



## **Human Evolution and Breastfeeding: Implications for Contemporary Public Health**

Daniel W. Sellen, PhD

Professor of Anthropology, Nutritional Sciences and Public Health and  
Canada Research Chair in Human Ecology & Public Nutrition  
University of Toronto, Toronto, Canada  
Dept. Anthropology, 19 Russell Street, Suite 268  
Toronto, Ontario, M5S 2S2, CANADA  
Email: dan.sellen@utoronto.ca  
Phone: +1 416.978.8112

### **Short biography**

Daniel W. Sellen, PhD, is Professor of Anthropology, Nutritional Sciences and Public Health and Canada Research Chair in Human Ecology & Public Nutrition at the University of Toronto, Canada. His expertise is the ecology of child feeding and care-giving practices and application of evolutionary/medical anthropology to global public health nutrition. His current research focus is strategies to protect, promote and support of infant and young child feeding (IYCF).

### **Objectives**

Participants will:

- learn how anthropologists contribute to breastfeeding research
- learn how integration of multi-disciplinary perspectives offers fresh potential for connecting social and health sciences in designing strategies to promote breastfeeding
- gain an overview of the evolutionary, cultural, and socio-economic causes of mismatch between contemporary practice and clinical recommendations for exclusive and continued breastfeeding

### **Abstract**

Public nutritionists struggle to address the causes of suboptimal (i.e. non-recommended) patterns of breastfeeding and complementary feeding. This lecture identifies specific ways that anthropological and ethnographic studies contribute to a general conceptual framework for understanding prehistoric, historic, and contemporary variation in human lactation and complementary feeding. Evolved similarities and differences in human and nonhuman primate lactation biology suggest that humans have evolved an unusually flexible strategy for feeding young. It is argued that complementary feeding provided our ancestors with a unique adaptation for resolving tradeoffs between maternal and infant reproduction and survival. Greater flexibility in feeding young was likely adaptive in the environments in which our ancestors evolved. However, in today's world it creates potential for unhealthy mismatch between optimal and actual feeding practices. An evolutionary analysis suggests that successful promotion, protection and support for optimal feeding practices based on clinical recommendations will depend on continuing social and economic innovations to improve the behavioral contexts of breastfeeding.



## Key words

Breastfeeding; complementary feeding; evolution; promotion



## **Bibliography**

Sellen, D. W. Evolution of infant and young child feeding: Implications for contemporary public health. Annual Review of Nutrition, 27:123-147, 2007.