



3rd CD SKILLS NEWSLETTER

Communication (WPC) results of the fourth implementation period

We were very active during this period and put a lot of efforts into communication activities to achieve our goals:

We are very happy to announce that our **brochure for caterers "A gluten-free guide for caterers"** is published, not only in English, but also in Croatian, Czech and Slovenian language (other project language variants will follow soon). This is the third comprehensive guide, after the first one for celiac disease patients followed by the second one for health care professionals, prepared in CD SKILLS project.

This brochure will help catering professionals to increase their competences in preparing dietary meals for their guests who do not tolerate gluten. Read more:



Brochure for caterers

<https://www.interreg-danube.eu/news-and-events/programme-news-and-events/7350> and
<https://www.interreg-danube.eu/news-and-events/programme-news-and-events/7431>



At the end of June 2022 partners will participate at an international targeted event for professionals, at the **annual meeting of the European Society for Paediatric Gastroenterology Hepatology and Nutrition ESPGHAN**, which will take place in Copenhagen. Partners will present posters, hold lectures and disseminate results. A partner meeting will be organized.

In the fourth period we have done great progress and have implemented new e-tool language variants. The e-tools will be available also in Czech, Romanian and Moldavian languages. To support the promotion activities, we have prepared a **promotion postcard and posters to present the e-tools to patients and health care professionals.**

All regions have organized national campaigns to mark **International celiac disease day**. A variety of different events took place in May and June, to raise awareness and to improve the knowledge about celiac disease.

Slovenian project partners UKC Maribor and the Municipality of Maribor visited Day care center "TOTI DCA Maribor" and Elderly home "Dom pod Gorco" and tested the residents and employees with rapid tests for celiac disease with the aim of early detection of this condition, which affects 1-3% of people and in 80% remains undetected causing many complications. Rapid testing for the presence of celiac disease specific antibodies in a drop of blood was performed as part of the pilot activity of the CD SKILLS project. One hundred residents and employees were tested. Read more:

<https://www.interreg-danube.eu/news-and-events/programme-news-and-events/7534> and
<https://www.interreg-danube.eu/news-and-events/programme-news-and-events/7562>



A press release to mark International celiac disease day/month was launched to raise awareness and improve knowledge about celiac disease as well as to inform general public about our screening activities in the frame of pilot activity »Testing for Celiac disease in general population, risk groups and elderly«.

Croatian partners organized an event "By knowledge to the health of people with celiac disease" and participated at the 8th International Congress of Nutritionists

This year's International Celiac Disease Day (May 16th), but also the whole of May, the month of celiac disease awareness, CeliVita dedicated to strengthening the knowledge and understanding of this disease with many faces and a single model of treatment - consistent implementation of gluten-free diet. The educational event "By knowledge to the health of people with celiac disease" was organized as a central event by the CD SKILLS project partners Children hospital Zagreb and CeliVita - Living with celiac disease, with the support of the Croatian Society of Gastroenterology and the Croatian Society of Paediatric Gastroenterology, Hepatology and Nutrition. We presented the Register of Gluten Free Products. The event was held in Zagreb, Croatia. Read more:

<https://www.interreg-danube.eu/news-and-events/programme-news-and-events/7483>

Children's hospital Zagreb and CeliVita were invited to present CD SKILLS project at the 8th International Congress of Nutritionists that took place in Zagreb, Croatia, 19th - 21st May, 2022. The meeting was held as a face-to-face meeting. There were about 50 participants present in the lecture hall, mostly health care participants (nutritionists). Read more:

<https://www.interreg-danube.eu/news-and-events/programme-news-and-events/7488>

"Dan celiakije" – "Celiac disease days" in Serbia

On 12th May 2022 an educational seminar on the celiac disease was held at the University Children's Hospital. Five lectures were held at the seminar. Doc. Dr. Zoran Leković dedicated his lecture to a practical approach to the diagnosis of celiac disease with special reference to TGA. In her lecture, dr. Irena Đorđić presented a wide range of clinical presentations of celiac diseases, as well as the most common mistakes and obstacles in making a diagnosis. Read more:

<https://www.interreg-danube.eu/news-and-events/programme-news-and-events/7563>



Medicine student Iza Zorc and the elderly home resident during the rapid testing on celiac disease



German celiac disease day was organized online to raise awareness about celiac disease

German celiac disease society event on the world celiac day

„During the special online event of the German Celiac Disease Society (DZG) on the World Celiac Day, 16th of May, Dr. Katharina Werkstetter presented our CD SKILLS project and gave an impression on the various thematic fields that are being covered by our collaboration. Read more:

<https://www.interreg-danube.eu/news-and-events/programme-news-and-events/7494>



Celiac Disease Awareness Day – National Campaign, INSMC Bucharest, Romania

Celiac Disease Day was celebrated in May with many interesting activities organized by Center for Management of Celiac Disease from National Institute for Mother and Child Health "Alessandrescu Rusescu" Bucharest, Romania, coordinated by dr. Alina Popp.

In the first half of the month, a gluten free baking workshop for children, **"Pastry without gluten in the hands of children"**, was organized with the support of Kids Chef Academy from Bucharest. During the session, the 11 participants had a hands-on experience and learned how to prepare gluten free pastry from a professional pastry chef. Read more:



"Pastry without gluten in the hands of children" work shop

<https://www.interreg-danube.eu/news-and-events/programme-news-and-events/7565>

Pilot projects achievements of the fourth period (WPT4)

Partners were very active to implement all seven pilot activities using common pilot methodology based on experience of CE Focus IN CD project. All project pilots have a transnational dimension of development, implementation and transferability. The results will be published in our last newsletter in December 2022, this time we are publishing only a few fourth period highlights.

PILOT: Gluten-Free Products Registry (Registry)

The first Gluten-Free Product Registry (Registry) will facilitate the treatment of celiac disease in Croatia: reliable information on safe foods for patients is now available in a free web application that has been developed as a part of CD SKILLS project (WPT4 Pilot projects). Among the first information in a Registry, there are those from project associate partner Schär products, present at the Croatian market. **You can check the Registry at this web address:** <https://bezglutena.celivita.hr/>

Benefits of such GF products registry are numerous:

- all the relevant food information is gathered at one place
- information are available 24/7
- information is reliable
- information is searchable
- information is digital and available via mobile phones or at the computer
- information is free of charge



Front page of Gluten-free products registry

Apart from celiac patients, the Registry is a useful tool for all those involved in the procurement and preparation of gluten-free food, regardless of whether it is prepared in family homes, institutional kitchens (kindergarten, school, hospital...), hotels or restaurants caterers. Read more:

<https://www.interreg-danube.eu/news-and-events/programme-news-and-events/7396>



PILOT: Improved capacity of food catering providers to provide safe gluten-free products

Educational event “Alphabet of gluten-free cuisine”

In the frame of the pilot activity »Improved capacity of food catering providers to provide safe gluten-free products«, we organized a transnational event on 10 March 2022, which **took place virtually (live) in four languages simultaneously, in Slovenian, Croatian, Serbian and Romanian, in order to improve the knowledge of caterers and all employees who are likely to be involved in the preparation of gluten-free meals for patients with celiac disease, especially staff in the kitchens of kindergartens, hospitals, schools and elderly homes as well as restaurants and hotels. Read more:**

<https://www.interreg-danube.eu/news-and-events/programme-news-and-events/7329>



A short teaser (T) of the event is available here

Optimization of diagnostic strategies in celiac disease (WPT2)

Work package two aims to improve the diagnostics of celiac disease in the Danube region by harmonizing serum celiac antibody detection tools and optimize new technical approaches. During the project we purified IgA patient antibodies to get reference material for calibration antibodies and developed cloned antibody preparates to transglutaminase epitopes that can be applied in defined concentrations in the assay as calibrators. Further, medical partners collected patient serum samples which represent panels of study material for comparison in each antibody measurement assay utilized by the different centers. Approximately 320 serum samples have been collected so far by the project partners and one aliquot of each was sent in May to PPI0 for central testing. Celiac disease diagnostic tests usually measure IgA class antibodies, since they are of the relevant immunoglobulin type for the disease process. In order to do so, enzyme-labelled secondary antibodies against



Bio-layer interferometry device (BLITZ) purchased in CD SKILLS project



Hungarian team working in Celiac disease center in Budapest



human IgA are applied in the diagnostic assays. Upon binding, the enzyme component of these reagents generates an amplified colour or fluorescent signal which can be easily measured. When utilizing cloned antibodies as calibrators which are not of IgA type, signal generation can be ensured by conjugating the calibrator antibody directly to the signal producing enzyme. There are variations among different commercial celiac antibody tests which type of enzyme is used. Most use horse-radish peroxidase and we obtained good results with such type of conjugates on various commercial ELISA-based manual assays. However, newer celiac antibody tests are also run on automated, machine-based platforms where other enzymes are applied. One experimental antibody conjugation was tried with one of such enzymes and we were able to obtain an encouraging proof-of-concept preliminary result with it on the Phadia 200 platform. Another option is to introduce label-free measurement assays based on the bio-layer interferometry device (Blitz) purchased earlier for this project. Measurement optimisation with calibrators is in progress also on this platform.

Building knowledge capacities (WPT3)

The aim of the Work Package „Building knowledge capacities“ is to improve knowledge, skills and competences of health care professionals, patients and general public and thus to improve the capacity of public healthcare system by implementing innovative learning strategies and by promoting efficient knowledge exchange. This is being achieved by four activities:

1. Organisation of learning interactions

During the first nearly two years of the project following learning interactions were organized: two transnational and eight regional learning interactions. In addition, **partners held more than 20 lectures at educational institutions**: primary schools, high schools, universities (medical schools, school for nurses, faculty for pharmacy and biochemistry, faculty for agriculture and biosystemic sciences, biomedical postgraduate studies), at university hospitals for paediatric residents and nurses.

Celiac facts
Online courses on celiac disease

A warm welcome to Celiac Facts!

Online Course for Patients

Online Course for Physicians & Dietitians

Web-App to Celiac Disease

E-tool for patients and health care professional are available in several languages

Continent

Continent	Visits
Europe	5,000
North America	1,000
Asia	300
South America	81
Africa	36
Oceania	47
Central America	1

Since 1st January until June we had 7,669 visitors from all over the world also from North America and Asia.

Country

Country	Visits
Germany	1,341
United States	344
Italy	271
France	200
Canada	167
Hungary	166
Russia	153
China	150
Indonesia	140
United Kingdom	131

Countries with 10 most frequent visits

Visitor Map

7,669 visits

Visitor map



2. Implementation of innovative e-learning tools for health care professionals and patients

Within CD SKILLS project, two innovative e-learning tools are being implemented, one for health care professionals and one for patients. The aims of these tools are to improve and harmonize existing celiac disease management practices in the Danube region and to increase patients' self-management capacities.

The e-learning tools are built on the existing tools developed within the CE Focus IN CD project and updated based on the new ESPGHAN (European Society of Paediatric Gastroenterology, Hepatology and Nutrition) celiac disease management guidelines published in 2020 and on the lessons learned from CE Focus IN CD project.

Three new language variants have been added and e-learning tools are now available in English, German, Slovenian, Hungarian, Croatian, Czech, Romanian (Romania) and Romanian (Moldavia) language. Incorporated are also educational video cartoons for health care professionals and patients.

Both e-learning tools are an open on-line course that can be accessed without the need to register.

The course focusing on healthcare professionals is comprised of two units, covering basic information on celiac disease, clinical manifestations, diagnosing, treating and monitoring of celiac disease. Each unit offers also a self-assessment and several lessons including interactive elements.

The course for patients includes four units covering background, diagnosis, treatment and living with celiac disease and explaining the medical background in lay terms. It also offers self-tests, graphic illustrations interactive elements, videos and a dictionary.

The use of tools is promoted through the networks of medical partners, professional societies and patient support organisations and public authorities.

Please, visit the e-learning tools at: <https://celiacfacts-onlinecourses.eu/?lang=en>

3. Establishing CD SKILLS transnational information exchange network for health care professionals

CD SKILLS medical partners established a transnational **Information exchange network**. That is a web-based platform designed for health care professionals **with the aim to exchange knowledge and information, to discuss challenging cases and to share problems in the field of celiac disease with other members of the network**. This platform is open access and without the need for registration.

Each month an interesting and instructional clinical case is presented as a „case-of-the-month“ presentation. Up till now each project partner presented at least one case, having in total 17 case presentations at the platform. The second part of the platform is dedicated to the „cases for discussion“ where partners and other health care professionals can present and discuss challenging celiac disease cases, ask questions and share problems.

The platform was presented to local health professionals at several regional and local meetings. Also, on January 22, 2022 members of the CD SKILLS consortium attended the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) Coeliac Disease Special Interest Group (CD SIG) meeting and Zrinjka Mišak from CHZ presented the current status of the information exchange platform and e-learning tools. Both activities were suggested to be used by other members of the SIG.

Please, visit the platform, which is available here: <https://cdskills.eu/>

There you can find cases like:

- Diagnosis of CD after repeated (negative) screening in Down syndrome
- Refractory CD in childhood does not exist
- CD as the cause of failure to thrive in cystic fibrosis
- CD and Crohn's disease
- ...



Information exchange network (platform) cases

4. Cross-disciplinary Study visits and international professionals and patients

Unfortunately, due to COVID-19 pandemics we were unable to organize cross-disciplinary study visits during the first year and a half of the project. However, during the last period two study visits were accomplished, one to Tampere, Finland and one to Zagreb, Croatia.

In addition, project partners attended and actively participated at several international meetings (mostly held online) such as WCPGHAN (World Congress of Pediatric Gastroenterology, Hepatology and Nutrition), ESsCD (European Society for study of Coeliac Disease), Europediatrics, UEGW (United European Gastro week) and presented progress and results of the CD SKILLS project.



Cross-disciplinary Study visits have been postponed COVID-19 pandemics



CD SKILLS scientific meeting - Celiac disease diagnosis - all is old, and all is new*

The scientific meeting Celiac Disease Diagnosis - All Is old, and all Is new* addressed to health care professionals, was organized simultaneously with 5th SCOM taking place in Bucharest, Romania. Important European Celiac disease experts gave presentations about achievements and challenges related to celiac disease diagnosis.

Jernej Dolinšek, MD, PhD, University Medical Centre Maribor, Slovenia presented the challenges related to diagnosis of celiac disease, among them being the changing clinical presentation, unreliable diagnostic tools, lack of knowledge, un-harmonized guidelines, as well as low guideline adherence.

Zrinjka Mišak, MD, PhD, Children's Hospital Zagreb, Croatia gave a lecture about the status of Celiac disease in Mediterranean area. Dr. Mišak highlighted that in many Mediterranean countries, few cases of celiac disease are diagnosed because of low level of awareness, knowledge and skill, but also the lack of diagnostic resources.

Alina Popp, MD, PhD, University of Medicine and Pharmacy "Carol Davila" and National Institute for Mother and Child Health "Alessandrescu Rusescu" Bucharest, Romania gave a lecture about Strengths and Limitations related to Intestinal biopsy in celiac disease. Dr. Popp talked about pitfalls in the interpretation of the intestinal biopsy and the necessity of interdisciplinary communication for a correctly established diagnostic.

Kalle Kurppa MD, PhD, University of Tampere and Tampere University Hospital, Finland, shared interesting information related to No-biopsy guidelines for the diagnosis of celiac disease in adults: Finnish experiences. Serology diagnosis seems to be as accurate as biopsy in adults with celiac disease, but further data need to be analyzed in order to have a well-established no-biopsy guideline in adult patients validated in all European countries. He further presented the new non-biopsy Finnish strategy in adult celiac disease.

In order to improve their knowledge, healthcare professionals can access Celiac disease information exchange platform, at <https://cdskills.eu>, and online courses - CELIACFACTS, at www.celiacfacts.eu. The website news is available here:

<https://www.interreg-danube.eu/news-and-events/programme-news-and-events/7566>



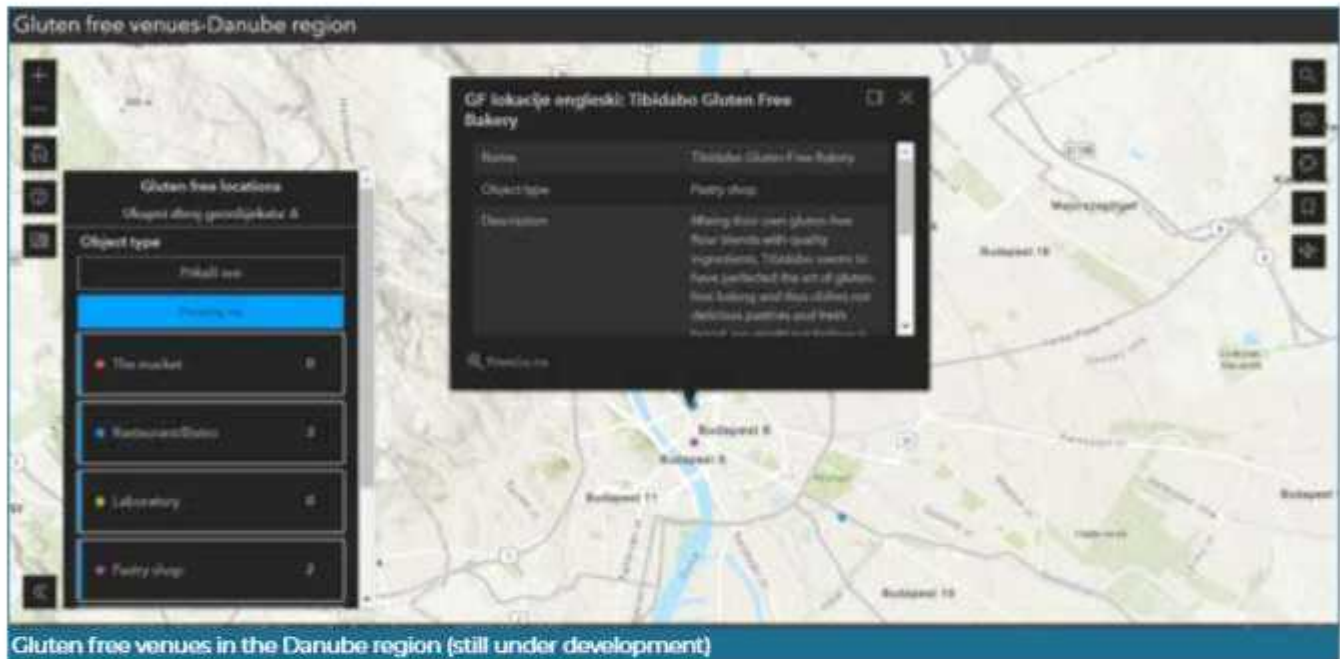
Efforts to optimize the diagnostic strategies in Celiac disease were presented by Ilma Korponay-Szabó, MD, PhD



Gluten-free restaurants guide application

Project partners have collected the information about safe gluten free venues in their countries, which have been placed on the interactive map.

Users—people on gluten free diet, can easily access the information via web application, on their mobile devices or at the computer and get useful information about the type of venues, offers, their location and contact information.



Visit CD SKILLS (Danube Transnational Programme) website and stay informed:
<http://www.interreg-danube.eu/approved-projects/cd-skills>

Our e-learning tools for patients and health care professionals are available at: www.celiacfacts.eu