

**The Breastfeeding Education Series are specialized courses from the Health e-Learning & Step2Education which are offered with registration through the PEI Reproductive Care Program.**



## **2013 Course Descriptions:**

**ES01 Breastfeeding Essentials** - average study time is 20 hours. Breastfeeding Essentials is a professional development educational course on lactation and breastfeeding management for health professionals supporting women during pregnancy, birthing and for the duration of breastfeeding. The course covers the 10 Steps to Successful Breastfeeding, and the 7-Point Plan for the Protection, Promotion and Support of Breastfeeding in community settings. The Essentials course is awarded L CERPs.

**ES03 Breastfeeding Essentials for Doctors** - average study time is 4-8 hours 'Breastfeeding Essentials: A short course for doctors' is a professional development course on lactation and breastfeeding management for medical practitioners who support women during pregnancy, birthing and the early weeks postpartum.

**\*\*BE01 through BE10: 12 hours each- Online study courses\*\***

### **BE01: Breastmilk Composition and Function**

This course details the biochemistry and immunology of breastmilk and the importance of these components to the development of total health and well being of babies and mothers. The relative health risks of not breastfeeding will be covered for you to understand clearly the significance of breastfeeding.

### **BE02: Anatomy and Physiology of the Lactating Breast**

To understand the abnormal you must first have a comprehensive understanding of normal. In this course you will study breast anatomy and physiology from embryology to full lactation and quiescence, then examine the abnormalities of both structure and function that will impact on a mother's ability to breastfeed her child.

### **BE03: Positioning and Latch of the Baby to the Breast**

In this course you will learn about breastfeeding-related maternal and infant anatomy and the infant's innate reflexes that facilitate breastfeeding. The physics of sucking and milk transfer will also be studied. Being aware of the principles of positioning and latch will allow you to apply this knowledge to any situation and be proficient at assessing a breastfeed for effectiveness.

### **BE04: Breastfeeding Initiation and the First Week**

This course is designed for the practitioner who cares for mothers prenatally or intrapartum, or the mother and baby in the first week postpartum. The positive and negative influences of prenatal and birthing circumstances as they affect breastfeeding are discussed. You will learn about the normal course of lactation, such as getting the first breastfeed right and the changes in mother's breasts and milk. Common problems, such as engorgement, nipple damage, breast refusal, hypoglycemia, jaundice, etc will be discussed in terms of cause, prevention and management strategies.

### **BE05: Communication and Education**

Of all the skills essential to a health care professional, it could be said that the most important of these is communication skills. Without the ability to communicate effectively your knowledge, skills and care cannot be shared. In this course you will learn about the strategies that define a good communicator, and have the opportunity to apply your knowledge. Being in a position of respect as a health professional you will be asked to address groups of people, the public, colleagues, or parents and therefore this course will help you to prepare for public speaking, as well as develop effective workshops, classes and written materials.



### **BE06: Breastmilk, Breastfeeding and the Preterm Baby**

This course reviews the specific nutritional, immunological, developmental and psychological needs of the preterm baby and the critical role of breastmilk to each of these. You will learn strategies to apply to your clinical practice which will facilitate transition from fully supported medical care to breastfeeding.

### **BE07: Breastfeeding After the First Week**

In this course you will examine the normal progress of the infant to around two years of age, looking at expected growth and development and breastfeeding behavior. Problems encountered will be viewed in terms of cause, prevention and management strategies. Infant issues include sucking issues, jaundice, excessive crying, intolerances, allergies and reflux, and failure to thrive. Maternal issues include nipple conditions, breast problems, breastmilk supply problems and how to guide a mother during times of separation from her infant.

### **BE08: Breastmilk, Lactation and Medications**

This course provides easily understandable explanations of the complex mechanisms that affect transfer of drugs and substances into breastmilk, infant exposure and infant uptake of the medication. You will learn about medications contraindicated during lactation and those commonly prescribed for breastfeeding mothers such as galactagogues, antibiotics, antidepressants and analgesics. Social and illicit drugs and environmental contaminants and their effect on lactation and the infant are examined. An understanding of these factors is vital for you to provide breastfeeding mothers with accurate information about the potential effects of medications on her baby via breastmilk.

### **BE09: Other Factors Affecting the Breastfeeding Dyad**

This course covers issues affecting the mother and/or infant that are less commonly encountered. It is designed to extend your knowledge in counseling and supporting the mother for the best achievable health when she is affected by such conditions as breast surgery, diabetes, asthma, thyroid disease, obesity, lupus, Rh arthritis, infectious diseases (hepatitis, HIV, CMV, HTLV-1, etc), or infants have oro-facial abnormalities or muscle and neurological disorders. Other issues considered include maternal nutrition, sexuality, contraception, relactation, tandem breastfeeding and breastfeeding multiples.

### **BE10: Evolution of Breastfeeding as a Public Health Issue**

Evolution of Breastfeeding as a Public Health Issue traces the way breastfeeding has been practiced, prescribed, regulated and thought about from ancient times to the present day in an interesting time-line format. This course provides food for thought about the political, social and economic issues which threaten breastfeeding and local, national and international initiatives to protect, promote and support it.

- All Health e-Learning required reading materials and resources are available online. A quality, current lactation text is advisable to augment your studies. Participants are permitted to print one copy of their course for personal use only. If you do wish to print, please be aware that some courses are over 60 pages in length. Please be advised that links to articles and interactive activities are not available in the printed version. All Health e-Learning courses are reviewed annually, as well as being updated as new information becomes available.



## **\*\*CE12 through CE36: 1 hour each- Online Lecture Series\*\***

### **CE12 Making Enough Milk for the Preterm**

Mothers of preterm infants may not produce adequate volumes of breast milk to sustain the growing baby's needs. Dr Morton's research describes expressing techniques which combine early hand expressing plus ongoing Hands-on Pumping. Results show a 48% increase in milk production at 7 weeks. Dr Jane Morton is an executive board member of the American Academy Paediatrics section on breastfeeding. She is Fellow Academy Breastfeeding Medicine and past Director Breastfeeding Medicine Program at Stanford University. Jane practices full time paediatrics and has completed considerable research on B/F and produced multiple publications and education tools including videos on B/F.

### **CE15 Bilirubin Management and Implications for Breastfeeding**

Although neonatal jaundice is a common occurrence in both breastfed and artificially-fed infants, there are some special relationships between breastfeeding and jaundice in newborns. The entities of "Breastmilk Jaundice" and "Starvation Jaundice of the Newborn" will be defined. Using guidelines from the American Academy of Pediatrics, the talk will explore how to identify the infant at increased risk for exaggerated neonatal jaundice and how to assure good follow-up of the high risk infant. Methods for optimizing breastfeeding while controlling hyperbilirubinemia will be explored in detail. Prof Lawrence Gartner was Professor of Pediatrics and Director of the Children's Clinical Research Unit at Albert Einstein College of medicine and later, appointed as Professor and Chairman of the Department of Pediatrics at The University of Chicago and Director of Wyler Children's Hospital. He is a past-president of the Academy of Breastfeeding Medicine and currently Professor Emeritus, Departments of Pediatrics and Obstetrics/Gynecology at The University of Chicago.

### **CE16 Neonatal Hypoglycaemia Evidence and Recommendations**

From over two decades of research, we have a much better understanding of the physiology of blood glucose, and other fuels such as lactate and ketones, in the newborn baby; but we still have few randomised trials to guide us towards the best strategies either for the prevention or the management of hypoglycaemia. This presentation therefore focuses on normal physiology in the context of term and preterm delivery; the concept of 'safe' blood glucose values in relation to alternative fuels; the hormonal control of blood glucose in the newborn; situations of abnormalities of supply and demand for glucose; and some of the influences of intrapartum care on newborn metabolism. Dr Martin Ward Platt has been a consultant in neonatal medicine in Newcastle upon Tyne since 1990; he is also honorary Reader in Neonatal and Paediatric Medicine at Newcastle University. He has a long standing interest in the developmental physiology and metabolism of the neonate and infant, and has published extensively on clinical aspects of blood glucose control and its disorders.

### **CE19 Stemming the Tide of Supplementation**

Early supplementation of the breastfed infant with infant formula has significant effects on the recipient infant's gut flora, can provoke sensitivity and allergy to cow's milk protein and has been identified as an environmental triggering event in the development of diabetes in susceptible families. The vast majority of supplementation in the hospital is done by maternal request based on infant behavior, cultural influences, or due to clinicians' use of formula to solve

breastfeeding problems. Exclusive breastfeeding at hospital discharge is a vanishing entity. This presentation will explore reasons for supplementation, look at true medical indications for supplementation, discuss what to supplement, when to supplement, how to deliver the supplement, how much supplement to give, and how to stem the flow of supplements in the hospital. Marsha Walker RN, IBCLC has been assisting breastfeeding families in hospital, clinic, and home settings since 1976. Marsha is the executive director of the National Alliance for



Breastfeeding Advocacy: Research, Education, and Legal Branch (NABA REAL). She served as a vice president of the International Lactation Consultant Association (ILCA) from 1990-1994 and in 1999 as president of ILCA. She is a board member of the Massachusetts Breastfeeding Coalition and Baby Friendly USA, ILCA's representative to the USDA's Breastfeeding Promotion Consortium, and NABA REAL's representative to the US Breastfeeding Committee. Marsha is an international speaker, and an author of numerous publications including ones on the hazards of infant formula use, Code issues in the US, and Breastfeeding Management for the Clinician: Using the Evidence.

### **CE20 Delayed Onset of Lactogenesis**

Delayed onset (after 72 hours postpartum) of lactogenesis II is surprisingly common among women in the United States. Why do U.S. mothers not experience their "second milk" coming in until day 4, 5, or 6, or even later, when women in other settings experience onset on day 1 or 2? How do we optimize lactation support during this temporary challenge? I will present the current evidence regarding:

1. the short and long-term consequences associated with delayed lactogenesis II
2. individual, institutional, and behavioral risk factors associated with delayed lactogenesis II
3. potentially effective interventions to hasten the onset of lactogenesis II, and
4. the importance of in-person post-discharge follow-up support in ensuring that delayed lactogenesis II does not interfere with meeting breastfeeding goals.

Prof Laurie Nommsen-Rivers is a research assistant professor at Cincinnati Children's Hospital Medical Center in the Division of Neonatology. Prof Nommsen-Rivers has studied and evaluated lay childbirth support programs (doula care), tested and confirmed the hypothesis that mother-friendly childbirth practices will decrease the risk of delayed lactogenesis, thereby decreasing the risk of weaning prior to 6 weeks postpartum.

### **CE23 Translating Evidence into Practice**

WHO/UNICEF recently revised the interpretation of Step 4 of the 10 Steps to Successful Breastfeeding to read "Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed." (BFHI, Section 1, 2009, p. 34). Since as early as 2000, international, national and professional organizations have recommended placing all newborns in skin-to-skin contact (Birth Kangaroo Care, BKC) starting immediately after birth and leaving them there until after the first breastfeeding is completed. Thus, it is necessary for birth practices to change so BKC with breastfeeding is routine care. However, such a change in care is not easy as it means changing culture within birthing units and changing well-established behaviors and habits of health care providers. Steps to translate BKC with breastfeeding into practice will be presented through examples of implementation projects in the United States, followed by discussion of BKC implementation in other countries. Dr. Barbara Morrison is a nurse midwife, family nurse practitioner, and assistant professor of nursing. She has been working with and for parents and their newborns for 28 years. Her research interests focus on breastfeeding, kangaroo (skin-to-skin) care for full-term infants, and developing a hospital environment that promotes, protects and supports breastfeeding. Dr. Morrison has a special interest in the neuro-endocrine and neuro-biological effects of kangaroo care that lead to strong social attachments and exclusive breastfeeding.

### **CE28 Infant Feeding Frequency: Proposal Based on Available Evidence and Neuroscience**

Our medical culture behaves as if the brain and the gut are disconnected. The autonomic and enteric nervous systems regulate the gut, and the main sensory inputs are olfactory and tactile, provided in skin-to-skin contact. It is usually assumed that the anatomy and physiology of newborns is immature, but given the right context even the preterm gut

behaves competently. The proposal therefore is that the feeding frequency should be approximately hourly, but adjusted to the actual sleep cycle with associated enteric cephalic phase which averages one hourly. This has implications for reflux and hypoglycemia, two very common feeding related problems; it may even address early epigenetic programming of obesity. While such frequent feedings may seem too much work, closer scrutiny shows it results in a major time saving. Dr Bergman is a paediatrician whose primary professional interest revolves around Kangaroo Mother Care (KMC), and the underlying perinatal and developmental neuroscience.



### **CE32 Watch Your Language**

“Our study found significantly lower illness rates among breastfed infants.” “Breastmilk is the ideal infant food.” “It’s wonderful that you’re still nursing your baby.” “There was a 20 percent lower risk with breastfeeding.” How can any of these statements be counterproductive? Because breastfeeding is our biological norm, and should be the control group in any study of infant feeding! Surprising things happen when we use formula as the study norm instead. We’ll look at the effect of inaccurately framed research on the media, health care professionals, mothers, and the general public, and discuss who should be promoting breastfeeding and who should protect and support it, and how. Diane has been a La Leche League Leader since 1985 and an IBCLC since 1990. She has published articles and commentaries on various breastfeeding topics, and is a contributor to Smith’s *The Lactation Consultant in Private Practice* and Genna’s *Supporting Sucking Skills in Breastfeeding Infants*. Most recently she has co-written the completely revised eighth edition of *La Leche League International’s The Womanly Art of Breastfeeding* with Diana West and Teresa Pitman.

### **CE35 Breastfeeding Premature Infants**

Exclusive breastfeeding is achievable for most premature babies. An understanding of the physiology of breastmilk production and maintenance of supply, premature infant breastfeeding behaviour, and the unique feeding challenges posed by prematurity are essential to feeding success. This talk covers unique benefits of breastmilk for premature infants, establishing and maintaining the breastmilk supply, development of effective feeding behaviours and transition to breastfeeding, including problems commonly encountered by premature babies. Yvette has worked in Neonatal Intensive Care for over 28 years as a registered nurse and as the Lactation Specialist at the Royal North Shore Hospital, Sydney for the last eight years. Her special interests include breastmilk as medicine and transition to breastfeeding for premature infants.