for the preparation of food have been evolved. Necessary products are declared and individual staff training by a specialist in the field of nutrition is performed. Necessary dietary products are declared properly, and strict hygiene during the process of preparation is maintained. The food is stored and prepared using separate dishes and separate kitchen utensils to ensure the absolute absence of gluten in the respective dishes. The dishes are permanently marked and samples of the prepared food are left for 48 hours of storage.

A lot of effort has been undertaken in Varna to ensure that the needs of children requiring gluten-free dieting are met. The system established has been performing well and the follow up of the respective children has been excellent. Patients are regularly followed by medical professionals and internal assessments of needs and achievements are ongoing.

Conclusion/Lessons learned

From bare availability of gluten-free meals in kindergarten and nurseries in Varna to the successful implementation, the town of Varna can now stand as a Good Practice Example. **Only the continuous effort of all stakeholders made those changes possible. Implementing effective networking, interrelated communication, and organization with all partners are lessons learned in this project.**

Those achievements may benefit various institutions nationwide. In the beginning of year 2021, a canteen (kitchen) providing food for children up to 3 years of age and financially covered by the Municipality, aimed at children who do not attend nurseries, has been organized and will be start operating from 04/01/2022 onwards to provide healthy nutrition for infant and toddlers with food allergy and hypersensitivity. A recipe book is on the way due to good collaboration with the National center of public health and analysis is forthcoming and might further facilitate this development.

HOSPITAL KITCHEN (Croatia, Zagreb)

Design and evaluation of an HACCP gluten-free protocol in a children's hospital

Introduction-Description of the initial practice

A critical function of hospital kitchens is to produce meals for patients with special dietary requirements such as food intolerance or allergies. Celiac disease, gluten-related disorders such as wheat allergy, and gluten sensitivity are cases when affected individuals must avoid gluten-containing food, and lifetime adherence to a gluten-free diet (GFD) is the only known treatment for gluten-related disorders.

Achieving a GFD is a challenge because of the ubiquity of gluten in the Western diet, making gluten contamination difficult to avoid. In order to avoid gluten, individuals can eat food that naturally lacks gluten or that has been declared "gluten-free", which according to European Commission Regulation No. 828/2014 means that the gluten content of the final product is less than 20 mg/kg (ppm). However, gluten-free food can be contaminated when handled or stored in areas where gluten-containing foods are also handled, or when it is processed using inadequate kitchen procedures or even poor dishwashing

procedures. All entities that produce, process, transport or sell food products are legally required to implement a Hazard Analysis Critical Control (HACCP) system in which potentially risky situations are defined for each work process, and control measures to guard against and minimize such risk are enacted. Such implementation by itself, however, is no guarantee that foodservice locations produce reliably gluten-free food.

One of the difficulties in achieving a truly GFD is that most countries have not established standard procedures for monitoring gluten content in food. In fact, we are unaware of an HACCP gluten-free protocol for hospital kitchen systems. Therefore, the aim of the present study was to develop, implement and validate an HACCP protocol for production of gluten-free meals in a hospital kitchen, involving rigorous checks of gluten content.

Parties involved

This research project was conducted in the hospital food production unit within the Department of Dietetic and Nutrition of Children's Hospital Zagreb (Croatia). Sample testing was done by Department of Food Quality Control, Faculty of Food Technology and Biotechnology, University of Zagreb and Division of Food and Consumer Goods Safety and Quality - MoH RC for Food Safety Analysis, Andrija Stampar Teaching Institute of Public Health.

Procedure, changes that have been made

The first phase of the research project was the development and implementation of an HACCP protocol for the production of gluten-free meals, as an addendum to the verified HACCP system which has already existed at the hospital since 2008. The second phase was validation of the protocol, including analysis of food samples before and after HACCP protocol implementation. The third phase was evaluation of a patient's total daily gluten intake on the GFD produced according to the new HACCP protocol.

HACCP protocol for gluten-free meals

An HACCP team was formed with a food safety expert as the president, and included a nutritionist, food supplier, cook and nurse as well as several other professionals. The team analyzed risk of gluten contamination during meal production based on a standard flowchart (Food and Agriculture Organization of the United Nations, 1998) and established critical control points, their associated critical limits, and procedures for supervising meal preparation and corrective measures based on the “HACCP Guidelines for the Production of Gluten-free Products” (AOECS, 2015). This process led to an HACCP protocol for production of gluten-free meals (Table below), and hospital staff were trained and assessed on this protocol. The Protocol Procedures described each phase of product manipulation, from raw material to distribution to the final consumer, and it prescribed measures to avoid gluten contamination and to respond effectively when it occurred. HACCP protocols should be adjusted to the sizes, activities and constraints of the particular kitchen.

Education of kitchen staff

All kitchen staff (20 of them), including head and assistant chefs, were educated about the HACCP protocol and issues in the preparation of a GFD. The education covered basic information about gluten, e.g., what is gluten and hidden sources of it, labeling of gluten-free foods and how to read food declarations, storage, preparation and serving of gluten-free foods as well as food cross-contamination. After the training, written and practical assessments were carried out. The written assessment included questions about gluten and the HACCP system, with emphasis on the preparation of gluten-free foods, procedures for monitoring critical control points, corrective measures if monitoring showed possible gluten contamination, proper clothing while preparing gluten-free foods, and washing of equipment used to prepare gluten-free foods. Of the 20 staff, 18 passed the written examination. This was followed by a practical assessment,

Table shows Critical control points (CCPs), mandatory requirements (MRs) and best practices (BPs) in the HACCP protocol for preparation of gluten-free meals

Item	CCP	MR	BP
1. Food chain supply control			
Food analysis certificates from suppliers	+		
Declarations	+		
Alternative supplier	+		
2. Storage			
Food entrance - packaging check		+	
Precisely planned storage spaces	+		
Hermetically closed boxes	+		
Original packaging	+		
If space limited: shelves with gluten-free food above shelves with gluten-containing food	+		
3. Selection of recipes and ingredients			
Precise and accurate gluten-free menu		+	
Clear and unique names		+	
Documentation of recipes for all gluten-free meals		+	
Checking of food / ingredient declarations at the time of meal preparation		+	
4. Meal preparation			
Time, space, production path design	+	+	
Devices reserved only for gluten-free food preparation	+		
Utensils and equipment	+		+

Item	CCP	MR	BP
Ventilation and air conditioning		+	
5. Marking and storage of final product and/or semi-processed food	+	+	
6. Transport and food distribution			
Hand hygiene during transport	+		
Distribution (marking of gluten-free food, separation of gluten-free and gluten-containing foods during transport)		+	
7. Personnel, hygiene and training	+		
Instruction posters available		+	
Continuous training			+
8. Food safety coordinator			+
9. Communication methods during gluten-free food production		+	
10. Documentation		+	
11. Procedures when contamination suspected			
Any ingredient suspected of contamination should not be used or distributed further	+		
Complaint / Recall			+
12. Analysis of samples		+	

in which head and assistant chefs monitored the preparation of gluten-free food for 3 days, and 17 staff passed this evaluation.

Food sampling

An extensive study followed, with food sampling before and after HACCP protocol. A total of 38 samples were analyzed over a period of 12 months.

Results

Gluten levels in all 38 food samples were below the European Union- defined limit of 20 mg/kg. The highest gluten concentrations (>10 mg/kg) were found in cereals and cereal-based meals: polenta, raw rice, and risotto.

Individual daily gluten intake on the GFD prepared according to the HACCP protocol was estimated based on single food servings and the gluten ELISA results. By consuming the hospital GFD, patients' daily gluten intake was estimated to average between 3.22 and 6.64 mg/day, while 10 mg/day is conservative approximation of daily limit for gluten intake.

Conclusion/Lessons learned

CHZ has HACCP which appears to be well suited to the demands of a hospital kitchen, where a large number of recipes, special diets and menus must be prepared accurately.

CHZ here provides evidence that an HACCP protocol for the preparation of gluten-free foods can be successfully implemented in a hospital kitchen, and that even with appropriate procedures in place, substantial risk of low gluten level exists in nominally gluten-free foodstuffs such as rice, presumably reflecting contamination during handling prior to arrival in our kitchen. This highlights the need for continuous monitoring of gluten levels at critical control points along the food production pathway, which can be accomplished with the effective and reliable R5 ELISA method.

Text was adapted for Brochure for caterers' purposes, from the paper:

Design and evaluation of an HACCP gluten-free protocol in a children's hospital
Diana Vukman, Petra Viličnik, Nada Vahčić, Dario Lasić, Tena Niseteo, Ines Panjkota Krbavčić, Ksenija Marković, Martina Bituh

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Celiac's experience

Celiacs' experience will give you another perspective on how important it is to at least understand special dietary needs of celiacs, if one is not in a position to prepare a gluten-free meal.

Špela's experience (Student, Slovenia)

Eating out gluten-free - Probably one of the most common consequences of lack of gluten-free meal options is whole families or groups of people deciding to skip eating out and opt for something we prepare ourselves.

I've lived with a celiac disease diagnosis for a better part of my life. Most if not all my memories of eating out are therefore somehow connected with making sure the food I consume is gluten-free. Finding restaurants that offer such food is not always easy. My options are mostly limited to only a few places or none at all. Sadly, a lot of our social lives revolve around food and especially eating out. The lack of restaurants that offer gluten-free meals results in a few different situations for us gluten-free-folks. One is awkwardly sitting at a table, having ordered nothing, while our friends or family feel bad for eating – a situation I think we've all been in and dread it almost as much as the people next to us. Consequently, a lot of people on a gluten-free diet start avoiding food-related situations altogether and unintentionally socially isolate themselves. Probably one of the most common consequences of lack of gluten-free meal options is whole families or groups of people deciding to skip eating out and opt for something we prepare ourselves. Expanding the

network of restaurants that have gluten-free options would therefore greatly improve the lives of people on a gluten-free diet.

Of course, it is not only important to provide gluten-free food, but also to make sure it really is safe for someone such as myself to consume. With that, I would like to say that someone telling me they can't guarantee my food is safe, is much more appreciated than them lying and serving me something with gluten in it. Throughout the years I've experienced both situations as well as being provided with great safe food by educated staff.

Positive – Bolzano, ITALY

My family and I are quite avid travelers. Of course, Italy is known for being a paradise for people on a gluten-free diet. Even so, I was still surprised how well educated most people in the catering business are there.

During our stay in Bolzano, my family and I decided to go out for an early dinner. The restaurant we went to advertised a wide selection of gluten-free meals. The waitress explained how the gluten-free food is made and how they avoid cross-contami-

nation. When she brought us bread, she placed the bread with gluten in front of my parents far away from me and pointed out, that I shouldn't eat it. My bread was brought separately and packaged differently in a paper bag. We later noticed that plates on which the meals were served differed as well. The gluten-free meals were served on blue plates and had a small flag on top, while the "normal" meals came on white or brown plates.

The attention to detail and the care they put into making sure that the food doesn't get cross-contaminated even when already on the table and that there isn't a mix-up with the dishes, as well as the waitress patiently answering all our questions, showed that they really knew a lot about making safe gluten-free food.

Negative – Burgers in Belgium

When travelling through Europe – especially northern Europe – by train, one doesn't have all that many options for safe gluten-free meals unless you're in a big city. Of course, you find many different places that offer "gluten-free" food on the internet, but one shouldn't rely only on that. You should always ask the waiter (or other members of the staff) about how your food is being made. The ones who understand what "safe for a celiac" really means, will understand your concerns and gladly answer.

Not blindly trusting in a "GLUTEN-FREE" label really saved me in Belgium. Having already gone to a few "gluten-free" places, that turned out to not have any food for me whatsoever, my friends and I eventually came to this restaurant. It offered "gluten-free burgers with certified gluten-free buns". When the waiter came to take our order, I questioned him a bit about how the food is made and if they take any precautionary steps to avoid cross-contamination. Right away he became very defensive and avoided my question, which immediately made me doubt that he knew what I was talking about. However, he brought me a packaged, certified bun to show me how they store them and it

actually seemed OK. Still, I wouldn't have placed the order, but I saw that they had an "outside" kitchen, so you could watch your food being prepared. I decided to order the burger and see what happens.

They brought the bun out packaged just as the waiter showed me – great! After that everything just went downhill fast. As soon as the cook opened the package all thought of "gluten-free" was forgotten. Other buns with gluten were carried over mine, the patties were the same, the toaster was the same.

Apparently, the waiter saw me watching this ordeal and remembered me telling him all the consequences I could have, if I ate something with gluten in it. After watching them prepare my burger for only a few minutes, I walked up to him, wanting to cancel my order. However, he offered to cancel it before I said anything and even seemed greatly relieved when I agreed. Still, I'm not sure if he wouldn't have served me that burger, had I not walked up to him, even if he knew it wasn't safe for me.





Mirela's experience (Student, Croatia)

I think that knowledge and awareness of the fact that gluten-free diet is actually not just a trendy diet but our only cure would change that perception and motivate them to adjust and become inclusive for celiac students.

The student life of a celiac is very challenging. I study outside my place of residence and live in a student dorm. Gluten-free food is very expensive and preparing gluten-free meals takes a lot of my time.

I have an X-ica, a document that proves the status of a student and serves to achieve a more favorable price of food in the student restaurant, but I can't use it because food in student restaurants is not completely safe for people with celiac disease and student restaurant staff are not willing to help nor adjust. My impression is that they don't know much about celiac disease as well as about risks and mitigation measures involved in gluten-free food preparation. I think that knowledge and awareness of the fact that gluten-free diet is actually not just a trendy diet but our only cure would change that perception and motivate

them to adjust and become inclusive for celiac students.

I would be happy if I could get gluten-free meals because I would have more free time, and it would be cheaper. I have a small kitchen in the dormitory, so I cook my meals there every day, which I then take with me to college. Sometimes it happens to me that the kitchen is already occupied so I have to find available kitchen on other floors. Since other students also prepare food, I have to clean everything up extra and watch out for contamination. On weekends, I go to the market and make a purchase for the whole week. I have to have everything planned out because nutrition is very important to me, and I have other obligations besides college.

As for other gluten-free restaurants in Zagreb, I can't complain much. A couple of new stores have opened where you can buy gluten-free lunch, sandwiches, pastries, etc. After 4 years of student life, I got used to preparing meals every day and harmonizing all college and other obligations.



Ana's experience (Working person, Romania)

After my diagnosis, my social life changed drastically. There are no safe gluten-free eating out options in the city where I live.

I have been diagnosed with celiac disease when I was more than 30 years old. So, part of my life I was able to enjoy the "normal" lifestyle, going out and eating in restaurants without any concerns regarding gluten. I was able to go anywhere, anytime.

After my diagnosis, my social life changed drastically. There are no safe gluten-free eating out options in the city where I live. Meetings with friends and colleagues have changed; they are much shorter and less spontaneous. I definitely cannot go anymore anywhere I want, anytime. Going out in the evening is not something that I can do spontaneously. I have to go home, eat something, and then go out and enjoy time with friends. It is uncomfortable to watch others eat being the one not be able to participate, to share the moment. My friends are very nice and supportive and they rarely eat in front of me, as they understand that it is not something I fully enjoy, nor do they. Nevertheless, the time I spend out has reduced significantly and the type of interactions changed since I need to follow a gluten-free diet.

When I meet new people, we cannot just go out for a lunch or dinner and get to know better as other people do, as there are no safe gluten-free options. So, I might be perceived as less open and less willing to spend time with friends, even though I am not.

There have been moments when I needed to choose something from the menu that was closest to a safe gluten-free option. I often had the feeling that the personnel from the restaurants does not fully understand what gluten is and what the requirements of a gluten-free diet are, why it is important to avoid

cross-contamination and how this can be achieved.

I strongly believe that there is need to increase awareness about celiac disease and gluten-free diet. More knowledge, experiences, and good practices need to be shared with stakeholders from restaurants, cafés or catering in order to create the premises of safe gluten-free options for persons with celiac disease, and thus to improve their quality of life and allow them to have a satisfactory social life. Food is never just food, it is an important part of building social ties, enduring relationships, and not being able to share it has a strong negative impact.



Photo: Unsplash, Priscilla du Preez



Online courses for celiacs, health care professionals and other interested target groups

**Celiac disease? Have you been approached by a celiac recently?
Would you like to learn more about this autoimmune disease
and the gluten-free diet? Would you like to gain new knowledge
about the preparation of a safe gluten-free meal?**

Check our online course at:

<https://celiacfacts-onlinecourses.eu/?lang=en>

The online course »Celiac facts« provides all information about celiac disease – comprehensive, understandable and free of costs! Available in several languages: English, Croatian, German, Hungarian, Italian, and Slovenian and very soon in Romanian and Czech.

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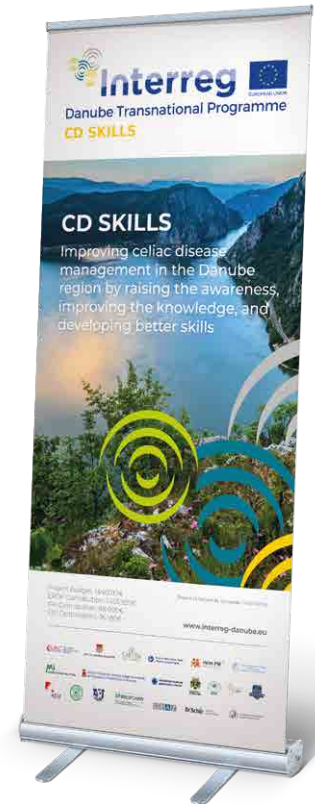
About the project

CD SKILLS project is addressing existing challenges of the healthcare sector in celiac disease management in the Danube region.

Celiac disease is a lifelong systemic reaction against gluten found in wheat, barley, and rye. It can occur at any age but usually starts in early childhood. Women are affected twice as common as men. Without a very strict exclusion diet, severe complications can develop. More than 1% of the population (about 1.2 million) in the Danube region could have celiac disease, with a much larger population affected indirectly. It has an impact on families and friends, as well as on childcare institutions, food producers, catering services, and especially on the healthcare sector. About 80% of patients are diagnosed with a long delay or remain undiagnosed, increasing the risk of complications, resulting in high morbidity and mortality, low school performance, and high work absenteeism. This has an important negative impact on sustainability of the healthcare sector and society. Possible reasons are low awareness and knowledge about the disease, limited access to diagnostic tools, limited opportunities for innovative learning, and inefficient information exchange. CD SKILLS project aims to overcome these shortcomings to ensure a sustainable

public healthcare sector, which will efficiently meet the health-related and social needs of celiacs and the general public affected by celiac disease. The important initial activity of the project is the assessment of regional practices in CD management, which will be followed by the introduction of an innovative learning strategy combining traditional lectures and modern e-tools, supported by the new information exchange platform, development of efficient disease detection strategies, and testing of innovative pilot services focusing on early detection and improved diagnosis of the disease and its complications, and improvement of celiacs' quality of life. The main long-term goals of the project are improvement of the knowledge, skills, and competencies of health care professionals and celiacs as well as other stakeholders, and increased capacity of healthcare service in the Danube region to better meet the needs of people with celiac disease and to improve their quality of life.

More about the project:
<http://www.interreg-danube.eu/approved-projects/cd-skills>



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Danube Transnational Programme

CD SKILLS

