Pediatric Patient Frequently Asked Questions for Healthcare Professionals

Q: Why can’t my child eat or drink before his/her surgery/procedure?

Answer: The purpose of fasting guidelines is to minimize the volume of stomach contents. Depression of our protective reflexes occurs during anesthesia. One of the most basic protective reflexes is to keep stomach contents from entering the airway. When stomach contents enter the airway, aspiration occurs. Aspiration is less likely to happen when the stomach is empty.

Q: Why is aspiration so bad?

Answer: Solid or semi-solid stomach contents may make exchange of gases in the lungs impossible. Liquid stomach contents that are acidic may burn the lungs and make gas exchange impossible. Both types of aspiration may cause brain damage or death. It is possible to treat aspiration once it occurs and most people survive aspiration, but treatment in an intensive care unit is often necessary. Aspiration may prolong your child’s hospital stay by days to weeks.

Q: Should I wake my child up two hours before the scheduled time for the procedure or surgery to give him or her clear liquids?

Answer: Yes, avoiding dehydration is very important. For example: if your 5 year old child’s procedure or surgery is scheduled to start at 8 am, you could give up to 4 ounces of a clear fluid up to 6 am. You may want to consider waking your child for fluids at 5 am so that the fluids are finished by 6 am.

Q: My child was in an automobile accident and needs emergency surgery. She ate just before the accident and it has only been four hours. Her doctor says she needs the operation now. Why doesn’t she have to wait 8 hours before she can have her surgery?

Answer: Guidelines assist doctors and patients in making decisions about health care. Fasting guidelines are not intended as standards or absolute requirements. The risk of aspiration must be weighed against the risk of not having surgery in a timely manner. Your anesthesiologist may modify the type of anesthesia to mitigate your child’s risk.

Q: Can my child chew gum or suck on hard candy while waiting for her procedure or surgery?

Answer: No

Q: What about carbohydrate-rich drinks?

Answer: It is safe for patients to drink clear carbohydrate-rich drinks up to 2 hours before surgery. BUT, not all drinks are free of dairy products and pulp containing fruit juices, so the specific drink must be considered by the health care team. If the exact ingredients of the drink are unknown, a 6 to 8 hour fasting period is considered to be a conservative duration.
Q: What about Jell-O?

Answer: Jell-O® is a trade name for one company which produces many forms of gelatins. Gelatins are created when a powder is mixed with water and forms a semi-solid when cooled. Some forms of gelatins may also contain milk products and fat, such as puddings. Scientific studies have found that the gelatin can be found in patients’ stomachs several hours following ingestion. This residual stomach contents poses as an aspiration risk. Anesthesia and sedation following ingestion of gelatin increases the risk of aspiration. Therefore, all gelatins are treated as “food” and the fasting period following ingestion must be 8 hours. Risk and benefit for patient safety regarding the urgency of the procedure following gelatin consumption verses the risk of aspiration must be discussed among the patient and medical specialists involved in the patient’s care.

Q: What about oral contrast?

Answer: Oral contrast is a mixture of Gastrografin® 50 cc, Black Cherry Drink Mix, and water to form a solution which looks and tastes like Kool-Aid®, containing a Ph of about 6.0 to 7.6. When patients are not going to have anesthesia, an adult is required to drink between 800 cc and a liter of oral contrast. Children are asked to drink a certain volume of oral contrast based on age and the type of anesthesia for the procedure (general anesthesia or sedation). Risk and benefit for patient safety regarding the urgency of the procedure following oral contrast consumption verses the risk of aspiration must be discussed among the patient and medical specialists involved in the patient’s care.

Q: Why must I use Apple Jelly to give crushed medications to my child?

Answer: Apple jelly is made from apple juice (apple juice is an acceptable clear fluid) which has been boiled and cooled causing it to thicken. Therefore, plain apple jelly is acceptable up to 2 hours prior to the procedure. On your child’s day of surgery apple jelly may be utilized to take crushed medications rather than pudding, apple sauce, etc.

Q: Who came up with these guidelines?

Answer: The durations for fasting are based on analysis of the current medical literature and expert opinion. The American Society of Anesthesiologists and the European Society of Anesthesiologists appointed separate task forces to develop guidelines. Faculty in the Department of Anesthesia at the University of Iowa adapted these guidelines for the University of Iowa Hospitals and Clinics.

Q: May my child have honey before her procedure?

Answer: No
Q: If I take food in through an enteral or nasogastric tube (e.g., gastric/stomach tube, enteral/jejunostomy tube, etc.) should I observe the same fasting intervals?

Answer: Eight hours fasting from enteral feeds is preferred. For patients in whom residual volumes are checked, four hours fasting following the last feeding is safe if residual volumes are not increasing. Feeding should be stopped at the first sign of increasing stomach residual volumes. Continuous duodenal feedings poses a lesser risk of aspiration than stomach feeding. The urgency of the procedure and the need for continuous nutritional support versus the increased risk of aspiration need to be considered by patients and all the medical specialists involved in patient care.

Intubated patients with cuffed endotracheal tubes or with gastric feeding tubes documented to be post pyloric may have enteral feedings continue up to and throughout surgery.

Q: What about perioperative enteral feeding in burned patients?

Answer: Burned patients have special metabolic requirements because of increased caloric needs and nutritional support.

Intubated patients with cuffed endotracheal tubes or with gastric feeding tubes documented to be post pyloric may have enteral feedings continue up to and throughout surgery.

Non-intubated patients or with enteral feeding tubes in the stomach can have enteral feeding up to 4 hours before surgery unless the gastric residual volume (GRV) is greater than 200% above the hourly volume of feed. For example, if the hourly volume of feed is 30/hr and the GRV residual is 60cc, enteral feeding should be stopped and residual volume suctioned 4 hours before induction of anesthesia.

Tube feeds may need to be discontinued earlier based on co-morbidities of the patient that might make airway management more difficult.
Q: Fasting guidelines are specifically designed for elective procedures; what is an “elective procedure”?  

Answer: The University of Iowa Hospitals and Clinics operate using a Triage Schema. Triage priority is based upon patient’s condition. The triage priorities are defined as follows:

- **Elective case:** A patient/case that does not meet the urgency/emergency criteria of the triage emergency prioritization system as noted below.

  Preoperative should be considered synonymous with periprocedural, as the latter term is often used to describe procedures that are not considered operations, like MRI scans.

- **Emergency classifications:**
  
  **Class A** – Life, limb, and/or sight threatening condition requiring immediate surgery, and takes precedence over any other case.

  **Class B** – Life, limb, and/or sight threatening requiring immediate surgery within four hours.

  **Class C** – A non-life threatening condition that may lead to severe complications if surgery is not performed within 8 hours of classification.

  **Class D** – A non-life threatening condition but requiring surgery within 24 hours or severe complications will occur.

  **Class U** – Urgent – inpatient referrals or patients admitted who require surgical intervention within 48 to 72 hours; these cases may be worked into the existing schedule.

Q: A patient’s doctor wants to cleanse the bowel before surgery, “bowel prep.” The doctor has prescribed GoLYTELY® (polyethylene glycol electrolyte solution (PEG)). What is the fasting period between ingestion of the GoLYTELY® and when the patient can receive regional, general or monitored anesthesia care?  

Answer: Endoscopists at the University of Iowa will sedate patients after two hours following GoLYTELY®. Adult colorectal surgeons have elective surgical patients start drinking GoLYTELY® at 3:00 pm or sooner, to be completed well before midnight.

Nevertheless, medical literature suggests that there is a potential aspiration risk from polyethylene glycol electrolyte solution (PEG), an ingredient in the GoLYTELY®. Literature also suggested that four to six hours is the optimal fasting interval.

**Ingestion of GoLYTELY® must be completed at least 4 hours prior to the scheduled procedure time.**

IF YOU WOULD LIKE TO COMMENT ON THESE GUIDELINES OR FOR ADDITIONAL FAQ, GO TO: [http://www.anesth.uiowa.edu/](http://www.anesth.uiowa.edu/) and click on “Fasting Guidelines.”