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British Columbia Celiac News

Canadian Celiac Association L'Association canadienne de la maladie coeliaque

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CCA Vision Statement:

The gluten solution: Find. Treat. Cure.

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NEXT ISSUE:

If you have any recipes, restaurant reviews/articles for the December 2019 issue, please have them submitted by November 15, 2019.

If you have any comments, praises or criticisms, quips or questions:

Please submit to:

- ° info@vancouverceliac.ca
- ° 604-736-2229 / 877-736-2240
- CCA British Columbia Letters to the Editor
 360-1385 West 8th, Vancouver, BC V6H 3V9

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NEWSLETTER SUBMISSION DEADLINES

Newsletters will be distributed:

March 1st - Easter & Spring	September 1st - Fall & Back to School
June 1st - Travel & Summer	December 1st - Christmas & Holidays

Also, please submit your content to us a minimum of 3 weekends prior to the edition you'd like to be featured in. We will accept early submissions for upcoming editions as well, just let us know which issue you'd like to be in. You can summit your stories, recipes, photos, etc in a variety of ways. If you have any questions: EMAIL: val_vaartnou@telus.net or info@vancouverceliac.ca

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resident's Message



I hope you have found opportunities to relax, recharge and reconnect with family friends and colleagues over the Summer months.

As you will read about in this Newsletter, we have had another very successful Scotia Bank Charity fundraising event. Our friends and sponsors allow us to keep our Chapter active and provide us the opportunity to donate to those who continue to do research to find a cure for Celiac Disease. We will continue to fundraise all year round but this event is certainly one we are very proud of. We will back next year for our 5th with our goal to be even higher; we hope that you are able to participate in some small way.

I am looking forward to our next travel adventure. We are off to Ireland and Scotland this month. This will be one of the few times when traveling I that

am not worried about the road trip. I have heard so many wonderful things about Ireland's understanding and accommodation for those of us with Celiac Disease. This is thanks to Facebook recommendations, travel bloggers and one of our past members, Aliya, who moved there last year and has become quite active in her local Chapter.

I must admit, I do not easily navigate myself very well through Facebook (my closest friends can attest to this) However, for those of us impacted by Celiac Disease, I have certainly come to appreciate just how much support we provide to each other in so many different aspects. Some of us are parents trying to navigate the health of their child, or we are the children of elderly parents who are trying to eat safely in an institutional type environment. The recommendations for restaurants I have learned about are truly priceless and probably the most commonly asked question that we seek out. (Besides how long will it take for my tTG levels to come down to a normal level.)

Your Board has been looking to what our future looks like and how we can best progress successfully. Currently we are in the process of changing our Chapter's name to better reflect who we are geographically. We held a Special Meeting* to pass a Resolution to change our name to Canadian Celiac Association British Columbia. Once the Resolution is passed, we will continue with all the necessary changes that come along with the name change, such as our bylaws, Constitution and Social Media.

Thank you for your continued support; your membership is what keeps us strong and loud!

Wishing that the Autumn brings you and your loved ones bountiful health and happiness.

And remember......"A smile is a curve that sets everything straight" Phyllis Diller

*(at the date I am writing this we have not yet had this meeting.)

Líz



On-line Information to Help for the School Year

"Colorful, Fun, and Magical Gluten Free Bento Box Lunches ALL Kids Will Love!" preparing THE coolest gluten free kids school lunch ever to send with your child on a weekly basis and on any field trip. <u>https://www.coloredinflour.com/</u> <u>post/colorful-fun-and-healthy-gluten-free-school-lunches-all</u> <u>-kids-will-love</u>

Books to Explain to Your Child About Celiac Disease and Recipes: available on Amazon

- Why Can't I Have a Cupcake? By Betty Childs and illustrated by Dan Olson
- The Celiac Kid by Stephanie Skolmoski and Anneliese
 Bennion
- Mommy, What Is Celiac Disease?: A look at the sunny side of being a gluten-free kid by Katie Chalmers
- by Katie Chalmers
- Dear Celiac by Kristen Adam and Van Yzendoorn, Tiffany Gluten Free Recipes For Kids: How To Guarantee Nutritious Gluten Free Lunch Times at School! (Celiac Disease In Children Book 3)

- Gluten Free Recipes For Kids: How To Cook Enjoyable Gluten Free Dinners for the whole family! (Celiac Disease In Children Book 4)
- Gluten Free is Part of Me by Laurie Oestreich

https://www.glutenfreerespect.com/child-has-to-be-glutenfree-dear-teacher/ Discussions to have with your child's teacher

https://gfjules.com/back-school-gluten-free/ Jules provides a gluten-free e-book. Although it talks about the US 504 plan, the information can still be valuable for preparing for the school year.

https://thehelpfulgf.com/15-gluten-free-lunch-ideas-for-back -to-school/

Vegan and Nut Free Bento Boxes – You Tube <u>https://</u> www.youtube.com/watch?v=98nm1Qw4cFE <u>https://www.momables.com/7-gluten-free-lunch-ideas-for-</u> school/ Lunch ideas with recipes

nuPasta Gluten free and al dente every time!



Ask Jess: Nutrition Corner



Jess Pirnak is a Registered Dietitian who kindly volunteers her time to write newsletter articles for us and answers questions from our members. Jess can be reached at nutrition@vancouverceliac.ca if you have any questions.

She can be contacted for consultation at: https://www.foodyourself.com/contact-1/

Q) I was hoping to start following a plant-based diet, but I'm not sure if tofu is safe for someone with celiac disease or safe in general?

A) Tofu is definitely a staple in vegetarian and vegan diets and good news tofu, in general, does not contain gluten; however, certain varieties do! Watch out for the prepared or flavoured tofu varieties as they might contain soy sauce.

Regarding if tofu is safe in general: a few years ago, early animal studies created some bad publicity for soy foods by claiming the estrogen-like compounds found in soy may raise the risk of hormone related cancers. After the dust settled, what we know now from stronger human studies and a consistent body of research is that soy foods are safe for those diagnosed with cancer AND those without. The fact is that soy foods contain several key nutrients and phytochemicals, including isoflavones. Isoflavones are a group of phytoestrogens, studied for their cancer prevention properties when eaten in similar amounts to a typical Asian diet, which is about two servings a day. It is important to note that phytoestrogens are not the same strength as your body's own estrogen – in fact, they are known as 'weak estrogens' which tend to have a moderating (not strictly additive) effect on your body's hormone levels.

However, it should be noted that soy supplements may contain a concentrated source of plant estrogens than found in natural whole foods and until more information is available women are being advised to avoid soy supplements (e.g. soy products in concentrated or pill form).

Celiac Disease in the News

Submitted by Val Vaartnou

The following are summaries of research in progress or completed from credible medical journals and medical sites. Links are provided where further information can be found.

Use of Fecal Gluten Immunogenic Peptides (GIP) to Monitor Children Diagnosed with Coeliac Disease During Transition to a Gluten-free Diet

97% of children had detectable gluten peptides at diagnosis. On a gluten-free diet at 6 months this dropped to 13% of children, however increased to 25% at 24 months. This suggests that gluten exposure was intentional. The elevation of tissue transglutaminase antibody was more prolonged in patients with detectable gluten peptides. Adolescence is a developmental phase characterized by rebellion and teenagers may be particularly susceptible to the burden of a GFD related to stigmatization and are more likely intentionally non-adherent in such settings. Teenagers are more likely to eat out and are therefore subject to more cross contamination. It is therefore important to diagnose CD as soon as possible to avoid the years when social issues become a problem. The introduction of GIP as an assessment tool of GFD adherence may help to ascertain dietary compliance and reduce the need for additional invasive investigations on follow-up.

For more information: Aliment Pharmacology and Therapeutics. 2019;49(12):1484-1492

Vitamin Deficiencies May Be the Only Sign of Celiac Disease

In a Mayo Clinic proceeding, June 2019, Dr. Joseph Murray, study coauthor and a professor of medicine at the Mayo Clinic in Rochester, Minnesota, indicated that "People have preconceived ideas of what celiac disease looks like. They expect to see patients who because of nutrient malabsorption and diarrhea will end up being skinny with lots of deficiencies. But now we have lots of patients who haven't lost weight - and many who are quite overweight - but still have micronutrient deficiencies. While they are not losing calories, they are not absorbing some vital nutrients."

Low levels of certain micronutrients, in particular iron, vitamin D and zinc can cause telltale fatigue, that may be the only symptoms of CD. In a study of 309 adults, zinc was deficient in 59.4% of those with celiac versus 33.2% of controls; copper was low in 6.4% of celiac patients versus 2.1% of controls, folate was low in 3.6% of celiac patients versus 0.3% of controls and vitamin B12 was low in 5.3% of celiac patients versus 1.8% of controls. Among celiac patients, iron was low in 30.8%, but there were no controls with iron measurements to compare to. And contrary to traditional assumptions about celiac and thinness, weight loss was seen in just 25.2% of patients diagnosed with the disease.

For more information: Article by Linda Carroll, June 26,

2019, Reuters Health http://bit.ly/2XCi8Wq

Early-Life Gluten Intake Linked to Increased Risk of Celiac Disease

"We found that 1-year-olds in the highest third of gluten intake had a two-fold increased relative risk of developing celiac disease autoimmunity (CDA), a potential prodromal stage of celiac disease," said Dr. Karl Marild from the Norwegian Institute of Public Health, in Oslo, Norway, and Queen Silvia Children's Hospital, in Gothenburg, Sweden. Compared with 1-year-olds in the lowest third of gluten intake, those in the highest third had a 96% increased risk of CD (P=0.09) and a significant 2.17-fold increased risk of CDA. The study was done on 1,875 children who were at risk of developing CD in the Denver area of the US.

For more information: American Journal of Gastroenterology, https://bit.ly/2x5ICRo

Association Between Antibiotics in the First Year of Life and Celiac Disease

The intestinal microbiota is believed to be involved in the pathogenesis of celiac disease, in addition to genetic variants and dietary gluten. The study collected information from 1.7 million children, including 3, 346 diagnosed with CD. Exposure to antibiotics was identified if the child took antibiotics in the first year of life. The study found that risk of CD increased for those exposed to antibiotics in their first year of life and it also increased more with each prescription for antibiotics in the first year. Further research is required in this area.

For more information: Gastroenterology, **June 2019** Volume 156, Issue 8, Pages 2217–2229

Human Gut Derived-organoids Model to Study Gluten Response and Effects on Microbiome in Celiac Disease

Using intestinal organoids developed from duodenal biopsies from both non-celiac (NC) and celiac (CD) patients, the study explored the contribution of gut epithelium to CD pathogenesis and the role of microbiota-derived molecules in modulating the epithelium's response to gluten. When compared to NC. RNA sequencing of CD organoids revealed significantly altered expression of genes associated with gut barrier, innate immune response, and stem cell functions. The study concluded that: (1) patient -derived organoids faithfully express established and newly identified molecular signatures characteristic of CD. (2) microbiota-derived bioproducts can be used to modulate the epithelial response to gluten. Finally, the study validated the use of patient-derived organoids monolayers as a novel tool for the study of CD (mini-gut models).

For more information: <u>https://www.nature.com/articles/</u> <u>s41598-019-43426-w</u>

Celiac Disease in the News

Potential Risk Factors for Celiac Disease in Children

This study found a connection between skim milk consumption, and vitamin D drop use for more than 3 months, and later development of celiac disease. It also found evidence to support earlier data that early life exposure to antibiotics and early life infection, especially ear infection, are also associated with the development of celiac disease in children.

For more information: <u>https://www.dovepress.com/</u> <u>potential-risk-factors-for-celiac-disease-in-childhood-a-case</u> <u>-control--peer-reviewed-article-CEG</u> Published July 4, 2019

Gluten inequality? Report finds two thirds of coeliac sufferers in Italy are female

Women, who have more reactive immune systems than men, are more susceptible to coeliac disease, says the Italian Ministry of Health.

For more information:

https://www.foodnavigator.com/News/Science/Gluteninequality-Report-finds-two-thirds-of-coeliac-sufferers-in-Italy-are-female_25-Feb-2019 By Flora Southey

Anxiety Might be Alleviated by Regulating Gut Bacteria

People who experience anxiety symptoms might be helped by taking steps to regulate the microorganisms in their gut using probiotic and non-probiotic food and supplements.

The authors say one reason that non-probiotic interventions were significantly more effective than probiotic intervention was possible since changing diet (a diverse energy source) could have more of an impact on gut bacteria growth than introducing specific types of bacteria in a probiotic supplement.

For more information:

https://www.sciencedaily.com/releases/2019/05/190520190 110.htm

Adults over 50, Newly Diagnosed with CD Have Greater Risk of Some Cancers

A Dutch study of medical records between 1994 and 2014 correlated the diagnosis of CD and malignancies associated with lymphoma and GI tract cancers and found them to be higher in CD patients. T-cell lymphoma, small bowel carcinoma and esophageal carcinoma had elevated risks although the absolute risks of the diseases were low.

For more information:

https://journals.sagepub.com/doi/full/10.1177/20506406188 00540

United European Gastroenterology Journal

Advances in the Understanding of How Microbes Promote Food Sensitivity

New findings suggest that enzymes produced by opportunistic pathogens and certain bacteria within the gut can trigger host immune responses that could increase susceptibly to food sensitivities.

McMaster University have been completing research into gluten digestive processes. In a recent study published in Nature Communications and led by Dr. Elena Verdu of McMaster's Farncombe Institute, Dr. Caminero identified additional pathways by which the opportunistic pathogen incites gluten sensitivity, but which are independent of gluten metabolism. 'Biopsies from celiacs had more bacteria that were able to use gluten as an energy source," said Verdu.

When "HLA-DQ8" mice were colonized with the proteaseproducing *P. aeruginosa*, the bacterial proteolytic activity synergized with gluten to induce more severe inflammation and intestinal damage.

For more information:

https://www.gutmicrobiotaforhealth.com/en/advances-inthe-understanding-of-how-microbes-promote-foodsensitivity/ and Caminero A, McCarville JL, Galipeau HJ, *et al.* Duodenal bacterial proteolytic activity determines sensitivity to dietary antigen through protease-activated receptor-2. *Nat Commun.* 2019; 10:1198. doi: 10.1038/s41467-019-09037-9.

Family Screening for Relatives of Celiac Patients

Even patients without symptoms benefit from going gluten free because they have fewer digestive problems, less intestinal damage and less anxiety about the illness. Studies estimate the disease affects 10 percent of people who have a first-degree relative with celiac. To achieve earlier diagnosis, guidelines recommend screening parents, siblings and children of those with celiac.

For more information:

<u>https://www.glutenfreeliving.com/gluten-free/celiacdisease/family-screening-for-relatives-of-celiac-patients</u> April 22, 2019

High Fiber During Pregnancy Reduces Risk of Celiac Disease in Children

"Experts from Norway found that the risk of pediatric coeliac disease was 8% lower per 10g increase in fiber intake during pregnancy. For those with the highest fiber intake (>45 grams per day), the risk was 34% lower in comparison to the lowest fiber intake (<19 grams per day). High fiber intake from fruits and vegetables, rather than from cereals, were associated with the lowest risk."

For more information: <u>https://www.eurekalert.org/</u> pub_releases/2019-06/sh-hfd053019.php

Understanding Prebiotics and Fiber

For a great infographic on this topic see: <u>https://</u> www.gutmicrobiotaforhealth.com/en/the-different-ways-that -prebiotics-and-fiber-affect-the-gut-microbiota/

The Link Between Type 1 Diabetes & Celiac Disease



- On average, 8% of people who have Type 1 Diabetes also have Celiac Disease.
- 60-70% of children who have Type 1 Diabetes, have no obvious symptoms of Celiac Disease.
- Both autoimmune diseases are inherited and share similar genetic origins.
- 90% of the time, the diagnosis of Type 1 Diabetes comes before a Celiac Disease diagnosis.



Screening for Celiac Disease



Symptoms	Undiagnosed Celiac Disease	Type 1 Diabetes
Frequent Urination		٧
Unusual Thirst		v
Extreme Hunger	v	v
Weight Loss	v	٧
Extreme Fatigue	V	٧
Irritability	v	٧
Growth Failure (children)	٧	٧

Sources: www.diabetes.org/ www.csaceliacs.org

Why Screen? May prevent bone loss, stunted growth & may reduce hypoglycemic episodes.

How often? Screen for Celiac Disease at time of diagnosis with Type 1 Diabetes and every 1 to 5 years after.

Celiac Disease Treatment: A Life Long Gluten-Free Diet 8

No Needles

Gut Health - Prebiotics

Information submitted by Val Vaartnou

<u>https://thewholejourney.com/prebiotics/</u>Christa Orecchio Check out the video on this site. The site also contains many articles and videos on gut health which is crucial for those diagnosed with celiac disease.

When it comes to good gut (and immune) health, probiotics get all the press, as beneficial live microorganisms can survive exposure to stomach acid and bile and support a healthy balance of bacteria within the intestines. But we wouldn't need nearly as many probiotics if we consumed the right PREbiotics.

You see, PREbiotics act as FOOD for your good gut bacteria and help them grow naturally, on their own, so you won't need to consume as many probiotics.

PREbiotics are found naturally in foods containing a plant fiber known as inulin. And inulin improves food's nutritional value.

Some examples of foods high in inulin include (picture news-medicine.net):

- Chicory
- Garlic
- Asparagus
- Bananas
- Onions







Celiac in the Kitchen

Aromatic Basil and Cherry Tomato Salad

Simple but tasty

Author: Andrea Beaman, author of Using Herbs and Food as Medicine, <u>https://andreabeaman.com/</u>, see her website for lots more recipes

Serves: 2 servings

Ingredients:

- 2 cups heirloom cherry tomatoes, halved
- 1 small red onion, peeled and sliced into thin crescents
- 14-16 whole small basil leaves
- 3 tbsp. white wine vinegar
- ¹/₃ cup extra virgin olive oil
- Generous pinch of sea salt and freshly ground black
 pepper
- Garnish with 1/4 cup feta cheese (optional)

Directions:

- 1. Put the tomatoes into a salad bowl
- 2. Add red onion and basil
- 3. Combine vinegar, salt and pepper, and olive oil
- 4. Gently toss the salad with dressing
- 5. Garnish with crumbled feta cheese



Salmon Burgers

Courtesy of Elana's Pantry <u>https://elanaspantry.com/</u> <u>sesame-salmon-burgers/</u>

When the local farmer's markets have fresh corn available, this is a hearty soup that can be a full meal. If you are dairy free, use vegetable or chicken broth to replace the milk. The soup will not be as rich, but the fresh ingredients will make it tasty.

Ingredients:

- 1 pound salmon, skin removed
- 1 tablespoon toasted sesame oil
- 1 tablespoon ume plum vinegar
- 1 clove garlic, pressed
- 1 teaspoon peeled and minced fresh ginger
- ¼ cup chopped scallions, white and green parts
- ¼ cup toasted raw sesame seeds
- 2 large eggs
- 1 tablespoon coconut flour
- coconut oil, for frying

Directions:

- 1. Rinse salmon, pat dry and cut into ¹/₄-inch cubes
- 2. In a large bowl, combine salmon, oil, ume, garlic, ginger, scallions, sesame seeds, and eggs
- 3. Stir coconut flour into mixture
- 4. Use a ¼ cup measuring cup to form mixture into patties
- 5. Heat coconut oil in a 9 inch skillet over medium-high heat
- 6. Cook patties for 4 to 6 minutes per side, until golden brown
- 7. Transfer patties to a paper towel-lined plate and serve hot



Picture: foodrepublic.com

Celiac in the Kitchen

Celiac in the Kitchen	nick_
Best Ever	Vegan kinnikinne
Bars	Avocado Bagels
Courtesy of Elana's Pantry: https://elanaspantry.com/best -ever-bars/ Ingredients: Crust • 1½ cups almonds • ½ teaspoon Celtic sea salt • ¼ top raspberry jam • ¼ cup raspberry jam • ¼ cup coconut oil, melted Topping • 1 cup chocolate chips • ½ cup unsweetened coconut flakes Directions: 1. In a food processor, pulse almonds until the texture of gravel 2. Pulse in salt, jam, and coconut oil until dough forms 3. Press dough into an 8 x 8-inch baking dish 4. Melt chocolate over very low heat in a saucepan 5. Pour chocolate over crust 6. Sprinkle coconut flakes over chocolate	 Light and refreshing perfect for breakfast or a mid-day snack. Recipe created by Kinnikinnick Corporate Chef Lori Grein Ingredients: 2 firm avocados – remove pit and peel/cut into ¼ pieces (512 g) ¼ tsp salt (1 g) 1 tbsp olive oil (15 g) ½ lemon - juiced/zested (27 g) 2 Kinnikinnick plain bagels (172 g) Directions: In a medium bowl, combine all ingredients and mash together using a fork or potato masher. Spread on toasted Kinnikinnick bagels and top with your favourite toppings. Tips: Topping suggestions Radish sprouts, sliced radishes Cucumber strips and assorted peppers
 Refrigerate for 30 minutes, then cut into 16 squares Refrigerate for an additional 1½ hours Serve Serves: 16 bars 	



Picture: Theanthonykitchen.com



Celiac in the Kitchen

Bacon Bagel Stuffing

Recipe created by Kinnikinnick Corporate Chef Lori Grein

It's your breakfast favourites all wrapped up in a stuffing dish.

Ingredients:

- 1 package Kinnikinnick Plain Bagels cut into ½ inch cubes (344 g)
- 1 lb bacon cooked/chopped (454 g)
- 2 tbsp olive oil (30 g)
- 1/2 red onion diced (175 g)
- 2 celery sticks chopped (8 g)
- 2 cloves garlic diced (6 g)
- 2 sprig thyme stem removed/chopped fine (1 g)
- 2 sprig sage stem removed/chopped fine (2 g)
- 1 sprig rosemary stem removed/chopped fine (1g)
- ¹/₄ cup chopped fresh parsley (15 g)
- 1/2 tsp salt (2 g)
- 1 tsp pepper (2 g)
- 1 cup prepared chicken stock (240 g)

Directions:

- 1. Preheat oven to 350°F (176°C), line a baking sheet with parchment. Set aside.
- 2. Spread cubed bagel pieces evenly on prepared pan. Bake in preheated oven for 10 minutes, turning bagel cubes once in oven. Turn oven off, leave pan in oven for 10 minutes turning once.
- 3. Remove from oven and let cool.
- 4. In a large skillet, heat olive oil over medium heat. Sauté onion, celery, garlic, salt and pepper for 5-7 minutes or until onion are translucent.
- 5. In a large bowl toss together dried cubed bagel, onion mixture, bacon and prepared herbs.
- 6. Moisten stuffing with 1/3 cup chicken stock.
- 7. Preheat oven to 350°F (176°C).
- 8. Lightly grease a 4-quart casserole dish. Place prepared stuffing in casserole dish and moisten with remaining chicken stock prior to baking.
- 9. Bake covered for 30 minutes in preheated oven. For a crispier finish uncover for the last 5 minutes.

Tip:

Stuffing can be prepped and stored in the refrigerator up to 24hours ahead. Hold back 2/3 chicken stock until just prior to baking in a casserole dish.

If stuffing inside bird, pat turkey dry inside and out. Stuff both cavities. Skewer cavities closed, tie legs together and tuck wings under back. Place in roasting pan breast side up. Follow cooking directions based on the weight of your bird to an internal temperature of $165^{\circ}F$ ($74^{\circ}C$).



ikinnick

Thanks to Lynda Neilson for taking such excellent notes at the conference.

Panel 1: Research - Table Discussion / Q&A



Dr. Don Duerksen (Gastroenterologist, St. Boniface Hospital, University of Manitoba)

Dr. Duerksen talked about the Canadian Celiac Association – Professional Advisory Council (PAC) role with respect to research. There are three main areas that are needed to be addressed.

1. Major research involvement

- a. Two awards are given out J A Campbell Research and Young Investigator Awards
- b. PAC adjudicates these awards
- c. These awards have funded a lot of Canadian research projects and stimulated research in Canada

2. How to get Celiac Disease (CD) higher funding for gastroenterology research

- a. Started funding JA Campbell in 1992
- b. Should we partner with industry for these awards?
- c. Secondary PAC does surveys
 - CCD survey Canadian Celiac Health Survey in

 2007
 - ii. CCA and FQMC survey partnership living with CD survey
 - iii. What should PAC take on in terms of research?

3. Position Statements and Publications

- a. Tackle both common and controversial issues like home blood testing vs management of bone health in patients with CD. Both published in journals not CCA websites. Another example is the CCA Guidelines on Oats.
- b. Not "research" but peer reviewed journals, accessible and credible and then published on celiac.ca
- c. Must be careful with controversial issues remain evidence based.

Summary – JA Campbell gets focus, however, need to extend and enhance support and be involved in Position Statements.



Dr. Elena Verdu (Professor, Division of Gastroenterology McMaster University)

Dr. Verdu stated that CD is the only autoimmune disorder with a known dietary trigger and where molecular HLA based mechanisms are understood. We also understand that damage can be reversed by GF diet. This ability to reverse is unique for an autoimmune disorder.

This enables researchers to model the gastrointestinal disorder as it is understood and dynamic.

There has been an increase in prevalence of CD from 2000 onwards. IGA TG2 serology (blood test) is 95-97% accurate.

This prevalence is on the rise, growing 4x in the past 40 years ago. Why is it increasing so fast? We do know that approximately 30% of the population carry the genes and only 1% of the population develops CD.

- Timing and dose of gluten introduction? NO, this does not matter.
- Breast feeding? NO, this does not matter.
- Microbial factors this is emerging as an unknown factor and may be an issue.

There is an unmet need in management of CD and that is the GF diet is an imperfect therapy. Ten years ago, we did research on mice with CD.

- Can gut bacteria affect risk of CD?
- Is gluten digestion by gut bacteria altered in CD?

Now we are moving back to animal models and clinical trials to answer these questions. We are discovering, that there is sequential digestion of gluten in the intestine by one's enzymes – if one has certain pathogen enzymes in the intestine, gluten can be better metabolized and reduce risk to CD.



Dr. Jocelyn Silvester (Pediatric Gastroenterologist, Boston's Children's Hospital)

Is Celiac Disease (CD) a solved problem? If you take gluten away and villi grow back. Does this really work? Is a GFD enough?

It works great in controlled situations but not in real life. The Doggie Bag Study had 18 celiac pa-

tients collect stool, urine and doggie bags of food and it was found that 12 of 18 had gluten in their food.

Is there more morbidity on GF diet?

Non-Responsive CD in Children and adults and gluten exposure is common cause along with eating disorders. This area needs more study.

How quickly do individuals heal on a GF diet?

- 1/2 people healthy intestine 2 years
- 2/3 healthy intestine at 5 years.

Gastroenterologists should be monitoring patients on a GF diet. 95% follow strict GF diet and yet say they were exposed to gluten in previous week or think they have been glutened.

How do we monitor in clinic? No better tools to monitor than tTG and subjective diet adherence by patient and experience of interviewer (dietitian). We know that gluten can be detected in stool and urine as not all gluten is digested. The gluten immunogenic peptides are not digested.

Antibodies (TTG, DGP, EMA) can be tested if gluten is being consumed. It really is a study of Behavior versus Biology.

Questions are

What is the treatment goal in CD?

- i. Resolution of symptoms
- ii. Normalization of serology
- iii. Normal mucosa

What is the cause of persistent villous atrophy? There are too many questions.

Celiac Disease is a problem to be solved.



Dr. Dan Leffler (The Celiac Center at Beth Israel, Medical Director, Takeda Pharmaceuticals)

Exploring CD therapies in Development

"CCA sets standard around the world for standards for those diagnosed with Celiac Disease"

CD is a chronic inflammatory con-

dition affecting the small intestine (the other IBD). The Doggie bag study, as mentioned by Dr. Jocelyn Silvester is going to be a landmark study as unfortunately, there is no such thing as a GF diet – only gluten restricted diet. It is never zero even if we think we are ingesting no gluten.

Diagnosis has been increasing due to increase prevalence and widespread availability of accurate serologic testing, however, the GF diet treatment, is often incompletely effective and patients are generally unsatisfied with treatment.

Diet is not enough and telling patients to stop cheating is not the answer.

CD develops in genetically predisposed individuals, with major genetic determinants being HLA DQ2/DQ8 genes that are found in 40% of European populations. Gluten peptides from wheat, rye and barley enter the submucosa of the small intestine and are demediated by tissue causing leaky gut.

Treatment opportunities for CD

- Multi drugs prevent mucosal exposure to gliadin from eating gluten
- One drug Ph2A block gliadin deamidation
- Multi drugs promote immune tolerance to gliadin
- Few drugs pre-clinical ph2 prevent intraepithelial lymphocyte IEL expansion
- Few drugs yet to be announced will promote villous repair

Don't be discouraged as we now have a critical mass of drugs to make it to market – there will be several that will work on different aspects for different patients.



Kristin Neff (Vice President, Clinical Operations & Project Management, ImmusanT)

ImmusanT develops medical devices and drugs and focuses on autoimmune disorders, including CD and Type 1 Diabetes.

Fact – 80% of people with CD are female

CD is a great condition to start research on as it can be triggered – NexVax 2

Studying in CD and hope to fast track designation for treatment by FDA to give protection against inadvertent gluten exposure for CD Patients on GF diet. The drug is made with 3 peptides and it creates an immune response for people HLA DQ2.5. It is delivered subcutaneously. Testing for dosage is currently: twice a week from 1mg up twice a week for 5 weeks and then maintenance doses at 900 mg. It attaches to T-cells and reprograms them from reacting when gluten is mistakenly consumed.

Studied in more than 150 CD patients to date in 5 studies to date including gluten challenges.

Unfortunately, after the conference, this trial was cancelled due to getting results that were no better than a placebo.

Panel 1 – Question & Answers

Question - I see a variety of "reaction" times for someone who is diagnosed with Celiac Disease. It is my assumption that as it is a duodenum/upper Intestinal tract disease that the gluten must get that far before a "reaction" happens. Some people say they react in 20 minutes, others in 2 hours, others in 12 hours and some take 3-4 days. What is correct? Would people who react within minutes be more of an allergic type reaction where people reacting in 2 - 12 hours leaning more towards CD? How then do you explain 3-4 days to react?

Answer - For all GI diseases there is a poor understanding what drives the symptoms and they all occur well before visible damage occurs however reaction is significant. There are different reactions and therefore different mechanisms that happen. In a control study of 25 people, peak reaction time was 2-3 hours and were back to normal baseline after 6 hours from the time gluten was consumed. The

people in this study were fed a slurry of gluten equivalent to 2 slices wheat bread.

Question - Does the reaction when a child is young show how CD is going to affect them growing up?

Answer - No, the gluten reaction has no significance on how reactions will be later in life or if the person will develop other AI conditions.

Question - When do children develop CD?

Answer – Earliest is at 18 months to 2 years, however gluten has to be introduced first for CD to develop. The tTG test will not pick up antibodies for kids younger than 3 years old, as the intestine is not fully developed. Also, the diagnosis can follow when the parents are also diagnosed. Highly recommend the endoscopy to diagnose kids as it is a life-long condition.

Question - How much gluten do you introduce to a child/ infant?

Answer - No special precautions, 4-6 months is the general timeframe.

Random statements: Sometimes a high amount of gluten plus an infection is thought to be a trigger of CD. Edmonton Stollery Hospital is creating education modules for CD and re-training by dietitians.

Thanks to Lynda Neilson for taking such excellent notes at the conference.

Panel 2: Industry - Table Discussion / Q&A



Joel Warady, Chief Marketing Officer, Enjoy Life Foods

Enjoy Life Foods has been in business for 18 years. The business started as a class project in Chicago while getting an MBA. A team of bankers, with one of their mothers having MS and who needed to be on a GF diet. They

did a marketing plan for Enjoy Life company and got an A on the project. When they graduated, they created the company!

They were acquired by Christies/Nabisco a few years back.

From the start the company was GF plus other 8 allergens. Today Enjoy Life avoids 14 allergens as this is the EU requirements.

72% of their customers who buy products have 1 additional allergen in addition to gluten.

Wants to bring emotion and happiness into people's life and bring celebration back too, so they focus on lightly processed snack foods. They grew as most GF companies focused on small stores and they focused on supermarkets with their snack food. Canada is big part of growth and 11% of their business.

Their products test down to 5 ppm. They are big believers in certifications: certified by GFCO (GIG); CFCO certifies 26% of GF products and Enjoy Life was first certified company. In USA, FDA says you can call products GF if it tests below 20ppm. GFCO requires 10 ppm or less. In AU/NZ need 5 ppm so that is why their products are all 5 ppm. They test inbound, intermediate and outbound ingredients.

Note, some companies' inbound ingredients higher than 20ppm when finished product is less than 5ppm. This causes spikes in testing and should not be done. An example of that is Cheerios.

They did not use Oats in their products for many years, however when Health Canada allowed them, they now use Purity protocol oats from Canada and test them. They are currently looking into Augmented Reality, the ability to scan package for more information to get more information onto their packaging. See Q&A for more information.

Mike Marshall, COO Westoak Naturals, Inc. and Only Oats

Mike Marshall was the original owner of Avena Foods. Ten years ago, Only Oats was born from a group of producers and they started to mill to produce a safe GF oat product using the purity protocol which is grower based and distributed.

They are certified to 10 ppm. Round Up is not allowed to be used in fields where the Oats are produced.



Jerry Bigam, President/CEO, Kinnikinnick Foods

35 years ago, Jerry Bigam and his wife, got involved in a small company in Edmonton with 6 people and

built it into what it is today.

10-15% of grocery sales were gluten free and now the GF market is dropping so retailers are less excited about having GF products on their shelves. The expectation is that there will be fewer selections in the future because of this.

Issue is that there are 2 or 3 big companies in Canada that affect the stock in main grocery stores. Social media will be a good way to pressure stores to get products in stock. Small GF companies go to co-packers who pack in shared facilities and cross contamination occurs. No one tests like the gluten free industry does to make sure the products are as safe as possible.

Kinnikinnick online business has doubled on Amazon so people can purchase in one place.

GF consumer has had a pretty good run of products with family run businesses for the past 10 years – now the shift is to major corporations and how many are going to keep up the GF business. That is an unknown for the future.

Paul Valder, Director of Business Development, BRC

Paul Vadder has had a ten-year relationship with CCA through the Gluten Free Certification Program which is now a global standard recognized around the world. It is the Gold standard for certification for facilities. The program could not have happened without CFIA, Health Canada and other groups.

Issue 3 of a GFCP protocol/audit procedures is coming out August 1st to further define the GFCP certification process. Right now, work is being done on standardizing the approach for GF and getting all Europe and AU/NZ in agreement. There currently is a lot of confusion as to what symbols mean such as self-declarations of GF versus the real certification symbols.

How can we inform consumers as to what the standards are? Job still to be done with gluten free claims on products and what marketing statements can be made.

Panel 3 Industry – Question & Answer

Question – How prevalent is it for a person to have Celiac Disease and have other food allergies?

Answer – For those with CD, about 25% have additional food allergies.

Question - What is Augmented Reality mentioned by Enjoy Life?

Answer – in about 24 months, the ability to use your cell phone to scan a product to get more information, such as details of the ingredients, purity protocol oats which currently the FDA does not allow to put included on the packaging.

Question - GFCP – is there going to be the ability for small companies to join the certification program and for it to be cost effective?

Answer – With the advent of Issue 3 of the GFCP protocol/ audit procedures, there is going to be an easier way to enter the market that will be free for them and will grow with them through the certification process. The only issue, which the panelists brought up, is that small companies/ mum&pop GF producers are going to start having a bigger barrier to entry in the following years as bigger GF companies are taking over the shelf space.

Question - What is it going to take to get single package items into planes, trains etc. for people who are traveling?

Answer –Kinnikinnick is on cruise ships, Disney etc. Enjoy Life will not allow people to buy in bulk and then bundle items outside of their wrapper due to cross contamination concerns. Copackers – not a safe procedure and Kinnikinnick sells what they produce and does not co-pack. GFCP = copacker needs to be certified also.

Panel 3: Regulatory - Table Discussion / Q&A

Michael Abbott, Section Head, Food Allergy and Intolerance Division, Health Canada

Labeling regulations include three components:

1. Labeling ingredients - Enhanced labeling regulations in 2012

Whenever one of the gluten sources are part of prepackaged food they must be declared in the list of ingredients or contains statement on the product.

The contains statement is optional. Some ingredients are exempt, for example, ingredients used in another food, must be declared individually.

2. Gluten-free claims

No gluten can be intentionally added the food. Anything specific to the gluten protein – protein, modified or fraction must be labeled as gluten. You cannot label the food as gluten-free with the impression that it is gluten-free if it is not gluten-free. Any unintended cross-contamination cannot be above 20 ppm. You cannot intentionally add wheat flour.

3. Marketing Authorization for GF Claims on Oats

Oats were included as a gluten source as they are normally cross-contaminated. Also shows pure oats are safe for certain people with CD and there is a difference. It is a non regulatory way for the minister to exempt people from a regulation. Very pure, less 20 ppm, if used as an ingredient in another food, other food must be pure also and less than 20 ppm. Referred on label as gluten-free oats to differentiate from regular oats.

Precautionary labeling

Gluten-free foods sometimes have a MAY CONTAIN wheat statement. This happens in situations where the company meets the GF standards but detects a small amount of wheat cross-contamination. Given there is no threshold of wheat identified for a wheat allergy, this statement is warning people with wheat allergy. The recommendation is to require more prescriptive labeling for industry.

Health Canada agrees that further definitions are required for precautionary labeling.

Beer labeling laws change and remove the gluten source exemption by Dec 31, 2022. The manufacturers must list the source of gluten and any other allergens.

Jacqueline Peppler, Director of Sales and Marketing, Gluten Free Food Program (GFFP)

The GFFP provides training for establishments to provide safe GF food for their customers. The program involves a Checklist and inspection of all products coming into the establishment and ensuring there is no contamination of products coming in. Processes monitored include how food is stored, prepared and how customer safety is ensured.

Online training exists in the GFsmart program where, every employee needs to take training every 2 years. Temporary employees are also required to be trained.

Training includes how to get the product from kitchen to customer safely and how to set up dedicated kitchen equipment, like toasters and strainers to ensure no crosscontamination occurs.

There are two certifications:

- Dedicated (no gluten at all) no may contain, use only purity protocol on oats, in-house made food instead of pre-packaged.
- Verified

The program is working with universities and other establishments as well as restaurants.

Misu Paul, Acting Senior Policy Analyst, Canadian Food Inspection Agency (CFIA)

Food labeling requirements are the responsibility of Health Canada. They identify the requirements and why they are required, as well as how to interpret the requirements. There is an Industry Labeling tool on the CFIA website. Other information on the site include:

- Food Products that Require a label link.
- Allergen Labeling Tips for Food Industry
- Food Allergen Labeling infographic on how to label

This information is distributed to foreign suppliers, so they know Canadian requirements. Information is also available at #stateofceliac on Instagram.

The information on the CFIA site on Gluten is the information that the inspectors use too.

Deb Wharton M. Ed, CPHI(C), Manager Quality Assurance and Food Handler Certification, Toronto Public Health

Toronto is a Food Tourist destination and the Toronto Public Health Authority has a Dine Safe program which includes

a placard system and website. The website also has information on:

- Standardize inspections and results
- Complaint registration

There are 17,000 food premises, 27,000 inspections, and 6,000 food safety complaints each year and the Toronto Public Health provides Food Handlers Training and Certification to over 5,000 individuals per year.

Margaret Hughes – Avena Foods

If the regulations say less than 20 ppm, then why test to under 5 ppm?

Pedigree farmers grow the purest seeds possible. There is a great deal more testing done now than in the past. This started in 2008. They look at 2 kg of oats and if there are more than 2 grains of wheat the whole batch is rejected. Dust is the issue when it comes to gluten. To be safe, Avena Foods tests to 5 ppm.

Avena Foods merged with a lentil company and they will be releasing a purity protocol lentils.

Questions & Answers

Question—for the CFIA regarding Single Ingredient and Precautionary Statements

Answer – CFIA must balance safety with choices. Right now, it is skewed to Safety. CFIA/Health Canada needs to provide more guidance for statements and why they are there and provide feedback as to the choices that are made to put certain allergens on the products.

Anything you put in your mouth should not have gluten in it. Groups like CCA, FMQ, etc are dealing with the labeling of shakes, probiotics, natural health products, and gluten cutter etc. Food regulations deal with food and not natural health products. There are other regulations for natural health products. Inspected Natural Health Product products have DIN number.

Question – Is the term "Gluten-Free" regulated for baked goods sold on premises and is it enforceable?

The regulations are not just for pre-packaged foods. If a restaurant tells you the food is gluten free and it is not, who has the authority to enforce it? More work needs to be done in this area.

The Kids Meet Up Group held a meeting June 18th and it was a great success. The evening included the kids planting their own healthy garden plants and a visit by the hospital's therapy dogs.

Celiac Kids Meetup Group 6-8 pm Room KO-155 Ambulatory Building (Starbucks)



September 2019 ~ British Columbia Celiac News







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Status of Celiac Disease Research

Summary of Current Research into Celiac Disease Therapies



Information thanks to Beyond Celiac and each of the research companies (links provided) that are developing potential Celiac Disease drugs.

The recent announcement that Nexvax2 Phase 2 trial was being curtailed as results showed the vaccine to treat celiac disease did not provide protection from gluten exposure when compared to a placebo. This was disheartening as the results of their Phase I trial, provided at the 2019 Digestive Week conference, indicated that tolerance of even high doses of gluten peptides in celiac disease patients was seen when Nexvax2 was administered.

There is still a lot of research into Celiac Disease taking place. The following is a summary of the status of trials underway, with a brief description of what is being undertaken:

Breaking down gluten using enzymes

IMGX-003 - Latiglutenase - ImmmunogenX - Mid Phase 2

Latiglutenase is a mixture of recombinant proteases that degrade gluten proteins in the stomach rendering them physiologically inactive. The drug has been extensively studied in Phase 2a and 2b clinical trials where it has demonstrated protection of intestinal mucosal injury and symptomatic improvement in CD patients. <u>https://immunogenx.com/</u>

KumaMax (PvP Biologics and Takeda Pharmaceuticals – Start of Phase 1

KumaMaz is a novel enzyme designed to break down the immune-reactive parts of gluten in the stomach, thereby avoiding the painful symptoms and damage done in the small intestine from accidental gluten ingestion. <u>https://www.takeda.com/newsroom/newsreleases/2017/Takeda-and-PvP-Biologics-Announce-Development-Agreement-around-Novel-Therapeutic/</u>

ONE

Interrupting the immediate or delayed effects of gluten on the cells lining the intestine

Larazotide Acetate - Innovate - Start of Phase 3S

Larazotide acetate or INN-202 is Innovate's leading drug candidate for celiac disease entering phase 3 clinical trials. INN-202 is a tight junction regulator, which helps restore "leaky" or open junctions to a normal state. In CD patients, ingestion of gluten causes disruption or opening of the tight junctions. The open junctions cause an inflammatory cascade within the intestinal epithelium that eventually destroys the intestinal villi, decreasing the surface area for absorption of nutrients, thus leading to a variety of diseases. When ingested prior to a meal, larazotide may help keep the tight junctions closed, thus reducing the intestinal-inflammatory process in response to gluten.

Intestinal permeability is thought be involved in a variety of GI and autoimmune diseases and using a safe, nonabsorbed drug like larazotide with more than 800 patient exposure, can allow for rapid proof-of-concept clinical trials. http://www.innovatebiopharma.com/inn-202.html

Preventing the enzyme tTG from modifying gluten in the cell, which helps to reduce an abnormal immune response

Un-named trial - Sitari/GSK - Mid Pre-Clinical

Sitari Pharmaceuticals is targeting the Transglutaminase 2 (TG2) pathway for the development of treatments for multiple disease indications, with an initial focus in celiac disease. The company's therapeutic approach targets TG2, an enzyme that is thought to play a multi-factorial role in celiac disease. TG2 is the primary human protein that is attacked as part of an autoimmune response in patients with celiac disease. The enzyme is also responsible for catalyzing a reaction with dietary gluten peptides that drives pathogenesis of the disease. Sitari is developing targeted inhibitors of TG2 with the potential to suppress the autoimmune response that results in intestinal inflammation and cell pathogenesis in celiac patients.

ZED1227 - Zedira and Dr. Falk - Start of Phase 2

Dr. Falk Pharma GmbH and Zedira announce the start of the phase 2a clinical trial of ZED1227, a direct acting and specific inhibitor of tissue transglutaminase, in patients with Celiac Disease. The proof of concept study will enroll patients in 8 European countries including Germany, Finland, Norway, and Ireland. Aim of the clinical trial is to show the protective effect of the small molecule drug candidate during a 6-week gluten challenge. The placebo-controlled dose -finding study will evaluate the efficacy and tolerability of the new pharmacological agent. Safety and tolerability of ZED1227 have already been shown in earlier successful phase 1a single ascending dose and 1b multiple ascending dose clinical trials in female and male healthy volunteers.

https://zedira.com/News/Press-release-Dr-Falk-Pharmaand-Zedira-announce-start-of-the-phase-2a-proof-ofconcept-study-of-ZED1227-for-the-treatment-of-celiacdisease_107? oswsid=794f677e0057b64f537b37d9c4b0290f

Status of Celiac Disease Research

Inducing immune tolerance to protect against the effects of gluten by preventing an immune reaction

TIMP-GLIA (Cour Pharmaceuticals & Takeda Pharmaceuticals) – Mid Phase One

TIMP-GLIA is an investigational product, using Cour's novel technology which proposes to reprogram the body's immune system in order to enable patients to develop a tolerance to gluten as a non-threatening substance and could subsequently abrogate or reverse the signs and symptoms of celiac disease without using immune suppressing drugs. By encapsulating a component of wheat in a nanoparticle Cour is proposing to develop a "back door" approach, whereby the gluten may not be recognized by the body's immune system until immune tolerance can be generated through non-inflammatory antigen presentation.

https://www.courpharma.com/2018/01/08/courpharmaceuticals-receives-fda-fast-track-designation-fortimp-glia/

Nexvax2 (ImmusanT) (Discontinued at Phase 2)

Name TBD (Selecta Biosciences) - Mid Pre-Clinical

Selecta's proprietary Synthetic Vaccine Particles (SVP) technology is a highly flexible nanoparticle platform, capable of incorporating a wide range of antigens and immunomodulators, allowing the SVP-based products to either induce antigen-specific tolerance or activate the immune system. They are using this technology to find drugs to assist celiac disease and peanut allergies.

https://www.selectabio.com/

Interrupting the immune reactions that occur

PRV-015 (formerly AMG 714) Non-responsive celiac disease (Amgen/Provention Bio) – Mid Phase 2

PRV-015 (AMG 714) was initially developed by Amgen in rheumatoid arthritis. In 2015, Amgen out licensed AMG 714 to Celimmune LLC, a clinical development-stage immuno-therapy company founded by Provention's CEO, Ashleigh Palmer, and Chief Scientific Officer, Francisco Leon, MD, PhD. Celimmune conducted two separate AMG 714 Phase 2a clinical trials in NRCD and refractory celiac disease type II, after which Amgen acquired Celimmune in 2017. Data from both clinical trials were presented at Digestive Disease Week[®] (DDW) 2018.

https://www.proventionbio.com/prv-015/

AMG 714 Refractory celiac disease type 2 (Amgen) – End Phase 2 – see PRV-015

CALY-002 (Calypso Biotech) - Mid Pre-Clinical

Calypso Biotech is an immunotherapy biotech company, spin-off from Merck Serono, that discovers and develops monoclonal antibodies for the treatment of immune pathologies with large unmet medical needs. Calypso Biotech's portfolio consists of two preclinical therapeutic antibodies that intercept key immune checkpoints involved in multiple immune pathologies.

Calypso Biotech's lead program, CALY-002, is a best-inclass therapeutic antibody that binds to and neutralizes interleukin-15 (IL-15). IL-15 plays multiple roles in the immune system by controlling the homeostasis and activation of T, B, NK but also has recently emerged as a key driver of disease-perpetuating tissue resident memory T cells (T_{RM}). Thus, CALY-002 has the potential to be a game-changing treatment in multiple indications where T_{RM} cells are important.

Calypso Biotech targets diseases which incidence has dramatically increased in recent years due to changes in diet and lifestyle, likely through alteration of the microbiome. Among these, Eosinophilic Esophagitis (EoE) is an emerging immune pathology driven by food antigens and resulting in severe dysphagia and poor quality of life in children and adults. Therapeutic options for EoE are very limited, and Calypso Biotech have demonstrated the strong potential of its anti-IL-15 CALY-002 antibody for EoE. CALY-002 has obtained Orphan Drug Designation status for EoE with the European Medicines Agency.

https://www.calypsobiotech.com/company/

Hu-Mik-Beta 1 Refractory celiac disease - National Cancer Institute, Mayo Clinic, University of Chicago Medicine Celiac Disease Center - Start of Phase 1

Vedolizumab - Investigator initiated in collaboration with Takeda Pharmaceuticals – End Phase 1

Focus is Ulcerative Colitis. <u>https://www.takeda.com/newsroom/</u>

BNZ-2 - Bioniz Therapeutics - Mid Pre-Clinical

BNZ-2 selectively inhibits IL-15 and IL-21 and has showed potent in vivo activity. IL-15 is central in celiac disease and many other inflammatory diseases of the gut and recent research has demonstrated that IL-21 functions in tandem/synergistically with IL-15. https://bioniz.com/pipeline/bnz-2/

Upending Some Beliefs About Celiac Disease

February 13, 2019

Experts weigh in on how views are changing



By Amy Ratner, Medical and Science News Analyst, Beyond Celiac Reprinted with Permission

Some beliefs about celiac disease have been "upended" by increasing scientific research according to a broad review of the condition in the latest edition of the journal <u>Gastroenter-ology Clinics.</u>

The review is designed to keep physicians and researchers current on clinical findings and make it easier for them to put these findings into practice. For patients, articles on a variety of topics help explain the latest developments in celiac disease.

Peter Green, M.D., and Benjamin Lebwohl, M.D., of the Celiac Disease Center at Columbia University served as editors of the publication and wrote the introduction. A few other celiac disease experts wrote articles on specific topics.

Changing views

"From the mid-twentieth century forward, celiac disease was understood as an illness primarily affecting children, exclusively affecting the small intestine, and treated by lifelong gluten restriction, with no other therapies on the horizon," they wrote. "In recent years, these aspects of celiac disease have been upended."

Celiac disease is now recognized as developing at any age, affecting many systems in the body, according to the editors. Research is finding breakthroughs in the diagnosis and treatment of refractory celiac disease, the more severe type, they note. Additionally, more is understood about the interplay between celiac disease and the microbiome and scientists are paying attention to the increase in incidence of celiac disease in Asia.

Meanwhile, a broad range of potential treatments are in various stages of development, including the critical clinical trials needed before any drug to treat celiac disease can be approved. In addition to celiac disease, the review includes an update on non-celiac gluten sensitivity, which Green and

Lebwohl wrote is still largely a mystery but is being studied with increased scientific rigor.

Following are key points made in articles in the review issue.

Diagnosis

The review presents a changing picture of patients being diagnosed with celiac disease.

The condition is increasingly being diagnosed in adults, including the elderly, according to the review. Additionally, it is being found both in those who have symptoms and those who don't. When symptoms are present, they can be gastrointestinal or affect another part of the body.

More than half of adults with celiac disease have gastrointestinal symptoms and weight loss. While diarrhea is the most common symptom, it has been decreasing in frequency.

In fact, those who have no symptoms now make up 30 percent of newly diagnosed cases, while those with symptoms outside the digestive system, including anemia, osteoporosis, neuropathy, headaches and reproductive problems, make up more than 40 percent.

Overall, women continue to be diagnosed more often than men and at a younger age, but as the incidence of celiac disease diagnosis grows among those older than 65, elderly men are being diagnosed more than women. Anemia is the most common symptom and nutritional deficiencies might be the only presenting feature. Gastrointestinal symptoms are less prevalent in the elderly and, if present, tend to be mild.

About 35 percent of celiac disease patients have another autoimmune condition, and they are more likely to have more than one autoimmune disease, according to the review. Hashimoto's thyroiditis is the most commonly associated autoimmune disorder, found in roughly 20 to 30 percent of patients. However, its frequency in celiac disease has been decreasing.

Follow-up of Celiac Disease

A lot of scientific discussion about celiac disease has focused on diagnosis, but follow-up care has generated less interest and needs more attention, according to the review article on the topic. The authors conclude that those who have uncomplicated cases of celiac disease should get annual follow-up with their physician and a dietitian, but they note that 20 to 40 percent of adult celiac disease patients have persistent symptoms and changes in the lining of the intestine.

A <u>2017 study by Beyond Celiac</u> and other researchers found that more than one out of four celiac disease patients diagnosed at least five years ago had not had follow-up healthcare for the condition over a five year period.

The review authors also look at some of the complexities of celiac disease follow-up, including the role of repeat

Upending Some Beliefs About Celiac Disease

biopsies, testing stool and urine for gluten immunogenic peptides (GIP), the limitations of anti-tissue transglutaminase immunoglobulin A (tTG IgA) testing for monitoring celiac disease and the current state of knowledge regarding how strict a gluten-free diet needs to be.

"The relationship between the quantity of gluten ingested and the development of symptoms and histologic abnormalities is not clearly defined and the exact amount of gluten that people with celiac disease can tolerate on a daily basis without suffering any deleterious effects has not been fully established," the authors wrote.

GIP testing needs to be made more sensitive so it detects smaller amounts of gluten but could provide a sensitive and specific option for monitoring how well someone is adhering to the gluten-free diet whether the tests are used by researchers, physicians in their offices or patients at home, according to the article.

The authors also look at the differences in follow-up for children, adolescents and adults. Although children generally do well on the gluten-free diet, those who do not get follow-up care do not follow the diet as well as children who do. Young adults often don't get any follow-up and are the group with the greatest need, according to the article.

New treatments

While a strictly gluten-free diet is effective in treating celiac disease, the reality is that the diet is challenging and difficult to maintain, according the authors of an article on nondietary treatments for celiac disease. For those who have nonresponsive and refractory celiac disease, symptoms and intestinal damage can continue even with a very strict diet.

The authors note that the sequential steps in the development of celiac disease are well understood, giving researchers well defined targets for drugs being investigated. Since 2005 when the first clinical trial in celiac disease was registered with the National Institutes of Health, 192 trials have been conducted, with 43 focused on treatment alternatives to the gluten-free diet, according to the review.

They identify the following treatment possibilities: degrading gluten with enzymes before or after food is ingested, binding and sequestering gluten in the intestine, restoring tight junction barrier function in the intestine, preventing tissue transglutaminase from modifying gluten in the cell, inducing tolerance to gluten and reducing intestinal inflammation with anti-inflammatory treatments.

Although enzymes that break down gluten are one of the treatments being investigated, the article warns against patients using digestive enzyme supplements currently on the market. The authors point to a study of five commercially available products that found the supplements do not detoxify gluten as claimed. In particular the authors were concerned that celiac disease patients are very interested in the supplements and perceive them as proven remedies.

While treatments currently under study would be used along with the gluten-free diet the article authors look toward "the ultimate goal," a future where patients could eat a diet without gluten restrictions.

"This life-changing advance for patients with celiac disease could also act as the pivotal event in the prevention and management of other autoimmune disorders for which the environmental activators of disease are not well characterized," they wrote.

Microbiome

Bifidobacterium: microbes that are among the first to colonize the human gastrointestinal tract and are believed to exert positive health benefits on their



host.

Lactobacillus: a type of bacteria that lives in the intestines and converts sugars to lactic acid and is considered a friendly bacterium

Gram negative bacteria: bacteria that cause infections including pneumonia, bloodstream and wound infections and are resistant to multiple drugs and antibiotics as the bacteria have built-in abilities to find new ways to be resistant and can pass along genetic materials that allow other bacteria to become drug-resistant as well.

As the role of the microbiome in celiac disease has been increasingly studied, researchers have seen differences in the population of Bifidobacterium and lactobacillus in study participants, according to the review. Celiac disease patients also seem to have an increased number of gramnegative bacteria, specifically proteobacteria. This imbalance of bacteria, called dysbiosis, can lead to modification of the intestinal barrier and persistent activation of the immune system by the harmful protein in gluten, leading to symptoms.

Studies related to the microbiome have shown that the gluten-free diet alone does not normalize this condition, and probiotic therapy is being investigated, the authors wrote. More research is needed in relationship to celiac disease and the microbiome, they conclude.

Refractory celiac disease

Refractory celiac disease continues to need investigation as it is the more severe form of the condition, in particular type 2, which brings the risk of malnutrition and lymphoma. Recent advances in understanding the pathogenesis of refractory celiac disease open the possibility of targeted therapy, according to the review.

Treatment with the medication open-capsule budesonide has shown some promise, with one study by the Mayo Clinic finding that study participants had improvement clinically and in biopsy results, including those for whom immunesuppressive medications failed.

Upending Some Beliefs About Celiac Disease

Celiac disease in Asia

Although the number of celiac disease patients in Asia is small, it is expected to grow significantly in coming years as a result of more awareness and increased diagnosis, according to the review.

The medical community across Asia should define the extent of the problem now and be prepared to handle the "impending epidemic of celiac disease," the authors wrote.

Non-celiac gluten sensitivity

Scientific interest in non-celiac gluten sensitivity, also called non-celiac wheat sensitivity, has increased and is reflected by the growing number of original papers, reviews, and trials published on this topic in the past 10 years, authors of an article in the review found.

"The initial skepticism surrounding this disorder has gradually given way to a progressing awareness of its existence," they wrote. The exact triggers of symptoms among the various components of wheat and related cereals remain unclear, but gluten, amylase/trypsin inhibitors (ATIs), fructan and other components may play a role.

Fermentable oligosaccharides, disaccharides, monosaccharides and polyols (FODMAPs) have been reported to contribute to certain intestinal symptoms in some patients. but other components of wheat and related cereals are believed to trigger immune activation or dysfunction of the intestinal barrier that could explain intestinal and other symptoms.



Biomarker: a distinct cellular. biochemical or molecular indicator of a process, event or condition that can be measured reliably in tissues, cells or fluids to detect early changes in a person's health.

The search for biomarkers for gluten sensitivity has intensified because they would enable diagnosis without the need for a time-consuming food challenge, which is currently used but not well-accepted by patients, the authors note.

Scotiabank Charity Challenge 2019

Another successful Scotiabank Charity Challenge - the CCA - Vancouver Chapter fundraisers raised \$13,087 and another \$2,300 in advertising! A huge thank you to volunteers, fundraisers, vendor partners and donors for making this years' fundraising activity so successful.

l op fundraisers	
Fundraiser name	Raised
Lizbeth Wall	\$2,245.00
Valorie Vaartnou	\$1,675.00
Pushpa Kapadia	\$1,495.00
Marian Collins	\$1,400.00
Jennifer Arntorp	\$710.00
Julie Luciani	\$420.00
Jessica Mooney	\$380.00
Betty Wong	\$375.00
Sara Christopher	\$350.00
Karen Andersen	\$295.00

Prizes for Top Fundraisers



Jewellers, Earrings Langley, BC

Two \$50 gift certificates to certificates for dine at her White Kinnikinnick product (order Rock restaurant

online)

Ray Ban Sunglasses - Pearle Vision – Central City, Surrey, BC



and candies

Omega

products

Four \$25 dining certificates

The Canadian Celiac Association – Vancouver Chapter wishes to Thank Our Scotiabank Run Partners: RUNNING GLUTEN-FREE



Board Highlights - CCA – Vancouver Chapter – May to August

- Restaurant events held: Iki Sushi, Kin Thai Kitchen
- June 23rd Scotia Bank Charity Challenge fundraisers raising \$50 or more received a gift bag from our Partners (see article in this newsletter thanking these very generous partners). Thanks to Julie Luciani, Marian Collins and Gail Fraser-Chin who helped Lizbeth Wall and Val Vaartnou put all the gift bags together and deliver them to the fundraisers. Fundraisers and donors raised \$13,087 and \$2,300 in advertising was sold.
- Canadian Celiac Association Vancouver Chapter has reserved the name Canadian Celiac Association British Columbia. Members will vote through a Special Resolution on August 18th to determine if they agree with name change. Vancouver Chapter has confused the public as the chapter supports all the lower mainland and much of BC. Other CCA chapters in BC are currently inactive. If approved, the name change would be gradually implemented and will require changes to our Constitution and Bylaws through the BC Society Act. Once these changes are complete, the name will also be changed with the Canada Revenue Agency.
- The second Kids Meet Up was held at BC Children's Hospital on June 18th. The Therapy Dogs attended the meeting and were a big hit. As well, the kids planted their own vegetables so they can tend to them and eat

healthy this summer. Thanks to Jasmine Sidhu for coordinating activities for the kids.

- Val Vaartnou attended a Health Fair at the Maple Ridge Save On Foods on June 22. CD information was provided to those interested.
- Honeycomb.ai has added their restaurant app information to our website at http://www.vancouverceliac.ca/restaurants.html Check it out and if interested download their app at https://www.vancouverceliac.ca/restaurants.html Check it out and if interested download their app at http://www.vancouverceliac.ca/restaurants.html Check it out and if interested download their app at https://www.honeycomb.ai/ Thanks to Jessica Mooney for working with Honeycomb on this initiative.
- Lizbeth Wall met with the food and beverage managers at YVR on July 21st. They are very interested in the GFFP. Liz will continue working with YVR to identify gluten free options at the airport that will eventually be noted on YVR's new website.

MEMBERSHIP - JOIN OR RENEW

Vancouver Information with links to National site: http://www.vancouverceliac.ca/membership.html

National Site to Renew or New Members:

https://cca.imiscloud.com/cca_mbr/home/mbrcca/benefits.aspx? hkey=a613a736-3fa3-43dd-bbfc-0cb4dbab094c

Phone: call National toll-free 800-363-7296 ext. 225



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Backpack Bars

3/4 cup Namaste Foods Organic Perfect Flour Blend 1/2 cup uncooked quick cooking oats 1/2 cup coconut oil, melted 1/4 cup Namaste Foods Golden Flax Meal 1 tablespoon grated orange zest 1/2 cup coconut or brown sugar 2 teaspoons Namaste Egg Replacer 3 tablespoons warm water 1/4 cup coconut or brown sugar 1/4 cup raw pumpkin seeds 1/2 cup shredded or flaked coconut 1/2 cup dried cranberries 1/2 cup raisins Heat oven to 350° F. Line 8"x 8" pan with parchment paper. In a large bowl, mix Perfect Flour, oats, coconut oil, flax meal and orange zest on low speed. Add 1/2 cup coconut sugar and blend together on medium speed for 1 minute. Mixture will look dry. Pat into prepared pan. In a small bowl, mix egg replacer with water then add ¼ cup coconut sugar. Stir in pumpkin seeds, coconut, cranberries and raisins. Pour evenly over mixture in pan. Bake for 30-35 minutes or until toothpick

inserted in center comes out clean. Cool on a wire rack and cut into 12 pieces. Enjeu!

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Strategy – Cdn Celiac Assoc. – Vancouver Chapter

Submitted by Val Vaartnou, CCA – Vancouver Chapter Director

In the fall 2018 and spring 2019, the Canadian Celiac Association – Vancouver Chapter Board of Directors had several sessions to review and revise the chapter strategy going forward. The charity will align priorities in the following direction.

A huge thank you to Susan Braverman, President, The Flag Shop for facilitating the meetings.



VISION STATEMENT

To prevent suffering from anyone impacted by Celiac Disease.

Foster a greater understanding of what Celiac Disease is, how we live with it....

Empower people with Celiac Disease to make smart food choices

Raise money to make a difference. Without money, we've got no research, without research no change

Create relationship with food companies "from farm to table"

WHO ARE WE?

We are the:

- Face
- Voice
- Eyes
- Ears

of those affected by Celiac Disease. We are the mothers, fathers, children, partners, grandparents, students, siblings, friends, neighbours, coworkers.....We live and thrive with Celiac Disease and we know what it is like......

We are the faces of those affected by Celiac Disease.

We are the resources in our community for those affected by Celiac Disease.

WHY WE CREATED THE VANCOUVER CHAPTER?

A local resource for people with Celiac Disease, or people who struggle with gluten sensitivity.

We want to help make living a gluten-free life less overwhelming.

We want to make Celiac Disease understood and respected, because it IS a disease. Communication mandate.

"I have Celiac Disease".

WE WANT TO MAKE A DIFFERENCE!

We've been overwhelmed with Celiac Disease, we live with Celiac Disease, and we are continually learning how to thrive with it.

We are you; you are us, and together we are stronger.

WHAT ARE WE FUNDRASING FOR?

- JA Campbell Research Fund
- Local Initiatives

Major fundraising event- Scotiabank Charity Challenge: TAKE IT TO THE STREETS - RUNNING GLUTEN-FREE

Here is your opportunity to invest in your disease. This is your opportunity....

AWARENESS

We are a registered charity.

OUR VALUES

- R Respect: all interactions, levels, media
- I Information accuracy and share knowledge
- C Create community: helpful, smart, friendly, supportive
- E Empathy for all!

NOTE: August 18, 2019 approval was received for a Special Resolution to change our name to Canadian Celiac Association British Columbia.

BACK TO SCHOOL WITH PROMISE

HIGH IN FIBRE, GLUTEN FREE, WHEAT FREE, DAIRY FREE

and Delicious



Promise

JEEN FR



Interview with Craig Belser, Founder of Bard's Brewing

Bard's Beer was the first commercially produced gluten-free beer in North America, and it was recently relaunched by Craig Besler, the original founder. Craig is an extremely curious and smart mind, who tirelessly experimented with the malting and brewing processes until he and his brother Scott, a non-celiac, official taste tester and now head of Sales for Bard's, found a beer that tasted like real beer. They would not accept a product that was "good enough".

Craig originally partnered with Kevin Seplowitz. (1) entering the market over sixteen years ago. Both were selfprofessed beer aficionados, avid home brewers and ordinary guys who were both celiacs. They made it their mission in life to find a way to make a great-tasting, craftbrewed beer that just happens to be gluten-free. The company started by accident. Craig's first beer used malted corn. Although it smelled good, the taste was horrible and the oil from corn coated your teeth. Craig eventually found the USDA and government agencies would help with the chemistry and testing. Eventually they focused on testing cultivars of Sorghum. This enabled him to guickly refine a beer that tasted good. Friends were volunteers for free beer tasting and at that time, no one was serving the 1% of the population who were celiac....a beer market of \$450M. They saw an opportunity.

Craig is a positive and optimistic individual whose attitude was always "how can we do it?". Craig wished to tackle the social issue of isolation felt by celiacs and enable them to enjoy social gatherings with friends and not feel left out. Positive feedback from consumers who had not been able to enjoy beer motivated the operation as well. Although competitors emerged, many of the beers were "corn syrup beers", that did not taste like beer and did not take the farm to table approach of production.

This is the ultimate in feel-good projects. To make money and make people happy, it's a Santa Claus project.

Kevin developed health issues and Craig took control of the company. The "Mad Scientist" found the business side challenging as well as liberating. Originally, beer distributors said no one wanted gluten-free beer so Craig used guerilla marketing to get consumers to take a sheet of

paper into the liquor retailers requesting Bard's Beer. It worked. Rapid growth meant cash flow issues, as you had to buy the ingredients upfront. Creative financing was needed and was procured as he was "selling out" of product. (2)

Today, Truly Gluten-Free[™] means that Bard's never contains any wheat, barley, rye or oats. Their secret to glutenfree beer that tastes like real beer, is malting their special cultivar of sorghum grain. (3)

Why is malt important? Malt is a sprouted grain that has been dried and roasted to produce rich flavors for brewing. One could say that malt is the "soul of beer." In fact, Bard's is the only gluten-free beer to take the important extra step of malting the sorghum used in their beer. So, unlike other

gluten-free and gluten reduced beers, there's no need to hide behind added fruit, artificial flavors or non-traditional ingredients. Bard's only contains malted sorghum, fresh hops, pure water and yeast, yielding a low bitterness, subtle floral aroma and a clean, refreshing finish. (3)

The relaunch of the beer in 2019, occurred after Craig took back a controlling interest in Bard's. The only change to the beer was packaging in cans rather than bottles to meet the needs of the active sports life-style of its consumers.

Craig truly cares about cross-contamination. Bard's has never had a contamination issue. He has forged relationships with the farmers who grow sorghum for Bard's and he has trained them about the importance of being gluten-free from "farm to table". The silos that store the sorghum for Bard's are gluten-free. The dedicated malt house is also certified gluten-free. He does contract out the brewing, however, given the microbiological sterile environment of the stainless steel drums, the fact that all ingredients are tested for gluten as they come into the environment and the beer is tested for gluten, both pre and post fermentation ensures there is never gluten in their product. Craig can say that because of the transparent and rigorous testing protocols, there is no chance of contamination as the processes maintain control from farm to table. What you see on the label is what you get.

Bard's also does not produce kegs as there is too much risk of cross contamination. Hoses are attached to taps at point of sale and the hoses may have had gluten containing beers passing through them. It is a risk that Bard's cannot control so kegs are not a product option.

Bard's wishes to increase beer choice for the beerless. Consumer market and manufacturing has changed significantly. The market is full of different styles of beer and Craig wishes to bring these alternatives to the gluten-free market as well. The products must always be able to compete with regular beers in taste and mouthfeel while always being Truly Gluten-Free[™]. Craig has developed the proto-

types for lite beer, stouts and lagers and looks forward to bringing them to the market initially as "seasonals". If the market buys, Bard's will make them a permanent part of the portfolio.

Try Bard's beer and look for the new varieties in the future! Available at LCB stores in BC today.



References:

http://link2leessummit.com/town-hall/bardsbeer Interview with Craig Belser and Scott Belser, Bard's Beer

https://www.handfamilycompanies.com/bards-beer https://www.bardsbeer.com/

The Drought is Over



The original, truly Gluten Free sorghum malt beverage is back in a 4 pack of 473ml CANS! Look for it at government and private beer stores and restaurants.

Ask for SKU 193590

2019 Research Grant Awardees Honored at Digestive Disease Week

In May, at Digestive Disease Week in San Diego, the Celiac Disease Foundation announced the two recipients of their Young Investigator Research Grant Awards:



Dr. Benjamin Lebwohl, Director of Research at The Celiac Disease Center at Columbia University, \$145,650

1. To assess the impact of gluten consumption on gut microbial diversity among a clinic-based cohort of patients with celiac disease and patients with non-celiac gluten sensitivity. The hypothesis is that gluten consumption will be associated with distinct

changes in gut microbial composition, characterized by a reduction in species diversity. The severity of gastrointestinal and extra-intestinal symptoms experienced during gluten exposure is correlated with reduced species diversity and distinct metabolic pathways. As the myriad of clinical presentations of celiac disease become more apparent, a fundamental question that remains unanswered is why people with celiac disease experience a wide range of symptom severity, particularly upon acute exposure to gluten. The poor relationship between symptoms and villus atrophy, as documented by our group, underscores the challenge facing patients and healthcare providers facing the scenario of persistent or recurrent symptoms among individuals with celiac disease who attempt to adhere to the gluten-free diet, a phenomenon that is present in approximately 25% of individuals after diagnosis at any given time. The proposed work also has relevance to those patients with celiac disease who have minimal or no symptoms, given that a subset of such patients has ongoing inflammation and villus atrophy, which may increase the risk of lymphoma and osteoporotic fracture.

To measure mortality risk in a population-based co-2. hort of patients with celiac disease: We hypothesize that the previously documented increased mortality associated with celiac disease has diminished since the year 2000 but is still elevated compared to that of the general population. Our results will form the foundation for future intervention studies that will investigate approaches to improving clinical outcomes in patients, with a focus on symptom control and achieving a normal life expectancy while maintaining a high quality of life. The elevated mortality risk in celiac disease has been documented in multiple studies, dating to the 1980s, but remains an urgent research priority given the changing nature of celiac disease in recent decades. As the mode of presentation has changed, and with increasing diagnosis rates in part due to improved awareness and more widespread seroprevalence, the mortality risk appears to be changing. We already know that the elevated risk of death in celiac disease declines over time after diagnosis, likely due in large part to the beneficial effect of the gluten-free diet. However, less well-characterized is whether there is a macrolevel mortality decline related to era, given the evolving

demographics of celiac disease characterized by improved availability of the gluten-free diet, improved healing rates, and more diagnoses among minimally symptomatic patients, such as first-degree relatives diagnosed due to their family history of celiac disease. Particularly among this latter group, a growing demographic within the celiac disease patient community, the oft-cited increased mortality risk can be a source of anxiety and uncertainty; it behooves the research community to determine whether there is indeed still an increased risk in the most recent era, and to characterize the causes of death in this demographic so as to develop risk-stratifying algorithms and preventive approaches.



Dr. Jocelyn Silvester, Attending Physician at Boston Children's Hospital and Instructor in Pediatrics, Harvard Medical School. \$180,000. Dr. Silvester is a past recipient of J A Campbell Research Fund, the research fund of the Canadian Celiac Association.

1. Establish whether gluten-reactive memory T cells are a marker of pediatric

celiac disease: We will use the HLA-DQ-gluten tetramer assay to measure gluten-reactive T cells in children with celiac disease and symptomatic controls with normal small intestinal villous architecture to confirm that the presence of gluten reactive T cells correlates with celiac disease status irrespective of current gluten consumption. The primary goal of this aim is to establish that the assay has similar performance characteristics in children as in adults and that we can perform the assay reliably in our laboratory.

- 2. Determine whether gluten-reactive memory T cells predict response to gluten challenge: One application of the HLA-DQ-gluten tetramer assay is to diagnose celiac disease in children who have already adopted a glutenfree diet. Currently, the standard of care for these children is gluten challenge (daily gluten consumption) followed by small intestinal biopsy to confirm (or rule out) celiac disease. For this aim, we will recruit children undergoing clinically indicated gluten challenge to determine whether the HLA-DQ-gluten tetramer assay can identify children on a gluten-free diet who have villous atrophy following gluten challenge.
- 3. Determine whether gluten-reactive T cells are present in potential celiac disease: For this exploratory aim, we will conduct a pilot study to assess the frequency with which gluten-reactive T cells are present in potential celiac disease. This aim will provide data to support future grant applications to follow children with potential celiac disease to determine if gluten-reactive memory T cells predict progression to villous atrophy.

Schedule of Events

Restaurant Events – 2019

We have set aside the following dates for our 2019 dinner events. The locations are TBA. The time: 6:00 p.m. for each event.

Future Dates:

September 16th (Monday) October 22nd (Tuesday) November 20th (Wednesday)

September 2019 - Kids Meet Up Group (5 – 12 years of age)

Weather permitting, the event will be held at a playground. We hope these activities will help get us all chatting and getting to know each other better. This is a free-from food event. Please refrain from bringing snacks or food as we want the group to be inclusive of those with food allergies and sensitivities. Final details will be sent via email.

Time: 6:00 pm - 8:00 pm

No cost for member; non-members welcome - \$5 for the cost of materials.

Please contact <u>celiackidsconnect@vancouverceliac.ca</u> if you are interested in attending.

Oct 30 – Nov 2 - College of Family Physicians Conference

Canadian Celiac Association – Vancouver Chapter will have a booth at this conference on behalf of national.

Check our website: <u>www.vancouverceliac.ca</u> and our Facebook page for updates regarding restaurants events, Children's Meet Up Group and other events.



Drop-In Groups

Chilliwack Drop-In - First Saturday of each month. Location changes each month. Contact: Geraldine David 604-792-2119 or <u>gdavid@uniserve.com</u>

Powell River Drop-In – Contact: Liz Kennedy: <u>lizkenne-</u> <u>dy@shaw.ca</u> or Val Harding: <u>valhar@shaw.ca</u> for location and time.

Richmond Drop-In – Second Monday of each month at 6:30 pm. The meeting is at Waves Coffee House in Steveston on Bayview and 1st, 1231 1st Ave, Richmond. Contact: Val at <u>val_vaartnou@telus.net</u> to let her know you will be attending the meeting. Tea, coffee and gluten-free cookies are available for purchase.

South Surrey Drop-In – Meetings are the 3rd Tuesday of each month, starting at 6:30 pm at the South Surrey Choices, 3248 King George Highway, Surrey. Please contact Pushpa Kapadia at <u>pushpakapadia@gmail.com</u> or phone her at 604-721-0098 to let her know you will be attending the meeting.

Contacts for Newly Diagnosed in areas where there is no Group Meeting:

Abbotsford: Ute Tindorf will continue to support newly diagnosed in Abbotsford. If you are newly diagnosed and would like the assistance of someone with many years of

being and supporting celiacs', contact Ute at 604-853-2610 or email at <u>utet@shaw.ca</u>.

North Shore: Eugenia Mooney will meet those who would like help with the gluten-free diet or who have questions. Please contact her at 604-985-0719 to set up a convenient time and place to meet.

Eugenia also has a brunch meeting the first Saturday of every month. If you would like to attend call Eugenia for the details of the location, as it changes monthly.

Vancouver: Val Vaartnou will meet with anyone newly diagnosed or who needs assistance with the gluten-free diet. Contact Val at 604-271-8828 or email at <u>val vaartnou@telus.net</u>

If you have any questions, you can also phone our helpline at 604-736-2229 and leave a message and a volunteer will get back to you. The purpose of our helpline is to offer support to newly diagnosed celiacs and those who are having difficulty with the gluten-free diet. If you just feel the need to talk to someone with the same illness who has been on the diet and living well as a celiac, please leave a message with your name, phone number and a brief description of your inquiry.

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FRESH ARTISAN BREAD!

At Cloud 9 We Are Making Baked Goods Even Better.

East Village and Cloud 9 have come together to meet the demand for trusted gluten-free and vegan baked goods.

Offering fantastic breads, pastries and savouries that you've come to love... made even better with with the added deliciousness from East Village Bakery!

Drop by our New Westminster location for a taste of what two pioneers in gluten-free have baked up for you.