
Healthy Birth Practice #1: Let Labor Begin on Its Own

健康分娩实践#1:让分娩自然开始

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ABSTRACT 摘要

As cesarean rates have climbed to almost one-third of all births in the United States, current research and professional organizations have identified letting labor begin on its own as one of the most important strategies for reducing the primary cesarean rate. At least equally important, letting labor begin on its own supports normal physiology, prevents iatrogenic prematurity, and prevents the cascade of interventions caused by labor induction. This article is an updated evidence-based review of the “Lamaze International Care Practices That Promote Normal Birth, Care Practice #1: Let Labor Begin on Its Own,” published in *The Journal of Perinatal Education*, 16(3), 2007.

在美国, 剖宫产率已上升到分娩总量的三分之一。在这种情况下, 当前的研究和专业机构都认识到, 让分娩自然开始是降低首次剖宫产率的最重要策略之一。让分娩自然开始的意义不仅在于支持正常的生理活动, 还能预防医源性早产以及引产干预所导致的瀑布效应。本文是对《围产教育杂志》里发表的《倡导正常分娩的国际拉玛泽照护实践, 照护实践 #1:让分娩自然开始》2007, 16(3)的最新循证综述。

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Keywords: let labor begin on its own, labor induction, hormonal preparation for birth

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关键词: 让分娩自然开始、催产、分娩的激素机制。

This article is an updated evidence-based review of the “Lamaze International Care Practices That Promote Normal Birth, Care Practice #1: Let Labor Begin on Its Own,” published in *The Jour-*

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本文是对《围产教育杂志》里发表的《倡导正常分娩的国际拉玛泽照护实践, 照护实践 #1:让分娩自然开始》2007, 16(3)的最新循证综述。

It can be argued that the most powerful way in which we can support the normal physiology of labor and birth is to let labor begin on its own. Virtually, every definition and consensus statement on normal birth begins with “spontaneous onset of labor” (see Table 1).

我们可以说，支持待产和分娩正常生理过程的最佳方式，就是让分娩自然开始。实际上，关于正常分娩的每条定义和共识都是始于“让分娩自然开始”。

Yet in a recent survey of American women who gave birth in a 1-year period from July 2011 to June 2012, less than half of the women surveyed allowed labor to begin on its own (Declercq, Sakala, Corry, Applebaum, & Herrlich, 2013). Cesarean rates have increased in the United States from about 23% in 1990 to almost 33% in 2013 (Hamilton, Martin, Osterman, & Curtin, 2014). With the vaginal birth after cesarean rate at only about 10% (Osterman & Martin, 2014), most women with previous cesarean surgeries go on to have scheduled repeat cesarean

births in subsequent pregnancies. The Centers for Disease Control and Prevention (CDC) also reports that the induction rate has more than doubled from less than 10% in 1990 to almost 23% in 2012 (Martin, Hamilton, Osterman, Curtin, & Mathews, 2013). A troubling concern for childbirth educators and other birth professionals is that the survey also revealed that American women do not have accurate information on which to make informed decisions. Almost 60% of the women surveyed *wrongly* believed that macrosomia is an appropriate indication for induction of labor, and almost 30% of the women wrongly thought that induction lowers the risk for cesarean surgery.

然而，一份针对在 2011 年 7 月到 2012 年 6 月这一年里分娩的美国女性的调查显示，只有不到一半的被调查女性实现了让分娩自然开始(Declercq, Sakala, Corry, Applebaum, & Herrlich, 2013)。美国的剖宫产率从 1990 年的 23% 上升到了 2013 年的几乎 33%(Hamilton, Martin, Osterman, & Curtin, 2014)。剖宫产后的阴道顺产率只有 10% (Osterman & Martin, 2014)，大部分有剖宫产史的女性再次怀孕后还会进行剖宫产。疾病控制和预防中心的报告显示，引产率从 1990 年的 10% 升至 2012 年的 23%，几乎翻了一番(Martin, Hamilton, Osterman, Curtin, & Mathews, 2013)。该调查还显示，美国女性缺乏正确的信息来做出知情决策，这令分娩教育者和其他分娩专业人士非常担忧。几乎 60% 的被调查女性错误地认为巨大儿是引产的适应症，约 30% 的女性错误地认为引产可以降低剖宫产手术的风险。

This article will review the importance of allowing labor to begin on its own for a safe and healthy birth and the risks associated with labor induction.

本文将综述自然开始分娩对于分娩安全和健康的重要性，以及与引产相关的风险。

TABLE 1

表 1

Normal Birth Definitions**正常分娩的定义**

Source 来源	Definition or statement 定义或表述
American midwives (<i>Supporting Healthy and Normal Physiologic Childbirth: A Consensus Statement by ACNM, MANA, and NACPM</i> [American College of Nurse-Midwives, Midwives Alliance of North America, National Association of Certified Professional Midwives, 2012]) 美国助产士 (《支持健康和正常的生理分娩: ACNM, MANA, 和 NACPM 的共识声明》 [ACNM: 美国护士和助产士学会; MANA: 北美助产士联盟; NACPM: 认证专业助产士全国协会, 2012])	Normal physiologic childbirth is characterized by spontaneous onset and progression of labor. 正常的生理性分娩的特征是产程的自然发动和推进。
Canadian obstetricians, obstetric nurses, midwives, family physicians, and rural physicians (<i>Joint Policy Statement on Normal Childbirth</i> [Society of Obstetricians and Gynaecologists of Canada, Association of Women's Health, Obstetric and Neonatal Nurses of Canada, Canadian Association of Midwives, College of Family Physicians of Canada, Society of Rural Physicians of Canada, 2008]) 加拿大产科医生、产科护士、助产士、家庭医生和乡村医生 (《正常分娩的联合政策声明》 [加拿大妇产科医生学会、女性健康协会、加拿大产科和新生儿护士协会、加拿大助产士协会、加拿大家庭医生学会、加拿大乡村医生学会, 2008])	A normal birth is spontaneous in onset. 正常的分娩是自然发动的。
English obstetricians, midwives, and childbirth educators (<i>Making Normal Birth a Reality—Consensus Statement From the Maternity Care Working Party</i> [National Childbirth Trust, Royal College of Midwives, Royal College of Obstetricians and Gynaecologists, 2007]) 英国产科医生、助产士和分娩教育者 (《让正常分娩成为现实-妇产护理工作共识声明》 [国家生育基金, 皇家助产士学会, 皇家妇产医师学会, 2007])	The "normal delivery" group includes women whose labor starts spontaneously. “正常分娩”的人群包括自然发动产程的女性。
World Health Organization (<i>Care in Normal Birth—A Practical Guide</i> , 1996) 世界卫生组织 (《正常分娩照护-实践指南》1996)	We define normal birth as: spontaneous in onset. 我们对于正常分娩的定义是: 自然发动。

SUPPORTING NORMAL PHYSIOLOGY**支持正常的生理过程**

The most compelling reason to let labor begin on its own may be to allow the birth hormones to regulate labor and birth, breastfeeding, and attachment as nature intends. Most childbirth educators and other birth professionals are familiar with the important roles which the four main birth hormones—oxytocin, endorphins, catecholamines, and prolactin—play in regulating labor and birth, breastfeeding, and attachment. But an important new report by Dr. Sarah Buckley (2014) also details the critical roles that these four hormones play in *preparing* both mother and baby for labor and birth.

让分娩自然开始的最主要原因, 可能是该方法可以让与分娩相关的荷尔蒙来自然调节待产和分娩、母乳喂养和母婴情感纽带。多数分

娩教育者和其他分娩专业人员都深知催产素、内啡肽、儿茶酚胺和泌乳素这四种与分娩相关的荷尔蒙对于调节待产、分娩、母乳喂养和母婴情感纽带的巨大作用。但是 Dr. Sarah Buckley 的一项新研究 (2014) 也详细阐述了这四种荷尔蒙对于帮助母婴做好待产和分娩准备可发挥哪些关键作用。

Oxytocin 催产素

Both the blood levels of oxytocin and the number of oxytocin receptors throughout the mother's body increase as pregnancy advances. However, final surges in oxytocin and oxytocin receptors may not occur until the final days before the spontaneous start of labor (Buckley, 2014). Letting labor begin on its own with the optimal number of oxytocin receptors and optimal levels of natural oxytocin on board increases the likelihood that labor and birth will progress successfully and that breastfeeding and attachment will get off to the best possible start.

随着孕周的增加, 母体血液中催产素的水平和催产素受体的数量都会增加。然而, 催产素水平和催产素受体的数量在分娩自然开始

之前的最后几天才会出现最后飙升(Buckley, 2014)。如果让分娩自然开始,此时身体中自然催产素的水平和催产素的受体数量均为最佳水平,从而提高了待产和分娩顺利推进的可能性,也使哺乳和母婴情感纽带有了一个最佳的开始。

In animal studies, there is a surge of maternal oxytocin in the 24 hr around the time of spontaneous labor (Ceanga, Spataru, & Zagrean, 2010). This surge of oxytocin is thought to transfer to the fetal brain via the placenta and the immature blood-brain barrier of the fetus. The oxytocin reduces oxygen requirements in the fetal brain, thus providing a neuroprotective effect for the fetal brain during labor. Animal studies also indicate that administration of high levels of synthetic oxytocin reduce this neuroprotective effect and may increase fetal vulnerability to low levels of oxygen. The increased vulnerability to hypoxia with the administration of synthetic oxytocin may be one piece of the puzzle in explaining the association between labor induction and increased cases of cerebral palsy reported in Norway (Elkamil et al., 2011) and the association between labor induction and autism reported in North Carolina (Gregory, Anthopolos, Osgood, Grotegut, & Miranda, 2013).

根据动物实验,在分娩自然发动前约24小时内,母体的催产素会飙升(Ceanga, Spataru, & Zagrean, 2010)。催产素的飙升通过胎盘和胎儿未成熟的血脑屏障传递给胎儿大脑。催产素降低了胎儿大脑对氧气的需求,因此在待产时为胎儿大脑提供神经保护。动物实验还发现,使用大剂量的人工合成催产素可能会减弱这种神经保护的效果,还可能使胎儿在低氧状况下更易受创。使用人工催产素而导致低氧时胎儿更易受创的情况,或许可以解释在挪威发现的引产和脑麻痹病例增加的之间关联性(Elkamil et al., 2011)和在北卡罗来纳州发现的引产和自闭症病例之间的关联性(Gregory, Anthopolos, Osgood, Grotegut, & Miranda, 2013)。

The reduced amount of natural oxytocin and reduced number of oxytocin receptors in women
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who do not allow pregnancy to proceed until spontaneous labor begins, in addition to the effect of overloading oxytocin receptors caused by the administration of synthetic oxytocin, may help explain the increased incidence of postpartum hemorrhage in women who are induced or augmented with synthetic oxytocin (Belghiti et al., 2011; Grotegut et al., 2011; Rooks, 2009).

那些没有在分娩自然开始之前继续妊娠的女性,她们的自然催产素水平和催产素受体数量都较低,催产素受体还因人工催产素的使用而超负荷,这或许可以帮助解释为什么那些用人工催产素进行引产或催产的女性,产后出血的发生率更高(Belghiti 等, 2011; Grotegut 等, 2011; Rooks, 2009)。

The most compelling reason to let labor begin on its own may be to allow the birth hormones to regulate labor and birth, breastfeeding, and attachment as nature intends.

让分娩自然开始的最主要原因,可能是该方法可以让与分娩相关的荷尔蒙来自然调节待产和分娩、母乳喂养和母婴情感纽带。

Endorphins

内啡肽

Like oxytocin and oxytocin receptors, levels of endorphins and the number of endorphin receptors also gradually increase during pregnancy. Research has shown that women who exercise regularly have higher levels of endorphins when they go into labor and report less labor pain than women who do not exercise regularly (Varrassi, Bazzano, & Edwards, 1989). Letting labor begin on its own and exercising regularly throughout pregnancy will allow women to begin labor with optimal levels of endorphins.

与催产素和催产素受体一样，内啡肽水平和内啡肽受体的数量也在孕期中逐渐提高。研究显示，比起不经常运动的女性，经常运动的女性在进入产程时内啡肽水平更高，产痛更轻微(Varrassi, Bazzano, & Edwards,1989)。让分娩自然发动以及在整个孕期持续运动，可使女性以最佳的内啡肽水平进入产程。

Catecholamines

儿茶酚胺

Fetal catecholamines also increase a few days before the spontaneous start of labor. Catecholamines play a critical role in readying the fetal lungs for air breathing immediately after birth by reducing the amount of fluid in the lungs (Jain, 2006; Jain & Eaton, 2006). Newborns who do not have this advantage because of scheduled cesarean surgery or induction of labor are at higher risk for respiratory problems at birth and admission to the neonatal intensive care unit (NICU; Buckley, 2014).

胎儿的儿茶酚胺也在分娩自然开始前几天增加。儿茶酚胺在减少肺部的液体上发挥关键作用，为胎儿的肺部做准备，使胎儿出生后可以立即呼吸(Jain, 2006; Jain & Eaton, 2006)。通过择期剖腹产手术或引产出生的婴儿，由于缺乏儿茶酚胺的准备作用，出生后出现呼吸问题或需要进入新生儿重症监护室的可能性更大(NICU; Buckley, 2014)。

Prolactin

泌乳素

In her report, *The Hormonal Physiology of Childbearing*, Dr. Buckley (2014) describes studies that show that prolactin levels, such as those of oxytocin and endorphins, increase throughout pregnancy, with steep increases at term. In animal studies, there is a large increase in prolactin receptors the day before the onset of spontaneous labor. Not only is prolactin critical in establishing breastfeeding, but it is also thought that late-gestation prolactin

plays a role in helping fetal lungs to mature and in helping the baby to regulate his or her temperature after birth.

Dr. Buckley 在她的研究报告《分娩的荷尔蒙生理机制》(2014)指出，催乳素水平也像催产素和内啡肽一样，在足月时明显上升。动物实验表明，在分娩自然开始前一天，泌乳素受体数量急剧升高。泌乳素不仅对于促成母乳喂养至关重要，妊娠晚期的泌乳素可以促进胎儿肺部的成熟，并帮助婴儿在出生后调节自己的体温。

SUMMARY OF THE IMPORTANCE OF ALLOWING LABOR TO BEGIN ON ITS OWN ON BIRTH PHYSIOLOGY

小结：让分娩自然开始对分娩生理机制的重要作用

With levels of endorphins gradually increasing throughout pregnancy and levels of oxytocin, catecholamines, and prolactin sharply increasing around the time of the spontaneous onset of labor, it is clear that waiting for labor to begin on its own will result in both the mother and the fetus having ideal levels of these critical birth hormones. With optimal levels of the birth hormones, the baby is physiologically ready for extrauterine life, labor is more likely to progress well, breastfeeding is easier and more successful, and attachment is enhanced.

内啡肽在孕期逐渐上升，催产素、儿茶酚胺和泌乳素在分娩自然开始的时候

也急速上升。显而易见，如果让分娩自然开始，妈妈和胎儿这些关键的分娩荷尔蒙就会达到最佳水平。在这种情况下，宝宝就会从生理上做好离开子宫的准备，产程也会更顺畅，母乳喂养更容易、更成功，母婴的情感纽带也会加强。

WHAT ARE THE RISKS OR HARMS OF NOT LETTING LABOR BEGIN ON ITS OWN?

不让分娩自然开始有何风险？

The three most important risks of not letting labor begin on its own are interfering with the hormones that regulate pregnancy, labor, birth, breastfeeding, and attachment (discussed earlier); iatrogenic prematurity; and initiating the cascade of interventions. 不让分娩自然开始的三个主要风险是：对调节妊娠、待产、分娩、母乳喂养和母婴情感纽带的荷尔蒙造成干扰（前文已论述）；医源性早产；引发干预的瀑布效应。

Iatrogenic Prematurity

医源性早产

In an analysis of the dramatic increase in the percentage of late preterm births between 1990 and 2006 in the United States, epidemiologists for the National Center for Health Statistics stated that, “studies suggest that the increasing use of induction of labor and cesarean delivery at 34–36 weeks has influenced the upswing in the late preterm birth rate” (Martin, Kirmeyer, Osterman, & Shepherd, 2009, pp. 5–6). As evidence mounted of the increased risks to babies born late preterm (Tomashek, Shapiro-Mendoza, Davidoff, & Petrini, 2007), the Joint Commission in 2010 asked hospitals to voluntarily report the number of elective births before 39 weeks as one of the perinatal quality measures. The good news is that since 2006, the percentage of late preterm births has slowly decreased each year (see Figure 1). In 2013, the rate was 8% (Hamilton et al., 2014), better than the 2006 rate of 9.15% but still well higher than the 1990 rate of 7.3%. As of January 1, 2014, the Joint Commission perinatal quality measure to report elective births before 39 weeks is required for all hospitals with 1,100 births or more per year. Many hospitals have banned all elective births before 39 weeks.

在一项针对 1990-2006 年期间内美国晚期早产儿比例大幅上升的分析报告里，美国国家健康统计中心的流行病学家指出：“研究表明，引产率和在 34-36 周进行剖宫产率的增加，导致了晚期早产儿比例的大幅上升(Martin, Kirmeyer, Osterman, & Shepherd, 2009, pp. 5–6)。”随着有关晚期早产儿风险的证据日益增加(Tomashek, Shapiro-Mendoza, Davidoff, & Petrini, 2007)，美国医院评审联合委员会在 2010 年要求医院自愿上报在 39 周前择期分娩的分娩量，作为一种围产质量测评的方式。好消息是，自 2006 年以来晚期早产儿的分娩量开始缓慢的逐年递减（见表

一)，在 2013 年减至 8% (Hamilton 等, 2014)，这相对于 2006 年的 9.15% 有了进步，但还是比 1990 年的 7.3% 高很多。自 2014 年 1 月起，美国医院评审联合委员会要求所有年分娩量不少于 1100 例的医院都要上报在 39 周前择期分娩的病例，以此进行围产质量测评。

There are two reasons why babies whose births are scheduled ahead of time may be born too early. One reason is that due dates are not exact. Engle (2006) found that prenatal methods for estimating gestational age have a margin of error of 2 weeks. Current guidelines report a consistent 8% margin of error for establishing gestational age based on ultrasound. This is calculated against the number of days of gestation so that at 8 weeks, the margin of error is 5 days; at 18 weeks, the margin of error is 10 days; and at 28 weeks, the margin of error increases to almost 16 days (Hunter, 2009). If the due date is estimated incorrectly and the birth is scheduled ahead of time, it is possible that the baby will be born late preterm or early term.

择期提前出生的婴儿可能提前太早出生，这一现象有两方面原因。第一个原因是，预产期并不准确。Engle(2006)发现，估算胎龄的方法会产生 2 周左右的误差。现今的指导文件指出，超声检查所估算的胎龄一般总会有 8% 的误差范围。因此，用妊娠天数进行计算，在怀孕 8 周时有 5 天的误差；在 18 周时有 10 天的误差；在 28 周时，误差范围高达将近 16 天(Hunter, 2009)。若预产期的估算有误，分娩择期提前进行，婴儿可能就是晚期早产儿或早期足月产儿。

Many childbearing women in the United States do not understand how important it is for babies to be born full term. In the *Listening to Mothers III* survey, mothers were asked to identify the earliest week when

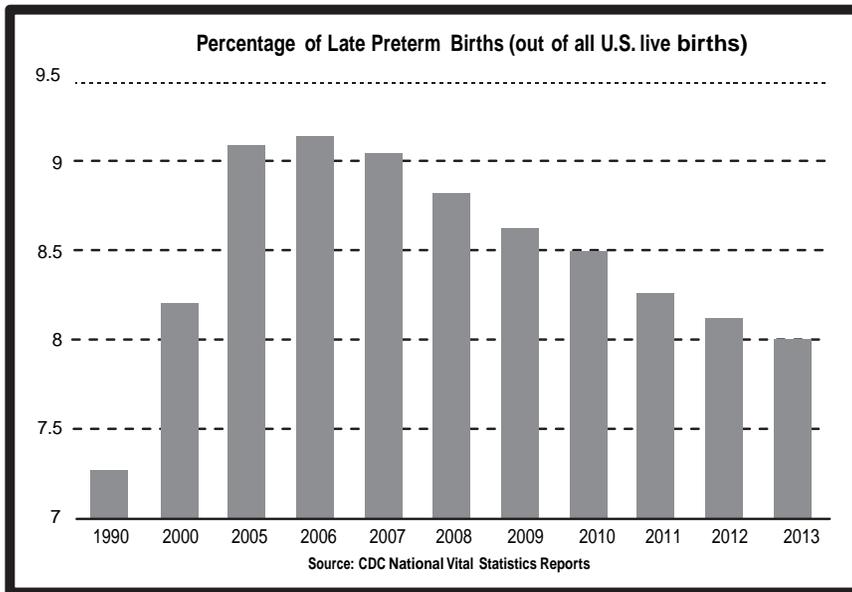


Figure 1. Late preterm birth rates.

表 1. 晚期早产率

it is safe for a baby to be born provided that there are no complications requiring early birth. Only 21% of the mothers chose the correct answer of 39 weeks or later. Thirty-five percent of the women chose 37–38 weeks, whereas 44% chose 34–36 weeks or less.

美国的许多孕产妇并不了解足月分娩的重要性。《倾听母亲 III》这项调查要求妈妈回答：若没患有需要提前分娩的并发症，安全分娩的最早孕周是多少。只有 21%的妈妈选择了不早于 39 周这项正确答案，35%的妈妈选择了 37-38 周，还有 44%的妈妈选择了 34-36 周甚至更早。

Risks for Late Preterm Babies. In a review of the literature published in 2010, researchers found that babies born “late preterm” (between 34 and 37 weeks) are at higher risk for respiratory distress, apnea, temperature instability, hypoglycemia, jaundice, and feeding difficulty (Loftin et al., 2010). A sobering statistic is that a baby born late preterm is three times more likely to die in the first year of life than a baby born full term (Mathews & MacDorman, 2013). In addition to increased morbidity and mortality, there is evidence that babies born late preterm are at increased risk for developmental delays and problems in school. Researchers in Florida looked at long-term effects of late preterm birth and found that even healthy late preterm infants compared with healthy term infants are at greater risk for developmental delay and school-related problems up to the first 5 years of life (Morse, Zheng, Tang, & Roth, 2009).

晚期早产儿的风险。根据 2010 年发表的一篇文献综述，研究者发现晚期早产儿（34-37 周出生）出现呼吸窘迫、呼吸暂停、体温不稳定、低血糖、黄疸和喂食困难的风险更大(Loftin 等, 2010)。一个引人注目的数据是，晚期早产儿在

出生后第一年死亡的概率是足月儿的三倍(Mathews & MacDorman, 2013)。除了发病率和死亡率更高，有证据表明晚期早产儿出现发育迟缓和学习问题的几率更高。佛罗里达的研究者观察了晚期早产对儿童的长期影响，发现与健康的足月儿相比，即使是健康的晚期早产儿在 5 岁之前都更可能出现发育迟缓和 Learning 问题。

Risks for Early-Term Babies. Even babies born just a few weeks early are at higher risk for increased mortality and morbidity. CDC researchers found that babies born early-term (37–38 weeks) have mortality rates that were two-thirds higher than those born 39–41 weeks’ gestation (Mathews & MacDorman, 2013). According to the American College of Obstetricians and Gynecologists (ACOG; 2013b), babies born at 37–38 weeks’ gestation are at increased risk for respiratory distress syndrome, transient tachypnea, ventilator use, pneumonia, respiratory failure, NICU admission, hypoglycemia, 5-min Apgar scores lower than 7, and neonatal mortality.

对早期足月婴儿的风险。即使只是早出生几周，婴儿也会面临更高的发病率和死亡率。疾病预防控制中心的研究者发现，早期足月儿(37–38 周)的死亡率比足月婴儿（39–41 周）高三分之二(Mathews & MacDorman, 2013)。美国妇产科医师学会(ACOG; 2013b)指出，37–38 周的婴儿更可能出现呼吸窘迫综合征、暂时性呼吸局促、需要使用呼吸设备、肺炎、呼吸衰竭，进入重症监护室、低血糖、五分钟阿普加评分小于 7，以及更高的新生儿死亡率。

In addition to estimating the due date incorrectly, the other reason that scheduling the baby’s birth ahead of time may result in a baby who is born “too early” is that there appears to be a wide variation in the length of human gestation. In a prospective cohort study published in *Human Reproduction* in 2013, researchers followed 221 healthy women with

no known fertility problems who discontinued contraception to become pregnant (Jukic, Baird, Weinberg, McConnaughey, & Wilcox, 2013). The women kept diaries and collected daily first morning urine specimens for 6 months or through the eighth week past their last menstrual periods if they conceived. Researchers measured hormone levels in the urine specimens to determine the exact date of ovulation. There were 130 conceptions during the study that resulted in singleton live births. After exclusions, including for preterm births, researchers found that ovulation-based gestation ranged from 247 to 284 days—a span of 37 days or more than 5 weeks. Using the traditional method of dating pregnancies from the last menstrual cycle, the pregnancies lasted from a little more than 37 weeks to a little more than 42 1/2 weeks. Although researchers cautioned that results may not be generalizable to more diverse populations, they recommended that a pregnant woman be given a range of due dates rather than just one specific day.

除了错误估算预产期，择期提前分娩可能导致宝宝过早出生的另一个原因是不同人的妊娠期有很大差异。在一项 2013 年发表在《人类生殖》的前瞻性群组研究中，调查者跟踪了 221 位健康女性，这些女性没有已知的生育问题，她们结束避孕后开始妊娠。这些女性在受孕后记日记，并且连续 6 个月或在末次月经之后连续 8 周每日收集第一次的晨尿标本。研究者通过检测尿液中的荷尔蒙水平来确定排卵日。研究中有 130 例产生单活胎的妊娠。在排除包括早产在内的例外后，研究者

发现，以排卵期作为计算标准的胎龄从 247 到 284 天不等——跨度达 37 天或 5 周还多。与末期月经为基准的传统计算方法比较，研究里的胎龄不仅略微超过 37 周，还有的甚至略微超过 42.5 周。尽管研究者提醒这些结果不能用来概括更大的人口基数，他们还是建议给孕妇一个预产期范围，而不是特定某一天。

When all the baby's organs including the baby's brain, which grows dramatically in the last weeks of pregnancy, and the late-maturing fetal lungs are fully mature and the baby is ready for life outside the uterus, the baby releases a small amount of a protein which initiates labor in the mother.

在妊娠的最后几周，胎儿包括大脑在内的各种器官快速发育，晚熟的肺部也完全成熟，做好了离开母体的准备，这时胎儿会分泌少量的一种蛋白质，引发母体分娩。

Many scientists now believe that it is the baby who initiates the labor process. When all the baby's organs are fully mature and the baby is ready for life outside the uterus, he releases a small amount of a protein that initiates labor in the mother (Condon, Pancharatnam, Faust, & Mendelson, 2004). This does not happen until critical growth and maturation take place in the baby's brain and lungs during the last weeks of pregnancy.

如今很多科学家认为，胎儿才是产程的发动者。当胎儿的器官完全成熟，做好了离开母体的准备，就会少量释放一种蛋白质，该种蛋白质引发母体的分娩(Condon, Pancharatnam, Faust, & Mendelson, 2004)。这个过程在妊娠的最后几周才会发生，此时胎儿的大脑和肺部会迅速发育成熟。

Thus, in most cases, the best way to know that the baby is fully mature is to wait for the baby to initiate the labor process. With a possible natural 5-week variation in the length of normal gestation, some babies may be fully mature at 38 weeks and ready for life outside the womb, whereas others need a few more weeks to become fully mature at 40 or even 42 weeks.

因此在多数情况下，判断胎儿是否成熟的最佳方法就是等他/她发动产程。正常胎龄的时间跨度差异可达五周，因此有的胎儿在 38 周时就充分成熟可以离开子宫，而有的则需要等到 40 甚至 42 周才能充分成熟。

Initiating the Cascade of Interventions ***引发干预的瀑布效应***

There are risks associated with most methods of labor induction, and the induction routinely requires additional medical interventions.

大部分引产措施都有风险，引产本身也需要额外的医疗干预。

Swiss researchers recently compared obstetrical and neonatal outcomes in elective and medically indicated labor inductions done at term (Baud, Rouiller, Hohlfeld, Tolsa, & Vial, 2013). Both groups were also compared to women with spontaneous onset of labor. They found no significant differences in outcomes between the elective and medically indicated induction groups. Compared to women with spontaneous onset of labor, women who were induced at term were at greater risk for cesarean surgery, instrumental birth, postpartum hemorrhage of more than 500 ml, and prolonged maternal hospitalization (more than 6 days). The babies of the mothers who were induced were at greater risk of arterial umbilical cord pH of lower than 7.1, admission to the NICU,

and prolonged NICU hospitalization (more than 7 days).

瑞士研究者最近比较了在足月时择期分娩和按医学指征采取引产的产科和新生儿结果(Baud, Rouiller, Hohlfeld, Tolsa, & Vial, 2013)。这两组都与自然发动分娩的女性做了对比。研究者们发现，择期分娩和按医学指征采取引产的分娩这两组结果没有显著差异。但是与自然发动分娩的女性比较，足月时引产的女性出现剖宫产手术、机械助产、量大于 500ml 的产后出血的几率更高，分娩后住院时间更长（多于 6 天）。引产出生的婴儿脐血 PH 值低于 7.1、进入重症监护室的几率更高，且在重症监护室停留的时间更长（多于 7 天）。

Labor is often induced by administering intravenous (IV) synthetic oxytocin (known as Pitocin in the United States and Canada). IV Pitocin is one of only 10 specific medications named to the "high-alert" list by the Institute for Safe Medication Practices (ISMP; 2012). According to ISMP, high-alert medications are drugs that bear a heightened risk of causing significant patient harm when they are used in error. Indeed, approximately half of all paid obstetric litigation claims involve allegations of oxytocin misuse (Rooks, 2009).

引产通常使用静脉注入的合成催产素（在美国和加拿大称作“匹脱新”）。静脉匹脱新在美国安全用药规范研究院（ISMP）（2012）列出的十大“高警讯药品”列表中榜上有名。美国安全用药规范研究院（ISMP）指出，高警讯药品若施用有误，对患者的风险尤其巨大。实际上，几乎半数的产科诉讼都涉及匹脱新的误用(Rooks, 2009)。

At the 2013 ACOG Annual Clinical Meeting, Dr. Michael Tsimis presented a retrospective analysis of deliveries that were either induced or augmented with Pitocin. The study included more than 3,000 women giving birth to full-term infants from 2009 to 2011 at Beth Israel Hospital in New York City. Researchers found that induction and augmentation with Pitocin was an independent risk factor for full-term babies for unexpected admission to the NICU lasting more than 24 hr. Augmentation with Pitocin also correlated with Apgar scores of lower than 7 at 5 min. A press release from ACOG (2013c) notes that "the analysis suggests that oxytocin use may not be as safe as once thought and that proper indications for its use should be documented for further study" (para. 6).

在美国妇产科医师学会 2013 年年度临床会议上，Michael Tsimis 医生报告了一项用匹脱新引产或催产的回溯性分析。该研究调查了在纽约

市 Beth Israel 医院 2009-2011 年间分娩足月婴儿的 3000 名女性。研究发现，使用匹脱新引产或催产，是足月儿意外入住重症监护室超过 24 小时的独立风险因素。如果五分钟的阿普加评分小于 7，也与匹脱新催产有关。美国妇产科医师学会的一篇新闻稿件(2013c)指出，“研究显示匹脱新的使用并不像之前认为的那样安全，应记录匹脱新的合适用量，用于日后进一步的研究” (para. 6)。

IV fluids are required when labor is induced with IV Pitocin. Because there is an increased risk for uterine tachysystole and neonatal morbidity with the administration of Pitocin, continuous electronic fetal monitoring (EFM) is also required. The combination of IV fluids and continuous EFM limits the ability of the laboring woman to move and change positions and her choice of comfort measures. Pitocin-generated contractions may peak more quickly and last longer than natural contractions, increasing the likelihood that the laboring mother will request epidural analgesia for pain relief. With epidurals, there are increased risks for the need for urinary catheterization and instrumental birth. Epidurals are also associated with the development of maternal fever during labor, which can lead to separation of mother and baby after birth and testing and antibiotic administration for the baby (Greenwell et al., 2012; Leighton & Halpern, 2002; Lieberman & O'Donoghue, 2002; Wassen et al., 2014).

静脉注入匹脱新的时候需要静脉输液。由于匹脱新会增加宫缩过频和新生儿发病的风险，在使用匹脱新时也需要进行胎儿电子监护。静脉输液和胎儿电子监护限制了产妇的活动，阻碍她调整到舒适的姿势。与自然宫缩相比，匹脱新引发的宫缩更快到达峰值且持续时间更长，这就增加了产妇要求硬膜外麻醉来镇痛的可能性。若进行硬膜外麻醉，又可能会需要插导尿管和器械助产。硬膜外麻醉还可能使产妇在产程中发烧，这就可能导致产后母婴分离，并且对婴儿进行检查和使用抗生素 (Greenwell 等, 2012; Leighton & Halpern, 2002; Lieberman & O'Donoghue, 2002; Wassen 等, 2014)。

Although there is some controversy about the association of labor induction and the risk for cesarean surgery, numerous studies have concluded that induction increases the risk of cesarean surgery for first-time mothers (Burgos et al., 2012; Dunne, Da Silva, Schmidt, & Natale, 2009; Ehrenthal, Jiang, & Strobino, 2010; Levine, Hirshberg, & Srinivas, 2013; Rattigan, Atkinson, & Baum, 2013). In their 2009 practice bulletin on induction of labor, ACOG (2009) advises obstetricians that “nulliparous women undergoing induction of labor with

unfavorable cervixes should be counseled about a two-fold increased risk of cesarean delivery” (p. 389).

尽管人们对于引产和剖宫产手术之间的关系还存在争议，但是很多研究显示引产会增加初产妇进行剖宫产手术的几率(Burgos 等, 2012; Dunne, Da Silva, Schmidt, & Natale, 2009; Ehrenthal, Jiang, & Strobino, 2010; Levine, Hirshberg, & Srinivas, 2013; Rattigan, Atkinson, & Baum, 2013)。美国妇产科医师学会在其 2009 年的引产实践公告里建议产科医生“对于那些宫颈条件不佳而需要引产的初产妇，应告知她们做引产会使得剖宫产的概率增加两倍” (p. 389)。

GUIDELINES FROM PROFESSIONAL ORGANIZATIONS

专业机构指南

The Joint Commission, which accredits hospitals in the United States, now requires that all hospitals with more than 1,100 births per year report the number of elective births before 39 weeks, with a goal of eliminating such births.

作为美国的医院认证机构，美国医院评审联合委员会现在要求所有年分娩量不少于 1100 例的医院都要上报在 39 周前择期分娩的病例，目的是废除择期分娩这种做法。

Almost all professional organizations of health-care providers, both in the United States and worldwide, now recommend induction of labor only for medical reasons. In February 2014, the ACOG and the Society of Maternal-Fetal Medicine (SMFM) issued a consensus statement in which they said that inductions should generally only be done only for medical indications before 41 weeks' gestation (ACOG, 2014).

如今美国 and 全球几乎所有的医疗专业机构都建议，只有在有医学指征的情况下进行引产。根据美国妇产科医师学会 (ACOG) 和母胎医学学会 (SMFM) 在 2014 年 2 月发布的一项共识声明，一般在 41 孕周前有医学指征时才可进行引产(美国妇产科医师学会, 2014)。

WHEN SHOULD LABOR BE INDUCED?

什么时候可以引产?

According to the ACOG, the following are examples of medical indications for late preterm or early-term births:

美国妇产科医师学会指出，如下情况是晚期早产和早期足月产的医学指征：

- Preeclampsia, eclampsia, gestational hypertension, or complicated chronic hypertension

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子痫前期、子痫、妊娠高血压或并发的慢性高血压

- Oligohydramnios
羊水过少
- Prior classical cesarean birth or prior myomectomy
之前做过古典式剖宫产术或肌瘤切除术
- Placenta previa or placenta accrete
胎盘前置或粘连
- Multiple gestations
多胎妊娠
- Fetal growth restriction
胎儿生长受限
- Pregestational diabetes with vascular disease
伴随血管疾病的孕前糖尿病
- Pregestational or gestational diabetes—poorly controlled
控制不佳的孕前或妊娠糖尿病
- Placental abruption
胎盘早剥
- Chorioamnionitis
绒毛膜羊膜炎
- Premature rupture of membranes
胎膜早破
- Cholestasis of pregnancy
孕前胆汁阻塞
- Alloimmunization of pregnancy with known or suspected fetal effects
孕期异源免疫，对胎儿有已知或未知的影响
- Fetal congenital malformations
胎儿先天畸形

In the same committee opinion in which ACOG (2013b) published the preceding list, ACOG also states, “In contrast, suspected macrosomia, well-controlled gestational diabetes, and documented pulmonary maturity with no other indication are all examples of conditions that are *not* indications for early-term delivery” (p. 1). Yet, almost 60% of the women in the *Listening to Mothers III* survey believed that macrosomia is an appropriate reason for induction. Childbirth educators hear almost every day that women are scheduling inductions because the baby appears to be “too big.”

在列出了如上清单的同一篇委员会建议里，妇产科医师学会(2013b)也指出“相反，若没有其他指征，在疑似巨大儿、或妊娠糖尿病控制得当、以及检查结果认为肺部完全发育的情况下，无需进行早期足月分娩” (p. 1)。但是《倾听母亲 III》调查里 60% 的女性都认为巨大儿是进行引产的正当理由。女性因胎儿看似“太大”而希望做择期引产，是分娩教育者几乎每天都听到的案例。

The Joint Commission, which accredits hospitals in the United States, now requires that all hospitals with more than 1,100 births per year report the number of elective births before 39 weeks, with a goal of eliminating such birth.

美国的医院认证机构-美国医院评审联合委员会现在要求所有年分娩量不少于 1100 例的医院都要上报在 39 周前择期分娩的病例，目的是废除择期分娩这种做法。

There is controversy about whether oligohydramnios by itself, without other symptoms of fetal compromise, is an appropriate indication for labor induction. Experts do not agree about the best method of measuring amniotic fluid and do not agree about how much amniotic fluid is too little. According to Dr. Mary Munn (2011), who reviewed the literature on oligohydramnios in *Obstetrics and Gynecology Clinics of North America*, “The significance of oligohydramnios is unclear in high-risk and especially low-risk populations, and may lead to interventions that increase morbidity and mortality, especially in the mother” (p. 391).

在胎儿无其他不良指征时，羊水过少本身是否是引产的征兆，人们对此看法不一。检查羊水量的最好方法是什么，羊水量达到什么程度才算过少，专家们都没有达成一致。Dr. Mary Munn (2011) 针对《北美妇产诊所》羊水过少的文献进行研究后，认为“我们还并不清楚羊水过少对高危人群的影响是什么，对低危人群的影响更不清楚，这会导致医疗干预，而干预会增加发病率和死亡率，尤其对于产妇而言。”

When to Induce for Postterm Pregnancies?

何时对过期妊娠进行引产？

Although some healthcare providers recommend routine induction for postterm pregnancies at 41 weeks, the weight of the evidence and professional consensus support routine induction for postterms at 42 weeks. In a 2014 practice bulletin, ACOG (2014a) reviewed the literature and made the following recommendations:

尽管一些医疗机构推荐在 41 周时做常规的过期妊娠引产，但是很多证据和专家共识都提倡在 42 周时做常规的过期妊娠引产。在 2014 年的实践公告里，妇产科医师学会(2014a)根据文献综述做出如下提议：

Induction of labor after 42 0/7 weeks and by 42 6/7 weeks of gestation is recommended, given evidence of an increase in perinatal morbidity and mortality. (Based on good and consistent scientific evidence (Level A) and. . . Induction of labor between 41 0/7 weeks and 42 0/7 weeks of gestation can be considered. (Based on limited or inconsistent scientific evidence (Level B).

根据产后期发病率和死亡率上升的证据 我们推荐在在 42 0/7 周到 42 6/7 周做引产(根据水平的充分且一致的科学研究证据)。可以考虑在 41 0/7 周到 41 6/7 周做引产(根据有限且不一致的科学研究证据 B 水平证据)。

Although the researchers who wrote the 2012 Cochrane Review on induction on postterm pregnancies (Gulmezoglu, Crowther, Middleton, & Heatley, 2012) state that routine induction at 41 weeks is associated with fewer perinatal deaths than expectant management, they acknowledge that the absolute risk of death is small and encourage healthcare providers to allow women to make informed choices.

尽管撰写《过期妊娠引产 2012 年考科蓝综述》(Gulmezoglu, Crowther, Middleton, & Heatley, 2012)的研究者指出与期待性管理相比，在 41 周做常规的过期妊娠引产与降低围产期死亡率有关，但是他们也承认绝对死亡风险很小，并鼓励医疗提供者允许女性做出知情选择。

A policy of labour induction [generally at 41 completed weeks] compared with expectant management

is associated with fewer perinatal deaths and fewer caesarean sections . . . However, the absolute risk of perinatal death is small. Women should be appropriately counselled in order to make an informed choice between scheduled induction for a post-term pregnancy or monitoring without induction (or delayed induction). (p. 2)

与期待性管理相比，引产（通常是满1周）会伴有更小的围产儿死亡率和更小的剖宫产率。但是围产死亡的绝对风险性很小。女性应获得充分信息，在过期妊娠时知情选择择期引产，或是在不引产的情况下监控（或者延迟引产）。

Although the current Cochrane review on induction at term or beyond was published in 2012, the reviewers did not use any studies published later than 2007 in their analysis. In 2009, Swedish researchers also published a systematic review looking at induction of labor versus expectant management for postterm pregnancies (Wennerholm, Hagberg, Brorsson, & Bergh, 2009, pp. 12, 15). Thirteen of the studies included in the Cochrane review were also included in the Swedish review. But Swedish reviewers excluded some additional studies included by Cochrane for predetermined reasons. The Swedish reviewers came to a different conclusion, stating,

尽管考科蓝当前关于足月或过期妊娠引产的综述是发表于2012年，研究者们并没有在他们的分析中参考任何2007年之后发表的研究。瑞典的研究者在2009年也发表了一项系统的综述，对过期妊娠的引产与期待性管理这两种方法进行了比较 (Wennerholm, Hagberg, Brorsson, & Bergh, 2009, pp. 12, 15)。这些瑞典研究者引用了考科蓝综述里的13篇文章，但是出于先前决定的某些原因，排除了考科蓝里的一些附加研究。瑞典研究者们得出了一项不同的结论：

Our results differ from that review [Cochrane] because of different selection criteria for the included trials. . . . These exclusions fulfilled our exclusion criteria determined in advance for this systematic review. In conclusion, the present meta-analysis did not demonstrate that there is a significant difference in perinatal mortality when comparing a strategy of elective induction with one of expectant management. (pp. 12, 15)

根据针对实验的不同选择标准，我们的研究结果与之前的（考科蓝）综述不同。研究中的排除项都符合为系统研究而提前确定的排除标准。总之，目前的元分析显示：择期引产和期待性管理这两种方法对于围产儿死亡率的影响

并无显著差异(pp. 12, 15)。

The authors of the prestigious medical textbook *Williams Obstetrics* agree with the Swedish systematic review rather than the current Cochrane review. They say,

著名医学教科书《威廉姆斯产科学》的作者也同意瑞典系统性研究，而不支持当前的考科蓝综述。他们认为：

. . . we consider 41-week pregnancies without other complications to be normal. Thus, no interventions are practiced solely based on fetal age until 42 completed weeks. (Cunningham et al., 2010, pp. 839–840)

我们认为，达到41周而没有其他并发症的妊娠是正常的。因此，我们不主张只依据胎龄这一因素就实行干预，除非胎龄达到42整周(Cunningham et al., 2010, pp. 839–840)。

The World Association for Perinatal Medicine also agrees with the Swedish systematic review (Wennerholm et al., 2009) in their guidelines for managing postterm pregnancy:

世界围产医学会在其管理过期妊娠的指南里，也同意瑞典的系统性研究(Wennerholm 等, 2009): *There is no conclusive evidence that this policy [routine induction before 42 weeks] improves fetal, maternal, and neonatal outcomes as compared to expectant management. . . it would seem appropri-*

ate to let women make an informed decision about which management they wish to undertake. (Man- druzzato et al., 2010, p. 111)

没有确凿的证据显示这种做法(在42周之前进行常规引产)与期待性管理相比能改善胎儿、产妇和新生儿结果...应该让女性就分娩方式做出知情选择(Man- druzzato 等., 2010, p. 111)。

Goer and Romano (2012) in their excellent analysis of evidence-based maternity care, *Optimal Care in Childbirth*, also say, “Refrain from elective inductions prior to 42 completed weeks” (p. 157).

Goer 和 Romano (2012)在其杰出的循证妇产照护分析《分娩的最佳照护》中也指出“不要在42整周前进行择期引产(p. 157)。”

WHAT IF A WOMAN HAS TO SCHEDULE THE BIRTH FOR MEDICAL REASONS?

如果女性因为医学上的原因而必须进行择期分娩，应怎样做？

There are times when it is better for a baby to be born than to stay inside the uterus. In such cases, allowing the pregnancy to continue for as long as possible will help to increase the levels of the birth hormones and the numbers of receptors. If IV fluids and continuous EFM are required during labor, asking if it is possible to sit or stand next to the bed will give the laboring woman more positions with which to work. If telemetry is available, the laboring woman can walk and change positions, taking the IV pole with her. Having a doula to provide support and encouragement to both the laboring woman and her labor partner will enhance progress and comfort. Finally, placing the baby skin-to-skin on the mother's chest immediately after birth and leaving the baby there until the first feeding is accomplished *even in the event of a cesarean* will increase substantially levels of oxytocin, endorphins, and prolactin. Keeping mother and baby together after the birth with skin-to-skin contact and frequent breastfeeding will help to compensate for the interference from synthetic oxytocin and other medical interventions and increase levels of the critical birth hormones to promote successful breastfeeding and attachment.

有些时候，让宝宝出生比留在子宫内是更好的选择。这种情况下，尽可能持久的妊娠可以帮助提升与分娩有关的荷尔蒙水平以及受体数量。若在待产中需要使用静脉输液和持续的电子胎儿监护，确认下产妇是否可以坐起或者站在床边，这样她可以变换姿势，利于分娩。如果有遥测技术，产妇可以带着静脉输液架走动和变换姿势。导乐对产妇及其陪产伴侣的支持和鼓励也会加速产程，增加分娩过程的舒适性。最后我们倡导，在宝宝出生后（即使是剖腹产），立即将之放在妈妈胸口进行肌肤接触，直到完成第一次母乳喂养。这会极大地提高催产素、内啡肽和泌乳素的水平。出生后的肌肤接触和频繁的母乳喂养可以弥补合成催产素和其他药物干预造成的不利影响，还可以提升与分娩相关的荷尔蒙，以促成成功的母乳喂养和母婴情感纽带。

WHAT CAN CHILDBIRTH EDUCATION DO TO ENCOURAGE WOMEN TO LET LABOR BEGIN ON ITS OWN?

分娩教育者可以采取哪些措施来鼓励女性让分娩自然开始？

Several years ago, physicians and childbirth educators in a large midwestern hospital argued about who was responsible for the recent increase in the number of inductions. The physicians said, “Our patients are demanding to be induced. We are just giving them what they want.” The childbirth educators retorted, “The students in our classes tell us that it is the doctors who are suggesting induction” (G.

Newman, personal communication, September 2010). To help resolve the argument, the doctors helped to fund a randomized controlled trial to look at whether childbirth education could decrease the

number of inductions. First, researchers looked at induction rates for women who attended childbirth classes at the hospital versus women who did not attend class. The induction rates were similar in both groups. Then, the researchers created a special 45-min presentation on the risks of labor induction entitled *Is Labor Induction Right for You?* After several months of offering childbirth education classes with the added presentation, researchers again looked at the induction rates between those who attended classes and those who did not. This time, those who attended classes were significantly less likely to have their labors induced (Simpson, Newman, & Chirino, 2010a, 2010b).

几年前，中西部一家大型医院的医生和分娩教育者展开了一项争论：近期不断攀升的引产数量是谁之过？医生们说：“引产是患者自己要求的，我们只不过是满足她们的需求。”分娩教育者反驳道：“根据课堂上学生的反应，是医生暗示或建议她们做引产 (G. Newman, personal communication, September 2010)。”为平息这场争论，医生们赞助了一项随机对照试验，来研究分娩教育是否可以减少引产数量。研究者首先比较了在医院参加分娩课程和没有参加课程的女性，发现两组在引产率上几乎没有差别。随后，研究者准备了一个特殊的名为《引产是你的正确选择吗？》的45分钟讲座，主题为引产的风险。将该讲座纳入分娩教育课程、并持续提供该课程数月以后，研究者再一次比较了参加课程和没有参加课程的女性。这一次，参加课程的女性中，选择引产的人数大大降低了 (Simpson, Newman, & Chirino, 2010a, 2010b)。

Childbirth educators and doulas who meet with their clients prenatally can encourage students to think of a range for their due dates rather than a specific day. They can share the consumer information from Dr. Buckley's (2014) report, *The Hormonal Physiology of Childbearing*, so that childbearing families understand the importance of having optimal levels of birth hormones “on board” for labor and birth, breastfeeding, and attachment. They can teach about the important growth and development that takes place in the baby's brain and lungs in the last weeks and days of pregnancy. (The March of Dimes poster or card illustrating brain growth in the last weeks of pregnancy is a valuable resource.) They can present information on the risks of not letting labor begin on its own, quoting professional organizations such as ACOG who recommend against elective inductions before 41 weeks' gestation. Most importantly, they can share positive stories and images of pregnancy, labor and

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birth, and breastfeeding so that pregnant women trust that their bodies know the perfect birth date for their baby and have confidence in their own body's innate ability to give birth.

在产前与孕妇见面的分娩教育者和导乐可以鼓励孕妇把预产期设定为一个时间段，而不是某一天。分娩教育者可以把 Dr. Buckley's (2014)的报告《分娩的荷尔蒙生理机制》分享给客户，因此孕妇的家人就会了解，在分娩前产生最佳水平的分娩荷尔蒙对于待产、分娩、母乳喂养和母婴情感纽带有何重大作用。分娩教育者可以告诉客户，在孕期的最后几周和几天，胎儿的大脑和肺部会迅速发育和变化（美国出生缺陷基金会的海报和卡片是解释这一过程的绝佳用具，因为在那些海报和卡片上阐释了孕期最后的变化）。他们还可列举不让分娩自然发动的风险，告诉客户，美国妇产科学会等专业机构都不建议在41周前择期引产。最重要的是，他们可以分享妊娠、待产、分娩和母乳喂养的积极案例，让孕妇相信自己的身体知道何时是宝宝诞生的最佳日期，对自己生育的本能增加自信。

WHAT CAN OTHER BIRTH PROFESSIONALS DO TO ENCOURAGE WOMEN TO LET LABOR BEGIN ON ITS OWN?

其他分娩专业人员可以采取哪些措施来鼓励女性让分娩自然开始？
Health-care providers can abide by current professional guidelines by not suggesting labor induction unless there are medical indications. In the randomized controlled trial cited earlier (Simpson et al., 2010a, 2010b), 75% of the women who completed the survey and had an elective induction indicated that the physician suggested the option, compared to only 25% who indicated that they asked the physician to perform an elective induction.

医疗提供者应遵循当前的从业指南，除非有医学指征，不建议引产。在之前引述的随机对照试验里 (Simpson 等, 2010a, 2010b)，参加调查且择期引产分娩的女性中，75%的人表示是医生建议她们做引产，只有25%的人表示是自己主动要求医生做择期引产的。

Labor nurses can participate on committees that establish guidelines for appropriate labor induction. For those pregnant women who require induction for medical reasons, nurses can support and promote comfort measures that promote labor progress and the flow of birth hormones such as immediate, uninterrupted skin-to-skin contact for the healthy mother and baby until the first feeding is accomplished.

产房护士也可以参加制订引产实践指南的委员会。对于那些由于医学上的原因需要引产的女性，护士可以采取支持和安抚的措施，来加速产程和促进分泌与分娩相关的荷尔蒙。这些措施包括，出生后立即进行的、不受干扰的、健康母婴之间的肌肤接触，直到完成第一次母乳喂养。

WHAT CAN CHILDBEARING FAMILIES DO?

孕产妇的家庭可以做些什么？

The childbearing woman can choose a provider and birth location that supports and promotes allowing labor to begin on its own. She and her support team can create a plan for birth based on the Lamaze International's six healthy birth practices.

孕产妇可选择那些支持和鼓励自然发动分娩的医疗机构和照护人员，她和照护人员可以根据国际拉玛泽的六项健康分娩实践来制定分娩方案。

Current evidence overwhelmingly supports the wisdom of allowing labor to begin on its own for healthy women and their babies. With professional organizations such as ACOG actively promoting vaginal birth and discouraging elective inductions, childbirth educators and others in the birth community have new support to help women to desire, plan for, and achieve letting labor begin on its own.

现有证据强有力地证明，对于健康的母婴，应让分娩自然开始。美国妇产科学会等专业机构都大力倡导阴道顺产，不提倡择期引产。分娩教育者和其他分娩专业人士获得了新的支持，可更好地帮助女性构想、计划和实现自然发动的分娩。

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