

June 8, 2016

Clinical Guidance Note 2

British Columbia Enhanced Recovery Collaborative Guidance on Pre-Operative Carbohydrate-Loading Beverage

Provision of a carbohydrate beverage in the immediate pre-operative period is a key strategy to mitigate against the metabolic consequences of the stress response to surgery. This process of care is intended to reduce the incidence of insulin resistance, as well as minimize post-operative protein and nitrogen losses(1) therefore preserving lean muscle mass (2) and muscle strength(3). Consuming the carbohydrate beverage is intended to result in insulin secretion, thereby changing metabolism from a fasted to fed state, similar to what is observed after eating a meal(4), and this is the test of effectiveness of any particular beverage(5). Pre-operative carbohydrate loading in conjunction with other aspects of the Enhanced Recovery protocol has shown a decreased risk of complications by 50% and reduced length of hospital stay by 2.5 days with no effect on readmissions risk or mortality(6). The Enhanced Recovery protocol has been used in elective colonic, elective rectal/pelvic, pancreaticoduodenectomy and radical cystectomy surgeries (refer to Appendix 2).

Modern fasting guidelines permit solids up to 6 hours prior to going to the OR, and clear fluids up to 2 hours prior to OR. Implementation of the pre-operative carbohydrate beverage 2 to 3 hours prior to OR requires endorsement of modern fasting guidelines. International experience and multiple RCTs dating back to the 1980s have demonstrated that this is a safe practice.

Enhanced Recovery pre-operative carbohydrate loading protocols are clear fluids (the test here is whether a newspaper can be read through a glass of the fluid) and ideally contain 12% complex carbohydrate(7). This produces a favorable insulin secretion profile with a low glycemic index, and ensures a lower osmolality to support gastric emptying(4)(6)(8). It is professional opinion that the fluid should not contain a significant renal solute load. Other desirable product attributes include ease of dissolving (if product is available in powder form), pleasant taste, and ability of product to be prepackaged in clinically relevant doses. The amount of carbohydrate provided should be in the range of 100 grams about 8 to 12 hours pre-operatively and 50 grams 2 to 3 hours pre-operatively.

The above guidance may be applied to diabetic patients in the same doses, however, the carbohydrate beverage could potentially impact glycemic control, and diabetic medications taken by the patient should be reviewed pre-operatively.

There are several products on the market that would seem to fit the criteria, but a lack of clinical trials leaves no one product ideal or superior to others. See Appendix 1 for a full list of products reviewed by this Nutrition Community of Practice.

The Enhanced Recovery Collaborative supports the following evidence-based practices with respect to appropriate pre-operative carbohydrate-loading protocols. Guidance Note 2 was

developed by the Nutrition Community of Practice of the BC Enhanced Recovery Collaborative (“the Collaborative”). It has been reviewed by the multi-disciplinary members of the Collaborative, presented to the BC Anesthesiologists Society for feedback, and approved by the Collaborative’s clinical co-chairs.

This document is not intended to serve as a comprehensive review of the literature, or a statistically driven guidelines document. The Enhanced Recovery Collaborative undertook an extensive review of current literature and practice patterns for pre-operative carbohydrate-loading, assessed the practical implications of the various proposed algorithms, and sought to summarize evidence and advise British Columbia’s clinicians as to best practice based on current evidence. In the end, each site and practitioner should base decisions on providing patient care based on consultation with local care providers, and through a multidisciplinary collaborative approach.

Carbohydrate-Loading Beverage Selection Criteria

1. Dosage:
 - 100g taken 8-12 hours pre-op (in 800ml). The volumes do not have to be consumed all at once, but rather can be taken over a couple of hours 8-12 hours before surgery.
 - 50g taken 2-3 hours pre-op (in 400 ml). Volume is driven by dose of carbohydrate and end concentration.
2. Clinical Considerations:
 - avoid renal solute load
 - low osmolality
 - contains a maltodextrin component (for optimal insulin secretion profile compared to higher glycemic index/simple sugars)
3. Palatability:
 - tasteless or at least not unpleasant to taste
4. Ease and Process of Administration:
 - preference for pre-packaged drinks/powders, easy to prepare (Bulk containers result in operational challenges and infection control concerns.)
 - clear liquid (either patient-mixed or comes as clear liquid)
5. Accessibility:
 - available and affordable to health authorities, hospitals, and patients

The Enhanced Recovery Collaborative considered the practice of providing a light snack the night before surgery, as an alternative to giving the carbohydrate-loading beverage in that period. There is insufficient evidence to support the prescription of a light snack pre-operatively. Due to the lack of evidence and in order to facilitate consistency among surgical patients, the Enhanced Recovery Collaborative maintains its recommendation to providing one dose of the carbohydrate-loading beverage 8-12 hours before surgery, and the second dose 2-3 hours before surgery.

Juice has been considered for use by a number of sites in BC, and has been implemented without adverse effects reported in Montreal, Fraser Health and Ontario according to a 2013 Enhanced

Recovery Nutrition and Environmental scan done by Alberta Health Services(11). Juice meets most of the beverage criteria in that it is readily available and palatable, may be administered at home or in hospital for minimal cost compared to specialized products, is already pre-packaged and simple to consume. Juice does not however meet the criteria of lower osmolality and does not have a complex carbohydrate/maltodextrin component. With these considerations in mind, some sites are adopting a “something is better than nothing philosophy”, but ultimately further research is warranted to determine the safety and efficacy of juice versus a more specialized product in the carbohydrate loading pathway of the Enhanced Recovery protocol.

References

- (1) Breuer JP, von Dossow V, von Heymann C, Griesbach M, von Schickfus M, et al. Preoperative Oral Carbohydrate Administration to ASA III-IV Patients Undergoing Elective Cardiac Surgery. *Anesth Analg* 2006; 103: 1099-108.
- (2) Gustafsson UO, Nygren J, Thorell A, Soop M, Hellström PM et al. Pre-operative carbohydrate loading may be used in type 2 diabetes patients. *Acta Anaesth Scan* 2008; 52:946-51.
- (3) Can MF, Yagci G, Dag B, Ozturk E, Gorgulu S. Preoperative administration of oral carbohydrate-rich solutions: comparison of glucometabolic responses and tolerability between patients with and without insulin resistance. *Nutrition* 2009; 25:72-7.
- (4) Melis GC, van Leeuwen PAM, von Blomberg-van der Flier BM, Goedhart-Hidding AC, Uitdehaag BMJ, Strack van Schijndel RJM, et al. A carbohydrate-rich beverage prior to surgery prevents surgery-induced immunodepression: a randomized, controlled, clinical trial. *JPEN-Parenter Enter* 2006; 30: 21-6.
- (5) Ljungqvist O. Insulin Resistance and Enhanced Recovery after Surgery. *JPEN*. 2012; 36(4): 389-398.
- (6) Noblett SE, Watson DS, Huong H, Davison PJ, Hainsworth PJ, Horgan AF. Pre-operative oral carbohydrate loading in colorectal surgery: a randomized controlled trial. *Colorectal Dis* 2006; 8:563-9.
- (7) Nygren, J, Thacker, J, Carli, F, Fearon, KCH, Norderval, S, Lobo, D.N. et al, Guidelines for perioperative care in elective rectal/pelvic surgery: Enhanced Recovery After Surgery (ERAS) Society Recommendations. *Clin Nutr* 2012;31:801-816.
- (8) Nygren J, Thorell A, Jacobsson H, Larsson S, Schnell P. Preoperative gastric emptying effects of anxiety and oral carbohydrate administration. *Ann Surg* 1995; 6:728-34.

Appendix 1: Products Reviewed by the Nutrition Community of Practice

Adherence of the following products with the criteria listed above has not been confirmed. Options regularly change and sites should review options periodically. The following were the products reviewed by the Nutrition Community of Practice for this document.

- Nutricia PreOp <http://www.nutricia.ie/products/view/preop> (Only drink subjected to randomized control trial. This product has been approved by Health Canada and is slated to be available in Canada by January 2016.)
- Nutricia Poly Cal http://www.nutricia.ie/products/view/polycal_powder
- Vitaflo (UK) PreLoad (like SOS25), dried glucose syrup
<http://www.vitaflo.co.uk/products/nutrition-support/nutrition-support/pre-surgery-product/preload/>
- Vitaflo (US) SOS <http://www.vitaflousa.com/products/metabolic-disorders/apps/emergency-regimens/s-o-s/>
- BevMD Clearfast <http://www.bevmd.com/what-is-clearfast>
- Solace SolCarb <http://www.solacenutrition.ca/products/solcarb/>

Appendix 2: Evidence Table

This table has been reproduced from the Alberta Health Services' *Nutrition Practice Guideline, Enhanced Recovery After Surgery (ERAS) Protocol Nutrition Components (August 2014)* with the permission of Alberta Health Services.

Author, year	Study Design	Population/ Sample Size	Intervention/ Item of Interest	Comparison	Outcome Measured	Appraisal
Nygren et al., 1995 ¹	Randomized control trial	n=12 <ul style="list-style-type: none"> • scheduled for elective laparoscopic cholecystectomy or parathyroidectomy • no history of DM, previous gastric surgery, or medication known to affect gastric emptying • Healthy volunteers (control group) n=7 	Nutricia group (400 ml, 48 g CHO, 285 mOsmol/L), n=6 Gastric emptying measured by gamma camera	Water group, n=6	<ul style="list-style-type: none"> • Anxiety and hunger levels ↑before surgery for Nutricia and water group vs. healthy volunteers. Anxiety ↓after water intake but not after intake of Nutricia drink at 90 minutes. • Gastric emptying faster in water vs. Nutricia group at t=60, no difference at t=90 minutes, stomach considered empty • No difference in gastric emptying before or after surgery for patients in Nutricia vs. water group and vs. healthy volunteers in each group. • Maximum plasma glucose and serum insulin levels at t=40 after ingestion of Nutricia, with return to baseline levels at t=120 minutes. 	<p>Oral CHO load leaves the stomach within 90 to 120 minutes after ingestion of Nutricia. Both plasma glucose and insulin return to baseline values at t=120 minutes after preop loading.</p> <p>Increased anxiety and discomfort before surgery has little, if any, effect on gastric emptying.</p> <p>Nutricia safe as preop loading product.</p>

Noblett et al., 2006 ²	Randomized control trial	<p>n=36</p> <ul style="list-style-type: none"> • elective colorectal surgery patients • 21-79 years • no diabetes, GERD or disorders of gastric emptying 	<ul style="list-style-type: none"> • Water group (Water) – 800 mL water the night before and 400 mL water 3 hours pre-op • CHO group (CHO) 100 g Precarb load in 800 mL water night before and 50 g Vitajoule in 400 ml water 3 h preop; mean age 58 years 	Fasting group (Fasting) – fasting from midnight the night before surgery	<ul style="list-style-type: none"> • LOS: ↓ in CHO vs. Water group (7.5 vs. 13 days). Trend for ↓ LOS in CHO vs. Fasting group (10 days). • GI function: Trend toward passage of first flatus and earlier bowel movement in the CHO group, however no difference among all groups for time to first flatus and first BM • Hand grip strength: Fasting: ↓ in grip strength on discharge vs. preop status. No reduction in grip strength in both Water and CHO groups vs. their preop levels. 	<p>Vitajoule® (a Vitaflo product) is similar to Nutricia and is available in Canada. Study shows benefits similar to that found when using Nutricia – a potential choice.</p> <p>Update: Vitajoule® no longer available in Canada: March 31, 2014.</p>
Melis et al., 2006 ³	Randomized, controlled, clinical trial	<p>Total Subjects n=30</p> <ul style="list-style-type: none"> • scheduled for elective orthopedic surgery • exclusion criteria: inability to consent, decreased LOC, increased risk for poor gastric emptying, pregnancy, 	<ul style="list-style-type: none"> • Group A- Nutricia Pre-Op (400ml)— CHO rich beverage 4 hours before surgery • Group B- Roosvicee vruchtenmix (400 ml)— CHO rich 	Control group-fasted overnight on the day of surgery	<ul style="list-style-type: none"> • no aspiration occurred in any group. • ↓ HLA-DR expression in control group post surgery No change in expression in both Group A and B. • no difference in leukocytes or percentage of monocytes among all groups. • all groups maintained fluid homeostasis, with urine sodium above 15 mmol/L • fasted group more thirsty 3 	<ul style="list-style-type: none"> • pre-operative feeding was well tolerated. • pre-operative feeding of a CHO-rich beverage preserves immune function during and after surgery • pts who

		<p>increased intracranial pressure, BMI >30, nausea, use of medications interfering with gastric emptying</p>	<p>beverage 4 hours before surgery</p>		<p>hours preop vs. Group A and B, and the two fed groups</p> <ul style="list-style-type: none"> • no difference in feelings of hunger, nausea, anxiety, and weakness. 	<p>receive a CHO-rich beverage preop are less thirsty, which improves their feeling of well-being.</p> <ul style="list-style-type: none"> • no effect on fluid homeostasis.
<p>Breuer et al., 2006⁴</p>	<p>Prospective, randomized, double-blind, controlled study</p>	<p>Total subjects n=160</p> <ul style="list-style-type: none"> • elective coronary artery bypass graft or valve replacement surgeries • >18 yrs • exclusion criteria: impaired gastric motility, GERD, difficult airway, ASA physical status >IV, non-elective/emergent surgery, presence of infection, pregnancy, CHO intolerance, DM1 	<p>CHO group n=56</p> <ul style="list-style-type: none"> • CHO drink (12.5% CHO, 50 Kcal/100ml, 290 mOsm/kg, pH 5.0) <p>Placebo group n=60</p> <ul style="list-style-type: none"> • flavoured water (acesulfame-K, 0.64g/100ml citrate, 0 kcal/100ml, 107 mOsm/kg, 	<p>Control group n=44</p> <p>-fasting starting at midnight the day before surgery</p>	<ul style="list-style-type: none"> • no difference in glucose levels or insulin requirements between groups including pts with pre-existing DM2. • no difference in median gastric fluid volume. • no pulmonary aspiration or drinking related complications. • no difference in hunger, nausea, anxiety, and/or dryness of mouth. • difference in thirst ratings in CHO group vs. placebo and control groups. • CHO group required less inotropes after weaning from cardio-pulmonary bypass to the end of the operation. • no difference in severity of illness scores or SIRS 	<ul style="list-style-type: none"> • pre-operative feeding was well tolerated • CHO administration 4 hours prior to surgery did not affect post-operative insulin resistance in this population • oral CHO administration can be considered safe for cardiac surgery patients, including DM

			pH 5.0)		<ul style="list-style-type: none"> • no incidence of post-op complications • no difference in ICU/hospital LOS 	2 patients
Gustafsson et al., 2008 ⁵	Prospective Comparison Study	<p>n=35 subjects</p> <ul style="list-style-type: none"> • 25 with DM2 (HbA1c <7%, BMI <35) • no clinical signs of neuropathy • 11 treated with insulin (DM duration: 11.6 years), 10 treated with OAs and 4 treated with diet only (Both OAs and diet: DM duration: 6.6 years) 	<ul style="list-style-type: none"> • Overnight fast and then ingest Nutricia preop carb loading drink (400 mL beverage, 50 g carbs, 240 mOsmol/L) for all type 2 diabetic and non-diabetic subjects • Gastric emptying measured by paracetamol 	Healthy, age-and weight-matched subjects; no DM; n= 10	<ul style="list-style-type: none"> • Overall ↑ gastric emptying rate in type 2 DM vs. healthy subjects (p<0.05). • Difference in gastric half – emptying time (T50) occurred at 49.8 +/- 2.2 min in all DM subjects vs.59.6 +/- 3.7 min in healthy subjects. • No difference in emptying at t=120 minutes between OAA, diet-treated and insulin treated DM. • Gastric emptying complete at t=180 minutes for all groups. • Peak glucose levels at t=60 min for both DM groups vs. t=30 minutes for healthy group. • Baseline glucose levels achieved at t=180 minutes for both DM groups vs. t=120 min for healthy group 	Study indicated no delayed gastric emptying for well-controlled DM 2. - Preoperative carbohydrate loading is safe and can be used for patients with uncomplicated DM 2.

Can et al., 2008 ⁶	Prospective Controlled Study	n=34 <ul style="list-style-type: none"> • 21-76 yrs • BMI 25.33-30.77 • -scheduled for cholecystectomy or thyroidectomy • Insulin resistance identified in subjects by Homeostasis model assessment IR score (HOMA-IR) 	800 ml Nutricia (100 g CHO) evening before surgery and 400 ml (50 g CHO) 2-3 h before surgery	Insulin Resistance (IR) group, n=8 Non-IR group, n=26	<ul style="list-style-type: none"> • No differences in mean plasma glucose levels at before am dose, 40 min, 90 min and anesthesia induction • Higher serum insulin in IR vs. non-IR group at before am dose, until at 90 minutes. No difference at anesthesia induction. • No difference in plasma cortisol, gastric pH or gastric volume just before surgery. 	Patients with IR can tolerate high CHO drinks similarly as people with no IR.
Jones et al., 2011 ⁷	Systematic Review	Literature search using PubMed, MEDLINE, Athens and Google Scholar. n=11 studies	Review aimed to critically appraise the evidence available regarding the use of pre-operative CHO supplements for elective colorectal surgery.		<ul style="list-style-type: none"> • preoperative CHO drinks do not alter pH or the volume of gastric contents with no increased risk of aspiration or any other associated complications • Level 1 evidence shows CHO drinks pre-operatively result in shorter hospital stay, a quicker return to bowel function, a decrease in the loss of muscle mass and a reduction in PONV. • Physiologically, CHO-rich drinks enhance insulin action and patients with insulin resistance, when given CHO drinks, have similar plasma glucose pattern 	CHO drinks are safe to use preoperatively and support improved post-op recovery.

Vermeulen et al, 2011 ⁸	Double-blind randomized crossover trial	<p>n=8 (4 male; 4 female)</p> <ul style="list-style-type: none"> • 49.6±6.1 years • BMI 25.6± 3 • healthy, euglycemia, normal lipids, no GI diseases or nausea, and no pregnancy • 4 smokers 	<p>400 mL Roosvicee Original Fruitmix (over-the-counter syrup lemonade: 70 mL syrup + 330 mL water): 48 g CHO, 805 mOsm/kg (Bev B) - Started after overnight fast, drank fluid mixed with 10MBq hepatate Tc99m</p> <p>Gastric emptying measured by scintigraphy</p>	<p>400 mL Nutricia preop: 50.5 g CHO, 240 mOsm/kg (Bev A) - Started after overnight fast, drank fluid mixed with 10MBq hepatate Tc99m</p>	<p>Bev A vs. B:</p> <ul style="list-style-type: none"> • Gastric emptying : First 15 minutes: trend for earlier onset of emptying (Bev A) • 120 minutes: No difference in mean residual volume (0 ml + 106 ml vs. 48.3 + 118 ml). • Bev A: ↑ plasma responses at t=30 (glucose), t=45 (glucose, C-peptide), t=60 (all), t=75 (glucose, C-peptide), but no differences at t=90, t=105 and t=120 minutes. • Bev A: ↑ glucagon levels at t=15 and t=60 minutes. NS for glucagon peak levels • No correlation of gastric emptying percentages and half-emptying time or residual volumes to glucose, insulin, or total glucagon for Bev A and B. • Both safe to use 2hrs pre-op. 	<p>The higher osmolarity in Roosvicee® Original Fruitmix, similar to the osmolarity of many fruit juices, had a similar gastric emptying effect as Nutricia that has a lower osmolarity. May be an indication that fruit juices containing about 50 g carbohydrates could be considered for preoperative purposes.</p>
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<p>Awad et al., 2013⁹</p>	<p>Meta-analysis of 21 prospective randomized studies between 1998 and 2012</p>	<p>Total of 1685 adult, non-DM patients – major open abdominal surgery (colorectal, liver, esophagogastric and pancreatic), laparoscopic/open cholecystectomy, thyroid, inguinal hernia, cardiac and orthopedic surgery.</p>	<p>Preoperative CHO treatment group (> 50 g oral CHO 2-4 hours pre-anesthesia) n=733 (mean age: 55.1+ 10 years)</p>	<p>Placebo/fasted group n=952 (mean age: 54.0+ 10.0 years)</p>	<ul style="list-style-type: none"> • Quality of evidence ranged from low to moderate • No difference in LOS between groups (when all studies combined) • ↓ in LOS in pre-op CHO treated patients who received major open abdominal surgery (-1.08 days, [-1.87 to -0.29], I2, p=0.007 (n=7 studies)) • No differences in LOS in patients with surgical procedures expected LOS <2 days (n=4 studies) • ↓ post-operative insulin resistance in pre-op CHO vs. control group (n=6 studies) • No drink-related complications in pre-op CHO vs. control group • No differences in post-op complications in both groups. 	<ul style="list-style-type: none"> • Pre-op CHO loading is safe, associated with reduced post-op insulin resistance and no effects on surgical complications. • Pre-op CHO loading should be used in patients with major open abdominal surgery • Although limited and weak to moderate research available for other surgery patients, preop CHO loading should be considered. • Well-designed RCTs are needed.
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Abbreviations

CHO = Carbohydrates ICU = Intensive Care Unit SIRS = Systemic Inflammatory Response Syndrome

DM = Diabetes Mellitus IR = Insulin Resistance Tc99M = Technetium isotope

DM 1 = Type 1 Diabetes Mellitus LOC = Level of Consciousness

DM2 = Type 2 Diabetes Mellitus LOS = Length of Stay

GI = Gastrointestinal mBQ = MilliBecquerel

HLA-DR = Human Leukocyte Antigen-DR OAA = Oral Antihyperglycemic Agent

1 Nygren J, Thorell A, Jacobsson H, Larsson S, Schnell P. Preoperative gastric emptying effects of anxiety and oral carbohydrate administration. *Ann Surg* 1995; 6:728-34.

2 Noblett SE, Watson DS, Huong H, Davison PJ, Hainsworth PJ, Horgan AF. Pre-operative oral carbohydrate loading in colorectal surgery: a randomized controlled trial. *Colorectal Dis* 2006; 8:563-9.

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9 Awad S, Varadhan KK, Ljungqvist O, Lobo DN. A meta-analysis of randomized controlled trials on preoperative oral carbohydrate treatment in elective surgery. *Clin Nutr* 2013; 32:34-4.

Appendix 3: About the Enhanced Recovery Collaborative

From November 2014 to January 2016, eleven BC surgical sites worked together as the BC Enhanced Recovery Collaborative ('the Collaborative'). The Collaborative aimed to improve outcomes for elective colorectal surgery patients by collectively implementing the evidence-based Enhanced Recovery protocol: a multi-modal perioperative care pathway designed to achieve early recovery after surgical procedures by maintaining pre-operative organ function and reducing the profound stress response following surgery. Sponsored by the Specialist Services Committee (SSC), the BC Enhanced Recovery Collaborative applied the Institute for Healthcare Improvement Breakthrough Series model to integrate evidence into practice by promoting cross-site learning and teaching, efficient sharing of resources and tools, and development of a multi-disciplinary network of Enhanced Recovery clinicians and champions.

For more information on the BC Enhanced Recovery Collaborative, please refer to the detailed [Final Report](#) and Final Report – [Highlights](#), which describe the background, structure, activities, results, and lessons learned from the Collaborative experience.

Specialist Services Committee (Sponsor)

- Dr. Ron Carere, SSC, Co-Chair
- Dr. Sean Virani, SSC, Co-Chair
- Adrian Leung, SSC, Executive Lead
- Angie Chan, SSC, Project Manager, Surgical Improvement
- Elizabeth Babcock, SSC, Assistant

Participating Collaborative Sites

- Campbell River Hospital
- Kelowna General Hospital
- Langley Memorial Hospital
- Mills Memorial Hospital (Terrace)
- Mount St. Joseph's Hospital (Vancouver)
- Nanaimo Regional General Hospital
- Royal Columbian Hospital (New Westminster)
- Royal Inland Hospital (Kamloops)
- St. Paul's Hospital (Vancouver)
- Surrey Memorial Hospital
- Vancouver General Hospital

Participating Health Authorities

- Fraser Health Authority
- Interior Health Authority
- Island Health Authority
- Northern Health Authority
- Providence Health Care
- Vancouver Coastal Health Authority

Advisory Panel

- Dr. Ron Collins, Enhanced Recovery Collaborative Anesthesia Co-Chair, Interior Health
- Dr. Ahmer Karimuddin, Enhanced Recovery Collaborative Surgery Co-Chair, Providence Health Care
- Garth Vatkin, Enhanced Recovery Collaborative Nursing Co-Chair, Interior Health
- Andrea Bisailon, Vancouver Coastal Health
- Dr. Jean Lauzon, Fraser Health
- Dr. Willem Lombard, Northern Health
- Valerie MacDonald, BC Hip Fracture Initiative
- Kimberly McKinley, BC Patient Safety & Quality Council
- Dr. Samaad Malik, Island Health
- Dr. Kelly Mayson, Vancouver Coastal Health
- Dr. Richard Merchant, Fraser Health
- Dr. Jill Osborn, Providence Health Care
- Stephen Parker, Providence Health Care
- Brenda Poulton, Fraser Health
- Geoff Schierbeck, BC Patient Safety & Quality Council
- Dr. Jacques Smit, Island Health
- Dr. Tom Wallace, Interior Health
- Dr. Garth Warnock, Vancouver Coastal Health
- James Watson, Island Health
- Deborah Bachand, Island Health (former member)
- Ly Truong, Island Health (former member)

Nutrition Community of Practice

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- Dr. Ron Collins, Interior Health
- Sue-Ann Fletcher, Interior Health
- Lisa Jaman, Fraser Health
- Vanessa Lewis, Providence Health Care

Patient Partners

- Lavina Boyd
- Pamela Jessen

Partner Organization

- BC Patient Safety & Quality Council