Increasing Milk Supply – use of Galactagogues

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Galactagogues are substances that aid the initiation and maintenance of milk supply at a level which meets the needs of the baby. The production of milk is controlled by the hormone prolactin. Nipple stimulation controls the release of prolactin whilst oxytocin controls the release of the milk, experienced as the letdown.

Poor milk supply can result from:
- Less than perfect positioning and attachment of the baby at the breast resulting in incomplete breast drainage
- Infrequent, restricted, limited feeds

Reduction in milk supply is frequently noted after premature delivery with milk supply maintained only by expression over a period of weeks (DaSilva 2004 and Wan 2008). Smoking is associated with decreased milk production and smokers are more likely to wean earlier because of low milk supply or to notice inhibition of letdown (Vio 1991 and Hopkinson 1992).

Many cultures have their own remedies to increase milk supply (Riordan and Auerbach 1998). In the past Guinness and Vitamin B supplements have been advocated widely. There is limited research evidence to support its effectiveness. However if a mother believes it will help her, the positive effect may be apparent - whether due to placebo or genuine effect is unknown.

Medicinal products which have been shown to increase milk supply produce their effect by dopamine antagonism, generally as a side effect, whilst having other therapeutic effects. Use of these medicines as galactagogues is outside of the licence application and prescribers are required to take ultimate responsibility for their use.

To speak to a Breastfeeding Supporter call the National Breastfeeding Helpline 0300 100 0212

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Many women perceive that their milk production is inadequate and it is the commonest reported reason given for cessation of breastfeeding earlier than the mother had intended. Medication should not be advocated as a solution to unfounded concerns or where additional support and encouragement as well as consistency of information are the prime need. Expert assessment of the latch and the effectiveness of feeding is essential.

**Metoclopramide (Maxolon ®)**

This drug is used as an anti-nauseant. Clinical studies have shown that it increases prolactin levels and consequentially milk supply at a dose of 10milligrammes three times daily. However it can produce extra-pyramidal side effects including tremor and slow, shuffling movements as well as precipitating depression (Ingram 2011, BNF)

**Domperidone (Motilium ®)**

This drug is used to speed gastric emptying and is used for dyspepsia after meals, reflux oesophagitis and vomiting (BNF). It is available as an over the counter medicine to treat bloating after meals. The normal dose is 10milligrammes three times a day. Reports of higher doses have been published (reported in Gabay 2002) but care should be taken if mother or child have a history of cardiac problems or are on interacting medication. Reported side effects are unusual but can include headache, diarrhoea, mood swings and feeling dizzy. The drug has been evaluated as a randomised double blind; placebo controlled trial although this only involved 20 women (reported in Gabay 2002). Warnings issued by the FDA in June 2004 reported concerns over IV use, which are not applicable in these circumstances (Hale 2014). Further concerns on use and limitations on dose and indication were published by MHRA and EMC in May 2014.


Sulpiride and Chlorpromazine have been noted to have galactagogue properties but side effects limit their effectiveness.( Hale 2014, Jones 2013, BNF)

If no increase in milk supply is noted after seven days of taking medication, consideration should be given to removing the medication rather than continuing to expose mother and child.

**Fenugreek**
This is a herbal spice, which is a member of the pea family whose seeds are used amongst other things as the artificial flavour in maple syrup. Anecdotal reports of its effectiveness go back to 1945 (reported in Gabay 2002) but no formal studies have been located. Its mechanism of action has been theorised as stimulation of sweat production (the breast is a specialised sweat gland). The recommended dose is 2-3 capsules three times a day (Newman 2009). Since herbal remedies are not standardised the exact amount of fenugreek may vary. Reported adverse events are rare and include maple syrup like odour of the sweat and urine, diarrhoea and aggravation of the symptoms of asthma (Lawrence 1998) although it has also been suggested as a remedy for asthma. Fenugreek can also interact with insulin and warfarin and anyone taking medication is advised to seek advice from a medical practitioner or herbalist. It also stimulates the uterus and should not be used in pregnancy. Hypoglycaemic effects (low blood sugar levels) have also been reported Vijayakumar (2005). Milk production is said to increase within 24-72 hours (Humphrey 2003).

It is important to note that natural products can vary in strength. The fact that they are natural products does not imply their use is without risk.

Other natural remedies said to increase milk supply include anise, basil, blessed thistle, caraway, chasteberry and fennel but evidence is anecdotal rather than scientific. Kellymom 2011, Humphrey 2003, Lawrence 1998)

Nursing supplementer (SNS) devices may prove effective in aiding additional nipple stimulation through suckling. Breast compression may also stimulate milk flow and encourage the baby to suckle.

References

• Amir LHm Donath SM. Does maternal smoking have a negative physiological effect on breastfeeding? The epidemiological evidence. Breastfeed Rev. 2003 Jul;11(2):19-29
• British National Formulary (accessed online August 2014)
• Gabay MP. Galactogogues -Medication that Induces Lactation, J.Hum.Lact. 2002;18(3) :274-9
• Hale T. Medications and Mothers Milk 2014 (16th Ed) accessed online August 2014
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- Jones W. Breastfeeding and Medication 2013 Routledge
Ways to increase breastmilk supply without drugs

Ensure the baby is well attached to the breast and is feeding effectively and frequently

- Encourage and support breastfeeding
- Listen empathetically to any concerns the mother may have or that have been raised by others who are less supportive of breastfeeding
- Ascertain why she feels she has a low milk supply and address any misconceptions, e.g., reinforce the normality of babies feeding eight to 12 times in 24 hours. Discourage the routine use of dummies if the baby is not feeding frequently enough. Reinforce normality of baby feeding patterns, e.g., ‘cluster feeding’ in the evenings
- If she feels the baby is unsettled and that this indicates she has a low milk supply, encourage periods of calming skin-to-skin contact or encourage use of a sling to settle the baby. She may also need guidance on feeding the baby lying down at night in order to cope with night feeds

- Observe a complete breastfeed. Check for effective attachment and ensure that both breasts are offered at each feed, with the baby coming off the first breast spontaneously and the breast feeling softer
- Check that the baby’s urine and stool output are normal for their age
- Check the baby’s weight gain progress
- Check that there are no hormonal reasons why milk supply might be low, e.g., polycystic ovaries, thyroid problems or retained placental fragments
- Question if any medications – prescribed or purchased – are being taken e.g., diuretic, combined oral contraceptive