Royal Hospital for Women (RHW)
BUSINESS RULE
COVER SHEET

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FORMER REFERENCE(S)	List documents that are replaced by this one including if the title has changed from previous versions Fasting Times For Elective Surgical Cases List any relevant higher-level NSW Health, SESLHD and RHW policies or procedures which are referenced. SELSHDGL/062 Pre-Operative/Procedural Fasting for Patients Undergoing Anaesthesia[1]
EXECUTIVE SPONSOR	RHW Director of Anaesthesia, Professor Leonie Watterson
AUTHOR	Wendy Hudson
SUMMARY	This Business Rule documents the process for the provision of Preoperative Oral Fluids prior to anaesthesia, ie 'Sip til Send'. It incorporates the best practice regarding fasting requirements of POWH/SSEH/RHW patients undergoing procedures that require procedural sedation or general anaesthesia
Key Words	Fasting, NBM, Sip til Send, Preoperative Oral Fluids

Pre-Operative/Procedural Fasting for Patients Undergoing Anaesthesia & Procedural Sedation

RHW CLIN124

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This Clinical Business Rule (CBR) is developed to guide safe clinical practice at the Royal Hospital for Women (RHW). Individual patient circumstances may mean that practice diverges from this Clinical Business Rule. Using this document outside RHW or its reproduction in whole or part, is subject to acknowledgement that it is the property of RHW and is valid and applicable for use at the time of publication. RHW is not responsible for consequences that may develop from the use of this document outside RHW.

Within this document we will use the term woman, this is not to exclude those who give birth and do not identify as female. It is crucial to use the preferred language and terminology as described and guided by each individual person when providing care.

1 BACKGROUND

This business rule will provide clinicians across RHW with guidance regarding fasting requirements of patients undergoing procedures that require procedural sedation or general anaesthesia, whether in operating theatres or other areas of the hospital. This includes both emergency and elective patients.

RHW are implementing a process called “Sip til Send”. This business rule should be read in conjunction with the SESLHD Guideline, SELSHDGL/062 - Pre-Operative/Procedural Fasting for Patients Undergoing Anaesthesia[1]

Individual patient circumstances and requirements should be considered by anaesthetic and procedural teams with pre-operative plans being made in conjunction with patients, families and carers.

This guideline supports the Agency for Clinical Innovations ‘Key Principles- Preoperative fasting in NSW public hospitals.

This guideline is **not intended** for use in non-procedural patients.

This guideline is **not intended** for use in those who are nil-by-mouth, requiring thickened fluids or are fluid restricted for other medical or surgical reasons. Seek advice from the treating team.

For the pre-operative fasting management of patients with Diabetes Mellitus (DM), please refer to:

- SESLHDGL/116 - Management of Pre-existing Diabetes Mellitus in Pregnancy[4]
- RHW CBR - Insulin Dextrose Infusion for Pregnancy[5]
- POWH/SSEH CLIN002 - Hypoglycaemia Management for Patients with Diabetes[6]
- POWH/SSEH Business Rule, POWH/SSEH CLIN032 Surgery and Medical Procedures for Patients with Diabetes Mellitus

- POWH Business Rule, POWH CLIN185 Insulin Infusion – For: Fasting for Surgery / treatment of Non-Diabetic Ketoacidosis (Non-DKA) / treatment of Non-Hyperglycaemic Hyperosmolar State (Non-HHS)
- POWH Business Rule, POWH CLIN178 Insulin pump: Inpatient self-administration of insulin using a continuous subcutaneous insulin infusion pump

2 RESPONSIBILITIES

Anaesthetists

- Pre-operative assessment of patient's 'fitness' for surgery
- Provision of clear and evidence-based instructions of fasting times to patients and nursing staff.
- Prescription of insulin regimens for patients with diabetes, in consultation with endocrine, where appropriate.
- Prescription of intravenous glucose infusions where appropriate
- Escalation of clinical deterioration of fasting patients refer to SESLHDPR/697-Management of the Deteriorating ADULT inpatient[2] or SESLHDPR/705 - Management of the deteriorating MATERNITY woman[3]
- Informing nursing staff if a patient is not appropriate for "Sip Til Send" and to document the alternative fasting plan.
- Documenting medication plan on NIMC/eMeds and progress notes.

Surgeons

- Documenting clear and evidence-based instructions for provision of fasting times to patients and nursing staff.
- Alerting anaesthetic and nursing staff of alterations in list order to provide patients with appropriate nourishment.

Registered and Enrolled Nurses

- Following instructions provided in this guideline for pre-operative patients.
- Communicating with anaesthetists and surgeons in regard to fasting instructions for specific patients.
- Escalation of clinical deterioration of fasting patients refer to: SESLHDPR/697-Management of the Deteriorating ADULT inpatient[2] or SESLHDPR/705 - Management of the deteriorating MATERNITY woman[3]
- Regular BGL monitoring of fasting patients with diabetes.
- Provision of clinical handover to the procedural unit or operating theatre nurse including fasting time and BGL monitoring.
- Ordering and providing appropriate fluids for pre-operative patients (as per local procedures) such as the Pre-Operative Fluid Diet.

Training Requirements

Local training for staff working in surgical and procedural areas.

3 Pre-Procedure Fasting

Pre-operative and pre-procedural fasting is necessary for all patients undergoing procedural sedation or general anaesthesia to protect the patient from possible regurgitation and aspiration of gastric contents[14,15].

It is important that patients are not fasted for extended lengths of time before a surgical procedure as this will increase the: surgical stress response, catabolic state associated with starvation, insulin resistance, risk of hypoglycaemia in patients with diabetes and general discomfort. Patients who are fasted from preoperative oral fluids for extended periods also become dehydrated, making it difficult to gain IV access, increase the intraoperative fluid requirements and increase the risk of sodium overload. It also increases pre-operative thirst, hunger, anxiety and nausea.

Clinical patient outcomes are improved when preoperative clear fluids are continued until the patient is sent for theatre (compared to prolonged fasting) including (ACI 2016):

Replacing/maintaining the body's water balance

Easier peripheral cannulation

Improved post-operative nausea and vomiting

Improved patient comfort

Enhanced post-operative recovery

Fasting audits have repeatedly shown that patients fast much longer than the recommended 2 hours. Recent evidence has questioned the need for a 2 hour fast, and several institutions have adopted policies that allow clear fluids until the patient is sent for [16,17,18]. Studies have also shown the multifactorial nature of aspiration of gastric contents and the rarity of events that lead to morbidity or death[19].

A pre-operative fluid diet does not provide adequate nutrients and should not be used as the sole source of nutritional support for longer than one (1) day.

3.1 Liquids / 'Sip Til Send'

Adult patients should be encouraged to sip Preoperative Oral Fluids at a rate of 200mLs per hour up until the time they are sent for theatre. Children should be encouraged to sip

preoperative oral fluids at a rate of 3mLs per kg per hour up until the time they are sent for theatre. This is otherwise known as “Sip Til Send”.

3.2 Exclusions- liaise with the treating team for requirements

- If there is a surgical or medical order for Nil By Mouth (NBM) or fluid restricted for a reason other than fasting for anaesthesia
- If the procedural anaesthetist documents otherwise in the eMR.
- If the patient does not want to drink
- Some patients having specific endoscopic procedures will need to avoid fluids that are red, blue or purple coloured.
- Patients with diabetes may require diet versions of preoperative diet fluids. If in doubt seek guidance based on blood sugar levels.

Preoperative Oral Fluids covered in this guideline **excludes** all liquids containing fat, protein and insoluble fibre. **Note:** Clear soups, thickened fluids and jelly that are included in a “clear fluid diet” are **NOT** suitable Preoperative Oral Fluids. See Table 1: Comparison of fluid diet specifications from ACI Frequently Asked Questions Preoperative Oral Fluid Diets Jan 2016[13].

3.3 Diet – Pre-operative Oral table

Allowed	*Not Allowed*
Water Ice-cubes/chips Apple juice (clear, pulp free) Black tea or coffee Commercial rehydration or electrolyte drinks such as *Dex™, Hydralyte™ , Gastrolyte™ , SOS™, Poly-Joule™ or Carb Plus™* “Sports drinks” such as *Gatorade™ and Powerade™* Clear carbonated drinks (eg lemonade) Cordial Ice blocks/icypoles provided it is a clear fluid when in liquid form (ie you can see through it when held up to light) Sugar or artificial sweetener added to drink	Anything with protein, fat or fibre Thickened fluids Milk (cow, goat, almond, oat etc) Anything dairy – eg skim milk, formula, yoghurt, Yakult™, watered-down milk, vanilla flavoured milks, ice-cream Lollies and sweets, even if only “sucking” Starch or cornstarch Bone broth, beef-extract or beef-tea Jelly (contains gelatin – a protein) Any protein drinks Anything with fruit pulp or vegetable fibres – eg “real” or freshly pressed/crushed apple, coconut, pineapple or other fruit juices Any fluid that is “cloudy” Orange juice Coca cola Anything given to “help get medications down” – eg Nutella, peanut butter, bread, yoghurt – no matter how small

	Alcohol Whilst chewing gum is technically allowed up until theatre, it should not be encouraged due to the risk of it becoming an inhaled foreign body if the patient forgets or chooses not to disclose it to the anaesthetist.
NB: Patients with diabetes should consider their BGL when choosing which fluid to sip on.	
NO FOOD PRODUCTS IN THE SIX (6) HOURS PRIOR TO INDUCTION OF ANAESTHESIA	

Adapted from NSW Agency for Clinical innovation, Key Principles: Preoperative Fasting in NSW Public Hospitals[13]

3.4 Solids

All patients undergoing procedural sedation or general anaesthesia should fast from solids for **no less than six (6) hours before the induction of anaesthesia.**

3.5 Pre-Procedural Medication Administration

Medications should not be withheld purely for fasting purposes. Good pre-operative pain management is essential for patient wellbeing. Check the anaesthetist's and surgeon's instruction for individual medication plans.

Prescribed morning medications (including analgesia) should be administered with a sip of water at 0600 hrs unless otherwise stated (check anaesthetist's and surgeon's instructions).

Medications to be withheld/suspended should be clearly annotated on the medication chart (NIMC/eMeds).

Exceptions:

This list is NOT exhaustive:
Intention to continue these medications should be confirmed with treating team and/or anaesthetist.

*

Contact the anaesthetist or medical team for clarification if required.

*

Anticoagulants
Antiplatelet Medications
Hypoglycaemic Agents
Lithium
Monoamine Oxidase Inhibitors
NSAIDs
Potassium Sparing Diuretics
Hormone Replacement Therapy
Oral Contraceptives

*

Patients undergoing vascular, neurosurgical or cardiac surgery may require the continuation of anticoagulation/antiplatelet medication. Seek clarification from Surgical/Anaesthetic Medical Officer.

*

Patients with cardiac stents should only have antiplatelet medications withheld with approval from a cardiologist.

All medications should be managed following:

- SESLHDPR/267 Medication Management Roles & Responsibilities of Clinicians[7]
- SELSHDGL/062 Pre-Operative/Procedural Fasting for Patients Undergoing Anaesthesia[1]

3.6 Enteral Feeding

Patients with enteral tube feeding can continue feeding **until six (6) hours pre-procedure**; Suitable adult patients should have Preoperative Oral Fluids administered via tube at a rate up to 200mL per hour **up until the time they are sent for theatre.** Children should have preoperative oral fluids administered via tube at a rate up to 3mLs per kg per hour **up until the time they are sent for theatre**. Patients should then be nil-by-tube until the end of the procedure.

4 DEFINITIONS

BGL	Blood Glucose Level
BTF	Between the Flags (eMR2)
DM	Diabetes Mellitus
DPP4s	Dipeptidyl peptidase-4
GLP1 agonists	Glucagon-like peptide-1 agonists
HbA1C	Haemoglobin A1c
IV	Intravenous
NSAID	Non-steroidal anti-inflammatory drugs
Preoperative Oral Fluids Diet	A diet used for preparation of patients for procedures involving anaesthesia or sedation. Only fluids that are rapidly cleared from the stomach.
SC	Subcutaneous
SGLT2	Sodium-glucose co-transporter-2
Sip til Send	A term used to describe the continuation of Preoperative Oral Fluids Diet up until the time patients are sent to theatre.

5 DOCUMENTATION

Pre and Post Procedural Handover Form

- Last food time
- Last drink time
- Last BGL pre-procedure result.

Intravenous Fluid Therapy

- Intravenous Fluid Order - eMEDS.

BGL

- BTF (eMR2)/SAGO/iView
- Approved Insulin Infusion forms
- Approved Subcutaneous Insulin Management forms
- Pre and Post Procedural Handover form.

Subcutaneous Insulin Prescription

- Approved Subcutaneous Insulin Management forms
- Approved electronic medication management systems (e.g. eMEDs, eRIC).

Intravenous Insulin Infusion

- Approved Insulin Infusion forms
- Approved electronic medication management systems (e.g. eRIC).

Progress Notes

- Specific fasting instructions (for deviations from this guideline)
- CERS notifications.

Medication Chart

- Document medications to be withheld/suspended on eMeds/NIMC and review date post operatively.

6 RELATED POLICIES/PROCEDURES

SELSHDGL/062 - Pre-Operative/Procedural Fasting for Patients Undergoing Anaesthesia

SESLHDPR/697 - Management of the Deteriorating ADULT inpatient

SESLHDPR/705 - Management of the deteriorating MATERNITY woman

SESLHDGL/116 - Management of Pre-existing Diabetes Mellitus in Pregnancy

RHW CBR - Insulin Dextrose Infusion for Pregnancy

POWH/SSEH CLIN002 - Hypoglycaemia Management for Patients with Diabetes

SESLHDPR/267 - Medication Management Roles & Responsibilities of Clinicians

POWH/SSEH CLIN002 - Hypoglycaemia Management for Patients with Diabetes

POWH Business Rule, September 2022. Insulin Infusion – For: Fasting for Surgery / treatment of Non-Diabetic Ketoacidosis (Non-DKA) / treatment of Non-Hyperglycaemic Hyperosmolar State (Non-HHS) (POWH CLIN185)

POWH/SSEH Business Rule, January 2022. Surgery and Medical Procedures for Patients with Diabetes Mellitus (POWH/SSEH CLIN023)

POWH Business Rule, December 2021. Insulin pump: Inpatient self-administration of insulin using a continuous subcutaneous insulin infusion pump (POWH CLIN178)

7 REFERENCES

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8 ABORIGINAL HEALTH IMPACT STATEMENT DOCUMENTATION

- Considerations for culturally safe and appropriate care provision have been made in the development of this Business Rule and will be accounted for in its implementation.
- When clinical risks are identified for an Aboriginal and/or Torres Strait Islander woman or family, they may require additional supports. This may include Aboriginal health professionals such as Aboriginal Liaison Officers, health workers or other culturally specific services

9 CULTURAL SUPPORT

- For a Culturally and Linguistically Diverse CALD woman, notify the nominated cross-cultural health worker during Monday to Friday business hours
- If the woman is from a non-English speaking background, call the interpreter service: NSW Ministry of Health Policy Directive PD2017_044-Interpreters Standard Procedures for Working with Health Care Interpreters.

10 NATIONAL STANDARDS

- Standard 1- Clinical Governance

- Standard 4 - Medication Safety
- Standard 8 - Recognising and Responding to Acute Deterioration

11 REVISION & APPROVAL HISTORY

Date	Revision No.	Summary of changes, Author and Approval
May 2023	0	New document developed by Philip Black POWH in consultation with RCOS, Anaesthetics, Program of surgery POWH.
June 2023	0	Approved by POW/SSEH Policy and Procedure Review Committee for distribution. SESLHD QUM not required.
December 2024	1	Aligned to RHW CBR with endorsement from POWH/SSEH Policy and Procedure Committee. Anaesthetics RHW
17.2.25	1	Endorsed RHW BRGC