

CORE CURRICULUM FRAMEWORK FOR SUPPORTED PAIN SELF-MANAGEMENT COURSES AT TERTIARY PAIN PROGRAMS IN BRITISH COLUMBIA

TOPIC: NUTRITION

KEY POINTS FROM THE LITERATURE

- Generally, a balanced diet rich in vitamins and minerals helps to improve overall health and is recommended to help reduce pain in those with chronic pain conditions<sup>3, 5, 15</sup>. Poor nutrition can predict, perpetuate or be foundational to a variety of morbidities, including excess body fat and inflammation, that contribute negatively to the pain experience<sup>1, 3-5, 11, 17, 18</sup>.
- Studies that found significant findings from consuming any specific food item, ingredient, or supplement tend to be of low to moderate quality with small sample sizes or have only been trialed in clinical settings. Doses as well as mechanisms of action are often not completely understood<sup>3, 6-9, 14, 15, 17, 20-22</sup>.
- Ingredients, supplements, and activities associated with eating are culturally influenced<sup>7, 12, 20</sup>; therefore, the pain practitioner should guide clients to consume a balanced variety of culturally appropriate foods. Additionally, making dietary changes can be difficult in some environments where healthy foods are expensive, not readily available, or are not socially normalized<sup>10</sup>. Patients should be advised to tell their health care providers about supplements they are taking, as these may interact with medications. (Commissioner, 2022)
- Pain improved for those with fibromyalgia when consuming chlorella green algae, vegan diet, coenzyme Q10, acetyl-L-carnitine, a low-FODMAP diet, a combination of vitamin C, E and Nigella sativa seeds<sup>14</sup>, and ancient grains such as Khorasan wheat<sup>16</sup>. Pro-inflammatory diets low in vitamins, minerals, and unsaturated fatty acids are associated with increased pain at tender sites in those with fibromyalgia<sup>2</sup>. Some suggest an association between intestinal bacterial overgrowth and central sensitization, leading to increased negative symptoms in those with fibromyalgia; however, further investigation is recommended<sup>6, 19</sup>.
- A Mediterranean and vegan diet may reduce musculoskeletal pain in those with chronic non-oncologic pain, including fibromyalgia and arthritis<sup>3, 15</sup>. Supplementation with type II collagen and vitamin D can also help reduce musculoskeletal pain<sup>13, 21</sup>.
- Anti-inflammatory foods, including blueberries, strawberries, and passion fruit peel extract, as well as high fatty acid capsules rich in polyphenols such as olive oil, argan oil, and fish oil, can reduce pain in those with osteoarthritis<sup>8, 13, 15</sup>.
- Zingiberaceae family extracts (turmeric, ginger, Japanese ginger and galangal) can help relieve pain in those with chronic pain on a dose dependent curve, but high doses may be associated with allergies, liver toxicity, anticoagulant properties, and nausea<sup>12</sup>. Other traditional herbal formulas have been associated with just as effective short-term pain relief as NSAIDS<sup>7, 20</sup>.
- A reduction in the consumption of the flavor enhancer monosodium glutamate (MSG) has been associated with reduced pain in those with fibromyalgia, irritable bowel syndrome, chronic orofacial pain, and migraines<sup>8, 9, 22</sup>.

## RECOMMENDED LEARNING OBJECTIVES FOR PARTICIPANTS

*We recognize that not everyone who enters a pain self-management program will be in the same place in their journey to living well with pain and not everyone will have the same level of readiness to change their behavior. Therefore, the following suggested skills and activities have been organized according to the Stages of Readiness for Change.*

### **1. Precontemplation:**

- i. Start to explore any feelings and misconceptions about nutrition and eating.
- ii. Start to articulate the concept that healthy nutrition can improve overall wellness.

### **2. Contemplation:**

- i. Discuss past experiences with food or diets and understand that healthy nutrition is a long-term lifestyle instead of a short-term trend.
- ii. Identify coping mechanism for pain, including eating practices.
- iii. Discuss benefits of balanced nutrition, including increased energy and potential pain reduction.
- iv. Identify healthy foods they enjoy and ones they would like to try.

### **3. Preparation:**

- i. Locate a class within the pain program (or in the community) that offers nutrition advice from a professional, including a registered dietitian, and sign up.
- ii. Explain the importance of food as a necessary part of a healthy lifestyle.
- iii. Create a Brief Action Plan for goals about eating.

### **4. Action:**

- i. Participate in a new activity/class.
- ii. Try a new food item, well-balanced recipe, or incorporate a healthy option into meals on a regular basis.
- iii. Incorporate a mindfulness component into eating practices such as before, during or after meals to increase awareness of hunger and satiety body cues (if desired).

### **5. Maintenance:**

- i. Adjust nutrition goals as needed as they learn to listen to their body's cues and understand their own limits.
- ii. Continue to revisit the idea that healthy nutrition is a long-term lifestyle that is not ruined by occasional food indulgences.
- iii. Identify ways to increase satisfaction with eating by including new flavors, being social with food, and including a variety of food types.
- iv. Acknowledge and celebrate the behaviour change.

## RESOURCES AND TOOLS

*This is a selection of recommended resources. Please supplement with resources and tools you have used at your clinic/program as needed.*

For patients (general):

- Mood Disorders Association of BC's Six-week course needing GP referral: [Nutrition as Medicine](#)

- [Dietitian Services at HealthLink BC:](#)
  - Call 8-1-1 to speak with a HealthLink BC Dietitian
  - Email a HealthLink BC Dietitian
- International Association for the Study of Pain: [Nutrition and chronic pain factsheet](#)
- Toronto Academic Pain Medicine Institute: [Healthy eating](#)
- Government of Canada: [Healthy eating and food safety for Indigenous peoples](#)
- [Canada's Food Guide](#)
- [Food Banks BC](#)
- [Unlockfood](#)
- [Cookspiration](#)

For Indigenous people living with chronic pain:

- First Nations Health Authority: [Traditional Medicine web.pdf \(fnha.ca\)](#)
- First Nations Health Authority: [First Nations Virtual Doctor of the Day \(fnha.ca\)](#)
- Metro Vancouver Indigenous Counselling: [Indigenous Mental Health and Wellness Counselling \(mvic.ca\)](#)

Resources in Punjabi:

- Punjabi Community Health Services: <https://pchs4u.com/optimized/index.html>
  - Support with: Provide services in Punjabi for many different aspects such as mental health, family supports, addictions, and senior supports. Phone: (905) 677-0889
- Sikh Family Helpline: Call 1-800-551-9128 to be supported by volunteers in Punjabi. You leave a voicemail and they will return your call within 24 hours
- Moving Forward Family Services: Offer counselling in Punjabi. Phone: 877-485-5025
- Deltassist: Offer support groups and counselling in Punjabi. Phone: 604-594-3455
- List for Punjabi counsellors: <https://counsellingbc.com/counsellors/language/punjabi-64>

Resources in Arabic:

- [Mental Health Information & Resources in Arabic - MMHRC \(multiculturalmentalhealth.ca\)](#)
- [EENet | Arabic-language mental health resources for newcomers \(camh.ca\)](#)
- [عادات غذائية تساعدك في التخلص من الألم المزمن \(ajel.sa\)](#)
- [الألم المزمن: أسباب، وأعراض، وعلاج. \(webteb.com\)](#)
- [مايو كلينك Mayo Clinic \(مابو كلينك\): قرارات العلاج -](#)

Resources in Chinese:

- Richmond Mental Health Outpatient Services [http://www.vch.ca/Locations-Services/result?res\\_id=665](http://www.vch.ca/Locations-Services/result?res_id=665)
- 中僑心理輔導服務 S.U.C.C.E.S.S. Counselling Service <https://successbc.ca/news/s-u-c-c-e-s-s-extends-free-affordable-community-counselling-services/>
- 中僑互助會心理熱線 S.U.C.C.E.S.S Chinese Help Lines <https://successbc.ca/counselling-crisis-support/services/help-lines>
- 由教練帶領的學習 BounceBack Coaching <https://bouncebackbc.ca/bounceback-coaching/>
- 粵語「打開心窗」關懷互助小組 Cantonese 'Heart to Heart' Share and Care Group <https://vancouver-fraser.cmha.bc.ca/programs-services/chinese-mental-health-promotion/>

- 開創會所中文愛心小組活動 Pathways Richmond Chinese Family Support Group  
<https://pathwaysclubhouse.com/what-we-do/chinese-support/>

For program facilitators:

- Pain BC: [Health education hub for health professionals](#)
- [Food Banks BC](#)
- [Unlockfood](#)
- [Cookspiration](#)
- PHSA: [San'yas Indigenous Cultural Safety Online Training \(sanyas.ca\)](#)
- Island Health: Indigenous Health Cultural Safety | Island Health
- Trans Care BC: [Intro to Gender Diversity - Expanded - LearningHub \(phsa.ca\)](#)
- Intercultural Online Health Network (iCON): English iCON (iconproject.org)
- EQUIP Health: [Trauma and Violence Informed Care](#)

#### LITERATURE SUMMARY

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