

All About Inductions

Unfortunately, most first time mothers are faced with the dilemma 'to induce or not to induce'. When you figure that the majority of obstetrical providers like to have mom deliver between 39-41 weeks, and you also consider that the average first-time mom will go into labor at 41.1 weeks, most women encounter this choice.

Remember, *it is* a choice in most instances and not necessity.

Some reasons that your care provider might encourage induction:

- Postdate pregnancy (care providers vary on what is considered 'overdue', but it is thought that anything beyond 40 weeks is 'overdue' – see my handout on due dates)
- Premature rupture of the membranes (your water breaking without contractions)
- Pregnancy-induced hypertension (high blood pressure) or preeclampsia
- Chorioamnionitis (an infection of your amniotic fluid and/or the bag of waters)
- Intrauterine fetal growth retardation (IUGR – baby is not growing anymore – this can be because of placental decay)
- Large baby
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- Oligohydramnios or polyhydramnios (too much or too little amniotic fluid)
- Significant maternal medical problems, such as diabetes mellitus with pregnancy at term

What are the risks of induction?

There are many risks to induction that should be weighed very carefully. In addition to the risks that normally occur with labor and delivery, induced labors tend to increase the incidence of pain medication use (which increases risk), and the induction itself carries its own risks. Some of the risks include: uterine hyperstimulation, fetal distress and a greater likelihood of postpartum hemorrhage.

As a result of the added risk, fetal heart rate (FHR) monitoring will be performed using a high-risk protocol, and a physician able to perform a cesarean section must be informed and available at all times.

If you are considering an induction or your care provider has offered/requested an induction, evaluate the situation carefully; the risks of remaining pregnant should outweigh the risks of an induction before it is considered.

How do I know if an induction will work?

You don't; in fact, no one does. You should ask your care provider about your Bishop's Score (explained later). This is a system whereby you and your care provider can determine if your cervix and body are ready for labor. If your score is a 7 or over, you are a good candidate for a successful induction (meaning you won't have a cesarean because your cervix didn't dilate), but many of the other risks are still possibilities.

How can I tell if I am a good candidate?

As stated previously, a care provider can assess your likelihood to successfully dilate with an induction by something called a Bishop's Score. If your score is 7 or over, you have a very good chance of dilating fully through induction.

The table below is the adapted midwifery model, as it tends to be more accurate than the medical model. If you would like to see the medical model, [click here](#).

Keep this chart on hand and, in the event that induction is mentioned by your care provider, refer to this chart and be sure that your chances for successful dilation are in your favor.

PARAMETER	POINT ASSIGNMENT			
	0	1	2	3
Position of cervix	Posterior	Midposition	Anterior	----
Consistency	Firm	Medium	Soft	----
Effacement (%)	0-30	40-50	60-70	>80
Dilation (cm)	0	1-2	3-4	>5
Baby's station	-3	-2	-1 to 0	>+1
Cervical sensations	None	Slight	Strong/frequent	Coordinating with toning contractions
Vaginal secretions	No increase	Increase mucus	Increase w 'show'	----
Toning contractions	None/slight	Mild	Strong/frequent	Almost regular, visible

Modifiers to this table include

Add 1 point to score for:

- Preeclampsia
- Each prior vaginal delivery

Subtract 1 point from score for:

- Postdates pregnancy
- Nulliparity (never having birthed children)
- Premature or prolonged rupture of membranes

You can deduce your score by adding your points.

- If your score is 7 points or less, your chances of successfully and fully dilating without the assistance of a cervical ripener are not in your favor.
- If your score is 9 or more, your cervix is favorable to attempt to induce.
- If your score is 12 or more, your cervix is ready for labor (perhaps even in early labor), and a small amount of encouragement often gets things moving.

How are inductions done?

There are a few different types of inductions to consider. These include stripping your membranes, artificially rupturing your membranes (AROM – breaking your water for you), cervical ripening, and pitocin induction.

Types of induction:

- *Stripping Your Membranes* - When a care provider wishes to encourage labor to start but is not ready to commit mom wholeheartedly, they might suggest *stripping your membranes*. This will encourage labor to start by a) aggravating the uterus because of the weight of the amniotic sac sagging against the cervical opening as it is no longer held up by the mucosa, b) causing your body to release prostaglandins because of this irritation, and c) which might result in cervical softening and contractions.
 - HOW IT'S DONE – the care provider completes a cervical exam. While they are near your cervix, your care provider inserts a finger into the cervical opening and sweeps their finger over the thin membranous mucosa that connects the amniotic sac to the wall of your uterus.
 - WHAT YOU CAN EXPECT – vaginal exam with a gloved hand, possible intense cramping with bloody show, outpatient procedure.
 - RISKS – risks that increase with stripping your membranes include: infection, PROM (premature rupture of membranes), bleeding.
- *Artificially Rupturing The Membranes* (i.e., artificially breaking your bag of water) – When your care provider is ready to commit mom to labor, the cervix is opened a few centimeters, and babies presenting part (usually head) is well applied to the cervix and low in the pelvis, they may suggest breaking your water to get labor started. This can work for many of the same reasons as stripping

your membranes, plus there is the added irritation to the cervix of the sac being released, which causes more friction/pressure on the cervical opening.

- HOW IT'S DONE – the care provider completes a cervical exam. While they are near your cervix, they insert a plastic or metal device that looks very similar to a crochet hook (or they will wear a specially designed surgical glove with a hook on the end of one finger), snag the amniotic sac, and tear a small hole in it, releasing the waters.
- WHAT YOU CAN EXPECT – vaginal exam with a gloved hand, possible discomfort at onset, gush or small trickle of warm water, possible bloody show, many times fetal monitoring, inpatient procedure
- RISKS – risks include: in most practices, ROM puts mom on a 24 hour window to birth baby and the procedure possibly won't create contractions or won't create strong enough contractions, necessitating pitocin use. If mom does not have baby within the allotted time for ROM, she will be encouraged to have a cesarean. Increase risk of infection, fever, cord prolapsed, fetal distress, fetal heart decelerations, fetal malpresentation or malposition, cord prolapse.
- *Prostaglandins* – prostaglandins are the hormones that ripen and soften your cervix, making it nice and pliable for dilation. To better the chances of a successful vaginal induction, the cervix must be 'favorable', meaning that it should be soft and more ready to dilate. When a care provider encourages induction and the cervix is not favorable or ripe, they might recommend a cervical ripener. There are two main types of cervical ripeners, Prostaglandin gels (Cervidil, Prepidil, etc..) and a pill called Cytotec (Misoprostol). For information on Cytotec, see the special section on Cytotec.
 - HOW IT'S DONE - The prostaglandin gels are applied directly to the cervix via a tampon-like applicator. Once contractions are established, or the prescribed amount of time has passed to see if this mode of induction is successful, they will remove the device.
 - WHAT YOU CAN EXPECT – intermittent to continuous fetal monitoring usually is completed, mom is often required to remain in bed, inpatient procedure. Cramping, bleeding, possible loose bowels, general discomfort. If contractions are not established within an allotted amount of time, and if your water has not broken during this time, there is the very good chance your care provider may send you home. If your cervix does become more favorable during this time, but contractions have not become established, they may recommend pitocin.
 - RISKS – increased risk of infection, uterine rupture, ,uterine hyperstimulation, fetal bradycardia, when uterine rupture does occur, fetal death rate is 25%
 - See here for more information: <http://www.drugs.com/mtm/prepidil.html>, <http://www.drugs.com/mtm/cervidil.html>
- *Pitocin* – pitocin is a synthetic oxytocin. Oxytocin is the hormone that produces contractions. When a medical induction is indicated or suggested, this is the most aggressive means of inducing. Pitocin works by stimulating and simulating contractions.
 - HOW IT'S DONE – the care provider or nurse will administer the synthetic hormone through an IV drip in your wrist, hand, or arm. Along with the hormone, you will be given IV fluids. The dosage is usually started at a low drip and then increased every 30 minutes or so until your contractions reach a regular and productive pattern.
 - WHAT YOU CAN EXPECT – IV pole, IV fluid bags, IV catheter in your hand/wrist or arm, continuous fetal monitoring, inpatient procedure, discomfort, increased pain, unnatural labor pattern (seemingly more intense), possible SROM, spotting and cramping from dilation, possible blood pressure increase, loose bowels, possible nausea.
 - RISKS – increased risk of titanic contractions (contractions that last too long), double peaking contractions, increased risk of uterine rupture, postpartum hemorrhage, increased risk of fetal malpresentation or malposition, increased risk of using pain medication, increased risk of cesarean for failure to progress, shoulder dystocia (baby), and fetal distress. Increased risk of fetal bradycardia.
 - See here for more information: <http://www.drugs.com/cons/pitocin.html>

****Cytotec is becoming more popular as a means of induction. It has been shown to start labor faster and result in faster labors than pitocin. It is a small pill that is inserted (whole or in pieces) into the vagina**

near the cervix, where it dissolves. There is no standard dosage for this medication as it was not intended for induction. Once it is administered, unlike prostaglandin gel or pitocin, it cannot be removed, even in the case of maternal or fetal distress. There are many risks, and a high incidence of them. Risks include: increased chance of uterine hyperstimulation, uterine rupture, no safe/effective dose, not approved by the FDA for this use, fetal malpresentation, fetal malpositioning, fetal distress, postpartum hemorrhage, fetal bradycardia, and, when uterine rupture occurs, the fetal death rate is 25%. For more information, please see: <http://www.drugs.com/ppa/misoprostol.html>, http://en.wikipedia.org/wiki/Misopro..._gynecological

What about alternative method of labor induction?

I will start by saying that, if you are interested in homeopathic means of encouraging labor, you should consult a midwife, herbalist, acupuncturist, homeopathic practitioner, chiropractor, etc... The information below is to provide information on these alternatives, but are not to be used as a suggestion or prescription.

That said, just like with any other intervention, there is always added risk when we tamper with nature. The positive aspect of homeopathic or alternative methods of induction is that, if your body isn't ready, it won't work. That is why I prefer to call these alternative labor *encouragers*.

Methods for alternatively encouraging labor:

- *Relaxation/Visualization/Meditation* – when a mom is in labor, she moves into this place where the world cannot worry her anymore. Oftentimes, stress, workloads, worries, fears, marital issues, etc..., can all cause upsets in naturally occurring labor. It is no surprise, then, when these same things can inhibit labor from starting at all. The great thing about this particular encourager is that it can be easily paired with a medical induction to increase the chances of it working.
 - HOW IT'S DONE – you would remove yourself from noise and disturbances, a place where you can relax and let your mind go blank. You could use hypnosis techniques (if you are a student of Hypnobabies, they have a Baby Come Out CD), visualization (picture your baby pressing down on your cervix, your cervix nice and soft and open, your uterus pressing in on your baby), meditation (positive affirmations about your body and baby). This distressing can be done with a warm bath, candles, incense, your partner.. anything.
 - WHAT YOU CAN EXPECT – a sense of peace, lowered blood pressure, perhaps gentle tightening. Some women report a pop when their waters spontaneously break, slight cramping, mild abdominal discomfort, spotting.. or you might expect no signs of labor, but a clear mind, a positive outlook, and the fortitude to wait a little longer.
 - RISKS – you may not be so anxious to have the baby, you may begin to enjoy having baby *inside*.
- *Prostaglandins* – Semen is a great natural source of prostaglandins. Having intercourse regularly throughout the last trimester will keep your cervix coated in prostaglandins, which will encourage a favorable cervix.
 - HOW IT'S DONE – Well, it is done however you would normally have intercourse with your partner. Your odds will increase in effectiveness if your hips are elevated for awhile after intercourse to increase the saturation of semen on your cervix.
 - WHAT YOU CAN EXPECT – feeling closer to your partner, a sense of euphoria, relaxation, sleepiness.
 - RISKS – possible cramping and bleeding, possible SROM if your cervix is open quite a bit and you are very aggressive.
- *Intercourse* – likewise, intercourse itself is a great uterine stimulant as orgasms (by the mom) produce oxytocin. The combination of semen and orgasm can cause a great environment to encourage cervical ripening *and* regular contractions.
 - HOW IT'S DONE – the same as above. Additionally, taking special attention to the woman achieving orgasm, as well as the man.
 - WHAT YOU CAN EXPECT – feeling closer to your partner, a sense of euphoria, relaxation, sleepiness.
 - RISKS – possible cramping and bleeding, possible SROM if your cervix is open quite a bit and you are very aggressive.

- *Evening Primrose Oil* – unlike popular belief, Evening Primrose Oil (EPO) does not cause contractions. It doesn't cause contractions, it only prepares and softens the cervix. For this reason, many women choose to start taking EPO around 36 weeks. This will encourage your body to produce its own prostaglandins.
 - HOW IT'S DONE – You would purchase 500mg gel caps. Starting around 36-37 weeks, you would take 3 of them in the morning. Then, roughly a week after starting that regime, you would begin *also* inserting 4 vaginally at night. During the night, the gel caps will be dissolved by the damp environment of your vagina.
 - WHAT YOU CAN EXPECT – possible softer stools, more discharge in the morning when the oil runs out of your vagina, softer perineal tissues, softer labia, some women report it increases their sex drive by feeling the increase lubrication.
 - RISKS – it can be messy, some women report nausea from orally consuming too many, some women report loose stools from orally consuming too many.
- *Nipple Stimulation* – nipple stimulation, like orgasm, releases oxytocin, which is the hormone that contracts the uterus. Midwives have been using nipple stimulation for induction of labor for many centuries.
 - HOW IT'S DONE – there are a number of ways: manual stimulation, artificial stimulation, or hydrostimulation. For manual stimulation, you or your partner would find a dark, relaxing place to tweak and gently manipulate your nipples for about 15 minutes. Take a break for about 2-3 hours, then start again. For artificial stimulation, you would do the same as previously explained, but you would use a breastpump instead. For hydrostimulation, you would run a warm shower and then, while in the shower, place a washcloth over your breasts. Allow the showerhead to stimulate your nipples through the washcloth for the same time regime.
 - WHAT YOU CAN EXPECT – mild to moderately irritated nipples, possible arousal, possible cramping or spotting,
 - RISKS – possible sore nipples, possible abdominal cramping with no labor.
- *Acupressure/Massage* – there is a stimulation point on your calf called the Spleen 6 which can cause oxytocin productions. Additionally there are pressure points in your lower back, upper neck region, and pad of your foot which can also cause uterine stimulation or oxytocin production.
 - HOW IT'S DONE – you would ask your doula, midwife, massage therapist, or reflexologist to assist you or teach you this practice.
 - WHAT YOU CAN EXPECT – mild discomfort at pressure point (similar to other deep tissue massage), afterward relaxation and better circulation.
 - RISKS – possible dehydration as your body moves toxins through your body and stimulates hormone production – be sure to stay hydrated, possible abdominal cramping with no labor.
- *Castor Oil* – castor oil is a stimulant; it irritates the bowels and, as such, can irritate or stimulate the uterus as well. The result is, most often, diarrhea, and sometimes, labor.
 - HOW IT'S DONE – you would procure castor oil from a local pharmacy or food store. It can be consumed in apple or orange juice, in scrambled eggs, in milk shakes, or with baking soda. Most commonly, the dosage is around 3-4 teaspoons. Some women have simply taken a few spoonfuls of castor oil, but most women cannot get past the gag reflex. Many midwives recommend not eating anything afterward for at least 2 hours to maximize the effect.
 - WHAT YOU CAN EXPECT – oily dosage, difficulty swallowing it, possible cramps and show within 3 hours of taking it. possible mild to moderate nausea, possible vomiting, most probably diarrhea.
 - RISKS – possible mild to moderate dehydration from diarrhea, be sure to drink plenty of water, possible severe diarrhea, possible severe vomiting, possible severe abdominal cramping with no labor.
- *Consumables* – Spicy food, pineapple, basil and eggplant have all been recommended as ways to encourage labor throughout the centuries. Purportedly, spicy food works because it irritates the bowels, which, in turn, irritate the uterus, similar to castor oil. Pineapple might encourage labor because it contains bromelain, and Basil and Eggplant because, well, I am not honestly sure where those came from.

- HOW IT'S DONE – prepare any of these foods in your favorite way and enjoy a wonderful meal.
- WHAT YOU CAN EXPECT – hopefully you will enjoy eating a good meal and feel full. There is limited research done on the validity of these claims.
- RISKS – spicy food and pineapple could produce heartburn, eggplant and spicy foods could produce loose stools, indigestion could occur as well.
- *Chiropractic Adjustment* – when your spine is misaligned, it might produced on and off again labor (start and stop, or prodromal labors). Having an adjustment by a chiropractic skilled in prenatal chiropractic care may be what your body needs to be able to start things on their own. Additionally, oftentimes, chiropractic adjustments can touch on the pressure points for induction of labor, unless the chiropractor is going out of their way *not* to touch those trigger points. Chiropractors also routinely place mom in a position that facilitates something called a pelvic floor release, which can 'unwind' tense pelvic floor muscles and allow baby to sink lower in your pelvis, potentially stimulating contractions and causing dilation from gravity.
 - HOW IT'S DONE – schedule an appointment with your chiropractor, letting them know that you are looking to encourage labor and would also like to have a pelvic floor release performed.
 - WHAT YOU CAN EXPECT – if you have never been to a chiropractor before, they will manipulate your muscles and joints through changing your positions on either a bed with a drop out section for your belly or on a specially designed chair for pregnant women. You may experience popping as they manipulate these joints and you may experience a slight humming or brief warming where it occurs.
 - RISKS – dehydration may occur from the release of these joints and muscles. Drink plenty of water afterward.
- *Blue/Black Cohosh, Cotton Bark, Squawvine, or Goldenseal* – These herbal tinctures do carry some medical risk, it is best to take these only under the close eye of a holistic practitioner. These tinctures can cause stimulation of the uterus and are rather reliable. They are considered the most aggressive alternative labor encouragement method of all.
 - HOW IT'S DONE – According to Anne Frye, (*Holistic Midwifery Volume II*) you would take 10 drops of both Blue and Black Cohosh four times a day, or as often as every hour, depending on how aggressive you would like to be and your bodies tolerance to the protocols. “For induction, Cotton Root Bark tincture is perhaps the most effective of all labor-inducing herbal remedies.” After using the Cohosh tinctures as directed therein, if it has little to no effect, Anne Frye recommends,” First, you can give a dropper of blue cohosh tincture at 30 minute intervals for 1 to 2 doses. Then switch to cotton root bark tincture in dropper doses spaced as often as every 15 minutes the for next 3 to 6 hours.”
 - WHAT YOU CAN EXPECT – the tinctures taste very herb-like and, if you have chosen an alcohol based one, may have a residual after burn in your mouth for short term. Cramping, spotting, increased discharge, possible heart palpitations, possible strong contractions, possible loose stools.
 - RISKS – contraindications include: history of anemia, history of postpartum bleeding, high blood pressure, or history of clotting disorders. Cohosh can cause blood pressure drop, so be sure to drink lots of water. Cohosh can also cause nausea or fetal heart rate fluctuations.
- *Various other methods* – Additionally, there are the options of going curb walking, blowing up balloons, walking through a pool with weighted ankles.. all of these are entertaining options, but the available validity of these claims are very sketchy.

In conclusion

Your body knows how long to grow your baby, what size of baby to grow, and how to start labor. I highly encourage women to know their options, but only act on them when the risks of baby remaining inside outweigh the risks of forcing nature's hand at the act of induction.

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