



**The Little Green Book of
Breastfeeding Management
for Physicians
& Other Healthcare Providers**

6th Edition

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Table of Contents

A. The Basics

- a) Bioactive Components of Breastmilk..... 9
- b) Why It Is Important to Breastfeed..... 10
- c) How to Read the Literature 11
- d) Conditions Necessitating BF Caution..... 13
- e) Current BF Recommendations..... 14
- f) Anatomy And Physiology..... 15
- g) Counseling Families On Infant Feeding Decision
And Prenatal Support 18
 - i. Prenatal Red Flags For BF Problems 20

B. Breastfeeding Policies That Impact Public Health

- a) Baby Friendly Hospital Initiative 20
- b) International Code of Marketing of Breastmilk
Substitutes..... 21

C. The Immediate Postpartum Period

- a) The Golden Hour 22
- b) Skin-to-Skin 23
- c) Positioning And Latch 24
- d) Rooming-In 25
- e) Feeding Frequency 26
- f) Pacifiers 27
- g) Weight Loss 28
- h) Stools 28

D. Problems During The Postpartum Hospitalization

- a) Jaundice..... 29
- b) Hypoglycemia 31
- c) Delay In Lactation 31
- d) Supplementation- Indications 32
- e) Supplementation- Options 33

f) The Infant Who Will Not Latch	34
g) Sore Nipples.....	35
h) Tongue-Tie.....	37
i) Late Preterm.....	38
j) Prematurity.....	40
E. The First Week After Hospital Discharge	
a) Office Follow-Up- First Visit	41
b) Topics of Discussion The First Week.....	43
i. Support At Home	43
ii. Vitamins And Supplements.....	44
iii. Infant Feeding Schedule	44
iv. Variations In Milk Supply	45
v. Changes In Stooling.....	45
vi. Pumping.....	45
vii. Night Time Feedings	46
c) Common Problems The First Week	46
i. Excessive Feeding Frequency.....	46
ii. Slow Weight Gain.....	48
iii. The Sleepy Infant	49
iv. Jaundice	49
v. Engorgement	49
vi. Sore Nipples.....	50
F. General Breastfeeding Medicine Topics	
a) Acute Nipple/Breast Pain	51
b) Chronic Nipple/Breast Pain	58
c) Imaging The Lactating Breast	60
d) Breast Surgery And Radiation.....	61
e) Low Milk Supply- Perceived And Real.....	62
f) Galactogogues	66
g) Hyperlactation (Excess Milk)	68

h) Birth Control	70
i) Maternal Illness	72
j) Infant-Specific topics	75
i. Infant Thrush.....	75
ii. Fussiness	76
iii. Infant Allergy/Sensitivity to BMilk	76
iv. Infant Illness Or Surgery.....	77
v. Breast Refusal	77
vi. Nipple Shield Use	79
vii. Bottle Refusal.....	80
viii. Tongue-Tie	81
ix. Special Needs Infants.....	82
x. Complementary Feeding.....	84
G. Pumping Exclusively	85
H. Pump Technology.....	85
I. Milk Storage	87
J. Returning to Work or School	89
K. Maternal Medications, Herbs, Substances, Alcohol and Tobacco	90
L. Multiples	94
M. Induced And Re-Lactation	94
N. Tandem Nursing.....	95
O. Weaning.....	96
P. Donor Human Milk.....	101
Q. Bibliography/Resources (with QR Codes)	104
R. Index.....	107

Low Milk Supply

Perceived Low Milk Supply

There are many reasons why mothers PERCEIVE they are not making enough milk, when in fact they are. Breastfeeding is a confidence game. If a mother interprets infant feeding behavior or breast changes as a loss of milk supply she may decide to supplement the infant with formula, leading to a decrease in production due to less frequent feedings at the breast. Changes in feeding routines that mothers may interpret as low supply include:

- Feeding more frequently than expected
- Infants with a high suck need
- Constant infant fussiness
- Infant rejection of the breast
- Decline in breast fullness after 2-4 months postpartum
- Decrease in infant stooling
- Bottle preference

Mothers should be encouraged to see a provider or lactation specialist to help determine if these changes are due to low supply or something else. An infant weight is crucial to sort this out. Therefore, this is not an evaluation that can be done over the telephone.

Real Low Milk Supply

There are also many reasons why a mother has a truly low milk supply. It helps to divide causes of low milk production into problems originating prenatally, intrapartum, and postpartum.

Prenatal Causes of Low Milk Supply

The most likely prenatal cause of low supply is insufficient breast development, called “Insufficient Glandular Tissue” (IGT) or “breast hypoplasia”. There are a variety of hormonal or anatomic problems associated with this phenomenon, all of which are not completely understood.

- **Hormonal-** breast development during pregnancy is under the influence of placental hormones that stimulate new glandular tissue formation. Hormonal problems such as polycystic ovarian syndrome, obesity, pre-eclampsia and diabetes are associated with insufficient glandular development during pregnancy. Current theories include high androgens and/or insulin resistance associated with these conditions.
- **History of breast procedures-** Women with a history of radiation to one breast, such as in cases of breast cancer, will not make milk from the irradiated breast. Breast reduction is also strongly associated with insufficient milk production. Breast augmentation tends to have little effect on milk production. (see section on Breast surgery and Radiation, Pg. 61)

- **Anatomic-** Some women have limited potential to make sufficient glandular tissue, for unknown reasons. These women may notice breast growth during pregnancy, but often have characteristic findings, such as wide spacing between breasts, a lack of 'rounding' of the breast, or tubular shaping of the breasts (See Fig 5). Women with very asymmetric breasts often find that the much smaller breast makes much less milk.



Fig 5.

Intrapartum Causes of Low Milk Supply

Some mothers have normal breast growth during pregnancy and no prenatal risk factors for low milk supply. Uncommonly, some mothers notice that the milk never 'comes in'. Reasons for this include:

- **Retained placental fragments-** Because the drop in progesterone after placental delivery is the hormonal trigger for making milk, retained

placental fragments that continue to secrete progesterone can be associated with lack of lactogenesis II.

- **Pituitary trauma**- This is commonly known as Sheehan's syndrome, an infarct of the pituitary usually caused by extreme hypotension, which stops the release of prolactin and oxytocin, halting lactation.
- **Theca Lutein cyst**- These are ovarian cysts that secrete testosterone. Testosterone is a strong inhibitor of lactation.
- **Medications**- Some medications given postpartum can markedly impact milk production, including decongestants, high dose steroids, and progesterone given for contraception immediately postpartum.

If there is truly NO milk production, then an evaluation including serum cortisol, prolactin, testosterone, thyroid function testing, HCG, and possibly an ultrasound looking for retained fragments is indicated.

Postpartum Causes of Low Milk Supply

By far the most common scenario is that the milk does "come in" fine, but is not removed adequately, resulting in a low supply. REMOVING MILK FROM THE BREAST IS THE MOST POTENT STIMULATOR OF PRODUCTION. Lack of milk removal results in a build-up of the feedback inhibitor of lactation (FIL), which is a substance that communicates with the lactocytes to decrease milk production.



Milk Mob Media

ISBN 978-0-9987789-0-7

90000>



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6th Edition.
Rev. 6.0 – March 2017
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