

Natural or Non-Pharmaceutical Induction

 gentlebirth.org/archives/natinduc.html

MAJOR ALERT!!

There is a vegetable oil called CASTOR Oil, which is sometimes used to get labor going or for other medicinal purposes. There is a petroleum product, i.e. motor oil, called Castrol Oil, which could be toxic. Please do not confuse them!

What Causes Labor To Start?

What Causes Labor To Start? By Sam McCulloch in Birth on September 20, 2015 -During late pregnancy, the uterus has an increased number of immune cells (macrophages). Macrophages help fight lung infection by effectively sweeping up any viruses or bacteria that might be present. A protein found in lung surfactant activates the macrophages, which begin to migrate to the uterus wall. Once there, a chemical reaction takes place, stimulating an inflammatory response in the uterus that begins the process of labour.

Editor - Midwives have long talked about how baby "throws the switch" when the baby's ready to be born. In addition to this signaling, it is also important for the mother's body to be ready: the uterus must be toned as a muscle with adequate oxytocin receptors, and the cervix must be ripe. Especially for older first-time mothers or women with a challenging history, I encourage prenatal herbs to help prepare the mother's body so that it's ready when baby throws the switch.

Fetal-to-maternal signaling to initiate parturition.

Reinl EL, England SK.

J Clin Invest. 2015 Jul 1;125(7):2569-71. doi: 10.1172/JCI82576. Epub 2015 Jun 22.

Multiple processes are capable of activating the onset of parturition; however, the specific contributions of the mother and the fetus to this process are not fully understood. In this

issue of the JCI, Gao and colleagues present evidence that steroid receptor coactivators 1 and 2 (SRC-1 and SRC-2) regulate surfactant protein-A (SP-A) and platelet-activating factor (PAF) expression, which increases in the developing fetal lung. WT dams crossed with males deficient for both SRC-1 and SRC-2 had suppressed myometrial inflammation, increased serum progesterone, and delayed parturition, which could be reconciled by injection of either SP-A or PAF into the amnion. **Together, the results of this study demonstrate that the fetal lungs produce signals to initiate labor in the mouse.** This work underscores the importance of the fetus as a contributor to the onset of murine, and potentially human, parturition.

STOP OMEGA-3s and Vitamin D

If you're taking supplemental omega-3s (e.g. DHA, EPA, fish oil, flax seed or flaxseed oil), you might want to stop those. They are an anti-inflammatory, and they could inhibit the ripening of the cervix, which is a slightly inflammatory process.

There is some research that shows that vitamin D may have a similar anti-inflammatory effect.

Inflammation Plays 'Biphasic' Role in Labor [12/18/13] - Inflammation plays a key role in getting labor underway, but too much of it can slow down active labor, according to a new study. Dr. Laura Goetzl of Temple University in Philadelphia and her colleagues found **women with the lowest levels of interleukin 6 (IL-6) had the slowest latent labor**, while those with the highest levels of interleukin-1 (IL-1) and tumor necrosis factor alpha (TNF-alpha) had the slowest active labor. [Medscape version]

[Ed: Perhaps the full paper makes a better distinction between two very different types of inflammation: the normal inflammation of the cervix that is part of the ripening process triggered by prostaglandins vs. the abnormal inflammation of uterine muscle in response to an intrauterine infection.]

Minor ALERT!!

Spicy food is often recommended as a way of getting labor going. Recent research shows that chili peppers contain a chemical capsaicin, which has been shown in lab rats to dull the pain-killing effects of the G spot; it's not clear how long this effect lasts, but the little I've been able to find indicates that it's probably a relatively long-lasting effect and possibly cumulative.

Beyond the g spot: New research on human female sexual anatomy and physiology*, Whipple B, Scandinavian Journal of Sexology, Volume 3 no. 2

If this is troubling to you, as it should be, let them know. You can easily send e-mail to Aetna's National Media Relations Contacts and simply tell them that they should not be in the business of denying coverage for reasonable healthcare choices, such as homebirth, waterbirth and VBAC. They will especially want to know if you are choosing another healthcare provider because of this unreasonable policy. You might also suggest that they expand their research beyond ACOG and AAP recommendations. They could start at: <http://www.gentlebirth.org/archives/homsafty.html#References>

Resources

Some suggested Alternative (Non-Pharmaceutical) Induction/Augmentation Ideas condensed from the remainder of this web page, courtesy of Birthrites: Healing After Caesarean [Follow the link in the left-hand column to "Induction or Augmentation of Labour especially during a VBAC"]

Methods of Induction of Labour - A Systematic Review [Medscape, 12/22/2011]- Of the non-pharmacologic methods, membrane sweeping appeared to have the strongest evidence-base. It was successful in reducing post-term gestations without increasing clinically-important harms. There is not enough evidence of benefit/safety to recommend the other non-pharmacologic methods of breast stimulation and sexual intercourse.

Scott Specialties makes a [Comfy Cradle Maternity Support, #3090](#) belly support which has a top strap that might do what the Asian binders do . . . encourage baby into the pelvis on the early side.

Herbal Hormones

[Summary of Natural Methods of Induction](#) - this is a summary of what midwives are actually doing in practice

One Midwife's Herbal Induction Protocol

[Opinions: Herbal Inductions](#) from Citizens for Midwifery. I'm not sure why she doesn't mention that sometimes we need to get labor going because of broken waters with a positive GBS status, or maybe because a very tiny woman is carrying a big baby!

Philosophy of Induction

Baby Starts Labor

I think the biggest part of bringing on labor is attitude. Clear away tension, doubts, and fears and this will help immensely. Another tip is the castor oil cocktail: glass of orange juice, baking soda, and castor oil

Ripening the Cervix with Borage Oil or Evening Primrose Oil

I put some borage oil on my glove (with my client's informed consent) and did an exam. I didn't strip the membranes and could not even reach the cervix because it was too far posterior. Those who are overdue (or even before if desired) can take a capsule at night orally and put one in the vagina to melt.

Apparently Borage seed oil works because the GLAs have prostaglandin precursors which start labor. Black currant seed and Evening Primrose are other options that supposedly work too but have fewer GLAs and may be cheaper to purchase.

I usually squirt Evening Primrose on to my fingers and separate the cervix from the membranes, making sure to get the oil all over the cervix. Then I sometimes just put one or two capsules into the vagina. They dissolve there. I wouldn't do that at a hospital birth however, because The MD might be shocked to see those little capsules born with the baby!

I have good success with using EPO with VBAC mums. One went from unripe cervix to delivery 6 days later. I get them to use an oral dose of three 500 mg caps/day.

Evening Primrose Oil acts as a prostaglandin, which ripens or softens the cervix. It's also useful for softening scar tissue from abortions or IUD damage. This will soften/ripen the cervical tissues and increase the flexibility of the pelvic ligaments. This will help the baby to deeply engage in the pelvis. This early application of the baby's head will assist with dilation and should result in a relatively easy birth, even after multiple C-sections for "stalled" labor. Evening Primrose Oil may be helpful for women with borderline pelvises as well. The utilization of Evening Primrose Oil seems to enhance the complex set of biochemical messages that initiate labor.

You can take evening primrose oil, orally, in the last four weeks of your pregnancy. You should take three evening primrose oil capsules daily for the first week (36th week of gestation) and then one to two capsules a day for the last three weeks of pregnancy.

2X/day oral and suppository starting at your due date or the week before, check with your midwife first.

My midwife told me to take Evening Primrose oil (gel-caps) 3X's per day and to insert 2 in the vagina at bedtime--you must stay laying down or else they fall out.

Evening Primrose oil can soften the cervix. My midwife recommends taking 3 capsules per day for the last 4 to 6 weeks. However, it doesn't START labor, only prepares the cervix. It is not an emmenagogue or get more oxytocin into your system.

My friend's doctor said you should never insert anything into the vaginal canal. My friend used it and got an infection and a bad irritation to inserting it into her. Please just post that use with caution. I wouldn't want anyone else to be hurt like this. Thank you.

This information seems contradictory.

Does this doctor ever do cervical exams during pregnancy? Do they recommend no sexual intercourse during pregnancy? If sexual intercourse is OK, do they suggest using condoms so that semen isn't put into the vagina? Semen is much more powerful than evening primrose oil, although they contain some of the same active ingredients.

All of those involve inserting something into the vagina.

Obviously, anything inserted into the vagina should be clean and not harmful to the tissues, but evening primrose oil is less likely to cause infection than a penis.

Nipple and Breast Stimulation

It is not safe to attempt nipple or breast stimulation on your own, without at least some professional guidance.

Nipple and breast stimulation over-ride the woman's natural safeguards in the same way that pitocin induction or augmentation can. This can cause contractions that are too long or too strong for the baby's safety; this could cause brain damage or death in the baby.

Ideally, you would be able to use nipple or breast stimulation under the guidance of a licensed professional in the room with you. Ideally, they would be able to monitor the baby's well-being with continuous fetal monitoring or at least a hand-held Doppler, and they would also be monitoring the frequency and length of the contractions to recommend how to continue. Even if you're planning a hospital birth, you may be able to hire a midwife to come to your home to supervise an induction via nipple stim.

At the very least, stop the nipple stimulation once a contraction starts and back off once contractions get closer than ten minutes apart or longer than sixty seconds. This is not the most effective way to do it, but in the absence of professional fetal monitoring, it provides at least a bit more safety!

Evidence on Breast Stimulation to Start Labor [6/14/17] by Rebecca Dekker

[Ed: Breast stimulation has the potential to cause fetal distress when not done cautiously. I recommend fetal monitoring when making a strong effort to induce labor this way.]

Changes in the Bishop score induced by manual nipple stimulation. A cross-over randomized study.

Di Lieto A, Miranda L, Ardito P, Favale P, Albano G
Clin Exp Obstet Gynecol 1989;16(1):26-9

Cervical ripening by breast stimulation.

Salmon YM, Kee WH, Tan SL, Jen SW
Obstet Gynecol 1986 Jan;67(1):21-4

It is stressed that no uterine hypertonus was detected with gentle, unilateral breast stimulation, and there were no maternal or fetal complications as a result of this modality of cervical ripening.

Breast stimulation for cervical ripening and induction of labour.

Kavanagh J1, Kelly AJ, Thomas J.
Cochrane Database Syst Rev. 2005 Jul 20;(3):CD003392.

AUTHORS' CONCLUSIONS: Breast stimulation appears beneficial in relation to the number of women not in labour after 72 hours, and reduced postpartum haemorrhage rates. Until safety issues have been fully evaluated it should not be used in high-risk women. Further research is required to evaluate its safety, and should seek data on postpartum haemorrhage rates, number of women not in labour at 72 hours and maternal satisfaction.

The use of breast stimulation to ripen the cervix in term pregnancies.

Elliott JP, Flaherty JF.
Am J Obstet Gynecol. 1983 Mar 1;145(5):553-6.

Induction of labor is frequently a matter of medical or obstetric necessity. Patients with worsening maternal or fetal problems often have an unfavorable cervix which may preclude successful induction of labor. In a blind, randomized, controlled trial of breast stimulation to ripen the cervix at term, it was found that breast stimulation was associated with a 45% incidence of spontaneous labor. When the patient did not go into labor, there was a mean change of 2.4 points in the Bishop score. Both findings are highly significant when compared with the control group.

Induction of labor with an electric breast pump.

Chayen B, Tejani N, Verma U.

J Reprod Med. 1986 Feb;31(2):116-8.

Nipple stimulation with an electric breast pump was compared with oxytocin infusion as a means of labor induction. The time from stimulation to the onset of regular uterine activity and to 200 Montevideo units of uterine activity and the time until entrance into the active phase of labor were significantly shorter in the nipple stimulation group. Once the women were in active labor, there was no difference between the groups in the length of labor or mode of delivery.

One of my midwife friends swears by the following protocol for a postdates situation or need to start labor because of ruptured membranes:

For multiples w/ruptured membranes

Cottonroot bark tincture and nipple stim - baby in two hours

CRB: 1/2 or full dropperful every 30 minutes

Breast pump - stimulate until they get a contraction

Break suction, turn off machine, and then as soon as contraction stops, turn it on again.

Do this until contractions are q 2-3, then continue for 20 minutes.

For a first-time mom, you may need to continue for up to an hour after contractions are coming close and strong in order to keep things going.

It has to be a double electric pump. Self stimulation causes soreness. Esp. w/multiples, if it's gonna work, they're going to get some colostrum out; they'll usually save it.

If the above isn't working, you can increase the cottonroot bark tincture to 3 dropperful every half hour. This seems a little aggressive to me, and I would worry a bit about overstimulation, so mamas . . . don't try this at home without your midwife's explicit approval!

If membranes are intact and you're dealing with a postdates situation, you might do the breastpump nonstop for at least an hour at a time.

Applying hot packs/heat to breasts is supposed to get a chemical going naturally [ed. presumably oxytocin] and will start labor. It worked with my second baby. I had bronchitis and it turned into a bad cold/cough. About a week before my due date, I had put a heat pad on my chest, hoping to loosen it up for breathing purposes. The next morning I went into labor and within a few hours, I delivered a healthy baby!! I then recalled having read somewhere that applying heat to the breasts will induce labor.

Breast stimulation

Start by applying warm compresses to both breasts, uncover one breast and begin use of pump. Using an electric breastpump, start by pumping on uncovered side for 15 min then switch sides and place warm compress on pumped side and begin pumping on other side, continue this alternation technique until regular strong and rhythmic contractions begin (usually 20-30 minutes) then stop...if contractions should begin to decline in strength or regularity, resume breast stimulation with breastpump for 5 min/side until the strength and regularity resumes. Contractions should be a minimum of (5) minutes apart lasting 60-90 seconds.

The method taught to me was to stimulate (with an electric breast pump, preferably) until a contraction starts, stop the pump during the contraction and then switch to the other breast. Switching frequently probably helps avoid nipple strain, and the breaks for contractions are supposed to prevent over-stimulation. (If doing manual stimulation, you might try using Lansinoh to prevent nipple soreness.)

Showing Baby The Way Out

One of my clients was also seeing a highly regarded fourth-generation Chinese acupuncturist, and he suggested the following: Lie on your back or squat and draw the legs up and then tuck the chin onto the chest for ten seconds. Do this three times in a row, once per hour. He called this "showing the baby the way out". The position sounds a lot like a pushing position, and it seems like this position might help to push the baby's head against the cervix.

I have heard that Japanese women used to wear their obi lower and lower so that it pushed against the baby's bottom. This would also push the baby's head against the cervix.

Both of these would very likely help to increase toning contractions, ripen the cervix and maybe start labor if done during the darkness of the late evening or early night.

Sweeping Membranes aka Stripping Membranes

Sweeping Membranes for Starting Labor

Foley Catheter

Management of Foley Catheter Induction Among Nulliparous Women - A Retrospective Study

Heidi Kruit; Oskari Heikinheimo; Veli-Matti Ulander; Ansa Aitokallio-Tallberg; Irmeli Nupponen; Jorma Paavonen; Leena Rahkonen
BMC Pregnancy Childbirth. 2015;15(276)

Conclusions: Oxytocin induction and early epidural analgesia were associated with caesarean delivery. Gestational diabetes and early epidural analgesia were associated with infectious morbidity. Since the first caesarean delivery has a major impact on subsequent pregnancies, optimising labour induction among nulliparous women is important. [Ed: This article didn't have good charts comparing various methods of induction, but the references are useful.]

Foley Catheter for Starting Labor

Homeopathic Options for Induction

Cohosh (in my experience) can make lots of uncomfortable toning contractions and false labor sometimes with the risk of raising the blood pressure. Because of this, I suggest another option which is taken orally. Nutritional Formulas make Matrigin. A similar medicine is made by Weleda with a different name-Dolisos Caulophyllum Complex. It is a 5 remedy homeopathic concoction that has reduced the length of labor in a double blind study in France (The Dolisos Study). Women started taking it at the beginning of the ninth month.

I have used it for preventing postmaturity and ripening the cervix in a few women who would seem to benefit from that. The remedies in the combination are Arnica, Caulophyllum, Cimicifuga, Pulsatilla and Gelsemium. Perhaps clients seem to fit to the personality/fears/symptoms of a certain remedy, in which case it is better to give a single remedy if a remedy is even warranted. Cimicifuga fears she will die in childbirth, for example. I have turned to caulophyllum in a putzy labor.

Are you concerned at all with the properties of Pulsatilla, which sometimes (generally?) results in babies turning from breech to vertex and vice versa?

Castor Oil Options for Induction

Castor Oil for Starting Labor

About Castor Oil and Meconium

Castor Oil and Meconium

Palm Dates

Health Benefits of Dates During Pregnancy -"The high content of sugars in dates like fructose, glucose and sucrose makes gives you instant energy." Hmmm, so does a candy bar.

"Dates have Beta glucan which is very good for diabetes." Hmmm, I doubt the benefit of the beta glucans makes up for the high sugar content.

"Dates are believed to give health benefits like strengthening the uterine-wall during pregnancy." This is something that I hear repeated over and over again. I hear that it is a traditional food for late pregnancy in countries where dates are common. All this might be true, but I can't find any evidence for it.

I guess I would have to say that I'm a skeptic about palm dates. I feel much more comfortable recommending late-pregnancy toning herbs that have been used for thousands of years and for which people can suggest causation from specific constituents. I've also seen great results with the tonic herbs so feel that this isn't a problem still looking for a solution. The only real solution offered by palm dates is that there are some people who might be more comfortable eating five dates a day instead of taking herbal supplements.

There has been much talk about eating palm dates in the last weeks of pregnancy to help the baby come in a timely fashion. Nobody has suggested a plausible mechanism for this, although I think it's possible that the fiber in large quantities might have a similar effect to maltitol.

Honestly, palm dates are quite high in sugar. There are different varieties with different sugar levels, but they're all high in sugars and carbs. For women with blood sugar issues, eating palm dates could actually delay the maturation of the uterus and delay the onset of labor, both of which could cause complications.

Maltitol for Induction

Maltitol is a non-intoxicating sugar alcohol used in sugar-free foods. When taken in moderate amounts, it tends to cause loose bowels; when taken "in excess", it can cause diarrhea.

This is just a theory, but I have observed that clients taking maltitol on a regular basis (either to reduce carbs or to treat constipation) seem to go into labor a week or so earlier than one might expect. It is possible that it causes low-grade intestinal irritation and thus the

production of systemic prostaglandins which encourage the start of labor.

Low-Carbohydrate Nutrition in Pregnancy lists many treats containing maltitol.

Herbal Options for Induction

Herbal Allies for Pregnancy by Linda Woolven from Mothering Magazine - has a section on Bringing on Birth.

Black and Blue cohosh and B&B tincture if they go overdue.

Blue cohosh tea (check with your caregiver first.)

Blue Cohosh and Birth Defects - This article points out that the alleged association between blue cohosh and birth defects comes from a single case in which the mom didn't even take any blue cohosh until the last month of pregnancy, which is past the point of causing birth defects.

The following is a list of herbs or remedies to encourage or strengthen labor. Individuals may vary in their sensitivity and response to these remedies. Always start with the lowest recommended dosage first and increase slowly only if needed. Please check with your care provider before initiating any of these remedies to be sure they are appropriate for you.

Cervical Ripening

1. Borage and Flax Seed Oil , Black Current Oil. or Evening Primrose Oil, 3-6 capsules, taken orally, everyday and/or rubbed directly on the cervix if bag of waters is intact, after 37 weeks.
 2. Blue and Black Cohosh Tinctures, 5-10 drops each, in cup of water or tea, 1-2 times everyday, after 37 weeks.
 3. For rapid ripening: Black Cohosh Tincture, 15 - 25 drops, under the tongue, every 30 - 60 minutes, will usually soften the cervix within 6 hours. Evening Primrose Oil may also be rubbed directly on the cervix and in the os and repeated after 30 minutes if necessary.
-

A tip I've learned in this search of mine... To induce labor in a full term client, use 2 ml palma rosa essential oil (make sure it is therapeutic grade essential oil) in to 100 ml carrier oil (no peanut oil for pregnant woman)to give a full body massage 24 hours before you want labor to start. Paying special attention to the abdomen and back. I haven't tried it yet, but it is supposed to boost the level of oxytocin. I figure at worst you have a very relaxed pregnant mom...And at best... well things get going. (this tip came from a midwife, RN, and licensed aromatherapist from england. 1500+ births)

This is straight from Naturally Healthy Pregnancy, by Shonda Parker - "Master Gland - A combination of vitamins, minerals and herbs is use do nourish the glandular system so that it might function normally. Since the glands produce our hormones, it makes sense that this would help initiate labor. My own personal experience in recommending this to midwives and having them use it with clients is that it has not failed to work in the post dates woman who is ready for labor but not going into labor. The herbs it contains are: Licorice, Lemon bioflavonoids, Asparagus, Alfalfa, Parsley, Kelp, Black Walnut, Thyme, Parthenium, Schizandra, Siberian Ginseng, Dong Quai, Dandelion, Uva Ursi, Marshmallow. Recommended amount: 2 tablets every 30 minutes until labor is underway and throughout the labor. If headache occurs, discontinue for that day and start again the next day. I have seen no problems with using this dosage for two to three days. It seems to make the labors go faster, too."

Goldenseal for Induction

Goldenseal

NOTE - Goldenseal is a threatened species, increasingly rare in the wild and very difficult to cultivate. If you must use goldenseal, please find an organically farmed source.

- We had tried massive doses of the cohoshes and inmortal...which did *nothing* but make my mouth sore, breast pump & manual nipple stim which only succeeded in giving me purple nipples, castor oil which did get the labor started, but then it petered out to the tune of one itty-bitty ctx every 30 minutes None of these tried-and-trues would keep my labor going -- much to the dismay of all, since I was 43 weeks. The goldenseal (taken one dropper q 15 minutes til the babe came out) didn't knock me on my butt like the pit did at my first birth, but did work in the same time span.

I am not an herbalist but...I would be extremely cautious about using golden seal in pregnancy. I say this because I DID IT, but I would not do it again. My firstborn was born at 36 weeks after I took golden seal for suspected UTI. Now, its hard to know what triggered this because I never had a positive culture. The early labor could have been because of the possible UTI *or* the goldenseal. I have a history of cycles of repeated UTI - usually associated with diaphragm use. Before I figured that out, I found that homeopathic Cantharis was the thing that would turn the corner for me on a UTI faster than all the other remedies combined.

Here is a quote from an excellent little book called "Healing the Family" by Joy Gardner.

"I have not recommended [goldenseal because it] is a very potent herb and not enough is known about it. However, what is known indicates that it should be used with great caution by everyone. It contains high concentrations of very potent alkaloids. It also contains berberine, an antibiotic which has broad-spectrum activity against bacteria and protozoa. And it contains hydrastine, which causes uterine contractions if taken in large quantities."

I have treated one woman who was 2 weeks from her due date with goldenseal caps, 3x a day. Using goldenseal would be the exception not the rule, there is some question of its safety in pregnancy and as a wild plant it is becoming extremely rare.

I did 1/2 dropper q15 minutes after the castor oil induction started to try and piddle out. We used it a couple more times while I was still apprenticing and it works pretty well to "augment" but I don't know if it works as a labor inducer, as that is out of my current scope of experience.

General Schemes for Induction/Initiating Labor

Most people agree that induction of labor doesn't always work, but once labor has started, these methods do work well.

Things often tried:

- Blue cohosh (may cause irritability in uterus, non-labor cxs; better to use to enhance labor rather than induce. Try making your own tincture. Less "violent" than castor oil.)

- Castor oil (same as above, also ends constipation/induces runs, but can be very effective with stripping) -- serve in OJ, root beer float or other drink; don't use the mother's favorite just in case it doesn't agree with her stomach. 1-4 Tbsp in drink (in 2 doses)
- sex, nipple stim with breast pump or manually

EPO capsules (evening primrose oil), 2-3 capsules high in the vagina, repeat 2-3x 24hr intervals

- Tincture of motherwort 5 - 10 drops
- enemas
- membrane stripping (same as above): the attendant separates the BOW from the cervix by running her finger around the internal os between the cervix and the membranes.
- cervical massage: 2 o'clock spot on cervix, rub for as long as 30 min. slowly and gently
- Caulophyllum 200 - 1 tab 1/4 hourly for 1 hour then 1 tab hourly for another 4 hours.
- acupuncture

If considering any of these labor stimulating remedies, begin early in the day after a good nights sleep and a light breakfast.

Blue Cohosh Tincture, 5 - 10 drops, in glass of water or tea, every half-hour for up to 4 hours, until contractions are regular. If no labor in 4 hours, take 1 dropper full, under the tongue every hour for up to 4 more hours until labor is strong and consistent..

Castor Oil:

a. May be warmed and rubbed on the belly and covered with a warm towel or hot water bottle if the cervix is ripe and labor seems near. (Blue Cohosh call also be used as above.)

OR b, Mix 2 ounces in 2 or more ounces of orange juice with a couple ice cubes in the blender and followed by a hot shower if desired. The dose may be repeated in 2 hours and followed by an enema if desired. If poor response, a third dose may be attempted. Labor will usually begin within 3 - 5 hours of the last dose. Many women object to this regimen since uncomfortable diarrhea and intestinal cramping is common.

Strengthening Labor

Blue and Black Cohosh Tinctures, 5 - 10 drops each under tongue or in glass of water or tea, every hour for up to 6 - 8 hours if labor stalls or contractions become weaker.

She could also put the labor ease extract in an enema and hold it in as long as possible.

This seems to work pretty well. Do a cleansing enema first, and use the labor tincture (perhaps with b&b tincture) in about a pint of warm water with a spoonful of honey. -- said to absorb better this way. This is essentially a tea, and mom could drink a cup or two of the same mixture (funny to think of it going into both ends -- so to speak!)

No RCTs of course, just a traditional thing here, used instead of meds if mom wants to give it a try. How about stripping membranes though?

Cumin Tea

- The traditional midwives, or *parteras*, I worked with in Texas used comino as a tea to stimulate labor in the presence of ruptured membranes. They always put a cube of potato at the bottom of the cup. I was fascinated--it really seemed to work. I forgot to mention that the comino tea was unsweetened., though I don't think it would be a problem to sweeten it by any means. The few ladies that I saw who tried it weren't thrilled with the taste but accepted it readily--my impression was that using comino wasn't unheard of. I haven't really utilized this intervention, as soon after that time I fell in love with homeopathic remedies and castor oil as favorite options for encouraging things along. I know it can't taste *great*, but maybe I should invade the spice cupboard and try some experimental batches.

The comino tea was made with cumin from the spice rack--I believe it was 1 tsp. in a cup (approx. 6 oz) of hot water. I could never get clear as to why the cube of potato was included--usual response was just that this was the way it was done. The infusion was usually administered twice, each cup about an hour apart as I recall.

My mother told me that the potato should be raw, about 1/2 inch cube. It seems to be one of those things that stimulates contraction just enough that if you are ripe and ready and labor is close anyway, it might kick you over the edge.

When I eat food with great amounts of cumin, I get the castor oil type clean-out of my system -not quite as violent as c-o but close. So, maybe the mechanism is the same.

Here's some suggestions for herbs that have worked very well for me. Start with 15 drops false unicorn root tincture, 10 drops Black Haw tincture and 10 drops Wild Yam tincture, 3x/day. You can increase the false unicorn to 25 drops and the wild yam to 15 drops, but maintain the black haw at 10 drops, if needed. You can also increase the # of times given, even up to q20 min. in a crisis, then castor oil type clean-out of my system -not quite as violent as c-o but close. So, maybe the mechanism is the same.

Here's some suggestions for herbs that have worked very well for me. Start with 15 drops false unicorn root tincture, 10 drops Black Haw tincture and 10 drops Wild Yam tincture, 3x/day. You can increase the false unicorn to 25 drops and the wild yam to 15 drops, but maintain the black haw at 10 drops, if needed. You can also increase the # of times given, even up to q20 min. in a crisis, then wean back down. This has worked very well for me as well as several other midwives that I work with.

PN-6 is available from:

Cascade Health Care Products, Inc.

141 Commercial Street, NE

Salem, Oregon 97301

(800)443-9942 (Orders only)

(503)371-4445 (Customer Service)

Evening primrose oil is also sometimes recommended for oral and vaginal use, as it contains precursors to prostaglandin. Vaginal use is controversial, as there's apparently no mechanism for the cervix to convert the precursors to prostaglandin, but it has a certain appeal.

Fasting/Dehydration

I've heard folks tell (how's that for anecdotal?) that they recommend mom's go off all fluids and foods starting the day they want the baby to get born. contractions usually begin within 12 hours and then they can eat and drink once labor is getting along. . . .

I thought the decreased fluid intake led to decreased fluid volume, which led to increased concentration of oxytocin in the blood. If this increased oxytocin concentration met the increased uterine receptivity, then contractions resulted.

You can reverse the effect by increased fluid intake, bolstered by deep water immersion to push the fluids into the bloodstream. This is why baths can stall out early labor or ease the intensity of active labor.

This might belong in the half-baked theory category but someone (can't remember who) once told me that the reason dehydration causes contractions is that the other hormone produced by the posterior pituitary is anti-diuretic hormone (ADH). Dehydration causes the

release of ADH and the stimulation of the posterior pituitary causes some oxytocin to be released as well. Seems to make sense but I don't know whether it's accurate.

Enemas for Starting Labor

What does OBE stand for? Ancient midwifery trick to induce labor Oil-Enema-Bath. Used for generations in US and UK hospitals. Early admit to begin in AM. Mom takes a big hit of castor oil.. followed by a 3 H enema (high, hot, hell of a lot), then after the CO takes effect -- and it will -- she soaks in a warm bath for a while. I know the initials are out of order -- it should be OEB - but I think OBE is a british joke on Knighthood awards.

Almost always women are in labor pretty dang soon... especially if cervix is ripe. If no ctx within 2 or 3 hours.. repeat the CO. And it's a lot of CO too... usually 2 to 4 ounces depending on recipe.

It's a lot to get through -- but after the upset stomach and the runs...the tummy settles down and soon mom is almost always in labor...

now .. if you REALLY wanna induce -- because you decided you really cannot wait.. then do the OBE after you strip the membranes.

AND I mean REALLY strip the membranes -- two knuckles deep and SLOW, SLOW, SLOW and stretch and stay in there with your fingers barely moving for about ten or fifteen minutes -- just gently stretch and stop.. hold the stretch.. stop moving... scootch your fingers a little further over.. stretch.. stop.. maintain the stretch.. Do it GENTLY. SLOWLY. DON"t do the quick run around the rim and out that we were taught was "stripping". Insinuate your fingers gently.. slowly.. YOU don't want to abrade the cervix.. you want to make it respond to a stretch -- you want to set off a reflex reaction (it is not true that stripping works by causing a mild infection/inflammation. If so.. it would take time to see an effect. AND if you do this right... SLOW.. GENTLE... you will start to feel contractions while you are in there. YOU will take long enough that you'll need to change hands so have extra gloves handy.. SLOW is the word. Stretch and hold -- don't run your fingers back and forth... be gentle.. just scootch the cervix open.. and if you take enough time you will feel the cervix begin to open.. it can go from a tight two where you can barely fit one fingertip to where you can get three fingers and wiggle them all the way around to the second knuckle. Go slow and count by the clock. Mom has to be willing to put up with this... it is uncomfortable but not painful because you are not forcing anything and you are going SLOW and GENTLE!

And when you get really good at this stretch/massage, you will almost always have labor --- without having to go all the way to the oil, enema steps.

I'm posting this with the understanding that it is major interference in pregnancy. And the hope that it will not ever be used without deep consideration of risks and benefits. I DO NOT believe in inducing unless there is very good reason to induce... and this particular technique is interventive enough to be considered an INDUCTION!

It IS effective. Seldom fails. But use it wisely -- please.

While I've never given a milk and molasses enema, I've had great results with a retention enema of herbal teas or added herb tinctures to get labor moving. Last time the mom sat on the toilet and didn't get up until about 1 hour later to have the baby...she had been at 4 cm the hour before! And yes rehydration with an enema is very rapid, not unlike using an IV and way less invasive.

Try a good cleansing enema followed about fifteen minutes later by an enema made of very strong raspberry tea and labor tincture? Yes, add honey to it. Make up enough for her to drink a couple cups too.

About an hour after the enema do a SLOW, THOROUGH, GENTLE cervical stretch. Not just sweeping the membranes, but ever so gently stretching the cervix and insinuating your fingers in to loosen the membranes and get a good forewaters formed. (Do NOT "massage" the cervix!). Just barely move your fingers so slowly -- the sensation should be that you are gently 'pulling" the cervix away from the membranes. Slip your finger between the membranes and the cervical/uterine wall and work to loosen the attachments). Work slowly all around the cervix; you'll probably need to change hands at least once. You might need to take fifteen minutes (BY THE CLOCK), but it literally almost never fails.

The last few years, I've mostly only done the cervical stretch alone without the enema and that's all it takes. Mom starts having ctx within a few hours at most and is generally in good labor by six hours. But if a baby really needs to get born, I'll do the double punch of enema and cervical stretch

Acupressure/Acupuncture For Starting Labor

[Electroacupuncture for cervical ripening prior to labor induction: a randomized clinical trial.](#)

Gribel GP, Coca-Velarde LG, Moreira de Sá RA.

Arch Gynecol Obstet. 2011 Jun;283(6):1233-8. Epub 2010 Jun 8.

CONCLUSIONS:

Our results showed that electroacupuncture can be used to obtain cervical ripening, with similar results as compared with misoprostol, with a significantly higher frequency of vaginal deliveries and without occurrence of obstetric complications.

Effect of acupoint Sanyinjiao (SP6) moxibustion on the first stage of labor and uterine contractive pain in primiparae.

Cui JM, Yang XX, Jin ZH, Ma SX, Dong LH, Li Q.

Chin J Integr Med. 2011 Jun;17(6):464-6. Epub 2011 Jun 10.

CONCLUSIONS: Applying S-Mox could markedly shorten the active phase of the first stage of labor and lower the VAS score of uterine contractive pain, which means alleviating the pain caused by vaginal delivery. Its mechanism is worthy of further study.

Acupuncture for cervical ripening and induction of labor at term--a randomized controlled trial.

Rabl M, Ahner R, Bitschnau M, Zeisler H, Husslein P.

Wien Klin Wochenschr. 2001 Dec 17;113(23-24):942-6.

"CONCLUSION: Acupuncture at points LI4 and SP 6 supports cervical ripening at term and can shorten the time interval between the EDC and the actual time of delivery."

The pressure points that I am aware of: (1) on the roof of your mouth, just behind the ridge behind the teeth, (2) four fingerwidths - and these should be from the fingers of the person using the pressure point - above the inner ankle, (3) on the hand, in between the thumb and the pointer finger - I have heard that this is both for pain relief as well as for stimulating uterine contractions. So far I have not found anything definitive about which it is really for.

TENS Use for Starting Labor

There is some thinking that a TENS unit will stimulate the nerves of the uterus and induce labor. No studies on this, but if you've got a TENS unit, why not give it a try? If you do, please let me know whether it works, either way, so I can collect some data about this. Please e-mail me the results, including where you placed the pads and how often and how long you used it. Here's some feedback:

- I have been using my TENS machine for lower back pain on and off for the last 3 days and though i have had increasing cramps, no sign of labour yet and i am 38 + 4.
 - I was about 38 weeks when i started using it and despite using it about 5 times a day and through the night, i went 10 days overdue and was eventually induced.
 - I used a TENS unit with my last child on a daily basis and was medically induced at 42 weeks.
 - I tried using my TENS unit last night in hopes of inducing myself last night with no luck. I have a very old model stimulator: fastSTART IF 4000. I used all four electrodes using one red and one black lead on each breast placed just on either side of the nipple. I tried varying the amplitude and the frequency but it only seemed to aggravate the muscle. I wore the unit on my breast less than a half hour as all it did was cause painful muscle spasms. I did also use the unit for an hour each on it's highest setting on my hips (for sciatic pain) and mid- upper back for an hour in each place as well. I am 38wks6 days and all of my other self induction methods have failed, (castor oil, walking, jogging, galloping, spicy/sour foods, breast pumping, mediation, etc). I hope this information is useful to your website and practice.
-

I used a TENS machine one evening at 37.5 weeks with my first and my waters broke early the next morning - I hadn't been warned about whacking it up to top speed which my midwife tells me is probably what did it. Contractions started around midnight and my son was delivered by low cavity forceps at around 5 pm the following day.

I found the study:

Transcutaneous electrical nerve stimulation at acupuncture points in the induction of uterine contractions.

Dunn PA, Rogers D, Halford K.

Obstet Gynecol. 1989 Feb;73(2):286-90.

"A significant increase in frequency and strength of uterine contractions was found in the electrically stimulated women compared with the placebo-group women."

The influence of acupuncture stimulation during pregnancy: the induction and inhibition of labor.

Tsuei JJ, Lai Y, Sharma SD.

Obstet Gynecol. 1977 Oct;50(4):479-8.

"[I]nduction of labor was attempted; in 32 cases delivery was achieved, resulting in a success rate of 78%."

From Henci Goer's The Thinking Woman's Guide to a Better Birth

"An even more promising study used mild electrical (TENS) nipple stimulation to induce labor in 21 women (Tal et al. 1988). Fifteen achieved progressive labor. The six who didn't had unripe cervixes. No woman experienced nipple discomfort. Uterine hyperstimulation in five women was easily corrected by adjusting the TENS unit."

Breast electrostimulation for the induction of labor.

Tal Z, Frankel ZN, Ballas S, Olschwang D.

Obstet Gynecol. 1988 Oct;72(4):671-4.

"The use of breast stimulation to promote cervical ripening and initiate labor has been studied frequently. However, the various mechanical methods that have been suggested cannot be adequately controlled by the physician. We studied breast electrostimulation as a controllable method of initiating labor in 21 women. This technique successfully induced labor in 15 women, including all nine with premature rupture of membranes. The six (of 12) women without premature rupture of membranes who failed to go into labor each had a Bishop score of 4 or less. All of the successfully induced women delivered vaginally. The time interval from the start of stimulation to birth ranged from 2-13.5 hours, and all infants were born in good condition. Uterine hyperactivity occurred in five cases, but was controlled easily by adjusting the electrical variables of the stimulation. Further work will be needed to establish clearly the indications and safety of breast electrostimulation for induction of labor."

This works because, as most of you probably know, stimulating the breasts triggers oxytocin production. I have since run searches on induction and augmentation for the new edition of *Ob Myths*, and so far as I know, there have been no other studies. Pity. TENS would allow nipple stim without irritating the nipples, and, as Paula reported with her client with the unusual response, once you stop, contractions immediately quiet down. Compared with other methods, what's not to like?

Sexual Activity / Semen for Starting Labor

A couple of contradictory studies:

Sex close to due date may cause spontaneous labor, study finds - "Women who have sexual intercourse during late pregnancy are more likely than abstinent women to have a spontaneous delivery at 38 to 40 weeks' and less likely to require labor induction, according to results of a study conducted in Malaysia."

Effect of Coitus at Term on Length of Gestation, Induction of Labor, and Mode of Delivery

Peng Chiong Tan, Anggeriana Andi, Noor Azmi, M. N. Noraihan

Obstet. Gynecol., Jul 2006; 108: 134 - 140

"CONCLUSION: Reported sexual intercourse at term was associated with earlier onset of labor and reduced requirement for labor induction at 41 weeks."

Sexual intercourse at term and onset of labor.

Schaffir J.

Obstet Gynecol. 2006 Jun;107(6):1310-4.

CONCLUSION: Sexual intercourse at term is not associated with ripening of the cervix and does not hasten labor.

Some Medscape articles:

Sexual intercourse for cervical induction and the induction of labour

Sexual Intercourse at Term May Not Hasten Delivery

Late-Pregnant Sex Doesn't Speed Labor

Coitus at Term May Be Linked to Earlier Onset of Labor

I wonder if the researcher didn't miss the boat on this one. In particular, I have to ask whether it really makes sense that the group who is more sexually active had lower Bishop's score, i.e. the cervix was LESS ripe. This is totally counter to the well-established practice of using prostaglandins (from real animal semen?) to ripen the cervix and induce labor.

Let's also consider the methodology of the study . . . the women were only asked about sexual activity at prenatal appointments, not after labor had started. This approach misses the class of women who aren't routinely sexually active in late term but who then successfully use sex as a way of starting labor. Those women never made it to the next prenatal appointment!

I also observe that this is another study that completely ignores the role of genetic heritage in the natural gestation length. This is especially important because sexual practices in pregnancy often have a strong cultural foundation. It's possible that if the researcher had asked the right questions at the right time, the real outcome of this study might have been that some ethnic groups with naturally longer gestations also have cultural prohibitions against sex during pregnancy.

If you're trying to help stretch out the lower uterine segment and allow the baby to drop, more semen could only help. If you'd like the semen without the usual intercourse, you might consider collecting semen in a condom and applying it in some creative way. You could probably pinch the condom about an inch from the end, turn the rest inside out around your hand, insert the condom as high near your cervix as possible and then push the semen out near your cervix. Knee-chest for a while might help as well. I know of absolutely no studies about any of this, so you're on your own regarding how much effort this might seem worth.

This brings to mind a rather funny conversation I once had with another midwife (Tip of the Year - avoid midwives in restaurants!) about creative ways to get semen onto a cervix. We had the idea of collecting it in condoms and then freezing it. I think we were originally considering this for a mom whose husband was away in the military, so we imagined that her husband could pre-freeze his semen before leaving into little POP-sicles. Or maybe we were calling them Prosta-Pops or something. The details blessedly escape me.

It just occurred to me that it might be easier to get those empty gelatin capsules at the health food store and simply put the semen in there.

Anyway, all of the above might be useful if you're adamant about getting the dad's semen onto your cervix.

If you just want the baby to drop and aren't so picky about how that happens, you might want to consider herbs.

I once worked with a mom whose first three babies had never dropped (all 3 c-secs). She started taking PN-6 late in pregnancy, and the baby engaged at 35 weeks. She was very happy and did go into spontaneous labor 7 weeks later. The extreme length of time between engagement and labor makes me think it was the herbs helping the lower uterine segment to soften and stretch. I'm not sure this is a great thing, as you then might have a baby's head uncomfortably engaged for longer than nature might do it. But you might consider it worth the gamble.

Sex accompanied by manual or vibrator stimulation for effective climax along with depositing semen on the cervix. Or self stimulation via manual or vibrator with strong climactic reaction is also effective. In particular, breast stimulation has been shown to ripen the cervix.

Oral Application of Semen

About fellatio: Actually, it would probably be beneficial, if the idea is to get the labour started. A great OB in Hamilton (John Lamont, I believe) spoke to our class about sexuality

and pregnancy. He mentioned the concept that prostaglandins are absorbed 10X more efficiently through the gut than through the vaginal mucosa, with respect to semen and labour onset.

Miscellaneous Induction Approaches

From the experience of our ethnic group, women have been using a juice of boiled pumpkin roots by drinking a half cup of tea, with good effect; however risk factors should be ruled out.

There are many things you can do approaching your dd to help, I recommend, as difficult as it may be!, making love with your dh once a day, don't get up right away after and elevating your hips is a good idea. This lets the prostaglandin in your dhs semen coat your cervix which helps to ripen it. Also, find a source for red raspberry LEAF tea and drink at least one cup a day. This also will help ripen your cervix. Do these things for a week or more, then go for the big guns if and when you have passed your dd. Making love, again!!, until you have had multiple orgasms has worked for a friend of mine who consistently went overdue. Nipple stimulation worked for me!! I sat in bed with my tea and "stimulated" my nipples, sometimes with dhs help!, and brought on good, strong contractions in about an hour!! Blue cohosh tea is another option, but don't use it if you are anemic or have a history of postpartum bleeding, or excessive blood loss during birth. Finally, go ahead and have that glass of wine you have been dying to have, at this point, it won't harm the baby, and will relax you-hopefully enough to bring 'em on!! I have a friend who swears by a good cry- she gets a tearjerker form the video store and has a good bawl to relieve tension. She has had 3 children and went at least 1 week overdue with each of them. The most important thing to do is to find a way to relieve tension. Tension works against labor. Relieve it., let everything go, and you may be surprised to find yourself in labor.

Blowing up balloons builds up intra-abdominal pressure and can put more pressure on the cervix to move things along.

That was great advice and below I have added my little collection to the list as well. These were all suggested to me by various folks who ALL got these recommendations from midwives.

Cumin seed tea recipe:

1 T. cumin seed to one cup of boiling water...let steep for 5 minutes and drink tea. not to exceed (1 number) cups of tea per (hour/day).

Pineapple for Cervical Ripening

Best Food for Late Pregnancy by Michael Greger M.D. FACLM October 15th, 2018 - Dates are put to the test in a randomized, controlled trial for cervical ripening.

He mentions that it takes five times as much pressure to open an unripe cervix as a ripe cervix.

Many midwives are concerned that this increased amount of dietary sugar late in pregnancy might not be healthy, so be attentive to that issue.

The effect of late pregnancy consumption of date fruit on labour and delivery.

Al-Kuran O, Al-Mehaisen L, Bawadi H, Beitawi S, Amarin Z.
J Obstet Gynaecol. 2011;31(1):29-31. doi: 10.3109/01443615.2010.522267.

We set out to investigate the effect of date fruit (*Phoenix dactylifera*) consumption on labour parameters and delivery outcomes. Between 1 February 2007 and 31 January 2008 at Jordan University of Science and Technology, a prospective study was carried out on 69 women who consumed six date fruits per day for 4 weeks prior to their estimated date of delivery, compared with 45 women who consumed none. There was no significant difference in gestational age, age and parity between the two groups. The women who consumed date fruit had significantly higher mean cervical dilatation upon admission compared with the non-date fruit consumers (3.52 cm vs 2.02 cm, $p < 0.0005$), and a significantly higher proportion of intact membranes (83% vs 60%, $p = 0.007$). Spontaneous labour occurred in 96% of those who consumed dates, compared with 79% women in the non-date fruit consumers ($p = 0.024$). Use of prostin/oxytocin was significantly lower in women who consumed dates (28%), compared with the non-date fruit consumers (47%) ($p = 0.036$). The mean latent phase of the first stage of labour was shorter in women who consumed date fruit compared with the non-date fruit consumers (510 min vs 906 min, $p = 0.044$). It is concluded that the consumption of date fruit in the last 4 weeks before labour significantly reduced the need for induction and augmentation of labour, and produced a more favourable, but non-significant, delivery outcome. The results warrant a randomised controlled trial.

Changing Temperature

Alternate cold/hot water. After 41 weeks.

Intense Music

I put on 'Holst: The Planets', specifically the 'Mars' selection (a brilliant and forceful piece) and danced about the house with the music coursing through me -- I went into labor before the disc was over. The prenatal classroom book advises against playing this piece - they say it is too intense. It could have been coincidence that it worked for me, then again, maybe not!!

Swinging

Go to a local park or playground and swing on those nice big swings. This is a really fun way to start labor!

Curb Walking

Try curb walking to help bring on labor. I know it sounds funny, but I really believe it helps. Walk along a curb, one leg up on the curb and one in the gutter, then turn around and go the other way. #include "trailer.incl"