Appendix 1 - Fasting guideline

1. Purpose

The purpose of this appendix is to guide management of 'fasting' in patients of all ages undergoing anaesthesia and is intended to include general anaesthesia, major regional anaesthesia[2], or any level of sedation exceeding minimal[3].

2. Scope

This fasting guideline is intended to apply to anaesthesia providers. It should also serve as guidance to non-anaesthetists who manage sedation.

It is not intended to apply to the management of minimal sedation as defined in *PG09(G) Sedation*.

3. Background

The aim of restricting solids and liquids prior to a procedure under general anaesthesia or greater than minimal sedation, is to minimise the risk of aspiration from the upper gastro-intestinal tract, when airway protective reflexes are known to be reduced or obtunded.

The duration of fasting should be sufficient to minimise gastric volume and reduce the potential for significant regurgitation and aspiration.

However, prolonged deprivation of liquids for more than 2 hours in adults and more than 1 hour in children may have deleterious metabolic effects as well as impact on a patient's sense of well-being. Continued consumption of **clear** liquids, especially those containing carbohydrates, may improve gastric emptying as well as mitigate the metabolic and psychological impact of fasting.

Fasting instructions should, therefore, consider the expected timing of anaesthesia.

'Clear liquids' include water, carbohydrate-rich clear liquids, pulp-free clear fruit juice, clear cordial, green tea, black tea and black coffee. The carbohydrates may be simple or complex.

It excludes fluids containing milk, particulate matter, soluble fibre or jelly.

4. Recommendations

4.1 For persons older than 16 years of age.

4.1.1 **Solid food** - of a low calorific nature (light meal) may be allowed up to 6 hours prior to anaesthesia.

4.1.2 **Clear liquids** - For elective and selected emergency procedures, clear liquids should be encouraged up to 2 hours prior to anaesthesia. While "SipTilSend"[4] is an emerging practice gaining increasing acceptance, a safe, acceptable rate of drinking clear liquids in elective situations is a maximum of 200ml/hr with a maximum volume of 400ml clear liquid 2 hours prior to the procedure. This does not appear to be associated with an increase in risk of regurgitation or aspiration.

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[2] Refer to *PG03(A) Guideline for the management of major regional analgesia 2014*
[3] Refer to *PG09(G) Guideline on procedural sedation 2022*
[4] Refer to the accompanying *PG07(A) Background Paper* item 2.2.5

4.1.3 **Carbohydrate-containing clear liquids** are becoming increasingly available for enhanced recovery after surgery pathways. Although there are more benefits than harm reported, they may not be recommended in all situations.

4.1.4 **Sips of liquid and medication administration** - Prescribed medications may be taken, with a sip (30ml for an adult) of water up to 20 minutes prior to anaesthesia. The 30 ml includes the volume required for any other liquid medications such as sodium citrate.

4.1.5 **Enteral feeds** should generally be continued in intubated intensive care patients until procedural transfer unless airway, thoracic or abdominal procedures are to be performed in which case they should be ceased for 6 hours.

4.1.6 **Medications that decrease gastric secretion and/or acidity,** and/or those that increases gastric emptying, should be considered for patients with an increased risk of gastric regurgitation.

4.1.7 **Local practices** (education, audit, quality improvement, communication protocols) are best developed to encourage these times to be followed, to avoid prolonged deprivation of oral liquids, even if intravenous fluids have been commenced. Currently this includes multi-centre initiatives where small volumes of water are permitted to be sipped until as late as possible (SipTilSend) in an attempt to comply with and implement the 2-hour goal.

4.2 For children up to 16 years of age

4.2.1 Prolonged fasting times should be avoided, and healthy children encouraged to drink clear liquids (water, pulp free juice, carbohydrate drinks) of $3ml.Kg^{-1}.hr^{-1}$ up to 1 hour before anaesthesia.

Solid food is allowed up to 6 hours prior to anaesthesia.

4.2.2 For infants under 6 months of age:
- breast milk feeding should be encouraged until 3 hours
- formula (non human) milk may be encouraged until 4 hours *

4.2.3 For children older than 6 months of age:
- breast milk feeding should be encouraged until 4 hours
- formula should be regarded as similar to solids with a fasting time of 6 hours *

* formula feeds vary in their fat and protein content resulting in different speeds of gastric emptying.

4.2.4 An acceptable rate of drinking clear liquids in children is a maximum of $3ml.Kg^{-1}.hr^{-1}$.

This fasting guideline may not apply to individual patients deemed at increased risk of perioperative regurgitation or vomiting.[(5)]

Where reducing risks for individual patients requires deviating from these recommendations, doctors should exercise their discretion over fasting times versus the risk of dehydration / metabolic effects or of regurgitation. Similarly, adjustment of anaesthesia and airway management techniques may need to be considered to further mitigate the risk of regurgitation.[5]

Chewing gum and boiled sweets should be discarded prior to inducing anaesthesia to avoid them being inhaled as a foreign body but do not constitute an indication for delaying any procedure unless they have been ingested.

Gastric ultrasound may be considered as a tool to ascertain volume and consistency of gastric contents, to guide further management.

[(5)] Refer to *PG07(A) Background Paper* for discussions around patient, procedural, pathological and pharmacological factors suggesting actual and potential variations, cautions and exclusions.