

SOUTH EASTERN TRUST

Title:	Guideline Oral intake for women in labour		
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Ownership:	Women and Child Health Directorate		
Approval by:	Consultants and Midwifery Managers within SE Trust	Approval date:	
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Version No.	3	Supersedes	V1-2004 V2-2005
Links to other policies	W&ACH Maternity GUI (35) 2011		

1.0 INTRODUCTION

1.1 Background

- 1.1.1** Managed oral intake in Labour Ward aims to provide adequate hydration and nutrition, while reducing the risk of maternal mortality and morbidity associated with aspiration of acid stomach contents.
- 1.1.2** Current reviews in the anaesthetic literature would suggest that the incidence of maternal deaths and injury relating to aspiration has declined. However, aspiration remains an important potential cause of maternal morbidity and mortality.
- 1.1.3** Risk factors for aspiration include the presence of food, the reduction in gastric emptying associated with labour and opioid analgesia, and reduced level or loss of consciousness, whether that be due to sedation from opioids, eclamptic seizure or general anaesthesia.
- 1.1.4** It should be remembered that all women are at some risk of requiring general anaesthesia in labour.

1.2 Purpose

- 1.2.1** Maintenance of low gastric volumes during labour to help reduce the risk of aspiration pneumonitis in the event of anaesthesia being required.
- 1.2.2** Minimising maternal ketosis and facilitating maternal comfort by allowing limited, safe oral fluid intake where appropriate.

2.0 DEFINITIONS/SCOPE

- 2.1** This guideline refers specifically to women on labour ward in the Ulster Hospital and also to those in labour in the Midwifery Led Units, and is to be used as guidance for appropriate oral intake, in conjunction with clinical assessment.
- 2.2** Women at an increased risk of requiring anaesthesia should be assessed by an anaesthetist and an individual decision made about appropriate fasting / oral intake.

3.0 ROLES/RESPONSIBILITIES

- 3.1** This guideline provides information for health care professionals involved in the care of women on labour ward in the Ulster Hospital and also to those in labour in the Midwifery Led Units.
- 3.2** Professional judgement, and appropriate clinical review, are central to the correct application of this guidance.

4. KEY PRINCIPLES

Statement

4.1 Principles

- 4.1** Women who are not in labour, and are unlikely to require surgical or anaesthetic procedure, may eat a **full** diet.
- 4.2** Women who are not in labour but have identified risk factors making it likely that they may require surgical or anaesthetic intervention should be referred for an anaesthetic consultation.
- 4.3** All women in established labour whether spontaneous or induced should restrict oral intake to water and **still** isotonic calorific drinks (e.g. Lucozade sport 100-200 mls/hr), in order to maintain low gastric volumes. Carbonated “fizzy” drinks should not be taken. Oral ranitidine should continue to be administered 6 hourly in labour ward. Oral ranitidine is not routinely administered to low risk women who are labouring in a Midwifery Led Unit unless there is an indication to do so e.g. after administration of opioids.
- 4.4** Women having epidural or spinal anaesthesia in labour should have the same oral intake restriction as those using other or no analgesia.
- 4.5** Women in labour should be regularly assessed to determine hydration status, especially where loss of fluids due to vomiting is a problem. Crystalloid intravenous fluids (e.g. Hartmann’s solution, 0.9% saline) may be administered to replace fluid and prevent dehydration. Anti-emetics may be prescribed if required.

- 4.6 Fasting status in any patient should be subject to regular review. Labour is a dynamic situation and the likelihood of requiring anaesthetic intervention may alter during its course.

5.0 **IMPLEMENTATION**

5.1 Dissemination

This guidance is relevant to all midwifery; nursing and medical staff (obstetric and anaesthetic) involved in the care of women on labour ward and in Midwifery led Units.

6.0 **MONITORING**

This guideline may be audited throughout the period that it is in use

7.0 **EVIDENCE BASE / REFERENCES**

- 7.1 Concerns surrounding patient comfort and energy supplementation were addressed in a study by Scrutton *et al.* In a randomised controlled trial 43 women were randomised to receive water only in labour, and 45 were offered a light diet throughout labour. All were in uncomplicated labour at 37 plus weeks' gestation.
- 7.2 The findings were that while there was no difference in their baseline Metabolic indices, the starved group showed higher B hydroxybutyrate, non esterified fatty acid levels and lower glucose levels.
- 7.3 Those women offered a light diet in labour reduced their food consumption as labour progressed. However the cross sectional area of the gastric antrum at delivery was greater than the starved group suggesting that much of this food remained unabsorbed.
- 7.4 There were no differences in maternal or fetal outcomes.
- 7.5 In fed patients the mean oral intake in labour was found to be about 80 cal/ hr and appeared to be sufficient to prevent ketosis and low blood sugar levels.
- 7.6 The author suggested that the use of isotonic calorific drinks that are rapidly emptied from the stomach may be ideal in providing an alternative nutritional strategy in labour.
- 7.7 In a more recent study the same author compared an isotonic drinks group with a water only group. Isotonic drinks administered in labour appear to reduce the incidence of maternal ketosis without increasing gastric volumes. The incidence of vomiting was similar in both groups.

- 7.8 The calorific load of proprietary sports drinks is approximately 25 calories per 100mls and therefore an intake of about 100mls to 200mls/hour may be sufficient to prevent ketosis and falls in blood glucose.
- 7.9 In theory the provision of isotonic nutritious drinks that are rapidly cleared from the stomach may provide sufficient fluid for labour, provide ready glucose for energy expenditure and maintain patient comfort.
- 7.10 The ingestion of solid food in labour increases gastric volumes in labouring women.
- 7.11 Supplementary nutrition can be easily administered to patients as nutritious glucose containing drinks during labour without the risk of increased gastric volumes.

References:

Hawkins J *et al* (Feb 1997), Anaesthesia related deaths during obstetric delivery in the United States 1979-1990. *Anaesthesiology*86: 277-284;

Leturquet *al*, *Fetal glucose utilisation in response to maternal starvation and acute hypertonemia*. American Physiology Society

Scrutton M.J., Eating in Labour A randomised controlled trial assessing the risks and benefits, *Anaesthesia* 1999 54,329-334

Kubli M, Scrutton, M O'Sullivan, Seed P (May 2000), Evaluation of 'sports drinks' in labour. Abstracts of free papers presented to the Obstetric Anaesthetists Association Winchester UK, 11-12 May 2000.

Chadwick H.S. (1996), *An analysis of obstetric anaesthesia cases from the American Society of Anaesthesiologists*, closed claims project database. *IJOA* 1996; 5:258-263.

O'Sullivan *et al*, *Non invasive measurement of gastric emptying in obstetric patients*. *Anesth Anal* 1987; 66: 505-11

Department of Health (1993), Changing *Childbirth* London HMSO

8.0 CONSULTATION PROCESS

Consultants, midwifery managers, anaesthetists, Head of Midwifery, Lead Midwife and Specialist midwives within the South Eastern Trust were consulted during the updating of this guideline.

9.0 APPENDICES/ATTACHMENTS

To be included as required.

10.0 EQUALITY STATEMENT

In line with duties under the equality legislation (Section 75 of the Northern Ireland Act 1998), Targeting Social Need Initiative, Disability discrimination and the Human Rights Act 1998, an initial screening exercise to ascertain if this policy should be subject to a full impact assessment has been carried out.

The outcome of the Equality screening for this policy is:

No impact.

SIGNATORIES

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