

Eating during labor

Labor is hard work requiring vast amounts of energy. The energy used in labor is equivalent to strenuous athletic activity with most women requiring between 700 and 1100 calories/hour¹. However, many hospitals have a policy of no eating, and sometimes no drinking except water or ice chips, during labor. For many women this won't be a problem if they are having strong contractions since they are unlikely to want to eat. If you are having labor started artificially (induction) though, or your labor is progressing slowly this restriction can be unpleasant and may cause problems.

The womb is a muscle and, like any other, needs energy and oxygen to work efficiently. It will contract during labor to help your cervix open and your baby to be born. Without energy it can quickly become exhausted and contractions can slow down or stop. If you are not drinking enough fluid you can also become dehydrated. This causes the levels of potassium in your cells to rise, which can prevent the mechanism for muscle action to work. The consequences of this can be an exhausted mother with contractions that space further apart or may stop altogether. If you were in hospital it might be managed by inserting an epidural so you could rest. You may also have drugs (oxytocic drugs such as pitocin or syntocinon) to make contractions stronger. An alternative approach at this point could be to eat and drink if you want to and relax as much as possible.

Myth: Eating during labor will cause you to vomit because of the fat in the food

Many women vomit during labor – this is usually an indication that they are getting close to the birth. The thought of vomiting while having strong contractions would not appeal to many women! However, being exhausted and hungry, and needing to have drugs to strengthen contractions is not a pleasant alternative. If you choose to have drugs to speed up labor this will mean being confined to the bed with a drip in your hand and continual monitoring of your baby using the electronic belt monitor. Both of these actions will restrict your ability to move around. The drugs used also carry risks to both you and the baby. Researchers at the Boston University School of Nursing carried out a study to see whether or not women, if given the opportunity, would choose to eat and drink during labor. All of the women in the study drank and more than 85% of them chose to eat. In the group of the women who ate, 20% vomited. In the group of women who did not eat 20% vomited².

Myth: If you eat during labor and need a caesarean the food can cause serious complications

You might hear people tell you that eating in labor is dangerous because of the effects of anaesthesia. This is because of the perceived risk of Mendelson's Syndrome – a condition where the stomach contents or stomach acid are aspirated during general anaesthesia. The risks of this occurring are very low and are only an issue for women having general anaesthesia. This policy became standard practice in the 1940's, when women were often sedated during labor and anaesthesia was given through a mask. In their book, 'A Guide to Effective Care in Pregnancy and Childbirth', the authors explain that the major reason for aspiration is poor anaesthetic technique. They conclude that using epidurals for caesarean birth whenever possible and ensuring safe anaesthetic technique could prevent most cases³.

There is little research that considers the full effects of fasting in labor. Most anaesthetists will acknowledge that the risk of aspiration is very small. Researchers Sleutel & Golden reviewed articles and historical text and concluded that the probable risk of maternal death caused by aspiration was approximately 7 in 10 million births⁴.

Myth: Fasting reduces the acidity of your stomach

Fasting does not guarantee a lower acidity of stomach contents. It may, however, result in dehydration and ketosis. Ketosis is an abnormal condition where there is an excess of ketones produced in the blood. When ketones build up faster than they can be used they are excreted in urine. One of the consequences of ketosis is a decrease of pH levels in the blood and an increase in breathing rate. Untreated ketosis can be a serious condition. One of the methods of preventing ketosis and dehydration is to give a woman in labor an intravenous drip of glucose, fluid and electrolytes. Besides the obvious disadvantage of this approach in restricting your movement, there is also a risk of it leading to an overload of fluid. This can develop into a serious condition for both the mother and the baby. An alternative would be for the mother to eat and drink when she feels hungry or thirsty.

Ironically, methods used to reduce the risk of aspiration syndrome may actually increase them. Glucose given through a drip can prevent the stomach from emptying. Intravenous fluids can also upset our fluid balance levels. There is evidence that giving glucose intravenously during labor can result in several problems. Nancy Hazle of St Louis University reported that intravenous fluids caused hyperglycaemia (excessive sugars in the blood) in both mother and baby. They also can lead to hypernatraemia (high blood concentrations of sodium) and jaundice⁵.

Myth: Fasting during labor results in you having an empty stomach

Research has repeatedly shown that despite the time elapsed since the last meal the stomach is never completely empty. Researchers from the Department of Anaesthesia at Oregon Health Sciences University conducted a study examining stomach contents of laboring women. They used ultrasound to determine whether or not fasting reduced the amount of

food in the stomach. Their results showed that sixteen of the women who had not eaten for 8-24 hours still had food detected in their stomach. In addition, nearly two thirds of those in active labor had solid food present in the stomach. This finding was regardless of the interval between when they last ate and when the ultrasound scans were performed⁶.

Conclusion

There does not appear to be evidence that fasting in labor offers any clear benefit to the mother or the baby experiencing a normal labor. Fasting is recommended due to the concern over aspiration of stomach contents. However, this is only a concern when the woman is having a general anaesthetic and the risk is considered very low if safe anaesthetic techniques are used⁴. Moreover, fasting does not reduce stomach contents and does not reduce stomach acidity.

Replacing food and drink with an intravenous glucose drip may result in blood sugar imbalances in both the mother and the baby and a higher risk of jaundice for the newborn. Many practitioners now believe that until there is sufficient evidence to show that fasting offers benefits to the mother and baby women should be able to eat and drink if they feel the need. Researchers at the Angelo State University in Texas summarise this by stating: 'Fasting during labor is a tradition that continues with no evidence of improved outcomes for mother or newborn'⁴.

References

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