A primer on current nutritional issues—What our patients should know

Nutrition is a favorite topic in British Columbia's health-conscious environment. It's important that physicians are armed with current, evidence-based nutrition information in order to answer patients' questions or concerns, and perhaps challenge any misinformation presented. We have tried to address a few of the most common topical nutrition issues and hope that you will find them useful.

New research in diet and allergy prevention—allergens such as peanuts no longer need delayed introduction

- There is no conclusive evidence that avoiding allergenic foods during pregnancy protects against allergy. Current research also suggests avoiding allergenic foods during breastfeeding does *not* prevent atopic disease.
- For infants at high risk of developing atopic disease—exclusively breastfeeding for at least 4 months or breastfeeding plus supplemental hydrolyzed infant formula (Nutramigen, Alimentum, Pregestimil) prevents or delays the occurrence of atopic dermatitis, cow milk allergy, and wheezing in early childhood when compared with breastfeeding plus supplemental cow's milk-based formula.
- There is no evidence to support delaying introduction of potential allergens such as egg, wheat, soy, peanuts, treenuts, fish, or shellfish beyond 6 months of age for prevention of atopic disease, unless the infant demonstrates signs of allergy.
- A good resource is Dial-A-Dietitian—Reducing Risk for Food Allergies in Babies at Increased Risk: www.dialadietitian.org/nutrition/Reducing%20Risktest.pdf

Recommendation: pregnant and breastfeeding women should only avoid foods to which they or their baby react.

Don't overlook vitamin D

- Vitamin D not only prevents rickets, it plays a protective role against diseases such as cancer (i.e., colon and skin), Type 1 diabetes, rheumatoid arthritis, multiple sclerosis, and autoimmune disease.
- Typical sources of vitamin D are the sun, fortified milk, margarine, eggs, fish, and some soy beverages.
- In Canada, the sun's UVB rays are not strong enough to produce vitamin D in our skin from October to March. People with darker skin, those who don't go into the sun often, those who cover their skin, and people over 50 years may require supplements.
- Current Health Canada recommendations are 400 IUs for infants under age 1 and those over 50 years and 200 IUs for all others up to age 50. However, other groups support higher vitamin D intakes. Food and drink can account for about 250 to 400 IUs of vitamin D per day, and a multivitamin can contain over 400 IUs. The safe limit for children, adults, and pregnant and lactating women is 2000 IU of vitamin D per day.
- Cod liver oil contains high preformed vitamin A in addition to vitamin D. Vitamin A may contribute to lower bone mass.

Recommendation: Suggest patients ensure they are meeting their daily vitamin D needs through diet and supplements.

Omega 3s—how much do we need?

- Omega-3 fats are essential fatty acids (EFAs). The critical EFAs are:
  - Alpha-linolenic acid (ALA), a plant based omega-3. Sources of ALA include flaxseed (must be ground for absorption) and flaxseed oil, walnuts, canola oil, soybean oil, and soy products, and small amounts in some dark green, leafy vegetables. Enriched sources of ALA fortified products include some yogurts and soy milk.
  - Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) are derived from marine sources, primarily oily fish, and some forms of algae. Enriched sources of EPA and DHA fortified products include some soy milk, milk, yogurts, eggs, and margarine.
- EPA and DHA help reduce inflammation, prevent blood clots, and in the case of DHA, support the development of the brain, eyes, and nervous system in infants.
- Omega 3 supplements can be made from ALA- or EPA+DHA-rich oils in varying quantities. It is important to carefully read labels, to include all three EFAs in the diet, and to select a supplement made from purified oils to reduce the risk of contaminants.

Recommendation: Suggest eating a 3 oz portion of fatty fish twice a week. For vegetarians or those who do not eat fish, suggest flax and fortified sources of omega 3.

New BC-specific mercury recommendations

- BC has released new recommendations for avoiding mercury from fish. These recommendations are

more restrictive for women of childbearing age and children (less than 12 years of age).
- Low-mercury fish that can be consumed freely include salmon, shrimp, prawn, rainbow trout, Atlantic mackerel, and sole or Dover sole.
- Tuna, shark, marlin, and swordfish are higher in mercury and should be limited. See BC Health File #68m on mercury (English + translations): www.bchealthguide.org/healthfiles/pdf/hfile68m.pdf

Recommendation: Ask parents and women of childbearing age about the types and amounts of fish they eat and compare with the BC Health File.

Introduction of solids to infants—It's not just rice cereal any more!

- Exclusive breastfeeding is recommended for the first 6 months of life for healthy term infants.
- Why *not* solids earlier than 6 months?
  - Growth and brain development are supported with essential fatty acids (EFAs) found in breast milk/formula. Solids can displace EFAs when introduced too early.
  - Earlier introduction of solids has not been shown to help babies' development or growth, or to sleep through the night.
- At 6 months the first foods should be iron-rich meat, poultry, fish, cooked egg yolk, lentils, beans, tofu, or iron fortified cereal. Cereals, vegetables, and fruits no longer have to be introduced first.

Recommendation: BC Health File # 69C Baby's First Foods (English + translations): www.bchealthguide.org/healthfiles/pdf/hfile69c.pdf and Toddlers First Steps: www.health.gov.bc.ca/children/initiatives/toddler.html.

Dietitian vs. nutritionist—There is a difference

- A nutritionist is not necessarily a registered dietitian. There are many different practitioners giving nutrition advice. Some use the term "certified nutritionist" and may have little or no training.
- "Registered dietitian" and "dietitian" are protected titles by law, indicating a health professional with a minimum of a bachelor's degree specializing in food and nutrition and an internship. Referral to a dietitian is possible through outpatient clinics at hospitals, or in private practice through the Dietitians of Canada web site at www.dietitians.ca.

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college library

Healthy offices, healthy patients

The built environment has a deep effect on our sense of well-being. In the particular instance of the medical office space, design modulates workflow efficiency, employee comfort and productivity, and patients' perception of quality of care.[1]

A core text on this topic is *Medical and Dental Space Planning* by Jain Malkin, now in its third edition. Malkin reviews the psychology and the general parameters of medical space planning, and then offers specific recommendations for work spaces in over 30 specialties, including primary care, diagnostic imaging, ambulatory surgery, and sport medicine. Other useful texts on the topic include *Hospital and Healthcare Facility Design* by Richard L. Miller and Earl S. Swensson (2002), *Healthcare Facility Planning* by Cynthia Hayward (2006), and *Healthcare Architecture in an Era of Radical Transformation* by Stephen Verderber and David J. Fine (2000).

The movement toward human-scaled, environmentally sensitive facilities can be explored in *Sustainable Healthcare Architecture* by Robin Guenther and Gail Vittori (2008). The library can provide articles on office planning such as "Practical Tips for Dealing with Office Construction and Repair" (L.S. Hills, 2008), "10 Ways To Give Your Office a Face-lift" (J. Pangrazio, 2006), the three-part series "The Myriad Faces of Facility Development," and the four-part series "Office Space Planning and Design for Medical Practices" (both by R.C. Haines and colleagues, 2005 and 2003). College members are welcome to contact the Library to borrow the above texts (*Sustainable Healthcare Architecture* is available by interlibrary loan for a small fee) or a compilation of articles on office design.

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Librarians/Co-Managers, CPSBC Library

Reference

1. Becker F, Douglass S. The ecology of the patient visit: Physical attractiveness, waiting times, and perceived quality of care. J Ambul Care Manage. 2008;31:128-141.