

FULL: Lactation Education Training (BreastEd Series)

The Full Lactation Education Training (LET-BreastEd Courses) is comprised of 10 unique courses, each dealing with a specific area or period of relevance to the breastfeeding mother/parent and infant. Together these courses provide a comprehensive education in lactation and breastfeeding.

The LET-BreastEd Courses has been approved by the *Lactation Education Accreditation and Approval Review Committee* (LEAARC), which recognises comprehensiveness and quality in lactation training and is the minimum standard recommended for all future Lactation Consultants training.

The LET-BreastEd Courses meets and exceeds the lactation-specific education prerequisite for those students preparing for the *International Board of Lactation Consultant Examiners* (IBLCE) Examination to become an *International Board Certified Lactation Consultant* (IBCLC) including the required education focused on communication skills.

Are you preparing to sit the IBLCE exam for the first time, you require Lactation Education Hours, not CERPs.

Aim:

The aim of the training is to provide students with a comprehensive direction of study that will significantly increase their lactation knowledge and also prepare them for the IBLCE certification examination should they choose to follow that path. The LET-BreastEd courses will provide them with the knowledge and confidence to become competent professionals in the field of lactation.

By developing and delivering this lactation education training online, our secondary aim is to provide high quality education accessible to students who by preference or necessity find the unlimited 12-month access to course content, tutoring and peer support best suits their needs.

Features:

Well-constructed online learning gives you the best of both worlds - quality content that you can work through at your own pace, in your own place, but with a level of personal attention that even rivals face-to-face training. And, you guessed it, the Health e-Learning-IIHL courses are the BEST of online learning with all these great features:

- Log in to work on your studies anytime it suits you 24/7/365
- Study at your own pace within your enrolment period
- All reading provided or linked
- Periodic testing of knowledge with fun self-test activities
- Course facilitation by highly experienced IBCLC's
- Gain valuable support and network with students from all over the world
- Immediate feedback for online assessments
- Certificate of Completion issued immediately
- Administrative and technical support available online

Assessment:

Achievement of the learning objectives is assessed by automatically graded, online, multiple-choice questions. A passing grade is 80%.

A Workbook, downloaded from the course, is not required to be submitted, yet completion of the workbook will aid in your learning and is an excellent resource when reviewing your courses.

When you successfully complete each course you should download your Certificate of Completion immediately as this is the date that IBLCE will use when you apply for your IBLCE exam application. Your Certificate notes ongoing education accreditation points.



Accreditation:

On successful completion of the 10 Full LET-BreastEd courses students will be awarded:

- 120 pre-exam lactation education hours for IBLCE*
- 120 Contact Hours – Professional Development
- 120 Continued Education hours – CE (Canadian Nurses - Accredited CE's)
- 8 credits – Université du Québec à Trois-Rivières program (DAL 6004)

*For IBLCE lactation education hours' purpose, **each course** provides 12 hours of pre-exam education

The Full LET - 10 BreastEd courses provides 120 hours of pre-exam education including **12 communication skills and 6 ethics (including 2 of WHO Code education) hours**.

Administration:

Each LET-BreastEd course is facilitated by an experienced International Board Certified Lactation Consultant.

Each course is available as a one-month subscription commencing on the day of notification to you of your username and password.

The subscription time is cumulative – resulting in having access to all 10 courses for 10 months should you enrol into them individually. However, should you enrol in all 10 courses in one transaction you will remain enrolled for 12 months.

The subscription time may be extended by purchasing extensions, which MUST be purchased **BEFORE** the subscription expiry date.

The average time taken to complete each course and assessment is 12 hours.

On successful completion your Certificate will be available to you in .pdf format from the course website.

Replacement certificates can be obtained for a fee; however, we maintain an official transcript that is available free for all customers to download at any time.

Fees and Payments:

Enrollments are accepted online. If another form of payment is required, contact admin@health-e-learning.com and communicate with us to see if we can accommodate this.

Payments online are available using either PayPal or credit card payments via our website.

The full fee cost is **USD\$135.00** per individual BreastEd course. (Subject to change without notice)

The full fee cost is **USD\$1250.00** for the full 10 LET-BreastEd LEARC approved training.

Additional fees, which are out of our control, may be charged by your bank to convert this to your local currency.

Please see our [Payments FAQ](#) for more information.

Refunds and Privacy:

Please see our [Terms and Conditions](#) for more information regarding refunds and our [Privacy Policy](#) is also available.



BE01: Human milk: Composition and Function (12 L CERPs)

Aim:

The aim of this course is to give you a good understanding of the biochemical and immunological composition of human milk and a strong appreciation of its value to infants, children, and their mothers/lactating parents.

Objectives:

On successful completion of this course you will be able to:

- List the macronutrients and many micronutrients in human milk, describing their function and value to the child.
- Describe what influences nutrient concentration in human milk.
- Describe the immunological functions of the major proteins, carbohydrates and fats in human milk.
- List 5 acute conditions and 5 chronic diseases directly attributable to being artificially-fed.
- Discuss 5 interventions, of which one is related to feeding choice, that will delay or lessen the severity of allergic disease in children.
- Discuss developmental delays attributable to artificial feeding.
- List the health implications of suppressing lactation on anaemia, contraception, weight control, diabetes, breast cancer, endometrial cancer and ovarian cancer.
- Debate the ethical responsibilities of informed consent that influence choice of infant feeding.

Detailed Content Outline domains: I (a-2, b-3, 5), II (b-1,2, 4), III (a-8,12,13, b-1,2,4), VI (F), V (C, J)

Syllabus :

1. Introduction
2. Optimal Nutrition
 - Protein
 - Carbohydrates
 - Milk Lipids
 - Vitamins
 - Minerals
 - Stages of Lactation
3. Immunology
 - Immune System Development
 - Defences in Human milk
4. Health Outcomes
 - Acute conditions
 - Chronic Disease Conditions
 - Allergic responses
 - Developmental characteristics
 - Maternal/lactating parental implications
5. Feeding Alternatives

Content Outline:

I. Development and Nutrition (5 hrs)

- A. Infant
 2. Food intolerances/allergies
- B. Maternal
 3. Composition of human milk
 5. Maternal nutritional status

II. Physiology and Endocrinology (3 hrs)

- B. Endocrinology
 1. Hormonal influence of milk production
 2. Diabetes
 4. Maternal autoimmune disorders

III. Pathology (3 hrs)

- A. Infant
 8. Infant acute disease (e.g., infectious, cardiac, metabolic)
 12. Infant cancer
 13. Infant GI anomalies
- B. Maternal
 3. Maternal acute disease (bacterial, viral, fungal, systemic)
 4. Maternal chronic disease
 12. Maternal cancer

IV. Pharmacology and Toxicology (1/4 hr)

- F. Contraception

V. Psychology, Sociology, Anthropology (3/4 hr)

- C. Foods to eat/avoid that affect lactation
- J. Safe sleep



BE02: Anatomy and Physiology of the Lactating Breast (12 L CERPs)

Aim:

The aim is for you to acquire a high level of understanding of breast anatomy and lactation physiology so that you can base your lactation management advice on sound principles.

Objectives:

On successful completion of this course the student will be able to:

- List the stages and hormones involved in the development of the breast from the embryological stage, through puberty to the childbearing years and beyond.
- Label the components of a lactocyte and describe their function, including the 5 pathways described for milk synthesis.
- Describe the ductal and glandular systems in terms of distribution, arrangement and number of milk ducts.
- Discuss the significance of the areola and nipple to breastfeeding.
- Articulate the series of events that occur when the milk ejection reflex is elicited.
- List the arterial supply to, and lymphatic drainage from the breast.
- Tutor colleagues and/or mothers/parents on how breast capacity impacts breastfeeding frequency.
- Recognize anomalies of breast anatomy that may impact on breastfeeding.
- Describe secretory differentiation in terms of onset and hormonal control.
- Describe secretory activation in terms of onset and completion, hormonal control and the changes in human milk components.
- List the two processes that control maintenance of lactation.
- Describe the anatomical and/or physiological basis of lactation failure.

Detailed Content Outline domains: I (b-1, 2, 4, 6), II (b-1,3), III (b-7,8)

Syllabus:

1. Introduction
2. Breast Anatomy
 - Mammogenesis
 - Functional anatomy
 - Supportive anatomy
 - Breast anomalies
3. Lactation Physiology
 - Secretory differentiation (Lactogenesis I)
 - Secretory activation (Lactogenesis II)
 - Lactogenesis III
 - Involution
 - Lactation insufficiency

Content Outline:

- I. Development and Nutrition (6 hrs)**
 - B. Maternal
 1. Breast development and growth (typical and atypical)
 2. Breast surgery
 4. Maternal anatomical challenges
 6. Nipple structure and variations
- II. Physiology and Endocrinology (5 hrs)**
 - B. Endocrinology
 1. Hormonal influence of milk production
 3. Maternal Hormonal Disorders
- III. Pathology (1 hr)**
 - B. Maternal
 7. Milk supply, low or over
 8. Nipple and breast conditions



BE03: Positioning and Latch of the Breastfeeding infant (12 L CERPs)

Aim:

The aim of this course is for you to learn the principals of good positioning that facilitate effective latch and milk transfer avoiding preventable feeding problems.

Objectives:

On successful completion of this course you will be able to:

- Describe the features of the lactating breast that facilitate and enhance milk transfer.
- List the cranial bones, cranial nerves and facial muscles of the infant relevant to breast/chest feeding.
- Describe the neurobehavior of the newborn infant that leads to breast/chest feeding.
- State the most important clinical practice that should be implemented immediately following birth.
- Describe comfortable positions that best facilitate infant feeding.
- Define the principles of infant positioning that facilitates breast/chest feeding.
- List the sequence of actions that lead to correct latch.
- Describe the placement of the nipple-areola complex in relation to the infant's tongue and oral cavity.
- List the individual roles of the mother/lactating parent and the infant in milk transfer.
- Describe the neurohormonal sequence of the milk ejection reflex.
- Describe the sequence of events in the suck cycle.
- List infant causes of poor latch and causes of un-coordinated suck and how to recognize them.
- Describe reasons causing poor milk transfer in terms of anatomy and milk ejection.
- Describe 3 observational stages employed during a feeding consultation.
- Demonstrate to a mentor how to teach a mother/lactating parent to position and latch correctly themselves.
- Recognise when and why problems of latching and suck are occurring and describe the process.

Detailed Content Outline domains: I (a-1,3,7,10,11, b-1,4,6), III (a-1,2,6, b-2), V (B, E, I, L) VI (A, B, C, F, G, H), VII (a-3, b-2,3,4,7, c-2)

Syllabus:

1. Introduction
2. Relevant anatomy for breast/chest feeding
 - Breast Anatomy
 - Infant Cranial Anatomy
3. Sharing the Skills
 - The Breastfeeding Environment
 - Good Positioning
 - Good Latch
4. Milk Transfer
 - Milk Ejection Reflex
 - Physics of Sucking
 - Factors affecting milk transfer: Infant
 - Factors affecting milk transfer: Mother/lactating parent
5. Lactation Consultation
 - Observation and Assessment
 - Feeding Assessment Tools
 - Lactation Consultation
6. Problems of Latch and Suck

Content Outline:

I. Development and Nutrition (7hrs)

- A. Infant
 1. Feeding behaviours at different ages
 3. Infant anatomy & anatomical/oral challenges
 7. Normal infant behaviours
 10. Skin tone, muscle tone, reflexes
 11. Term development and growth

B. Maternal

1. Breast development and growth (typical and atypical)
4. Maternal anatomical challenges
6. Nipple structure and variations

II. Physiology and Endocrinology (1/2 hr)

B. Endocrinology

3. Maternal hormonal disorders

III. Pathology (1 hr)

A. Infant

1. Ankyloglossia
2. Cleft lip and palate
6. Infant neurological disabilities

B. Maternal

2. Milk ejection reflex dysfunction



V. Psychology, Sociology, Anthropology (1/2 hr)

- B. Birth practices
- E. Family lifestyle
- I. Breastfeeding dyad relationship
- L. Cultural awareness

VI. Techniques (1h30)

- A. Effective milk transfer (including medically indicated supplementation)
- B. First hour
- C. Latching (attaching)
- F. Positioning of the breastfeeding dyad (hands-off)
- G. Refusal of breast, bottle
- H. Skin-to-skin (Kangaroo care)

VII. Clinical Skills (1h30)

- A. Equipment and Technology
 - 3. Nipple devices (e.g., shields, everters)
- B. Education and Communication
 - 2. Anticipatory guidance
 - 3. Care plan development and sharing
 - 4. Educating mothers and families
 - 7. Empowerment
- C. Ethical and Legal Issues
 - 2. Clinical competencies



BE04: Breastfeeding Initiation and the First Week (12 L CERPs)

Aim:

The purpose of this course is for you to be confident in your ability to inform and influence the mother/lactating parent regarding feeding, facilitate the birthing and postnatal environment to support breast/chest feeding and to problem-solve common difficulties encountered in the first week postpartum.

Objectives:

- On successful completion of this course the student will be able to:
- Plan the most effective strategies to support mothers/parents to choose to breast/chest feed
- List and address 3 common barriers to breast/chest feeding
- Plan evidence-based prenatal breast/chest feeding education covering the topics as outlined in Step 3 of the Ten Steps to Successful Breastfeeding (revised 2018)
- Identify those factors that occur in the birthing room that interfere with and support successful initiation of breast/chest feeding
- Describe the immediate post-birth environment that will facilitate the initiation of breast/chest feeding as outlined in step 4 of the Ten Steps to Successful Breastfeeding (revised 2018)
- List the effects on the mother/lactating parent, the infant or their breast/chest feeding experience as a result of separating the dyad
- Describe and indicate to a mother/lactating parent the progression of feeding behavior in their infant during the first postpartum week
- Demonstrate how-to guide and use optimal positioning techniques for the dyad to be able to correctly latch
- Demonstrate how to teach the correct technique for hand expressing
- Develop a check-list of educational messages that are essential to cover with a new mother/parent prior to discharge from health care support
- List the causes, prevention, and management of common difficulties encountered in the first week postpartum related to feeding

Detailed Content Outline domains: I (a-1, 7, 8, 10, 11), II (b-1, 5), III (a-5, b-7, 8, 9), IV (d), V (B, G, I, J), V (A, B, G, I, J), VI (A, B, C, E, F, H), VII (B, C, E)

Syllabus:

1. The Infant Feeding Decision
 - Addressing the barriers
 - Prenatal education
 - Important messages
2. The Intrapartum Period
 - Interventions
 - Mode of birthing
3. Birth to First Feed
 - The first feed
 - Birthing room practices
4. The First Week
 - Infant safety for discharge
 - Support and self-confidence
5. Problem-solving
 - The non-latching newborn
 - Hypoglycemia
 - Engorgement
 - Nipple damage or pain
 - Hyperbilirubinemia

Content Outline:

I. Development and Nutrition (3h10)

- A. Infant
1. Feeding behaviours at different ages
 7. Normal infant behaviours
 8. Nutritional requirements – including preterm
 10. Skin tone, muscle tone, reflexes
 11. Term development and growth

II. Physiology and Endocrinology (1h30)

- B. Endocrinology
1. Hormonal influence of milk production
 5. Newborn hypoglycemia

III. Pathology (2h50)

- A. Infant
5. Hyperbilirubinemia
- B. Maternal
7. Milk supply, low or over
 8. Nipple and breast conditions
 9. Nipple pain and trauma



IV. Pharmacology and Toxicology (1h30)

D. Medications

V. Psychology, Sociology, and Anthropology (3h20)

A. Transition to parenthood

B. Birth Practices

G. Maternal mental health

I. Breastfeeding dyad relationship

J. Safe sleep

VI. Techniques (3h)

A. Effective milk transfer (including medically-indicated supplementation)

B. First hour

C. Latching (attaching)

E. Milk expression (e.g., pumping, hand expression, leakage)

F. Position of the breastfeeding dyad (hands-off)

H. Skin-to-skin (kangaroo care)

VII. Clinical Skills (4h)

B. Education and Communication

3. Care plan development and sharing

4. Educating mothers and families

C. Ethical and Legal Issues

1. Breastfeeding in public

E. Public Health and Advocacy

1. Advocate for Baby-Friendly Hospital Initiative (BFHI)

3. Advocate for mother / infant in healthcare system



BE05: Communication and Education (4 L, 2 E, 6 R CERPs)

Aim:

The purpose of this course is to guide you in the acquisition of effective communication skills so that your interactions with clients, health care providers and the community will be professional, educational and demonstrate empathic understanding.

Objectives:

On successful completion of this course the student will be able to:

- Identify professional responsibilities relating to client consultation.
- Discuss and identify ethical and moral issues related to the IBCLC profession, the International Code, and the role of the IBCLC related to ethics and social media.
- Communicate effectively using counseling techniques, articulated by listing the qualities of an effective counselor, demonstrating attending behaviour, giving examples of following behaviour including open and closed questioning, choosing examples of different types of listening skills, listing judgmental words to be avoided, listing 3 ways to build self-confidence and demonstrating these skills in a role play with a mentor.
- Discuss the issues faced when a new infant enters the family, describing how they can be most effective in their support at this time.
- List the important steps in the preparation, the introduction and the conclusion when speech making.
- Develop and deliver educational materials demonstrating examples for auditory, kinaesthetic and visual learners; write an aim and learning objectives; list at least 5 points against which to check written materials.

Detailed Content Outline Domains: V (A, E, F, G, H, I, J, L), VII (a-7, b-1,2,3,4,5,6,7,8, c-2,3,4,5)

Syllabus:

1. Introduction
 - Professional Conduct of an IBCLC
 - Professional records
 - Ethics
 - Ethics and Social Media
2. Communication skills
 - Attending skills
 - Listening skills
 - Building confidence
 - Resolution
 - Applying the theory
3. Transition to parenthood
 - Pregnancy Issues
 - Parenthood
 - Implications for practice
4. Public Speaking
 - Preparation
 - Practice
 - Presentation
5. Principles of Adult Learning
 - Planning educational content
 - Infant feeding class or workshop
 - Written educational materials

Content Outline:

V. Psychology, Sociology, and Anthropology (2h30)

- A. Transition to parenthood
- E. Family lifestyle
- F. Identifying support networks
- G. Maternal mental health
- H. Maternal psychological/cognitive issues
- I. Breastfeeding dyad relationship
- J. Safe sleep
- L. Cultural awareness

VII. Clinical Skills (9h30)

- A. Equipment and Technology
 - 7. Communication technology (e.g., virtual visits, translation or interpretation services, websites)
- B. Education and Communication
 1. Active listening
 2. Anticipatory guidance
 3. Care plan development and sharing
 4. Educating mothers and families
 5. Educating professionals, peers, & students
 6. Emotional support
 7. Empowerment
 8. Group support



C. Ethical and Legal Issues

2. Clinical competencies
3. Code of Professional Conduct (CPC)
4. Principles of confidentiality
5. WHO code – advocacy and policy



BE06: Human milk, Breastfeeding & the Preterm Infant (12 L CERPs)

Aim:

To deepen your understanding about the specificity of human milk in meeting the nutritional, immunological, developmental and psychological needs of the preterm infant by providing you with recent, evidence-based information to assist the mother/lactating parent to provide their milk to, and eventually feed, their preterm infant.

Objectives:

On successful completion of this course you will be able to:

- Describe the nutritional needs of the preterm infant, and compare these needs to the biochemistry of the milk of a mother/parent birthing their baby preterm.
- Describe the immunological properties of the colostrum and mature milk of a mother/lactating parent birthing preterm and compare the outcomes of formula-fed and human milk-fed infants in terms of infectious diseases.
- Compare the gastrointestinal and neurobiological outcomes of formula-fed and human milk-fed infants and explain the reasons for the differences.
- Describe how the psychological needs of the preterm infant can be adequately met.
- Describe how mothers/lactating parents have reported feeling in traditional neonatal intensive care units, then describe how a positive culture can be implemented.
- Compare kangaroo mother care (KMC) with traditional incubator care on infant morbidity, cardio-respiratory stability, thermoregulation, breastfeeding exclusivity and duration, and length of hospital stay, and detail the steps necessary to implement KMC in a neonatal intensive care unit.
- Describe the process necessary for lactation initiation that will facilitate lactation success.
- Describe how to maintain an adequate lactation in terms of hand expressing, pumping frequency and duration, pharmacological and non-pharmacological galactagogues and storage of human milk.
- List the points to evaluate oral motor competence and list measures to decrease oral aversion.
- Discuss 3 methods reported in the literature on how to transition to full oral feedings.
- Describe how to cup feed an infant and how cup feeding and bottle feeding compare in terms of cardiorespiratory stability and nutritional intake.
- Describe the management of the lactation aspect of care for the mother/parent whose infant has died.

Detailed Content Outline domains: I (a-3,5,6,7,8,9,10 b-3), II (b-1), III (a-5,6,7,8, b-7), IV (G), V (A,B,F,G,H,I,K,L) VI (A,C,D,E,G,H), VII (a-1,2,5,6, b-4, d-1)

Syllabus:

1. Introduction
2. The Preterm Infant
 - Nutritional needs
 - Immunological needs
 - Developmental needs
 - Psychological needs
3. Mothering/parenting the Preterm Infant
 - Supporting the maternal/lactating parental role
 - Kangaroo mother care (KMC)
 - Initiation of lactation
 - Maintenance of lactation
 - From tube to breast
4. When a baby dies

Content Outline:

- I. Development and Nutrition (6 hrs)
 - A. Infant
 3. Infant anatomy and anatomical/oral challenges
 5. Low birth weight and very low birth weight
 6. Milk banking – formal and informal
 7. Normal infant behaviours
 8. Nutritional requirements – including preterm
 9. Preterm development, growth, and behaviours (including late preterm)
 10. Skin tone, muscle tone, reflexes
 - B. Maternal
 3. Composition of human milk
- II. Physiology and Endocrinology (30 min)
 - B. Endocrinology
 1. Hormonal influence of milk production



III. Pathology (30 min)

A Infant

5. Hyperbilirubinemia
6. Infant neurological disabilities
7. Small for Gestational Age (SGA), Large for Gestational Age (LGA)
8. Infant acute disease (e.g., infectious, cardiac, metabolic)

B Maternal

7. Milk supply, low or over

IV. Pharmacology and Toxicology (30 min)

G. Galactagogues

V. Psychology, Sociology, Anthropology (1h45)

A. Transition to parenthood

B. Birth practices

F. Identifying support networks

G. Maternal mental health

H. Maternal psychological/cognitive issues

I. Breastfeeding dyad relationship

K. Weaning

L. Cultural awareness

VI. Techniques (2 hrs)

A. Effective milk transfer (including medically-indicated supplementation)

C. Latching (attaching)

D. Managing supply

E. Milk expression (e.g., pumping, hand expression, leakage)

G. Refusal of breast, bottle

H. Skin-to-skin (kangaroo care)

VII. Clinical Skills (45 min)

A. Equipment and Technology

1. Feeding devices (e.g., tubes at breast, cups, syringes, teats, paladai)

2. Handling and storage of human milk

5. Pumps

6. Scales (e.g., accuracy, precision, operation)

B. Education and Communication

4. Educating mothers and families

D. Research

1. Apply research in practice



BE07: Breastfeeding after the First Week (12 L CERPs)

Aim:

This course aims to assist you to recognize and facilitate the normal progress of breastfeeding after the first postnatal week until beyond weaning, and to prevent problems related to breast/chest feeding, recognize them when they do occur and manage them effectively.

Objectives:

On successful completion of this course the student will be able to:

- Recognise the adjustment phase and the importance of the potential impact on the physical, mental and psychological states of parenthood
- Identify perinatal mood disorders that affect new parents and the role of the IBCLC.
- Identify growth and development milestones and breastfeeding behavior expected at various ages and how to use growth assessment tools.
- List the developmental milestones to be achieved before complementary feeding is commenced and suitable complementary foods at various ages.
- Refer mothers to articles discussing the normal age for weaning; and outline maternal and infant strategies to wean an infant prematurely.
- List possible causes of low milk supply and develop a plan of care to stimulate and manage it.
- List signs, symptoms and management of breastmilk jaundice.
- List causes and breastfeeding management of common infant gastro-intestinal conditions.
- List causes and management of nipple pain and damage.
- Identify the issues to discuss with a mother/lactating parent who is returning to the workforce.

Detailed Content Outline domains: I (a-1,2,4,7,10,11,12 b-1), III (a-4,5,13, b-1,6,7,8,9), V (A,E,F,G,J,K,L), VI (A,D,E,G), VII (a-1,2,4,5,6, b-2,4,6)

Syllabus:

1. Introduction
 - Adjustment to Parenthood
 - Falling in love with your baby or not...
 - Lactation, Mental Health and Management
2. The First Year or Two
 - Developmental Milestones
 - Infant growth
 - Normal behaviour
 - Breastfeeding
 - Weaning
3. Infant Issues
 - Breast refusal
 - Nipple preference
 - Breastmilk jaundice
 - Crying baby
 - Intolerance, Allergy and Reflux
 - Failure to thrive; Alternative feeding methods
4. Maternal/lactating parental Issues
 - Nipple infections, nipple conditions
 - Breast problems
 - Human milk supply problems
 - Separation of mother/lactating parent and infant

Content Outline:

I. Development and Nutrition (2h50)

- A. Infant
 1. Feeding behaviours at different ages
 2. Food intolerance/Allergies
 4. WHO guidelines for introducing complementary foods
 7. Normal infant behaviours
 10. Skin tone, muscle tone, reflexes
 11. Term development and growth
 12. Who growth charts
- B. Maternal
 1. Hormonal influence of milk production

III. Pathology (2h45)

- A. Infant
 4. Reflux/ GERD
 5. Hypebilirubinemia
 13. Infant GI anomalies
- B. Maternal;
 1. Feeding behaviours at different ages
 6. Mastitis
 7. Normal infant behaviours
 8. Nipple and breast conditions
 9. Nipple pain and trauma



V. Psychology, Sociology, and Anthropology (1h45)

- A. Transition to parenthood
- E. Family lifestyle
- F. Identifying support networks
- G. Maternal mental health
- J. Safe sleep
- K. Weaning
- L. Cultural awareness

VI. Techniques (45min)

- A. Effective milk transfer
- D. Managing supply
- E. Milk expression
- G. Refusal of breast, bottle

VII. Clinical Skills (3h55)

- A. Equipment and Technology
 - 1. Feeding devices (e.g., tubes at breast, cups, syringes, teats, paladai)
 - 2. Handling and storage of human milk
 - 4. Dummies (pacifiers)
 - 5. Pumps
 - 6. Scales (e.g., accuracy, precision, operation)
- B. Education and Communication
 - 2. Anticipatory guidance
 - 4. Educating mothers and families
 - 6. Emotional support



BE08: Lactation, Human Milk and Pharmacology (12 L CERPs)

Aim:

This course has been designed to provide you with sufficient information to understand how human milk is affected by medications, social drugs and environmental contaminants, and the potential effect on the breast/chestfeeding infant so that you can accurately advise the mother/lactating parent about safe usage.

Objectives:

On successful completion of this course you will be able to:

- Describe how drugs are transferred into human milk, listing what influences the concentration of drugs in human milk.
- Discuss the factors influencing absorption of the drug by the infant, and outline clinical strategies that reduce drug transfer to the infant.
- Identify drugs and herbal preparations that increase or decrease the production of human milk and outline their recommended usage.
- Advise which drugs are not compatible with breastfeeding.
- Detail the safe usage of drugs prescribed for common conditions such as postpartum infections and depression.
- Discuss the effect of environmental contaminants on human milk and infants.
- Counsel a lactating mother/parent on the effects of recreational and illegal drugs on themselves and their infant.
- Discuss professional responsibility related to lactation and medications

Detailed Content Outline domains: V (A, B, C, D, E, F, G, I, J)

Syllabus:

1. Introduction
 - Pharmacokinetics, pharmacodynamics, pharmacotherapeutics
 - Research Basis of Pharmacology
2. Drug Transfer into human milk
 - Maternal and infant factors and drug transfer
 - Drug factors and drug transfer
 - Active drug transport and measures of drug transfer
3. Prescribing during lactation
 - General Principles
 - Clinical Strategies to Reduce Transfer
 - Drugs Contraindicated during Lactation
 - Risk: Benefit Assessment Principles
4. Commonly Prescribed Drugs
 - Antibiotics and Antifungals
 - Analgesics
 - Antidepressants
 - Contraceptives
 - Galactagogues
 - Lactation Suppression
5. Non-prescribed Drugs
 - Social and Illicit Drugs
 - Environmental pollutants
6. Working with Prescribers
 - Client-centered care
 - Professionalism

Content Outline:

- V. Pharmacology and Toxicology (12 hrs)**
- A. Alcohol
 - B. Nicotine and tobacco
 - C. Cannabis
 - D. Medications (e.g., prescriptions, over-the-counter, diagnostic and therapeutic procedures, aids to labor and delivery)
 - E. Drugs of abuse
 - F. Contraception
 - G. Galactagogues
 - H. Gel dressings/nipple creams
 - I. Herbs and supplements
 - J. Chemotherapy/radiation therapy/radioactive scans



BE09: Other Factors Affecting the Breastfeeding Dyad (12 L CERPs)

Aim:

The aim of this course is to extend your knowledge of common and less common issues that could affect lactating mothers/parents and their infants. Your knowledge of how breastfeeding/chestfeeding affects these issues, or how the issue affects breastfeeding/chestfeeding will assist you to counsel the mother/lactating parent appropriately.

Objectives:

On successful completion of this course you will be able to:

- Compare and contrast all the forms of contraception that maybe considered while lactating.
- List the effects that lactation has on sexuality.
- Outline how induced lactation or relactation can be initiated.
- List the major points to be discussed with mothers'/lactating parents who are breastfeeding during a pregnancy, or tandem feeding.
- Outline a plan of care for a mother//lactating parent who has previously had breast/chest surgery.
- List the recommendations regarding lactation for the maternal infectious diseases discussed.
- List considerations relevant to lactation with any of the following conditions: diabetes, asthma, thyroid disorder, rheumatoid arthritis, lupus or obesity.
- Develop a parent handout describing infant feeding management of twins or higher-order multiples.
- Develop an outline for a short educational presentation to colleagues on caring for an infant with a cleft lip and/or palate.
- Describe how to assist an infant with a neurological deficit to feed.
- Describe techniques that will assist to feed an infant who is either hypertonic or hypotonic.

Detailed Content Outline domains: I (a-1,3,10, b-2,5), II (a-1,3,4,5, b-2,3,4), III (a-1,2,6, b-3,4,5,7), IV (D,F,G), V (C, E), VI (A, B, C, E, F), VII (b-1,2,3,4,6,7,8, d-1)

Syllabus:

1. Maternal Issues

- Maternal nutrition
- Sexuality and contraception
- Relactation/Induced lactation
- Breastfeeding in pregnancy/Tandem feeding
- Surgery and infant feeding
- Infectious diseases: Hepatitis B & C, HIV, Varicella, Cytomegalovirus, HTLV-1
- Medical conditions
 - Diabetes mellitus
 - Obesity
 - Asthma
 - Thyroid disease
 - Rh arthritis
 - Lupus

2. Infant Issues

- Ankyloglossia
- Cleft lip and/or palate
- Twins, triplets & higher order multiples
- Conditions affecting muscle tone

Content Outline:

I. Development and Nutrition (2h)

A. Infant

1. Feeding behaviours at different ages;
3. Infant anatomy and anatomical/oral challenges;
10. Skin tone, muscle tone, reflexes

B. Maternal

2. Breast surgery;
5. Maternal nutritional status

II. Physiology and Endocrinology (2h)

A. Physiology of Lactation

1. Relactation;
3. Inducing lactation;
4. Pregnancy and breastfeeding – tandem;
5. Multiples (e.g., twins, triplets)

B. Endocrinology

2. Diabetes;
3. Maternal hormonal disorders (e.g., pituitary, thyroid, Polycystic Ovarian Syndrome);
4. Maternal autoimmune disorders



III. Pathology (2h)

- A. Infant
 - 1. Ankyloglossia;
 - 2. Cleft lip and palate;
 - 6. Infant neurological disabilities

- B. Maternal

- 3. Maternal acute disease (e.g., infectious, cardiac, metabolic);
- 4. Maternal chronic disease;
- 5. Maternal disability (physical and neurological);
- 7. Milk supply, low or over

IV. Pharmacology and Toxicology (1h)

- D. Medications (e.g., prescriptions, over-the-counter, diagnostic and therapeutic procedures, aids to labor and delivery);

- F. Contraception;

- G. Galactagogues

V. Psychology, Sociology, and Anthropology (1h)

- C. Foods to eat/avoid that influence lactation;

- E. Family lifestyle

VI. Techniques (2h)

- A. Effective milk transfer (including medically-indicated supplementation);

- B. First hour;

- C. Latching (attaching);

- E. Milk expression (e.g., pumping, hand expression, leakage);

- F. Position of the breastfeeding dyad (hands-off)

VII. Clinical Skills (2h)

- B. Education and Communication

- 1. Active listening;
- 2. Anticipatory guidance;
- 3. Care plan development and sharing;
- 4. Educating mothers



BE10: Breastfeeding and public health (6.5L, 4E, 1.5R CERPs)

Aim:

The aim of this course is to give you an appreciation of the role breastfeeding plays within a public health system and the impact of breastfeeding on global public health. The course will look at breastfeeding through a Public Health lens. Address Individual vs. population-based principles, social determinants of health, public policy, the International Code of marketing of breastmilk substitutes, breastfeeding in emergencies and emerging controversies. On completion the student will have a good understanding of breastfeeding as an important part of the global health solution.

Objectives:

On successful completion of this course the student will be able to:

- Contrast public health with health care generally
- Define an upstream approach
- Describe three characteristics of a “wicked problem”
- State the four main areas within the field of public health
- Describe one way in which breastfeeding uses epidemiological science
- Provide one example of how environmental health might include breastfeeding/lactation considerations
- Evaluate whether an intervention is individual- or population-based
- Describe one population-based intervention
- Explain why population-based approaches increase equity
- Describe three determinants that fall under the social determinants of health
- Provide one example of an ACE (adverse childhood event)
- Provide one example of a challenge facing BFI
- State one source for evidence in support of BFI
- Illustrate one example of BFI beyond the hospital setting
- Define the products that are covered by the Code
- Provide one example of predatory marketing of products covered by the Code
- Define the concept of “cross-cutting” area
- State one key documents used in global guidance
- Describe one way in which breastmilk substitutes are managed in an emergency setting
- Explain the responsibility of public health practitioners in keeping up to date on emerging issues
- Define the “double burden” of nutrition
- Define MDG and SDG
- Illustrate the global nature of breastfeeding solutions with examples from the developing and developed world

Detailed Content Outline domains: V (V (L), VII (b-4, 5, c-1, 3, 4, 5, d-1, e-1, 2, 3, 4, 5, 6)

Syllabus:

1. Breastfeeding and public health - challenges and solutions
 - Definition of public health as different from health care in general
 - Acute, preventative and public health as complementary parts of a whole
 - Introduce concept population-based health
 - Upstream vs. downstream approaches in public health & breastfeeding specifically

Content Outline:

- V. Psychology, Sociology, and Anthropology (5h)**
- L. Cultural awareness
- VII. Clinical Skills (7h)**
- B. Education and Communication
4. Educating mothers and families
 5. Educating professionals, peers and Students
- C. Ethical and Legal Issues
1. Breastfeeding in public



- Definition of a “wicked problem”
- 2. Breastfeeding in the domains of public health
 - Applying the domains of public health to breastfeeding
- 3. Individual vs. population-based principles
 - Why breastfeeding is best supported population-based interventions & how these work in practice
- 4. Social determinants of health
 - How public health has adopted an SDOH lens and why this is particularly impactful in breastfeeding promotion and protection
 - ACE study outcomes
 - Racial & social inequalities
- 5. Health Policy: the BFI Initiative
 - Short history of BFI, evidence base for effectiveness & challenges with BFI
 - Discuss community BFI and extensions of BFI concept to medical practices, city and other
- 6. Public Policy: The International Code
 - Rationale and short history of the Code’s creation and development over 35+ years
 - Examples of predatory practices on infant feeding outcomes
 - Impacts of the Code where it has been implemented at national scale and within organizations
- 7. S.O.S.: Breastfeeding in Emergencies
 - Global guidance on IYCF-E
 - Protection of breastfeeding alongside responsible management of substitutes
 - Significant role for public health in this cross-cutting area
- 8. Emerging controversies (0.5 E CERPs)
 - Concurrent over- and under-nutrition as a result of poor infant and young child-feeding
 - Milk-sharing and milk selling on the local and global scale
 - Placental encapsulation
- 9. Breastfeeding: a global health problem, a global health solution
 - Review breastfeeding in MDGs and SDGs
 - How breastfeeding alleviates inequality & suffering
 - Return to the concept of “wicked problems” and their solution as a collaborative, long-term investments
- 3. Code of Professional Conduct
- 4. Principles of confidentiality
- 5. WHO code –advocacy and policy
- D. Research
 1. Apply research in practice
- E. Public Health and Advocacy
 1. Advocate for Baby-Friendly Hospital Initiative (BFHI)
 2. Advocate for compliance with World Health Organization International Code of Marketing of Breastmilk Substitutes (WHO Code)
 3. Advocate for mother / baby in health care system
 4. Develop breastfeeding-related policies
 5. Advocate to government / health ministries
 6. Breastfeeding in emergency situations (e.g., natural disasters, personal emergencies)

