



# Pre-Operative Fasting Guidelines

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## Executive Summary

The purpose of this policy is to inform health and social care professionals about the local procedural arrangements for fasting patients for elective surgical and interventional procedures.

This policy applies to all health and social care staff in the care treatment and support of people over the age of 18.

The basic principles relating to the fasting are described in this document.

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## 1. Introduction

Ever since the formative work of Curtis Mendelson<sup>1</sup> in peripartum women, the need for preoperative fasting has been propagated to help to minimize the risk of pulmonary aspiration of gastric content during anaesthesia.

Pulmonary aspiration of gastric contents during anaesthesia is not a common event. In the UK national survey of 2.9 million patients in 2008, aspiration occurred in only 23 patients, mostly with known risk factors, yielding an incidence of less than 1 per 100 000.<sup>2</sup>

The outcomes range from asymptomatic (the majority) to prolonged hospital admission or even death. The outcome of death occurs predominantly in severely ill adults and is caused by acute asphyxia attributable to complete airway obstruction with solids and particulate matter.<sup>3, 4</sup>

Fasting guidelines and recommendations have been produced as a consequence of this early work, with the majority advocating a 6h fast for solids, 4h for breast milk, and 2h for clear fluids for elective surgery in both adults and children.

Recent work has challenged the need for a strict 2 h clear fluid fast in children.<sup>5</sup> The introduction of this 6–4–0 rule for paediatric elective anaesthesia has demonstrated no increase in the aspiration rate compared with the traditional fasting times in >10 000 patients. On the contrary, the shortened fasting times improved the perioperative experience for parents and children.

There has been a recent report from UK of more than 5000 patients with no restrictions on pre-operative intake of clear fluid until transfer to the operating theatre. They observed a 27% reduction in postoperative nausea with this approach when compared with a comparable number of historical control patients not allowed to drink within 2 h of the start of surgery. Importantly, no cases of clinical symptoms from aspiration of fluids into airways were observed in any of these patients.<sup>6</sup>

There is an emerging opinion that as the risk and consequences for fluid aspiration are very low, and the benefits of a more liberal approach might outweigh the strict adherence to the 6–4–2 rule.<sup>7</sup>

The effects on patient experience of excess fasting include:

- Unpleasant discomfort
- Reduced patient experience
- Anxiety
- Drowsiness
- Dizziness
- Headaches
- Confusion

Adverse physiological complications can also occur including:

- PONV
- Cellular dehydration
- Insulin resistance
- Post op hyperglycaemia

- Muscle wasting
- Weakened immune response
- Electrolyte abnormalities

## 2. Scope

This policy principally applies to patients for planned elective procedures which may necessitate general anaesthesia.

Emergency patients should also be managed in accordance with safe minimal starving policy as far as possible. It is understood, however, that the treatment urgency and starvation needs of the patient will be considered on an individual basis.

## 3. Definitions

- Fasting – withholding intake of food and fluids.
- Sips of water – 30 mls of water at a time.

## 4. Duties

- To promote and ensure patient safety.
- Maximise the hydration of patients.
- Ensure best possible patient comfort and experience.

## 5. Process

### 5.1. All patients:

The day before surgery, patients can have light supper around midnight if awake. They should **NOT** have any food or drinks with milk or carbonated fizzy drinks after midnight.

Patients should be encouraged to have sips of water after midnight till they are ready to come to operating theatre for their surgery (Sip Till We Send).

Patients with non-insulin diabetes should have their blood sugar checked. For administration of specific oral anti-diabetic medications, please refer to Perioperative Drug Administration Guidelines. If BM <5 or >12 consult doctor for management. They should be first on the list.

For patients with Insulin dependent diabetes, refer to GKI Support Guidelines.

For medications on the day of surgery, refer to Perioperative Medicines Guidelines.

Cancelled patients will be recognized and alerted as early as possible so they can be offered food and drinks.

For patients on enteral feeding from Critical Care Unit, refer to Guidelines for Enteral Nutritional Support and Diabetes (NG feeding, gastrostomy feeding).

### 5.2. Dissemination of information to patients by :

Patient education in pre-op clinic.

Reinforcement of instructions by admitting nurse on ward.

Clear instructions in the letter sent out to patients for Same Day Admission.

## 6. Training

- Intranet based policy.
- Senior nurse training at trust level, empowering dissemination at ward level.
- Surgical, anaesthetic and theatre staff training.
- Patient Information leaflet.

## 7. Monitoring

Audit of the effect of changes on patient safety, comfort and experience.

## 8. References

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