

The University of British Columbia  
School of Population and Public Health  
**Master of Public Health/MSc Public Health**

2017W (Jan – Apr 2018)

**Calendar Entry:** SPPH 581R Pediatric Nutrition and Public Health

**Course Instructor:** Dr. Rajavel Elango

**Email:** [relango@bcchr.ubc.ca](mailto:relango@bcchr.ubc.ca)

**Seminar Time:** Tuesdays (9.30AM – 12.30PM)

**Location:** SPPH-B136

**Credits:** 3

**General Course Description:**

“Let food be thy medicine and medicine be thy food” ~ Hippocrates

“Proper nutrition is a powerful good: people who are well nourished are more likely to be healthy, productive and able to learn. Good nutrition benefits families, their communities and the world as a whole.” – UNICEF.ORG

Malnutrition during childhood, which encompasses both under and over nutrition, has a profound impact on the long-term health of populations.

This course will serve as an introduction to the fundamental concepts of nutrition with a particular emphasis on maternal-fetal aspects, infancy through adolescence. The course is designed for all learners at the Masters and PhD levels in Public and Population Health and is a prerequisite for students in MCH, LCS and other related themes.

“Proper nutrition helps give every child the best start in life. Taking action on undernutrition is the single most important, cost-effective means of advancing human well-being.” – Copenhagen Consensus (A project that seeks to establish priorities for advancing global welfare using methodologies based on the theory of welfare economics, utilizing cost-benefit analysis)

**Course Objectives:**

1. To understand fundamental aspects of nutrition with respect to pediatric health (Weeks 1, 2)
2. To understand current nutrient intake recommendations for pediatric populations, and how to interpret food nutrition labels (Week 3, 4)
3. To understand maternal-fetal aspects of nutrition, infancy, and issues that impact growth and development (Week 5)

4. To understand how growth assessment using growth charts can be done in young children (Week 6)
5. To understand nutrition related allergies (Week 8)
6. To understand global nutrition issues and the impact of culture on diet habits with particular relevance to pediatric health. (Week 9)
7. “Why then, can one desire too much of a good thing?”- As You Like It by W. Shakespeare – relevance of the quote in current times’ to child nutrition and the childhood obesity epidemic (Weeks 10, 11)

**Course Evaluation:**

Class participation: (20%)

Mid Term Quiz: (25%)

Case Study/Research paper: Apply skills to critically appraise a case study/topic of a critical pediatric nutrition issue in the context of population and public health (30%)

Oral Presentation: 20-minute presentation of the above Research Paper (25%)

**Course overview**

**Week 1:** Introduction and Course Overview: Fundamentals/key concepts of human nutrition

**Week 2:** Nutrient intake recommendations for children - Canada’s Food Guide, Dietary Reference Intakes, World Health Organization/Food and Agriculture Organization

**Week 3:** Understanding food and nutrition labels

**Week 4:** Maternal-Fetal aspects of nutrition and impact on child growth & development

**Week 5:** GUEST LECTURE: Sandra Bodenhamer, RD, Coordinator, Healthiest Babies Possible, Vancouver Coastal Health Authority. “Healthiest Babies Possible – a Perinatal Nutrition program for socially vulnerable women in Vancouver and Richmond.”

**Week 6:** GUEST LECTURE: Dr. Linda Casey, MD, BC Children’s Hospital. “Feeding, Nutrition & Growth in the 1<sup>st</sup> Year”

**Week 7:** Midterm Quiz

**MIDTERM BREAK (no classes)**

**Week 8:** Nutrition and food allergies – impact on child health

**Week 9:** Global nutrition - Pediatric malnutrition: focus on under-nutrition

**Week 10:** Pediatric malnutrition: focus on childhood obesity epidemic

**Week 11:** GUEST LECTURE: Rola Zahr, MPH, RD, Nutrition Educator, BC Dairy Association. “School based initiatives to tackle pediatric nutritional issues.”

**Week 12:** Student Research paper presentations

**Week 13:** Research Paper due AND Student Research paper presentations

**Recommended Readings (no textbook required; reading material will be provided):**

- Nutrition Now, 7<sup>th</sup> Edition, Judith E. Brown, Wadsworth Publishing, Belmont, CA, USA, 2013 (Units 1, 2, 3 and 7)
- Pediatric Nutrition, Fourth Edition, Patricia Queen Samour and Kathy King, Jones & Bartlett Learning, 2010 (Chapters 2, 3, 7 and 8)
- Managing Child Nutrition Programs: Leadership For Excellence, Second Edition, Josephine Martin, Charlotte Beckett Oakley, Jones & Bartlett Learning, 2007 (Chapters 9 and 10)
- Pediatric Nutrition in Practice, Koletzko B, Cooper P, Makrides M, Garza C, Uauy R and Wang W, Karger Publishers, 2008 (Chapters 1 and 2)
- Public Health Nutrition, 2<sup>nd</sup> Edition, Buttriss JL, Welch AA, Kearney JM and Lanham-New SA (Eds), The Nutrition Society, Wiley Blackwell Publishing, 2018

**Academic Integrity:**

The following information is from the UBC webpage Citing Sources and Avoiding Plagiarism: Plagiarism is using someone else's thoughts or publications, and presenting them as one's own, without citing the source. Many new university students are not aware of what constitutes plagiarism, but it is considered a serious academic offence. The UBC [Calendar](#) describes plagiarism as an act of academic misconduct subject to discipline. [Penalties](#) can range from giving a failing grade to suspension from the university, depending on the severity of the plagiarism. Many resources are available at UBC to help you avoid plagiarism. For more information, visit: <http://toby.library.ubc.ca/subjects/subjpage2.cfm?id=673>