The Protocols for Induced Lactation

A Guide for Maximizing Breastmilk Production

By Lenore Goldfarb, B. Comm, B. Sc., LE, IBCLC and Jack Newman, MD, FRCPC
Based on the Original Induced Lactation Protocol conceived and published by Jack Newman, MD

A Word About This Guide

This guide to maximizing breastmilk production came about as a result of Lenore's own experience with induced lactation. In 1999, she set about trying to find a way to bring in a milk supply for her son who was to be born via gestational surrogacy. Lenore contacted Dr. Newman as soon as she learned that her son was on the way, and together they set upon a journey that enabled Lenore to successfully breastfeed her son, who was born 2 months prematurely, from his second day of life. Lenore was able, with Dr. Newman's help, to bring in an astonishing 32 oz per day without a pregnancy. Dr. Newman published the protocol that Lenore followed in a book he published in 2000 [1]The protocols that follow in this guide were developed from ongoing research based on the original protocol that Dr. Newman conceived. Together, they have helped over 250 adoptive, relactating, and intended mothers to bring in substantial milk supplies. This guide has been through several revisions and they expect to continue to refine the protocols as more information becomes available to them through their research.

Introduction

If a mother is committed to relactating, or breastfeeding her adopted baby or her baby born via surrogacy, she can do it. Any amount of breastmilk she is able to provide for her baby is a precious gift. Many women have induced lactation. In fact, in some traditional cultures, the baby's grandmother induced lactation routinely in case the mother experienced problems. Lenore personally induced lactation and we are aware of at least 350 other mothers who were successful at inducing lactation. Induced lactation is also known as "adoptive breastfeeding" and refers to the ability for a woman to breastfeed without going through a pregnancy.

The information and recommendations that follow are derived from Lenore's own experience with induced lactation and that of (to date) 350 other mothers that she and /or Dr. Newman have followed. They highly recommend that every mother who is inducing lactation consult her physician. If the mother's physician is not yet comfortable with this process, a good lactation consultant familiar with induced lactation can be an invaluable aid. There is a website at www.iblce.org that has both a national and international registry where one can locate an Internationally Board Certified Lactation Consultant (IBCLC).

The information contained in this guide should be forwarded to the mother's physician and lactation consultant so that needed medications as well as follow-up medical and technical support will be available. The hospital where the baby is to be born should be notified in writing and verbally that that the adoptive or intended mother is planning to breastfeed. The hospital or birthing centre may have a lactation consultant who can help. Make copies of this information to give to any family members, friends, or medical staff, who may be unfamiliar with induced lactation and who may try to discourage the mother

from giving her baby this precious gift.

The Biology of Induced Lactation in a Nutshell

It is not necessary to have been pregnant in order to breastfeed. During pregnancy a woman's body produces increasing amounts of progesterone and estrogen (via the placenta) and prolactin (via the pituitary). These hormones ready the breasts for breastfeeding. Once the pregnancy is completed, progesterone and estrogen levels drop and prolactin levels increase resulting in lactation [2]. The protocols outlined later in this document are designed to mimic what happens during and after pregnancy. See the "Introduction to the Protocols" for more information about hormones.

Once the milk supply is established it works on a "supply and demand" basis under the baby's control if the mother is breastfeeding and under the mother's control if she is pumping. The more often and the more efficiently the baby withdraws milk from the breast (or the mother pumps), the more milk will be produced by the breast. As the baby suckles at the breast (or the suction from the pump begins), a signal is sent to the brain from the breast that causes the release of oxytocin initiating the milk ejection or let down reflex (MER) causing the milk to flow. The release of oxytocin coupled with the draining of milk from the breast, causes the breast to produce more milk [3]. This is one of the reasons for the use of the hospital grade double electric breast pump during the protocols. Stimulation by the double pump further increases prolactin and oxytocin levels, thus increasing milk supply.

Should the medical practitioner be concerned about the quality or composition of the mother's breastmilk, the MICAM test may be performed to assess the various stages of the mother's milk [4]. Testing of the composition of the mother's breastmilk may be done at a local laboratory. Studies have shown that if the breastmilk of a mother who has induced lactation is compared to that of a birth mother's breastmilk at 10 days postpartum, there is virtually no difference [5].

Introduction to the Protocols for Induced Lactation

The protocols that follow are designed to prepare the mother's breasts for making breastmilk, just as occurs during pregnancy. Until recently, the typical advice that lactation consultants and members of the medical profession suggested to women who were interested in adoptive breastfeeding was to either pump and stimulate the breasts or do nothing before the baby arrives, just put the baby to the breast when the baby arrives and in a while the mother may or may not have breastmilk. The option of pumping alone requires serious dedication and commitment to pumping and breast stimulation many times per day for several months.

Many mothers may prefer to go the route of putting the baby to the breast and waiting to see what happens, not using any preparation at all or any medication. This is a legitimate option but one that will much less likely produce significant amounts of breastmilk.

There is more to breastfeeding than breastmilk but if it is possible to breastfeed AND bring in the breastmilk…why not do it?

There is a concern on the part of many lactation consultants and medical practitioners about the use of the birth control pill. It takes some getting used to...the notion of using a birth control pill to bring in a milk supply when we in the "lactation field" are told that the combination birth control pill (estrogen and progesterone) is BAD for milk supply. The thing to remember is that these mothers are not lactating YET. The use of the birth control pill and domperidone enables us to provide 3 of the 4 necessary hormones to simulate pregnancy and induce lactation. The forth one being human placental lactogen which is only available with a pregnancy.

The birth control pill can be started at any time in a woman's cycle because she is taking it for her breasts not her uterus. In fact, her uterus and ovaries do not need to be present at all in order for her to induce lactation. Many mothers question the need to take birth control pills when they have had a hysterectomy. These mothers require assistance to understand that the birth control pill is not for contraception, it's for her breasts.

Typically, patients undergoing in-vitro fertilization procedures are given the equivalent of 200 mg progesterone (vaginal suppositories) to help support and maintain their pregnancies while it only takes 1-2 mg progesterone (oral) to induce lactation. Another thing to remember is that these protocol are for the most part short term (less than 1 year).

Many have asked how we arrived at the current protocols. We followed a series of deductions:

a) Ladies on the birth control pill experience breast changes but they do not lactate. They can be on the birth control pill for YEARS and nothing happens after the initial increased breast size if any.

b) Some ladies on the domperidone for upper GI dysfunction did experience, as a side effect, lactation depending on the dosage taken...so did men.

c) Combining the birth control pill with domperidone is similar to making water boil. The birth control pill is the water (breast changes) and the domperidone is the salt (prolactin) that makes the water boil (milk production) much faster.

d) Add the breast pump or the baby at the breast and the result is copious breastmilk production.

e) Add the herbs, oatmeal and water and we have the recipe for increased milk supply.

It's as simple as that.

The protocols that follow involve the use of medications and herbs. There is the Regular Protocol, the Accelerated Protocol, and the Menopause Protocol. As a rule, the longer the mother can be on her particular protocol, the more milk she will end up with. The mother

will need to take a monophasic large dose birth control pill non-stop, only active pills, no sugar pills together with a medication called domperidone (see the medications and herbs 1,2,3 below).

1) Domperidone: How it works and how it compares to Reglan

Several medications have as a side effect, the production of breastmilk. Digitalis, chlorpromazine and other major tranquilizers are just a few of them. With medical management, it is not necessary to have been pregnant in order to produce breastmilk.

Domperidone is an anti-emetic or anti-nausea drug that was initially prescribed for people with upper gastrointestinal problems. Domperidone is not a hormone but it has a side effect that results in an increase in prolactin levels. It was discovered that when some women would take the drug this increase in prolactin levels could in turn cause lactation. As with most drugs, very little of the domperidone ends up in the breastmilk. The baby gets only minute amounts. There is another similar drug that is found in the US called Reglan (Metoclopramide). However it is not recommended for long-term use in lactating women. It crosses the blood-brain barrier and can cause neurological problems and depression. Note that according to the American Academy of Pediatrics classification, **Reglan (metoclopramide) is a drug "whose effect on nursing infants is unknown or may be of concern".** Domperidone is not known to cross the blood brain barrier in significant amounts and is used to treat chronic conditions that require it's long-term use. It is not known to cause depression.

Since domperidone does not cross the blood brain barrier it is much safer for mother and baby. They even give domperidone to babies in Canada suffering from severe regurgitation. Right now domperidone is not widely available in the US except at a few compounding pharmacies but **domperidone has been approved for use in breastfeeding mothers by the American Academy of Pediatrics (see below).**

Domperidone General Information:

Domperidone is widely available in every country in the world. In the United States domperidone is not yet FDA approved but it is currently available at select compounding pharmacies with a doctor's prescription. In Canada, domperidone was approved more than 20 years ago by Health Canada. This made it possible for a generic version to come onto the market enabling Canadians to obtain this medication economically.

Note that: **It is perfectly legal for a US doctor to prescribe domperidone even though it isn't available in the US.** Any Canadian pharmacy can ship domperidone with a prescription from a US doctor. And it is legal for a US citizen to bring domperidone into the US for personal use provided it is accompanied by a doctor's prescription, a letter stating that the medication is for the patient's personal use, and the shipment does not exceed a 3 month supply (see FDA regulations below). Here is what Dr. Thomas Hale says about domperidone in his book "Medications and Mother's Milk, 2002", Pharmasoft Publishing, p. 230 **Note: Please check with your doctor before beginning any medication.**

> **"Domperidone**

Trade name: Motilium
Can/Aus/ UK: Motilium
Uses: Nausea and vomiting, stimulates lactation
AAP: Approved by the Academy of Pediatrics for use in breastfeeding mothers

Domperidone (Motilium) is a peripheral dopamine antagonist (similar to Reglan) generally used for controlling nausea and vomiting, dyspepsia, and gastric reflux. It is an investigational drug in the USA, and available only for compassionate use. It blocks peripheral dopamine receptors in the GI wall and in the CTZ (nausea center) in the brain stem and is currently used in Canada as an antiemetic (1). Unlike Reglan, it does not enter the brain compartment and it has few CNS effects such as depression.

It is also known to produce significant increases in prolactin levels and has proven useful as a galactagogue (1). Serum prolactin levels have been found to increase from 8.1 ng/mL to 124.1 ng/mL in non-lactating women after one 20 mg dose (2). Concentrations of domperidone reported in milk vary according to dose but following a dose of 10 mg three times daily; the average concentration in milk was 2.6 ug/L (3). In a study by da Silva, 16 mothers with premature infants and low milk production (mean=112.8 mL/d in domperidone group; 48.2 mL/d in placebo group) were randomly chosen to receive placebo (n=9) or domperidone (10 mg TID) (n=7) for 7 days (4). Milk volume increased from 112.8 to 162.2 mL/d in the domperidone group sand 48.2 to 56.1 mL/d in the placebo group. Prolactin levels increased from 12.9 to 119.3 ug/L in the domperidone group, and 15.6 to 18.1 ug/L in the placebo group. On day 5, the mean domperidone concentration was 6.6 ng/mL in plasma and 1.2 ng/mL in breastmilk of the treated group (n=6). No adverse effects were reported in infants or mothers.

The usual oral dose for controlling GI distress is 10-20 mg three to four times daily although for nausea and vomiting the dose can be higher (up to 40 mg). The galactagogue dose is suggested to be 20-40 mg orally 3-4 times daily. At present, this product is unavailable in the USA.

Pregnancy Risk Category:

Lactation Risk Category L2: "Drug, which has been studied in a limited number of breastfeeding women without an increase in adverse effects in the infant. And/or, the evidence of a demonstrated risk, which is likely to follow use of this medication in a breastfeeding woman, is remote."

Theoretic Infant Dose: 0.4 ug/kg/day

Adult Concerns: Dry mouth, skin rash, itching, headache, thirst, abdominal cramps, diarrhea, drowsiness. Seizures have occurred rarely.

Pediatric Concerns: None reported.

Drug Interactions: Cimetidine, famotidine, niztidine, ranitidine (H-2 blockers) reduce absorption of domperidone. Prior use of bicarbonate reduces absorption of domperidone.

Alternatives: Metoclopramide, Cisapride

Adult dosage: 20-40 mg 3-4 times daily

T ½ = 7-14 hours (oral)	**M/P = 0.25**
PHL =	**PB = 93%**
PK = 30 min.	**Oral = 13-17%**
MW = 426	**pKa =**
Vd =	

References:
1. Hofmeyr GJ and van Iddekinge B. Domperidone and lactation. Lanet i, 647,1983.
2. Brouwers JR, Assies J, Wiersinga WM, Huizing G, Tytgat GN, Plasma prolactin levels after acute and subchronic oral administration of domperidone and of metoclopramide: a cross-over study in healthy volunteers. Clin Endocrinol (Oxf) 12(5): 435-40, 1980.
3. Hofmeyr GJ, et. Al. Domperidone: secretion in breast milk and effect on perperal prolactin levels. Brit. J. Obs. and Gyn. 92:141-144,1985.
4. da Silva OP, Knoppert DC, Angelini MM, Forret PA. Effect of randomized, double-blind, placebo-controlled trial. CMAJ. 164(1):17-21,2001.

Note: for best results it's a good idea to take domperidone 1/2 hour before meals and at least 1 hour before pumping or breastfeeding.

FDA regulations, which can be viewed here: http://www.fda.gov/ora/compliance_ref/rpm_new2/ch9pers.html state that the following criteria must be met to import medications into the US. It is legal for US residents to import medications from outside the US provided the following conditions are met.
a) The product was purchased for personal use and does not exceed a 3-month supply.
b) The product is not for resale.
c) The intended use of the product is appropriately identified.
d) The patient seeking to import the product affirms in writing that it's for the patient's own use.
e) The patient provides the name and address of the doctor licensed in the US responsible for his or her treatment with the product.
f) The medication is not a controlled substance, e.g. sleeping pills, Valium, narcotics.
Although domperidone is not readily available in the US, you may still obtain the medication as follows:

Domperidone Purchasing Information: Please see attached appendix 1

Domperidone Dosage Instructions for Induced Lactation

The maximum dose for domperidone is 20 mg four times per day. The suggested beginning dose is 10 mg 4 times per day for 1 week, then increasing to 20 mg 4 times per day. This should be increased gradually as per the instructions in the individual protocols. It is advisable to continue to take the domperidone from the initiation of lactation until weaning. Most mothers find that when they forget a dose their milk supply decreases. However, once lactation is well established and the baby is breastfeeding well, especially when the baby is 4 or 6 months or older, the mother may consider slowly decreasing the domperidone to 10 mg 4 times per day. If her milk supply drastically decreases, she can always increase the dose back to 20 mg 4 times per day.

For more information on domperidone visit the "Bright Future Lactation Resource Center" website at **http:/www.bflrc.com/newman/breastfeeding/domperid.htm**

2) Special Birth Control Pill. (Check with your doctor before beginning any medication.)

It is important to find a birth control pill that is at least equivalent to Ortho 1/35 (1 mg norethindrone + 0.035 mg ethinyl estradiol). But if a higher progesterone content is available, it would be preferable.

Acceptable birth control pills include: Ortho Novum 1/35, Necon 1/35, Demulen 1/35, Norethin 1/35E, Norinyl 1 +35, Zovia 1/35, and Yasmin. **Note:** It is **extremely important that the mother's doctor understand that the birth control pill is not being used to control menses but rather to develop the milk making apparatus of the breasts**. This is why the birth control pill must contain at least 1 mg of progesterone (2-3 mg is better) and no more than 0.035 mg of estrogen. Many women have found that higher doses of estrogen to be ineffective. The birth control pill must be taken non-stop, only active pills, no sugar pills, for the duration of the protocol.

The longer the time a mother spends inducing lactation by taking the birth control pill TOGETHER with the domperidone, the longer the milk making apparatus of her breasts will have time to prepare for milk production. It normally takes 9 months for a baby to gestate and during that time the milk making apparatus of the mother's breasts are being prepared for lactation. For this reason, 6-9 months, on the combination of the birth control pill and domperidone, before baby is expected to arrive produces the best results.

For the Accelerated Protocol and Menopause Protocol it is highly recommended to use Yasmin in place of the Ortho 1/35 because the Yasmin contains 3 mg of progesterone as opposed to the 1 mg of progesterone in the Ortho 1/35. The estrogen content is the same in the two medications. Many women have found that when the Yasmin is substituted for the Ortho 1/35, breast changes occur more rapidly and more effectively which is desirable when time is of the essence. Yasmin is available in the US, Austria, Germany, Switzerland, and the United Kingdom.

Several women have expressed concern about the hormones in the birth control pills. They have found it helpful when it is pointed out that the hormones that are contained in the birth control pills are minuscule compared to the hormone levels that a woman normally achieves during a pregnancy. The hormone levels necessary to achieve breast changes are minute compared to the levels necessary to support gestation.

3) Herbs

In addition to the medications described above, the following herbs have been found to be helpful in increasing milk supply for women on the protocols:

Fenugreek seed - 3 capsules (580-610 mg each) 3 times a day with food

Blessed Thistle herb - 3 capsules (325-390mg each) 3 times a day with food

These dosages were arrived at through a review of the available literature, a review of the recommendations of several herbal companies, and anecdotal evidence. Many women on the protocols have found that Fenugreek taken alone may cause stomach upset but when it is taken in combination with the Blessed Thistle the stomach upset is reduced or nullified. Taking these herbs with food seems to help as well and is recommended by most of the herb suppliers. Women often report that they smell like maple syrup or curry while taking fenugreek. Many women have found these herbs to be most effective if they are begun after completion of the necessary time on the birth control pill – domperidone combination, and once the women have started to pump. Also, many women have reported feeling nauseated when starting the herbs too early. For this reason it is not desirable to take the herbs while taking the birth control pill and prior to pumping.

Contraception and the Protocols:

There are several adoptive or intended mothers who are fertile but for whom pregnancy is contraindicated due to medical reasons such as in the case of a "brittle diabetic" mother. If the mother is fertile and does not wish to become pregnant, it is recommended that she use an alternative method of contraception while on the protocols. Because the birth control pill is started at any point in the woman's cycle, and is taken non-stop for the duration of the protocol, it does not provide the usual contraceptive protection. Break-through bleeding is a common symptom of the protocols. Condoms, non-hormonal IUD's, spermicides, and the diaphragm, are all acceptable alternatives to the birth control pill. It should be noted that use of the birth control pill once lactation has been established, may significantly reduce milk supply. Therefore, an alternative method of birth control is preferable.

Once the baby is exclusively breastfeeding around the clock (no bottles, no supplementary feeding tube devices, no thumb sucking or blanket sucking) this should protect against pregnancy almost as effectively as the birth control pill. This is known as the Lactation Amenorreah Method of contraception (LAM) [6]Both the birth control pill and the Lactation Amenorreah Method of birth control are 98-99% effective. However, neither method is foolproof. Once the baby has started on solids or supplement of any kind, the protection afforded by breastfeeding is reduced. Additionally, although breastfeeding significantly decreases fertility (if breastfeeding exclusively, the mother has not had a period, the baby is under 6 months of age), we still do not yet know if the protection afforded by breastfeeding following pregnancy, is the same as for those who induce lactation.

Medical Conditions and the Protocols:

Previous history of thrombosis, cardiac condition, and severe hypertension are contra-indications for the birth control pill portion of the protocols. Several women on the protocols who have been diagnosed with mild hypertension have responded well to Aldomet (methyldopa) enabling them to take the birth control pill. This medication has

the added benefit of further increasing milk supply and is approved by the American Academy of Pediatrics for use in breastfeeding mothers.

Several women on the protocols with a history of depression have responded well to Zoloft (sertraline). Several studies indicate that this medication is compatible with breastfeeding.

Inability to tolerate the birth control pills is a concern for some mothers. Several women have tried estrogen patches, external lotions, and progesterone creams together with the domperidone.

Fenugreek has been reported to affect serum glucose levels. Therefore, diabetic mothers are advised to use this herb with caution.

Fenugreek can aggravate asthmatic symptoms. Therefore, mothers with a history of asthma are advised to use this herb with caution.

Breast Pumps

Over the course of the past two years many reports have come to us, from women on the protocols, regarding the efficacy of pumps from different manufacturers. Based on these reports, the process of induced lactation requires a hospital grade double electric breast pump. In addition to this, many mothers have found that the top end products have been the most reliable. The favoured pump by women who can afford to purchase a pump, has been a product that is a double electric pump with a strong motor, portability, variable speed control, hands free option, battery pack option, and ease of use. For women who intend to rent a pump, the favoured choice for women on the protocols has been a product that is a double electric breast pump with a strong motor, portability, hands free option, and ease of use. Breast pumps may be rented from lactation consultants, local hospitals, or medical equipment suppliers. If the mother is intending to pump for more than 3 months, the more economical option is to purchase a pump. This company: **http://www.healthchecksystems.com/breastpumps.htm** offers pumps at very reasonable prices.

The Protocols for Inducing Lactation and Maximizing Milk Production:

The Regular Protocol **(suitable for intended mothers expecting a baby via surrogacy or adoptive mothers with a long lead time) Most of the women who have followed this protocol were able to meet most if not all of their baby's breastmilk needs and sustain until weaning.** [7]

1) Six months (the longer the better, if the mother can start as soon as she knows a baby is on the way it would be great) before the baby is due, take an "active" birth control pill each day + 10 mg domperidone 4 times per day for 1 week. Then increase the dosage to 20 mg 4 times per day. The breasts will swell. This is normal. The birth control pill actually suppresses milk supply mimicking what

happens during pregnancy. **No pumping or herbs please until 6 weeks before the baby is due. Pumping before the breasts are ready is not a good idea.**

2) Five months before the baby is due, the mother should take an "active" birth control pill each day + maintain the domperidone dosage at 20 mg 4 times per day. The milk supply will still be suppressed. **Still no pumping or herbs.**

3) Four months before the baby is due, the mother should take an "active" birth control pill each day + maintain the domperidone dosage of 20 mg 4 times per day. **Do not exceed this dosage.** The milk supply will still be suppressed.

4) Six weeks before the baby is due, the mother should **stop the birth control pill** and continue the domperidone dosage of 20 mg 4 times a day. The mother should experience vaginal bleeding. This is normal withdrawal bleeding. If the mother does not experience withdrawal bleeding and is fertile, it is recommended that she be examined for potential pregnancy.

Over the next two weeks, start pumping as follows:

- Pump for 5-7 minutes on the low or medium setting
- Breast massage, light tickle, jiggle **(see Appendix 2)**
- Pump for 5-7 minutes

It is suggested that the mother pump every 3 hours, Note: Stopping the birth control pill while maintaining the domperidone and then pumping, should cause a rapid decrease in the mother's serum progesterone level while causing an increase in the mother's serum prolactin level. This process attempts to mimic what happens after a normal pregnancy and birth. This should cause the mother's milk supply to come in.

Once the mother has started pumping she can add the herbs Blessed Thistle herb (390 mg per capsule) and Fenugreek seed (610 mg per capsule). The recommended herb dosage is 3 capsules of each, 3 times a day with meals. The domperidone should be taken ½ hour before meals for best absorption. Many mothers on the protocols have noticed a significant increase in their milk supplies when they began to add oatmeal to their diets regularly.

Fluids are very important. The human body naturally consumes and excretes the equivalent of 8 – 10 glasses of water per day. It is recommended that mothers drink at least 6 – 8 glasses of water a day if possible. Usually if mothers drink water when they are thirsty during the day, adequate fluid intake is achieved. Beverages containing caffeine should be avoided as they cause rapid excretion of fluids.

5) One month before the baby is due, the mother should continue the domperidone dosage of 20 mg four times a day. Pump as above and at least once during the night. A mother's serum prolactin levels naturally rise between 1 am and 5 am. Pumping during the night takes advantage of this natural occurrence. Additionally research has shown that frequency of breast emptying is more influential on milk supply than duration of breast emptying. The more often the mother pumps, the more milk she can store, and the better her supply will be.

The arrival of the milk supply while pumping follows a particular pattern. It begins with clear drops, which become more opaque and whiter in color. Drops will appear, followed by milk spray, and then a steady stream of breastmilk. It may take a few days, a week, or two, or more for the mother's milk supply to come in. Everyone responds differently.

6) Once the baby arrives, the mother should continue the Domperidone dosage of 20 mg four times a day and continue until either she achieves a full milk supply or is ready to wean her baby off the breast. The mother should put her baby to her breast as soon as possible, in the delivery room if she can. She should feed her baby "on demand" as often as possible. It should be emphasized to the mother that the pumping schedule outlined for these protocols represents the bare minimum needed to establish a milk supply and that a newborn typically breastfeeds 10-16 times per 24 hours.

While the mother's milk supply is still building, it is advisable for her to pump for 10 minutes after each feeding. This will help to increase her milk supply, until it is well established. The mother should maintain the herbs fenugreek and blessed thistle and continue until her milk supply is well established and throughout the entire time she is breastfeeding if necessary. Once the mother's milk supply is well established it might be possible for her to slowly decrease the domperidone and even eliminate it completely. See the section on "Stopping the Domperidone" below.

The Accelerated Protocol **(suitable for intended mothers or adoptive mothers who have little time to prepare, or for mothers who wish to relactate). Milk production may be significantly lower with this protocol than that achieved with the Regular Protocol but there is more to breastfeeding than breastmilk.**

Yasmin is taken for 30-60 days non-stop, only active pills, no sugar pills, together with the domperidone 20 mg 4 times per day. If significant breast changes occur within 30 days, the birth control pill is stopped while maintaining the domperidone, and the pumping schedule begins.

Significant breast changes include an increase in breast size (1 cup) and breasts that feel full, heavy and painful. Note: **stopping the protocol before these breast changes occur is not recommended**.

Milk production is not as great on the accelerated protocol but the supply is usually sufficient to provide a significant amount of the baby's needs. The mother can use the feeding tube device filled with either breastmilk or artificial infant milk to breastfeed her baby while she is going through the protocol. There are milk banks and milk exchange services that can provide the adoptive mother with breastmilk if it is not feasible for her to ask the birthmother to provide breastmilk. Many adoptive mothers and intended mothers have asked the birth mother to provide breastmilk for a limited amount of time ranging from two weeks to 1 month or more in order to provide colostrum to the baby. Many birth mothers are happy and willing to provide the child with a healthy start in life. At least one birth mother has reported that providing breastmilk helped her to cope with the adoption process. Many surrogate mothers have provided expressed colostrum and breastmilk for their couples to give their children. This has become more common in recent years.

If the mother has 4 weeks or less or even if the baby has arrived and the mother suddenly decides that she wants to do the accelerated protocol, she can. The Yasmin (once a day) is started immediately, regardless of the mother's cycle day, (see the section that describes the medications above) together with 20 mg of domperidone 4 times a day. The mother can expect to feel fatigued due to the rapid start of medications. If the mother can take the Yasmin together with the domperidone for at least 30 days she will have a good result.

Once the mother has completed at least 30 days on the combination of Yasmin and domperidone and has experienced significant breast changes she can stop the Yasmin maintain the domperidone and begin pumping with a double electric breast pump. A hand pump is just not up to the job. See the section on breast pumps. Significant breast changes include an increase in breast size (at least 1 cup) and breasts that feel full, heavy and painful.

It is recommended that the mother pump every 3 hours and once during the night. (See the above "Regular Protocol" for pumping instructions.) A mother's serum prolactin levels naturally rise between 1 am and 5 am. Pumping during the night takes advantage of this natural occurrence. Additionally research has shown that frequency of breast emptying is more influential on milk supply than duration of breast emptying. The more often the mother pumps, the more milk she can store, and the better her supply will be.

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Remember that if the mother is fertile, she must use an alternative method of contraception. It is advisable for the mother to store as much breastmilk as she can. Once her baby arrives, or if her baby is already here, the baby should be fed on demand. The baby can be supplemented if necessary using a feeding tube device filled with either the stored breastmilk, donor milk from a milk bank or milk exchange service, or artificial infant milk until the mother's milk supply is well established. Remember, not all the milk has to come from the mother. Whatever amount of breastmilk she can provide to her baby is a precious gift. There is more to breastfeeding than breastmilk.

Note that the birth control pill and domperidone are both approved by the American Academy of Pediatrics for use in breastfeeding mothers.

The Menopause Protocol

If the mother is menopausal due to surgical removal of her reproductive organs or naturally occurring menopause, she can still breastfeed and bring in her milk supply. A woman does not need a uterus or ovaries in order to breastfeed. All she needs are breasts and a functioning pituitary.

The first step is to stop the mother's hormone replacement therapy and replace it with Yasmin (once per day). The Yasmin contains enough estrogen and progesterone to keep the mother's menopausal symptoms at bay while at the same time developing the milk making apparatus of her breasts. The mother also needs to take domperidone (10 mg 4 times a day for the first week and then increase to 20 mg 4 times a day). It is a good idea for the mother to stay on the combination of Yasmin and domperidone until she experiences significant breast changes. At least 60 days, on the combination of Yasmin and domperidone is recommended for menopausal women. Significant breast changes include an increase in breast size (at least 1 cup) and breasts that feel full, heavy and painful.

Once the mother has completed at least 60 days on the combination of Yasmin and domperidone and has experienced significant breast changes she can stop the Yasmin, maintain the domperidone and begin pumping with a double electric breast pump. A hand pump is just not up to the job.

It is recommended that the mother pump every 3 hours and once during the night. (See the above "Regular Protocol" for pumping instructions.)

Once the mother has started pumping she can add the herbs Blessed Thistle herb (390 mg per capsule) and Fenugreek seed (610 mg per capsule). The recommended herb dosage is 3 capsules of each, 3 times a day with meals. The domperidone should be taken ½ hour before meals for best absorption. Many mothers on the protocols have noticed a significant increase in their milk supplies when they began to add oatmeal to their diets regularly.

Fluids are very important. The human body naturally consumes and excretes the equivalent of 8 – 10 glasses of water per day. It is recommended that mothers drink at least 6 – 8 glasses of water a day if possible. Usually if mothers drink water when they are thirsty during the day, adequate fluid intake is achieved. Beverages containing caffeine should be avoided as they cause rapid excretion of fluids.

The arrival of the milk supply while pumping follows a particular pattern. It begins with clear drops, which become more opaque and whiter in color. Drops will appear, followed by milk spray, and then a steady stream of breastmilk. It may take a few days, a week, or two, or more for the mother's milk supply to come in. Everyone responds differently.

If the mother experiences menopause symptoms, please do not resume the mother's hormone replacement therapy but rather suggest that she eat Soya products to control her symptoms. Soya milk and/or Soya butter are good choices because they contain phytoestrogens but the mother should eat only enough to stop "hot flashes" because too much will decrease her milk supply.

How to Decide Which Protocol is Right for the Mother

Depending on when the mother expects her baby to arrive she'll have to think like this...she'll need to pump for at least a month. The mother will need to be off the birth control pill when she starts pumping, she will need to be on the birth control pill - domperidone combination for at least 30 days non-stop. The longer the mother can be on the combination the better. So if the mother has three months...she'll be on the combination for 2 months straight. If she has 2 months...she'll be on the combination for at least 1 month straight. After the mother is off the birth control pill and still on the domperidone, she'll begin to pump. The mother will need to use a double electric breast pump such as either the Medela Pump n Style or Medela Lactina Select (see the section on breast pumps). And then she'll need to take herbs...fenugreek and blessed thistle.

What to Do If the Mother Does Not Experience "Significant" Breast Changes:

Significant breast changes include:
Breasts increasing in size by at least 1 cup size.
Breasts full, heavy, and painful.

These symptoms are indications of adequate growth of the milk making apparatus of the breasts. If the mother does not experience significant breast changes within 15 days of

beginning either of the protocols, she may want to consider increasing her progesterone intake. There are two reliable ways to do this. 1) **Replace** her current birth control pill with Yasmin. This medication has three times the amount of progesterone that is in the "1/35" type birth control pills. 2) Continue on the current "1/35" birth control pill and **add** at least 1 mg of progesterone another way such as by adding 1/2 a pill of Provera 2.5. Adding progesterone usually solves the problem but option 1 works better than option 2 because of the nature of the progesterone contained in the Yasmin.

A word of caution about creams…they do not provide the needed level of progesterone in a reliable manner. An oral form of progesterone is consequently a better choice.

Each element of the protocol serves a specific function. Consequently, it is very important to follow the protocols as written. If any of the ingredients for success are left out, the mother is likely to produce less breastmilk.

Supplementary Feeding Device

There are two basic types of supplementary nursing systems on the market. Basically, this is a bottle or bag, filled with expressed breastmilk, banked breastmilk or artificial infant milk, that is worn around the neck or clipped to clothing or hidden in a shirt pocket. Thin tubes leading from the bottle or bag attach to both breasts. The baby then breastfeeds from the breast normally. This is an excellent way to supplement the baby's feedings until the mother is able to bring in her milk supply, and to take the pressure off her, if she does need to supplement her baby's feedings once her milk supply comes in. There is an alternate homemade feeding tube devise occasionally described e.g. pp 80-81 of "The Ultimate Breastfeeding Book of Answers" by Dr. Jack Newman.

Once the mother's milk supply is starting to come in or is established. The best way to use the supplementer is to allow the baby to feed on each breast with the supplementer in place but not flowing until the baby doesn't drink anymore. The mother can tell because the baby will stop the suck>pause (downward motion of chin)> suck motion. The mother can use breast compression (see appendix 3) to get as much breastmilk to her baby as possible from the first breast and when that stops working and her baby stops drinking, she can then switch sides and do the same thing. The mother should allow the supplement to flow only when the baby has done both sides at least. That way, if the baby doesn't want any more, the baby won't take any more and the mother will know that her baby had as much breastmilk as possible.

What to Do With the Milk

The mother should save all the milk she pumps or acquires from a milk bank, and freeze it in one-ounce portions. There are freezer bags for breastmilk available at most baby stores. The mother should mark the date and time on each bag so they can be used in the order in which they were obtained. It is important that the freezer be colder than 0 degrees Fahrenheit. Use a fridge/freezer thermometer to check the temperature. The milk may be stored for up to a year this way. The phalanges and bottles may be washed with hot soapy water and rinsed well. It's a good idea to boil them in a pot once a week. Storing the breastmilk will enable the mother to supplement her baby's feedings with her

own breastmilk if she needs to. It is preferable when using the supplemental feeding device, to fill it with the mother's previously stored breastmilk. If the mother finds that she has finished all her previously stored milk, she can use artificial infant milk in the supplementer. [8]

Lactation Consultants

It is highly recommended that the mother contact an Internationally Board Certified Lactation Consultant (IBCLC) who has experience with adoptive breastfeeding or who is at least open minded about the protocols. There is a listing for the US at http://iblce.org/us_regional_registry.htm and for the rest of the world at http://iblce.org/international_registry.htm If for some reason you are unable to find a board certified lactation consultant you can try a La Leche leader through La Leche, Tel: 1-800-La Leche. La Leche representatives have a wide variety of products available. Most LLL leaders are familiar with the concept of induced lactation but do not usually have the experience with these protocols. Nor do most LLL leaders feel that following a mother for induced lactation is their function except in a supportive role. However, occasionally, a very experienced leader has acquired the clinical experience over years of service to her community. It is important to ask about her clinical experience. Also, LLL leaders may be able to guide a mother to an IBCLC.

Recipe for Increasing Milk Supply

If the mother is interested in increasing her milk supply and is not adverse to the idea of domperidone and herbs here is a recipe for success.

1) If the mother is an adoptive breastfeeding mother or an intended mother and is not already taking domperidone, it is a good idea to have a look at the Accelerated Protocol now.

2) If the mother has a medical contra-indication for taking the birth control pill she may want to consider domperidone and herbs alone. She can start with domperidone 10 mg 4 times a day for 1 week and then if she is not too tired and her stomach isn't too upset, increase the domperidone to 20 mg 4 times a day. It's a good idea to take domperidone 1/2 hour before meals and at least an hour before pumping. The mother should not start the herbs until she is comfortable with the domperidone…have her wait at least a week at the maximum dose of domperidone before adding the herbs or the mother can get a really upset stomach. And if the mother is already taking herbs…have her stop until she is comfortable with the domperidone.

3) The mother should empty the breasts 8 to 12 times in 24 hours by pumping, breastfeeding or both. She can keep a cooler with an ice pack by her bed at night so she can hand express (see appendix 1) her milk (if pumping is not an option) into a bottle and keep it in the cooler until morning when she can transfer it into a bag and either use it in the supplementer if she is breastfeeding or freeze it. You can also use this cooler idea at work if you don't have a fridge available to you. Freeze the milk when you get home or use it in the Lact-aid. Keep in mind that it

may take a while for your breasts to get the message. You could be pumping and getting very little for days and then suddenly…boom you have a lot more milk!

4) When the mother is ready to add the herbs, the recommended dosages are: Fenugreek seed (610 mg per capsule) and Blessed Thistle herb (390 mg per capsule). 3 capsules of each, three times a day with food.

5) Drinking water to thirst is good for milk supply as it prevents dehydration from the body's normal excretions. Avoid caffeine; it's a diuretic.

6) Many of the women on the protocols have found that eating oatmeal for breakfast 3 times a week is good for milk supply.

7) Above all, if the mother is breastfeeding, the number 1 most important thing is to have a good latch and position. If the baby is not latching on, he/she will not be able to get the milk that is available no matter how much the mother has. It is a good idea to work with an International Board Certified Lactation Consultant who will check the baby's latch and suck as well as teach the mother how to use the supplementary feeding device.

   According to Dr. Newman, "When a baby is getting milk (he is not getting milk just because he has the breast in his mouth and is sucking), you will see a pause in the chin after he opens to the maximum and before he closes, so that one suck is (open mouth wide-->pause-->close mouth). If you wish to demonstrate this to yourself, put a finger in your mouth and suck as if you are sucking on a straw. As you draw in, your chin drops and *stays down* as long as you are drawing. When you stop drawing, your chin comes back up. This pause in the chin represents a mouthful of milk when the baby does it at the breast. The longer the pause, the more the baby got. Once you know that, you know also when he is *not* getting milk. And once you know that, you know that 20 minutes on each side, for example, is nonsense. A baby who does this type of sucking (open mouth wide-->pause--close mouth), steadily for 20 minutes, won't take the second side. A baby who nibbles for 20 hours will come off the breast hungry."

8) If the mother has to supplement the baby's feedings, she should use a supplementary feeding device. This will help her milk supply while at the same time keep her baby breastfeeding. It may seem silly to state the obvious but a baby learns to breastfeed by breastfeeding. If the bottle is introduced, it will teach the baby that there is another way to get nourishment, which can cause a problem at the breast. This doesn't mean the mother can't ever go out and leave her baby with a caregiver to handle a feeding. Consider other ways of supplementing such as the infant cup and limit outings entirely in the first 6 weeks and to a maximum of once in 24 hours in the next 6 weeks to 3 months. Breastfeeding a baby takes commitment and time. The rewards are worth the effort!

9) Don't make yourself nuts over this. There is more to breastfeeding than breastmilk. Your baby only needs a small amount of breastmilk with each feeding in order to benefit.

For more information on increasing milk supply, see "Dr. Newman's Protocol for Not Enough Milk at http://www.asklenore.com/breastfeeding/not_enough_milk.html

Stopping the Domperidone

Some mothers have found that stopping the domperidone abruptly can cause discomfort and/or frustrate their babies if they are still breastfeeding. To stop the domperidone:

- Decrease the domperidone to 20 mg 3 times a day for 2 weeks.
- Decrease the domperidone to 10 mg 4 times a day for two weeks.
- Continue to decrease the domperidone to 10 mg 3 times a day for two weeks.
- Decrease the domperidone to 10 mg 2 times a day for two weeks.
- Decrease the domperidone to 10 mg once a day for two weeks. Then stop.

It is very important to stop the domperidone slowly. Although most women do not experience discomfort when stopping the medication, gradual weaning from the medication will help the mother's milk supply to adjust without frustrating the baby or causing her discomfort.

Recommended Reading:

This is a list of Additional Reading that can be printed out and shown to anyone who tries to divert the mother from her goal.

Breast-feeding: Unravelling the Mysteries of Mother's Milk
http://www.medscape.com/viewarticle/408813_print

Outcomes of breastfeeding vs. formula feeding
http://www.washington.edu/medical/uwmc/uwmc_clinics/matern/20010328_biospec.doc

How Breastmilk Protects Newborns by Jack Newman MD
http://www.asklenore.com/breastfeeding/protects_newborns.html

Why is Breastfeeding Important?
http://www.promom.org/bf_info/why_bf.htm

Risks of Artificial Feeding by Jack Newman MD
http://www.asklenore.com/breastfeeding/risks.html

Cost Benefits of Breastfeeding
http://www.prairienet.org/laleche/bfcost.html

Breastfeeding Good for Babies, Mothers, and the Planet
http://medicalreporter.health.org/tmr0297/breastfeed0297.html

World Health Organization: Relactation
http://www.who.int/child-adolescent-health/New_Publications/Relactation/Relactation_EN.html

References

[1] Newman J, 2000 pp 250-254
[2] Newman J, 2000 p 252
[3] Riordan J and Auerbach K, 1998, pp 103-105
[4] Riordan J and Auerbach K, 1998 p 149
[5] Riordan J, 1991, p278
[6] Short RV, 1993, *Lactational infertility in family planning*. Ann Med 25:2 175-80.
[7] Newman J, 2000 pp 253-254
[8] Duke CS, 1998, *New Beginnings,* Vol. 15 No. 4, July - August 1998, p. 109, La Leche League International http://www.lalecheleague.org/NB/NBJulAug98p109.html

Bibliography

"The Ultimate Breastfeeding Book of Answers" by Jack Newman, MD, FRCPC in the USA, Prima Publishing, 2000, or "Dr. Jack Newman's Guide to Breastfeeding", in Canada, HarperCollins Publishing, 2000. Dr. Newman is one of the foremost experts on lactation in Canada. He is a Toronto Pediatrician who established the first hospital based breastfeeding clinic in Canada at Toronto's Hospital for Sick Children. He is a consultant with UNICEF's Baby Friendly Hospital Initiative and is a popular speaker at breastfeeding conferences throughout the world. Dr. Newman has devoted a chapter to Adoptive Breastfeeding that is extremely helpful. The protocols are derived from information from Dr. Newman's book.

"The Breastfeeding Answer Book" by Nancy Mohrbacher, IBCLC and Julie Stock, BA, IBCLC, published by La Leche League International, 2000. This book is basically exactly what the title indicates. If you have a question, this book will answer it.

"Medications and Mother's Milk, Tenth Edition, 2002", by Thomas Hale, R.Ph, Ph.D., published by Pharmasoft, 2002. Dr. Hale is an associate professor of Pediatrics and associate professor of Pharmacology in the division of Pharmacology at Texas Tech University School of Medicine in Amarillo, Texas. His book is widely respected as being one of the definitive guides to medications for breastfeeding mothers.

"Breastfeeding, A Guide for the Medical Profession" by Robert Lawrence, MD and Ruth Lawrence, MD, published by Mosby, 1999. Both of these authors are MD's working in New York, Dr. Ruth Lawrence is a professor of Pediatrics, Obstetrics and Gynecology

at the University of Rochester School of Medicine and Dentistry and Dr.Robert Lawrence is an associate professor of Pediatrics and Microbiology at New York University School of Medicine. They have written an excellent resource book for understanding the physiology of lactation and related issues.

"Breastfeeding and Human Lactation, Second Edition" by Jan Riordan, Ed.D, RN, IBCLC, FAAN and Kathleen Auerbach, PhD, IBCLC, published by Jones and Bartlett, 1998. Dr. Riordan is associate professor, School of Nursing, Wichita State University, Wichita Kansas and Dr. Auerbach is adjunct professor, School of Nursing, University of British Columbia, Vancouver, BC, Canada. They have written an excellent resource book for understanding in great detail the physiology of lactation and related issues.

"The Womanly Art of Breastfeeding" by La Leche League International Authors, published by Penguin, 1997. La Leche League is recognized world wide as the largest breastfeeding support organization, has the largest library of research articles on breastfeeding, is recognized by governments world wide, and has consultant status to the World Health Organization. This particular book is constantly being revised to include the most updated information.

"A Practical Guide to Breastfeeding" by Jan Riordan, RN, MN, published by Jones and Bartlett, 1991. The information on comparison of biological mother's milk to induced milk can be found here along with the results of a rather large study that was done on induced lactation using methods other than the protocols.

Ask Lenore Website

I'm pleased to announce our new website at http://www.asklenore.info

Additional Information

For more information on induced lactation see the Adoptive Breastfeeding Resource Website at http://www.fourfriends.com/abrw/ and visit the Ask Lenore Message Boards at http://www.asklenore.info/ubbthreads/ubbthreads.php?Cat=

Dr. Jack Newman's articles are available on the following websites:

http://www.mamadearest.ca
http://users.erols.com/cindyrn/newman.htm
http://www.bflrc.com/newman/articles.htm
http://babiestoday.com/breastfeeding/drjack/
http://breastfeed.com/resources/articles/drjack/
and at http://www.asklenore.info

Questions?

We hope that this information has been helpful. If you need further assistance, you can e-mail me, Lenore Goldfarb, in Montreal, Canada, at Lenore@asklenore.info and I'll be happy to help.

Disclaimer: All material provided in this document is provided for educational purposes only. Consult your physician regarding the advisability of any opinions or recommendations with respect to your individual situation.

Appendix #1
Medications Purchasing Information

Domperidone Purchasing Information As of Nov 29, 2002:
Check with your doctor before beginning any medication

Domperidone is available in the US with a prescription at several compounding pharmacies.

Lloyd Center Pharmacy
1249 Lloyd Center
Portland OR 97232
(503) 281-4161

People's Pharmacy
Austin, Texas
(512) 459-9090

Lauden Pharmacy

1840 41st Ave
Capitola, CA 95010

(831) 462-9880

Any Canadian pharmacy can fill a US physician's prescription.
Domperidone is also available without a prescription from several sources. Before ordering, **we strongly suggest that the mother contact her doctor first** so that he/she can monitor the mother's progress. For mothers who do not have a family physician, it really is advisable to find one to oversee their treatment, but if domperidone is needed in a hurry, it may be obtained from the following sources.

Domperidone is available without a prescription COD from **Mexico**. For best results the order should be faxed. Just fax them the name, address, telephone number, and how many boxes of pills needed and whether you want overnight delivery or two days and they will send them FedEx, C.O.D. They will accept a money order or cashier's check made out to KCR, Inc. It's a good idea to write in block letters on the fax so there is no chance of error with the name and address. The minimum order is 8 boxes. There are 30 pills in a

box. That makes 240 pills. The price is US$112. FedEx 2 days is an additional US$20 or FedEx overnight is US$30. To Fax from the US dial 011-526-654-5522. It's a good idea to back it up with a telephone call. There is a person there that speaks English. To call from the US, dial 011-526-654-1834. It may take a while to get through. They have been very reliable to deal with.

There are several **online sources** for domperidone. Some of these include the following:

At http://www.1onlinepharmacy.com they ship domperidone anywhere in the world without a prescription. Look for the generic brand (variable sources) US$18 for 100 tabs (10 mg). Shipping is free if shipped by regular airmail. Delivery in 10 -30 days. They also offer express shipping but they don't recommend it because it can take up to 21 days with new customs regulations in place.

At http://www.1drugstore-online.com you can get domperidone without a prescription. Look for the generic brand by Jassen-Cilag, which is domperidone maleate (Motilium) They sell 100 tabs (10 mg) for $25. The minimum order is US$50 but shipping is free worldwide and takes 10-15 days. If the medication is needed fast, they'll ship it express for US$30. They will accept orders from everywhere EXCEPT Canada.

For Canadian mothers who do not have a family physician, it really is advisable to find one to oversee their treatment, but if domperidone is needed in a hurry, it may be obtained at http://www.pharmagroup.com without a prescription. Look for Motilium 10 mg 30 tabs for US$12. This comes out to US$120 for 300 tabs. They will ship worldwide including Canada and the US under regular shipping for 6% of their order or a minimum of US$16. If the order is needed within 3 business days it will cost 10% of the price of the order or a minimum of US$40.

Domperidone is available at http://www.canadameds.com with a prescription, for CAN $82.29 (about $54 US, depending on exchange rate) for a bottle of 500, 10 mg tablets. They ship anywhere in the world for CAN$18 shipping fee (about US$12). They will deliver within 21 days.

Domperidone may be obtained with a prescription from The Murray Shore Pharmacy Tel: 1-800-201-8590, Fax: 1-800-201-8591 or visit their website at www.mshorepharmacy.com. **Note: Murray Shore Pharmacy will not ship domperidone without a prescription from an MD licensed to practice in the province of Ontario.** The physician does not need to be practicing in the province of Ontario.

Note: Domperidone WAS available from New Zealand without a prescription but as of Nov. 3, 2001 the pharmacies there are no longer able to do so because of a new law that was passed stating that a doctor must have at least one face-to-face visit with a patient before writing a prescription. This law put www.pharmacycare.com essentially out of business and it was sold to new owners.

However, a new site has been set up by the previous owners of PharmacyCare, named **Planet Pharm.** They are able to supply domperidone without a prescription only to the US via email, fax or telephone. Here are the instructions. Current price is US$52.80 +US$7 shipping fee.

Planet Pharm instructions: Subject: Motilium orders

> "Dear Customers,
> There is some confusion about us and Pharmacycare.com, who are separate companies.
>
> Pharmacycare site has been sold last year (new owners, new management, new customer services and they are based off shore now) and is quite separate from us (I also received the "we're back online" notice and they really should have stated that Pharmacycare is under new owners with new management etc). We do not have anything to do with Pharmacycare anymore.
>
> We have been known as Pharmacycare for so long now, that old customers are getting confused with us and "Pharmacycare". We have changed our name to Planet Pharmaceuticals and have been slowly phasing out our old name for the past few months. Please be assured that we are quite separate entities.
>
> The situation will be a little confusing for customers for a while our new name of Planet pharmaceuticals becomes more widely known.
>
> We have sought legal advice regarding Motilium orders to the States, the good news is we can resume shipping this product, but this product only.
> Re: Motilium
> Motilium 10mg 100 tablets US$12.00
> Motilium 10mg 300 tablets US$28.80
> Motilium 10mg 600 tablets US$52.80
> shipping US$7.00 Mon-Fri. Takes about a week.
>
> Although the Pharmaceutical website that listed Motilium has been closed, we still accept Motiliun orders via telephone, fax or email. We accept VISA or MasterCard (sorry our new payment system will not accept AMEX cards). You will be charged in US dollar currency.
>
> To protect our customers from credit card fraud we require the following information, we need:
> Customer name and shipping address
> Cardholder name
> Cardholder billing address
> 3-digit verification code (imprinted on the back of the credit card)
>
> NOTE: incomplete details will delay processing of the order.
> I have included our details below:
>
> Phone 011-6-78- 272-82
> Fax: 011- 678-263-89
> Free calling number from USA: 1 (877) 271-6591
> email: hair@theoffice.co.nz
>
> Ask for Mirium
> Regards
> The Team at Planet Pharm

NOTE: Buyer Beware…..At least one mother has reported a problem dealing with PharmacyCare.com as of June 10, 2002. You should get a confirmed price via email or fax before ordering and use a credit card to protect yourself. This mother reported having to pay "US$300 for 600 tabs. This is how we found out about Planet Pharm.

Appendix #2

Pumping Instructions to Accompany the Protocols for Induced Lactation

We suggest a "baby honeymoon" for the first 48 hours of pumping. Pump every 2 hours by day and every 3 hours by night.

Then over the next two weeks, start pumping as follows as often as you can.

8 – 12 times per day:

- Pump for 5-7 minutes on the low or medium setting
- Breast massage, light tickle, Jiggle
- Pump for 5-7 minutes

It is suggested that the mother pump every three hours, Note: Stopping the birth control pill while maintaining the domperidone and then pumping, should cause a rapid decrease in the mother's serum progesterone level while causing an increase in the mother's serum prolactin level. This process attempts to mimic what happens after a normal pregnancy and birth. This should cause the mother's milk supply to come in.

Assisting the Milk Ejection Reflex (Let-Down)

1. **Breast Massage**: Do as you would for a self breast examination. Rotate the flats of your fingertips with gentle but firm pressure in concentric circles starting from the largest portion of the breast and working all around the breast towards the nipple. This will help to empty the alveoli (grapes) into the ducts (branches) and help to drain the breast.

2. **Light Tickle**: Using the nail side of the fingertips, very gently rake your fingertips from the top of the breast towards the nipple. This helps to move the breastmilk towards the collecting ducts located just behind the nipple and under the areola (colored tissue surrounding the nipple).

3. **Jiggle**: Lean over and give your breasts a light giggle. This uses gravity to help move the breastmilk throughout the breast towards the collecting ducts and the nipple.

The ENTIRE PROCEDURE should take approximately 15 minutes.
* Pump each breast 5-7 minutes. (Use a double pump to save time and get a better result)
* Breast Massage, Light Tickle, Jiggle
* Pump each breast 3-5 minutes.

Appendix #3

Breast Compression

The purpose of breast compression is to continue the flow of milk to the baby once the baby no longer drinks (open—*pause*—close type of suck) on his own, and thus keep him drinking milk. Breast compression simulates a letdown reflex and often stimulates a natural letdown reflex to occur. The technique may be useful for:

1. Poor weight gain in the baby
2. Colic in the breastfed baby
3. Frequent feedings and/or long feedings
4. Sore nipples in the mother
5. Recurrent blocked ducts and/or mastitis
6. Encouraging the baby who falls asleep quickly to continue drinking

Breast compression is not necessary if everything is going well. When all is going well, the mother should allow the baby to "finish" feeding on the first side and, if the baby wants more, should offer the other side. How do you know the baby is finished? When he no longer drinks at the breast (open mouth wide—then *pause*—then close mouth type of suck). **Breast compression** works particularly well ***in the first few days***, to help the baby get more colostrum. Babies do not need much colostrum, but they need *some*. A good latch and compression help them get it.

It may be useful to know that:

1. A baby who is well latched on gets milk more easily than one who is not. A baby who is poorly latched on can get milk only when the flow of milk is rapid. Thus, many mothers and babies do well with breastfeeding *in spite of* a poor latch, because most mothers produce an abundance of milk.
2. In the first 3-6 weeks of life, babies tend to fall asleep at the breast when the flow of milk is slow, *not necessarily* when they have had enough to eat. After this age, they may start to pull away at the breast when the flow of milk slows down. However, some pull at the breast even when they are much younger, sometimes even in the first days.

3. Unfortunately many babies are latching on poorly. If the mother's supply is abundant the baby often does well as far as weight gain is concerned, but the mother may pay a price—sore nipples, a "colicky" baby, a baby who is constantly on the breast (but feeding only a small part of the time).

Breast compression continues the flow of milk once the baby starts falling asleep at the breast and results in the baby:

1. Getting more milk.
2. Getting more milk that is *high* in fat.

Breast Compression—How to do it

1. Hold the baby with one arm.

2. Hold the breast with the other, thumb on one side of the breast, your other fingers on the other, fairly far back from the nipple.

3. **Watch for the baby's drinking**, though there is no need to be obsessive about catching every suck. The baby gets substantial amounts of milk when he is drinking with an open—*pause*—close type of suck. (open—*pause*—close is *one* suck, the pause is *not* a pause between sucks).

4. When the baby is nibbling or no longer drinking with the open—*pause*—close type of suck, compress the breast. **Not so hard that it hurts** and try not to change the shape of the areola (the part of the breast near the baby's mouth). With the compression, the baby should start drinking again with the open—*pause*—close type of suck.

5. Keep the pressure up until the baby no longer drinks even with the compression, then release the pressure. Often the baby will stop sucking altogether when the pressure is released, but will start again shortly as milk starts to flow again. If the baby does not stop sucking with the release of pressure, wait a short time before compressing again.

6. The reason to release the pressure is to allow your hand to rest, and to allow milk to start flowing to the baby again. The baby, if he stops sucking when you release the pressure, will start again when he starts to taste milk.

7. When the baby starts sucking again, he may drink (open—*pause*—close). If not compress again as above.

8. Continue on the first side until the baby does not drink even with the compression. You should allow the baby to stay on the side for a short time longer, as you may occasionally get another letdown reflex and the baby will start drinking again, on his own. If the baby no longer drinks, however, allow him to come off or take him off the breast.

9. If the baby wants more, offer the other side and repeat the process.

10. You may wish, unless you have sore nipples, to switch sides back and forth in this way several times.

11. Work on improving the baby's latch.

The above works best, in our experience in the clinic, but if you find a way which works better at keeping the baby sucking with an open—*pause*—close type of suck, use whatever works best for you and your baby. As long as it does not hurt your breast to compress, and as long as the baby is "drinking" (open—*pause*—close type of suck), breast compression is working.

You will not always need to do this. As breastfeeding improves, you will able to let things happen naturally.

Questions? Lenore@asklenore.info

Handout #15. *Breast Compression.* Revised January 2000
Written by Jack Newman, MD, FRCPC

Appendix # 3 may be copied and distributed without further permission

[1] Newman, 2000 pp 250-254
[2] Newman, 2000 p 252
[3] Riordan and Auerbach 1998, pp 103-105
[4] Riordan and Auerbach, 1998 p 149
[5] Riordan 1991, p278
[6] Short RV 1993 *Lactational infertility in family planning*. Ann Med 25:2 175-80.
[7] Newman 2000 pp 253-254
[8] La Leche http://www.lalecheleague.org/NB/NBJulAug98p109.html