British Columbia Branch I FALL 2020 I I

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News for the Canadian Institute of Public Health Inspectors

Minimizing the Health Risk of Egg Yolk Parmesan

Authors: Dianna Vuu, EHO Candidate and Lorraine McIntyre, Food Safety Specialist, BCCDC

Egg yolk parmesan, salt cured egg yolk, and candied egg yolk, refer to a method of preserving egg yolks in a curing medium of predominantly salt and/or sugar. They are described as fatty in texture with a savoury taste that can be adjusted with the addition of herbs and spices. First becoming popular in 2015, egg yolk parmesan recipes have since been seen by millions of people thanks to food and cooking sites like Bon Appétit. Now they can be found used as a sauce for steak, a dairy free "cheese" for a salad, or even a garnish for ice cream.

Egg yolks after 4 days of curing in salt/ sugar (Photo: Dianna Vuu)

The basic preparation of all egg yolk parmesan recipes involves separating the yolk from the egg, laying the yolk onto a bed of salt and/or sugar, and then blanketing the yolk with more of the same medium. The yolks are then dehydrated anywhere from four hours, for a soft spreadable product, to three weeks, for a hard grateable product. (Note: the dehydration step is described in online recipes as 'allowed to rest' or as 'curing'.)

However, some recipes do not include steps to address microbial hazards. For example, nearly all recipes state to dehydrate the yolks at refrigerated temperatures, but some recipe outliers state room temperature dehydration. Room temperature is within the danger zone range (between 4°C and 60°C) where many pathogens are able to growth and thrive. Recipes may advise that yolks may be consumed after initial dehydrations of only four hours while others ask for further dehydration at room temperature or in a low temperature oven. Recipes without any heat treatment (i.e. the kill step) allow for the survival of pathogens that may be present in the egg yolk.

Microbial hazards of concern in egg yolks are *Salmonella* and *S. aureus;* both are potential risks when making egg yolk parmesan. Growth of these pathogens may be controlled by low water activity (a_w); *Salmonella* species will not grow at a_w <0.92, [1] and *S. aureus* will not grow at a_w<0.85. However, while lowered water activity will inhibit further growth of these pathogens it will not destroy those already present in

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HIGHLIGHTS IN THIS ISSUE. . .

Branch Update

Autumn has arrived! Or, depending on where in the province you're located, it might already feel like winter. As we begin to navigate through the second wave of COVID-19, it's interesting to reflect back on our 2020 summer season, and how different it looked from previous years. Though bubbles expanded, and travel within the province was possible (and encouraged!), I'm certain that many of you were still very much engaged fully with contact tracing, facilities follow-up, handling complaints from members of the public, and trying to keep up with rapidly-changing evidence and Orders.

Throughout the pandemic, CIPHI (both the Branch and National) has worked to advocate for our profession and for environmental public health professionals, and highlight the importance of our work during a pandemic. Our CIPHI National Advocacy Campaign had a multi-week focus on social media, and we built on this for Environmental Public Health Week. There's been no better time than this to ensure that decision-makers, employers, unions and - most of all - the public know that we're out there every day protecting the health of all British Columbians. Our strategic planning for 2021 is well underway, and advocacy and promotion will play a large part in our work.

And so, though the pandemic has presented numerous challenges, there are also opportunities that are coming out of these unprecedented times: opportunities for engagement and advocacy; opportunities for relationship building between departments and agencies; and opportunities to explore how technology might make our work easier or more convenient. Within CIPHI-BC/YT, one of these opportunities is undertaking our first-ever all-electronic AGM. This would not have been possible in past years due to our Branch by-laws pursuant to the *Societies Act*, but we're excited to see how an electronic meeting might allow members from across the province to participate. I don't expect things to be perfectly seamless (they never are), but I do think that it creates a more level playing field for engagement than having just an in-person meeting. And, selfishly, I hope that it makes achieving quorum somewhat easier since that's the biggest challenge with any AGM!

A few of our goals that we had set for the Branch did not come to fruition this year and, as with all of my 2020 failures, I like to blame COVID-19. But the opportunities presented by the pandemic will strengthen our profession and its perceived value for years to come - just look at the large number of new EHO positions across the province. I'm looking forward to seeing how much more we can achieve in 2021, and how we can use the lessons learned this year to keep the momentum going.

Yours Truly,

Casey Neathway
BC Branch – President

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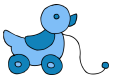
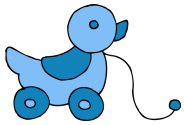
british columbia

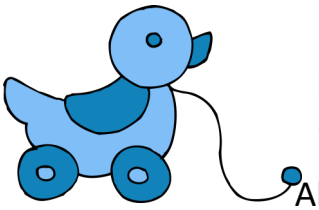
Baby Announcements

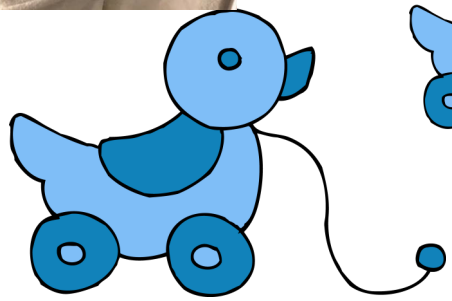
Paul Cseke and family welcomed Baby Hugo (left) on August 22, 2020 weighing in at 7lbs 8oz.

CONGRATS!









Marta Jaeckel and family welcomed Baby Wyatt on August 26th, 2020 . Big brother Alden is thrilled to have a little baby brother to cuddle!

CONGRATS!

Minimizing the Health Risk of Egg Yolk Parmesan Continued.. . .

the yolks. In practice this means that any microbial load that is present on the egg yolk will be ingested and could potentially cause a food borne illness. That is why a kill (cook) step is needed somewhere in the recipe.

A two-page food safety fact sheet was created by the BCCDC to outline best practices, critical control points and critical limits that should be present in all egg yolk parmesan recipes. These controls include:

- Proper hand hygiene to prevent the transfer of *S. aureus* from human skin to egg yolks;
- Curing yolks in a refrigerated environment to slow the growth of pathogens as the water activity of the product decreases;
- Curing yolks for a minimum of 24 hours to achieve a water activity below 0.92 in which *Salmonella* is unable to grow;
- Including a heat treatment step of 61°C for 3.5 minutes (or equivalent)[2] before or after curing unless pasteurized shell eggs are used.

Although not described in the food safety fact sheet, curing large chicken eggs for 24 hours resulted in an average a_w of 0.855 ± 0.01 (based on 39 egg yolks)[3]. Other sizes of eggs may require more or less curing time. *S. aureus* can still grow within this range of water activity. Thus the control of *S. aureus* is ensured via proper handling practices, refrigerated storage, and using a heat treatment step.

Storage of the egg yolk product depends on the curing time used. At 24 hours, the egg yolks will be soft and spreadable and should be refrigerated and stored in an air tight container. A hard dry yolk suitable for grating will require several more days of drying and may be stored in air tight containers at room temperature, although refrigeration is recommended.

References

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Environmental Operators Need CEUs, But We're in the Midst of a Pandemic!

By Kalpna Solanki BSc CPHI(C) MBA

Across Canada, every certification jurisdiction requires its Operators to complete a certain number of CEUs to maintain certification, and EOCP is no different. While this is in accordance with the Best Practices of the Canadian Water and Wastewater Operator Certification Committee, some jurisdictions have two-year reporting periods, while others have longer reporting periods. But for all, the CEUs required average out to 1.2 CEUs per year for Operators holding Level I-IV certifications with the only exception being Ontario where more CEUs are required the higher your level of certification.

At the EOCP, the CEUs needed per two-year reporting period are:

- Bulk Water Delivery (BWD): 0.6 CEUs
- Small Water System (SWS), Small Wastewater System (SWWS), Building Water System (BWS): 1.2 CEUs
- Levels I-IV: 2.4 CEUs

The EOCP has NOT changed its requirements for CEUs during this pandemic for several reasons:

1. Continuing professional development is a fundamental tenet of Operator certification throughout North America, and many professions are moving towards the model of mandating ongoing professional development;
2. We are only part way through the first year of a two-year reporting period, leaving plenty of time to complete CEU requirements;
3. Some training providers have had distance learning options for many years;
4. Many training providers have adapted to our new reality and provide virtual training and/or training in person with COVID-19 safety protocols;
5. The EOCP and other organizations have annual conferences that also provide opportunities to learn and accumulate CEUs.

Reaching out to organizations, this is what they had to say:

With the introduction of the lockdown in March 2020, a lot of utilities had staff working limited shifts (one day at home each week so staff did not work together) but Sun Peaks asked that they take courses online. Several courses taken were either free or had minimal costs. We held training sessions via Microsoft Teams and recorded them for future use. After a few glitches, the training went well. Staff used computers or tablets that were provided by the Municipality and supported this initiative as the courses were all good for CEUs and enabled staff to remain compliant with EOCP's requirements. – Pat Miller, formerly at Sun Peaks Mountain Resort Municipality

At BCMSA we have altered our training in two ways: right away, we modified all the courses to be delivered virtually via Zoom or MS Teams. That has been very well received and attended by many municipalities. When the Province entered Phase 3, we established strict safety protocols for face to face training sessions. The first few were a bit nerve wracking as a trainer, but we are firm in maintaining sanitation and distance protocols; if the municipality is unable to maintain these protocols, we would evoke our right to refuse unsafe work. Thankfully that hasn't been necessary. – Cathy Cook, BCMSA

Safety is paramount to both Operators and instructors, so to reduce the risk of transmission, our organization in con

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junction with the municipality focused on implementing physical distancing, hand hygiene, cleanliness of surroundings, physical barriers such as PPE, and elimination of shared surfaces or objects as much as possible. The main noticeable change was adhering to the Canada-wide public health guideline of two metre physical distance between each person by calculating the classroom area needed which meant that the learning space had to be large enough or the number of participants would need to be limited. In addition, all group activities were eliminated, instead a large discussion was facilitated while the participants remained seated in their assigned areas. In the most recent rendition of the course, a portion of the instruction was based outdoors to further reduce risk of transmission. The following are additional steps that were taken:

- *All training materials and exams were packaged and transported 72 hours in advance in individual envelopes*
- *Learning space was cleaned/sanitized the day before the course*
- *Municipality provided sanitizer for everyone.*
- *Gloves were used to instruct and touch surfaces of equipment belonging to the municipality*
- *Equipment was wiped with disinfectant wipes between users*
- *All training material envelopes were placed on the attendee's desk using gloves the day before the training*
- *Attendees provided their own writing utensils*
- *Attendees brought their own lunch*
- *Ashwin Mohan, Hetek Solutions*

We are doing online theoretical education combined with carefully controlled in-person practical training. It's a lot of work and attention to detail for both the instructors and students but we are all making it work. – Allison O'Neill, Okanagan College

The COVID-19 pandemic has presented BC Plant Health Care with a number of opportunities for growth and advancement. We have been willing to continue providing high quality training courses throughout this challenging time. Regarding in-person synchronous classes, we have been following provincial recommendations for physical distancing and mask wearing where this is not possible. To accomplish this, we have been working with reduced class and learning pod sizes. We have also been limiting points of contact by involving more pieces of equipment, using roll calls in lieu of sign in sheets, and sanitizing tools and props when necessary. Further to these measures, we administer self-assessments at the beginning of every class, where our COVID protocols are reviewed, and giving attendees an opportunity to discuss with us their safety. Finally, we have been offering asynchronous on-line learning courses to provide opportunities for people to learn without exposing them to additional risk. - Thomas Walz, BC Plant Health Care

The above, just a few of the comments received, show that similar to the EOCP modifying its operations to provide services to Operators in safe manner, training providers have pivoted to our new reality, and have made many modifications to their training methods to ensure Operators have access to training to maintain their CEUs and/or complete the education needed to write higher levels of certification exams. To make it easier for Operators to find courses that are virtual, we are asking training providers to indicate this in the EOCP's CRM, thus Operators can now use the 'Location' tab to search for virtual courses.

The DWPR stipulates the need for Operators to be certified:

> **12**(1)In this section, "Environmental Operators Certification Program" means the program of classification and certification for water supply system operators established in British Columbia by the Environmental Operators Certification Program Society.

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(2)Subject to subsections (3) and (6), a person is qualified to operate, maintain or repair a water supply system if the person is certified by the Environmental Operators Certification Program for that class of system as classified under the Environmental Operators Certification Program.

To be certified, an Operator needs to be up-to-date with membership dues and CEUs, and most often when an Operator has lost certification it is due to not completing the required CEUs – you can easily check the reason for loss of certification on the EOCP's Customer Relationship Manager (CRM).

We do not know how long this pandemic will last but do know that provision of safe drinking water and wastewater management will remain essential. Part and parcel of that is the requirement to complete the required CEUs, and fortunately, training providers appear ready, willing, and able to provide Operator training in a safe manner.

SAVE THE DATE

BC BRANCH AGM:

Wednesday, December 16, 2020

Be sure to check out the Summer 2020 Special Edition Newsletter from CUPE as they highlight CUPE Members and COVID-19. Environmental Health Officer, Nadia White, was praised for her strong effort in the fight against the pandemic.

CUPE BC Public Employee, Summer 2020 SPECIAL EDITION. The issue can be found on the CUPE BC website at https://issuu.com/cupebc/docs/cupe_public_employee_summer_2020_websmaller

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BC Branch Executive Update

The CIPHI BC Branch has a number of exciting opportunities on the Executive Committee, now open for nominations. Presently several Councilor positions are vacant; this presents us with a great opportunity to welcome new members to the Executive to share their thoughts and ideas, and lead the development of the Branch.

The roles of the Councilor (1 year term) include:

- Participating in monthly Branch meetings
- Contribute to Branch planning for activities, events, and Member support and recognition
- Advance Branch activities through participation on sub-committees

If a Councilor position is of interest to you, we welcome your nomination form and look forward to seeing you at the AGM! If you have additional questions about either role, please contact info@ciphi.bc.ca.

Retirement—Tim Shum

Tim Shum retired effective December 27, 2018 after 40+ years in the field of Environmental Health. Tim attended BCIT and graduated in 1978 and received his CPHI(C) shortly thereafter. Tim started work with the Calgary Health Dept. where he became the Assistant Director of Environmental Health in 1988. In 1993 he moved to the City of Burnaby to be the Chief Environmental Health Officer. In 1997 he was appointed the Director of Environmental Health with the Simon Fraser Health Region. When health regions in the area were amalgamated in 2002 into the Fraser Health Authority, Tim became the first Director of Environmental Health for the FHA. In October 2013 Tim took on a new position of Executive Director, Population and Public Health until his retirement in 2018.

Tim Shum (right) at his send-ff with the late Bill Koberstein and Ken Shaw.

At the retirement gathering for Tim, Dr. Martin Lavoie, Vice President, Population and Public Health and Chief Medical Health Officer spoke about his time working with Tim. “It was a privilege and an honor to work with Tim: he was a great colleague to work with and a very effective partner in achieving our goals and objectives. We worked together in a co-management relationship, leading the Population and Public Health Program together – and our collaboration and relationship were strong and effective, and I could trust Tim’s judgement and guidance, and knew that our programs were a very good hands.

Tim has been a very positive and effective force in the area of Public Health, and his extensive professional experience, broad know-how, very collaborative approach, and expertise have contributed to significant achievements over the years.

Tim brought a friendly and positive attitude to his work, had a strong sense of responsibility and was very committed to what he did. This made it easy to work with him and achieve great results.

I keep many very positive memories of the time when I was working closely with Tim.”

A Made-in-BC Community of Practice to Share Public Health Resources during COVID-19

Lydia Ma (NCCEH), Esther Tong (BCCDC) & Ken Shaw (FHA)

When the World Health Organization officially declared a pandemic on March 11, 2020, Canada's public health system was already mobilized to respond to the impacts of COVID-19. Already familiar with public health emergencies, environmental health professionals adaptively leapt into action at all levels to support communities and to protect the public.

In BC, an initial environmental health response began with addressing questions by Regional Directors, Food Protection Managers, the BC Ministry of Health, and the BC Centre for Disease Control. These questions included: *What issues were environmental health officers addressing in the various regions in BC? What types of questions were coming in from operators? What resources were either being developed or are already being used in each health authority?*

It became clear that a coordinated approach would be beneficial, as common issues were arising in the field across the province. EHOs have a role to play as a source of public health expertise and guidance; they needed evidence-informed resources to do their work safely and to support the ongoing and evolving public health response. Timeliness and responsiveness are critical in any public health emergency and there were still many unknowns about this new virus. The Provincial Health Officer issued public health orders, but guidelines were needed to support interpretation and to ensure consistency across the regions. Furthermore, as new research and evidence was emerging, practitioners in the field would need support in assessing the evidence to establish and validate best practices.

Since the onset of the pandemic, the National Collaborating Centre for Environmental Health (NCCEH) began to synthesize, collect and collate resources related to COVID-19 from the best available research evidence. There was a pressing need for NCCEH to provide relevant and timely evidence to inform the pandemic response, to bridge the gaps between science, policy and practice, and to counter the proliferation of mis- and disinformation regarding COVID-19. This work still continues.

Under the direction of Dr. Tom Kosatsky, Medical Director, BCCDC Environmental Health Services and Scientific Director, National Collaborating Centre for Environmental Health, the provincial COVID-19 Resources, Community of Practice (CoP) was formed in April 2020. This CoP included representation from all six health authorities, the BC Ministry of Health, BCCDC and NCCEH. Group administration and coordination was undertaken by BCCDC Environmental Health Services. The three main drivers for this group were:

1. To inform members of knowledge translation and guidance documents completed, under review and being developed.
2. To reduce duplication and encourage collaboration among members and their agencies who are developing such products.
3. To establish needs for knowledge and guidance products and identify individuals and agencies who can produce them.

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A Made-in-BC Community of Practice to Share Public Health Resources during COVID-19 CONTINUED. . .

The CoP had an open forum format that held regularly scheduled meetings that focused on knowledge exchange and discussion.

In the early days of the COVID-19 pandemic, BC lacked guidance documents to inform practice and to set policies, as the process to get documents developed and approved through the Province was still being established. In view of this, the BC Health Authorities began developing their own interim guidance documents as appropriate for their jurisdictions. The CoP thus became a convenient and effective forum for sharing many newly developed resources by member organizations that helped to support work in each of the regions. Some examples included:

- Northern Health: Guidance for gyms and fitness centres that were shared and adopted across multiple health authorities
- First Nation Health Authority: *Sharing the Harvest during the Pandemic* factsheet
- NCCEH: *COVID-19 Precautions for Multi-Unit Residential Buildings*
- Island Health: *COVID-19 Health Protection Schools FAQ*
- Vancouver Coastal Health: *Coronavirus Disease (COVID-19) Guideline for Food Processing Facilities*
- Fraser Health: Letter on COVID-19 Advice for Small Businesses
- Interior Health: Follow-up to operators of Class A & B slaughter facilities

As time progressed a more centralized process was established and thus reduced the need for the CoP to continue meeting. A brief, informal survey was shared with CoP members to collect general feedback and to explore new directions should the need for convening a group like this arise again in the future. Some examples of benefits expressed by CoP members include:

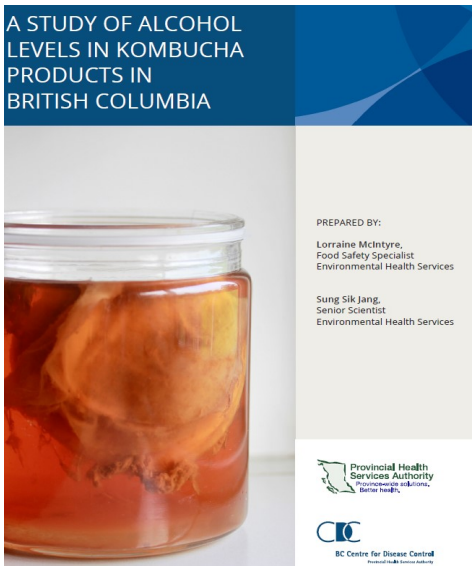
- *"It serves as a good platform for information sharing"*
- *"The information shared was useful to EHOs"*
- *"Helped reduce duplication"*
- *"Promoted coordination and consistency"*

To support BC and national efforts, the NCCEH continues to develop additional COVID-19 resources that can aid our understanding of questions such as: *What is the minimum infectious dose for this disease? What environmental conditions are conducive to SARS-CoV-2 survival and the likelihood of transmission? Are there changes in risks as we move into fall and winter seasons? How is COVID-19 complicating public health responses to extreme heat, wildfire smoke and climate change?* As new evidence and research emerges the NCCEH will continue to update the Environmental Health Resources for the COVID-19 Pandemic topic page.

The success of the CoP was largely due to the collective and individual expertise of the members that came together. Despite the limited period of activity, the membership made valuable contributions to the efforts of environmental public health professionals and EHOs all across BC. While this group no longer actively meets the individual members continue on in their regular roles to support efforts that will bring us safely through the remaining phases of the pandemic.

Addressing alcohol as a chemical hazard in kombucha processor food safety plans

By Lorraine McIntyre, Food Safety Specialist, Environmental Health Services, BC Centre for Disease Control



The aim of this article is to inform EHOs how they may approach reviewing alcohol (ethanol) in food safety plans of premises that are manufacturing kombucha. Kombucha is a brewed tea made with sugar and fermented with a live culture of yeast and bacteria. The basis of the fermentation is the conversion of sugar to ethanol by yeast, followed by conversion of ethanol to acetic acid by bacteria. In a recent BCCDC study, some kombucha products purchased and sampled in BC were found to contain low levels of alcohol above the regulated limit of 1% alcohol by volume (ABV). Highlights from the study found that 70% (n=27) of BC processors had alcohol levels that exceeded 1% ABV. Of these, 29% had alcohol levels exceeding 2% ABV.

Why are low levels of alcohol a concern and considered a health hazard? The amount of alcohol that causes illness (toxicity or intoxication) is calculated by the alcohol dose and weight of the individual. Low amounts of alcohol <5% ABV can create illness in lower weight toddlers. Children who have ingested doses of 50 mg of ethanol require observation in hospital. A kombucha drink that contained 2.5%ABV (containing 33mg/100mL) would mean that less than a cup of tea (150mL) would be enough to create illness in a child. Guidelines also recommend that people who are pregnant should avoid all alcohol to protect the fetus. There are also many other individuals in the population who may want to avoid ingesting any alcohol, for example, if they are taking prescription medications, driving, have an alcohol use disorder or choose to avoid all alcohol for personal or religious beliefs.

Regulatory rationale: All kombucha processors are required to have a food safety plan approved by the Regional Health Authority where the processor operates (and receives a health approval) or in food service premises where kombucha is made and sold on site (and receives a health operating permit) as shown in Figure 1. Kombucha products sold in retail grocery stores that are imported or kombucha products that are made in BC that are exported fall under the regulatory oversight of the Canadian Food Inspection Agency (CFIA). Requirements for labelling are made by Health Canada and because ethanol is a chemical are under the jurisdiction of the Bureau of Chemical Safety (HC-BCS).

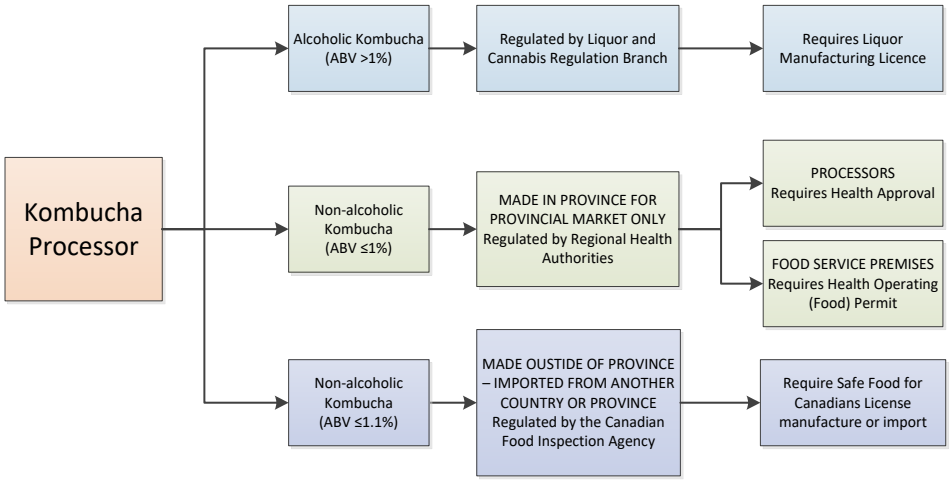


Figure 1. Regulatory oversight of kombucha

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Addressing alcohol as a chemical hazard in kombucha processor food safety plans. . . Continued

In BC the *Public Health Act* specifies that operators engaging in regulated activities must prevent health hazards, as well as respond to and mitigate health hazards that arise (section 18). The requirements for a food safety plan are specified in the *Food Premises Regulation* section 23(2) that specifies operators must develop written procedures (e.g., a food safety plan) that ensures health hazards do not occur. This section further requires identification of critical control points (CCPs), critical limits for the CCPs, procedures and action to control critical limits.

What processors need to know about controlling alcohol: Processors intentionally producing beverages with an alcohol-by-volume (ABV) greater than 1 percent (>1%) require a liquor manufacturer licence. Liquor manufacturing is regulated by the Liquor and Cannabis Regulation Branch (LCRB). They should contact the LCRB and apply for a manufacturer's licence before producing any more product.

As described above, processors producing non-alcoholic kombucha must have a health approval or health operating permit. It is their responsibility to ensure unintentional alcohol above 1% ABV is not present in their products during shelf-life and consumer use (and abuse) of the product. Kombucha that continues to ferment after bottling and distribution may allow alcohol levels to rise. Processors should be testing their kombucha for alcohol using an approved method. Kombucha processors requiring assistance reviewing their process and alcohol testing method may contact the BCIT Natural Health Products laboratory for assistance on a cost recovery basis (e-mail Dr. Chan).

Control of the hazard must be demonstrated by the operator by:

1. Testing alcohol in the tea at the time of bottling and at the end of the products shelf-life to demonstrate compliance with regulations that alcohol content does not increase above 1% ABV.
2. Keeping records to show that alcohol testing is being done, and making those records available to inspectors during inspections
3. Having critical limits in place to control for alcohol in the event it is above 1% ABV, keeping records of the critical limits and actions taken, and making those records available to inspectors during inspections.
4. Incorporating alcohol as a CCP into their written food safety plan and explaining how the CCP will be controlled with explanations of the critical limits also in the food safety plan.

Critical limit options when alcohol is not controlled (i.e. when testing demonstrates alcohol is >1% ABV) at bottling include:

- ◊ Diluting the batch;
- ◊ Diverting to alcoholic market stream (liquor manufacturing licence would be required);
- ◊ Pasteurizing the product at time of bottling to ensure yeast levels don't increase;
- ◊ Fermenting for a longer period so that alcohol is converted to acetic acid; and
- ◊ Discarding the batch.

Caution should be exercised when extending fermentation to ensure that the pH of kombucha does not become too acidic and fall below an acidity value of 2.5.

If alcohol is a persistent problem the operator should consider reviewing their process and recipe. Recommendations include avoiding added sugars after the fermentation period as sugars provide food for yeast and controlling yeast populations by:

- ◊ Employing technology to remove yeast through centrifugation, or
- ◊ Choosing yeast populations that do not grow at refrigeration temperatures, or
- ◊ Some other method to control yeast.

What inspectors can do to address alcohol as a hazard during routine inspections and reviews of food safety plans: We are all familiar with illnesses caused by bacteria such as *Salmonella* and verotoxigenic strains of *E. coli.* Food safety plans are routinely assessed to ensure ingredients and hygienic practices in establishments control these health haz-

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-ards. Alcohol is a chemical rather than microbial hazard. When we assess for chemical hazards we are usually assessing the weight of an ingredient added to a recipe to ensure the correct amount is added. For example, sodium nitrite must be added to fermented meats at levels above 100ppm to control for microbial hazards, but not at levels higher than 200ppm, which may cause toxicity when ingested. Alcohol is not an added ingredient in kombucha. It is created during the fermentation process. It may increase or decrease over time during the fermentation period, after bottling, during distribution and during its shelf-life and best before date. Active yeast in kombucha will increase alcohol levels and carbon dioxide when sugar is available and particularly when temperatures increase. While it is the operator responsibility to control alcohol (a health hazard) in their product, what can an inspector do to assess control?

New and existing kombucha processors should not be granted a health approval unless a food safety plan is available that addresses alcohol as a hazard. The plan should identify CCPs, critical limits for CCPs, procedures to ensure adherence to critical limits, and what occurs when critical limits are not adhered to. During inspections EHOs may:

- ◊ review food safety plans during inspections;
- ◊ require evidence that the procedures outlined are adequate and being followed in the form of
  - records for alcohol testing
  - records for control of alcohol as a CCP when critical limits are not met that show actions taken to mitigate the hazard.

Monitoring for alcohol should be an on-going activity with a demonstrated history of compliance to regulations. Is should be stressed that EHOs are not expected to collect samples for testing. However, if there is an ongoing demonstrated history of non-compliance (e.g., no alcohol testing is done, or control of alcohol is not demonstrated by elevated alcohol levels repeatedly found in testing records) then further actions may be considered. BCCDC may be contacted for further advice on this issue such as assistance with reviewing food safety plans, or as a liaison between the health authority and LCRB to report non-compliance.

Further recommendations: BCCDC recommends that precautionary statements and labelling be included on kombucha products so consumers can make an informed choice. Alcohol in any amount can be a risk for the population and particularly for vulnerable groups. Consumers have the right to know what products have alcohol in them, how much alcohol is present, and if there are any risks in handling the product. Labelling should include a declaration of the alcohol content, precautionary statements for vulnerable groups, and handling information. For example, labels should include

- ◊ may contain alcohol at <0.5% ABV
- ◊ not a suitable beverage for young children or during pregnancy
- ◊ keep refrigerated, do not shake
- ◊ readable BBD

In June 2020 Health Canada created a page to inform the population about unintentional alcohol in non-alcoholic fermented beverages. They ask consumers to keep these beverages refrigerated and to discard beverages past their BBD. We have requested labelling improvements with these products but heard there were no plans at this time to take further actions.

EHOs wishing to learn more about assessing kombucha recipes and the BCCDC study should consult our website where you can find an updated kombucha food issue note (March 2020), read the full report, or view a grand rounds presentation (Sep 2020).

BC Centre for Disease Control

YOU KNOW WHAT REALLY GRINDS MY GEARS . . .

While inspecting a restaurant - "How do I become an inspector because I've worked in restaurants my whole life and I know that they are hiding things from you guys that YOU don't even know about. Is it like, an online course to become an inspector?"

Please submit your "heard it a thousand time before one-liners" that you hear in the field over and over to bcpageeditor@ciphi.bc.ca. Let's all share in the hilariously annoying joys of our environmental public health experiences.

Recognition for CIPHI from the NEHA

In Memoriam—Karen Rehbein

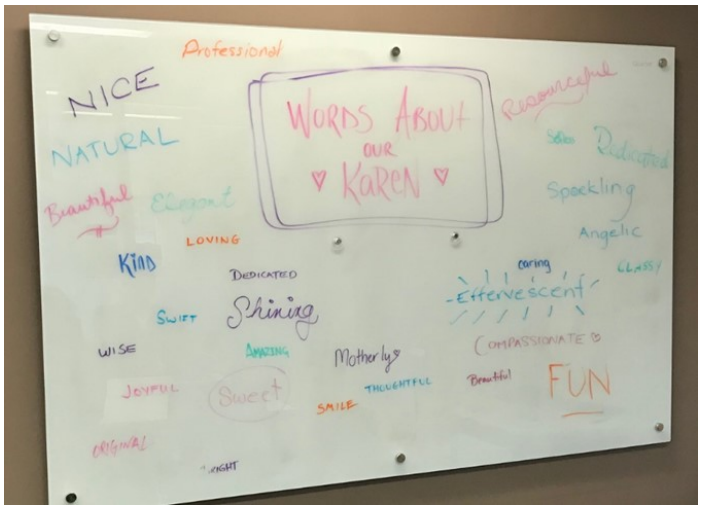
October 12, 1961—July 25, 2020

Where do I begin to tell the story of Karen Rehbein……

Environmental Health Officers are a close-knit community here in BC, so it was a shock for all of us to find out about Karen Rehbein's untimely death. She was only 58, but she managed to pack a lot into the years she had. Maybe she was prescient; she made the most of her time and carved out a life worth living.

A B.C.I.T. graduate, at 18 years old, she had the distinction of being the second female the City of Burnaby's Health Department hired as a health inspector. Karen took her work seriously; compliance mattered to her and she strove to bring her operators up to the high standards she expected of them. Some were initially resentful, a female in a male-dominated career, she took her role in stride.

More than one food processor, restaurant owner, or personal service establishment tested her ability to set the tone and requirements and she handled them with a particular grace and dignity while ensuring the highest level of health compliance.



She set high standards for herself as well. In her 40s, while her two children were still young, she returned to school, this time earning a Bachelor of Science degree from Simon Fraser University. After 25 years at Fraser Health, she migrated to Vancouver Coastal Health in search of a new set of challenges.

Karen retired early, having "put in her years" to earn a comfortable pension, only to discover that full-time gardening, travel, tennis, and renovation wasn't enough. She missed the interaction, so she returned, ostensibly as a part-timer. The hours probably resembled more closely those held by full-time staff, but for her, it was home. Karen loved her work and she loved making a difference.

Many of us that were close to her are still trying to deal with her death. It's impossible to think of Karen as not being in this world with us, with her serious work ethic and beautiful smile. Her absence will be felt for a long time, and maybe it should be that way. It serves as a reminder to all of us that the end is unknown. Karen Rehbein lived her life to the fullest; her death, at age 58, is a bookmark – a haunting reminder for all of us to do the same. (by Ralph Sears)

There are no words enough to describe or tell how we all felt about losing you. We cannot begin to imagine the pain and despair your family is experiencing! Our hearts go out to them, especially Samantha and Matthew; we listened to you talking about them year after year, how proud and close you all were. We want to celebrate you by putting some of our thoughts, feelings and memories together. In doing so we hope we can find some solace and carry on!

We loved the many expressions that were you:

You loved the garden. . . .

I miss you; I missed you coming into my room to say good morning every day. I missed your bright cheerful smile to say this day will be all okay. I missed you telling me how everything went each day. I missed you telling me what you encountered each day. I missed seeing how excited you were after you found something and made it right that day! I missed your bright indignant expression when operators didn't do what they should do day after day!

When I said I am happy to come to work to see everybody every day, you said I "must seek medical help"! Compare to you coming back to work almost immediately after your retirement; I think you're the one who really need help! We all knew how much you love your work and how you understood the significance of our work in making the world a better place every day!

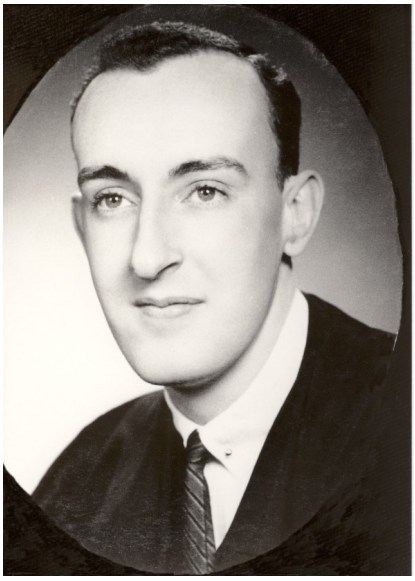
Thank you for helping me:

- learn to be mindful of the people I work with everyday
- learn to remember to cherish the people I work with everyday
- remember to say "I love you" to my beloved everyday
- learn to hold on tightly to the people I love everyday
- learn not to take for granted that I will live another day, and
- remember to give thanks for everything everyday

Oh, I miss you so! - From all the people who love you!

Submitted by Jessica Ip

In Memoriam—Charles Leslie Young

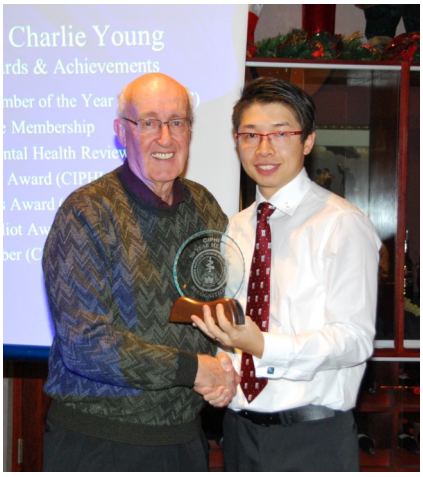


December 28, 1940 – August 10, 2020

Charlie Young lost his brief battle with cancer on August 10, leaving this world peacefully at the age of 79. He was grateful for the care and kindness he received at the end of his life from the doctors, nurses, and staff at Crossroads Hospice.

Charlie is survived by his loving wife Kathy of 57 years. He was a proud father and grandfather and will be lovingly remembered by his daughters Cheryl (Neil), Laurie (John), grandson Keenan Kerswell, nephews Brian and Andy Lister and his extended family in England.

Charlie was a 1962 graduate of the Public Health Inspection Program at Ryerson and started his career as a PHI in Toronto. He soon became involved in the Institute as a Councillor and Secretary of the CIPHI Ontario Branch in the 60s, followed by a term as Councillor on the National Executive in the late 60s and early 70s. In 1972, Charlie & Kathy moved to BC where he joined the BC Branch and soon was elected to the executive as a Councillor and then Vice-President. He was on National Executive again as a Councillor in the 80s, as National President in the 90s, and Past President on 3 subsequent occasions in the 90s and 2000. Charlie also served on the Board of Certification and was a Founding Trustee and then Treasurer of the Environmental Health Foundation of Canada for well over 10 years.



Charlie receiving the 50 Year Award from Gary Tam.

He was awarded the BC Branch Member of the Year Award, on two occasions, the President's Award and the Alex Cross Award. He developed the Food Safe Program for Expo 86'. He received numerous additional awards related to Environmental Health Promotion, Protection, and Education. Charlie was recognized as a Member of Distinction and was awarded Life Membership in the Canadian Institute of Public Health Inspectors. Charlie had nearly 60 years of continuous membership in the association.

(l to r) Charlie, Rob Bradbury, Greta Kos, John Gibb, Richard Taki

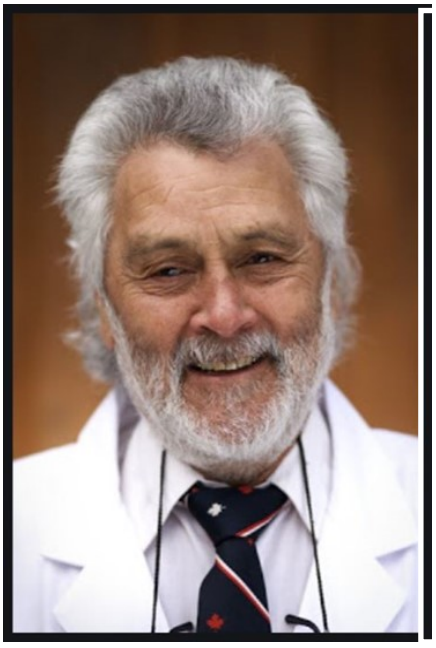
His wonderful sense of humour, large heart, and compassionate nature drew people to him, and he will be greatly missed and fondly remembered by his church family at Inlet United Church, by members of the Nothin Dragon Masters Dragon Boat Team, and as a choir member of Choral Connections and Friends at Princess Gate. Charlie was a gentle soul with a huge heart who gave back to whatever community he was part of. His students at the BC Institute of Technology, often spoke of the enthusiasm he brought to the classroom, but even more of the mentorship that he gave to them. Charlie also volunteered with a number of community organizations, usually taking on leadership roles in them. He enjoyed travelling, was passionate about sports, and loved singing.

A service of remembrance was held at First Memorial – Burkeview Chapel on Friday, August 28. In lieu of flowers, memorial donations may be made to the Cancer Association or the SPCA.

Many thanks to Mrs. Kathy Young for her contribution to this tribute to Charlie.

Tim Roark
BC Branch Historian

In Memoriam—Dr. Nazamadine Abdurahman



Nazamadine Abdurahman, better known as "Naz", died at his home on Hornby Island, B.C. on April 14, 2020. He was the last son of the late Dr. Abdurahman and brother to his late sister Begum Hendricks and his late brother Dr. Abdul Abdurahman. Naz was 86. He is survived by his wife Sylvia, children and grandchildren.

Naz completed his Master's Degree at the University of Strathclyde in Glasgow in 1958. In 1967 he received his PhD at the University of British Columbia. He was a chemist who taught at the BC Institute of Technology. This included students in the Environmental Health/Public Health Inspection Program for over 20 years.

Ann Thomas who was in the Class of 88 stated, "Naz had a very engaging and outgoing way of teaching what was to most of us a challenging subject. His wonderful sense of humour and ability to connect with the students made every class an adventure in learning!. He kept us entertained with his wit and loved a good practical joke even when he was on the receiving end. However make no mistake he was also a talented chemist and an effective and dedicated teacher. Our fondness and respect for Naz endures to this day and no class reunion is complete without the re-telling of stories about our legendary chemistry professor."

He retired to Hornby Island adjacent to Denman and Vancouver Islands. Life on the island was great and he enjoyed building a lovely new family home there. Being a very competent organic chemist it was not long before he and an icebreaker Captain got together and created **Island Spirits Distillery.** They pooled their experience and knowledge which fueled innovative new processes with sales of **phROG** products across Canada and in several countries around the world. Naz will indeed be missed by his family, friends and many former students.

Special thanks to Shelly Stetsko and Ann Thomas.

Tim Roark,
BC Branch Historian

Keep up to date on the latest news at the BC Branch website:

www.ciphi.bc.ca

The page also contains information on membership, conferences, career opportunities, documents, and much more. Check it out regularly.

Did you know the BC Branch is on Facebook and Twitter?

Click on the icon to find the BC Branch on Facebook and *Like* the page.

Click on the icon and *Follow* the BC Branch on Twitter.

In Memoriam—Mark Huddleston

We lost a friend and EHO colleague this past summer with the passing of Mark Huddleston on June 25, 2020 in Powell River. Mark started his career as a sanitarian and worked at various locations in the USA before he established a successful on-site septic consulting business in Washington state. From there, Mark came to work as an EHO in the Powell River office in 2009 where he and his life partner, Jacqueline, settled into the rural coastal community and found immediate joy and community as avid gardeners, foodies, artists, community activists, and all-around outdoorsy people, just to mention a few interests.

Mark having fun with EHO colleagues at 2010 Olympics, Whistler. From left to right, all EHOs: Brian Mcfadyen, Angela Whalen, Ginny Jorgenson, Kelcey Watts, Jonathan Choi, Mark Huddleston, James Whalen, Tim Adams, Bob Weston, Jon Pickles

After a cancer diagnosis in 2012, Mark always kept positive spirits and outlook. He battled the illness for far longer than any doctors thought possible. For myself, and other friends and colleagues, his positive outlook on both life and death left a deep lasting impression and legacy. Mark had come to peace with the process of passing away. He certainly 'went out' on his own terms and was surrounded by loving friends and family through the whole process of passing. Mark had a huge heart, and boundless compassion for others less fortunate than he. Mark, we will miss you dearly, but your legacy and memory will live on. Mark chose the following passage to be shared with friends, colleagues, and loved ones:

*– **All is Well** (by Henry Scott Holland)*

Death is nothing at all,
I have only slipped into the next room
I am I and you are you
Whatever we were to each other, that we are still.
Call me by my old familiar name,
Speak to me in the easy way which you always used
Put no difference in your tone,
Wear no forced air of solemnity or sorrow
Laugh as we always laughed at the little jokes we enjoyed together.
Play, smile, think of me, pray for me.
Let my name be ever the household word that it always was,
Let it be spoken without effect, without the trace of shadow on it.
Life means all that it ever meant.
It the same as it ever was, there is unbroken continuity.
Why should I be out of mind because I am out of sight?
I am waiting for you, for an interval, somewhere very near,
Just around the corner.
All is well.

Mark inspecting an athletes' village food premise at the 2010 Olympics.

By: Darren Molder

PDH ENTRY 2020

Are Professional Development Hours (PDHs) required for 2020?
Yes, PDHs are required for 2020. This decision was made to ensure the integrity of our profession at a time when we were are being called to use our skills above and beyond our regular work duties.

I have been so busy with COVID-19, how could I have earned PDHs?
You likely have more than enough hours. For 2020, many EPHPs have learned so much about COVID-19, have completed new training and stayed informed via webinars, research articles and updates. You have earned hours by:

- Listening to Provincial Health Officer or Medical Health Officer updates
  - Informal Activity – Webinar (no activity limit within the category)
- Reading articles, resource documents, technical reports, etc. on COVID-19
  - Informal Activity – Self-directed Studies (no activity limit within the category)
- Being trained in a new role like Contact Tracing
  - Informal Activity – Workshop (no activity limit with the category)
- Being tasked with creating COVID-19 resources for colleagues or the public
  - Contributions to Knowledge – Other (see PD model for limits)
- Taking part in COVID-19 specific meetings and updates (outside of regular work duties)
  - Informal Activity – Webinar (no activity limit within the category)

Tips:

- Add date, time and detailed description for each entry.
- Combine similar entries (MOH updates) into one entry. Include dates and times for each specific entry (ex. MOH update – July 28, 2020 @1:00pm-2:00pm).
- When entering PDHs, enter more than the minimum requirement.
- Deadline for Member Service Centre (MSC) PDH entry: January 31st of the following year.
- For questions, email cope@ciphi.ca or connect with your provincial CoPE rep

Oct 2020

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www.ciphi.bc.ca

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Editorial Policy

The objective of this newsletter is to keep the members of the BC Branch and other colleagues informed of the local and national events that are of interest and importance to them.

The views, comments, or positions of the BC Page are those of the Editorial Team or the author and do not necessarily reflect those of either the BC Branch or the Canadian Institute of Public Health Inspectors.

The Editorial Team reserves the right to edit material submitted, solicited or unsolicited, for brevity, clarity, and grammatical accuracy.

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