



# 2023 ASA Practice Guideline update to Preoperative Fasting

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## 2023 American Society of Anesthesiologists Practice Guidelines for Preoperative Fasting: Carbohydrate-containing Clear Liquids with or without Protein, Chewing Gum, and Pediatric Fasting Duration—A Modular Update of the 2017 American Society of Anesthesiologists Practice Guidelines for Preoperative Fasting

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# Disclosures

- None



# Outline

- Questions
- 2017 NPO Guidelines Summary
- 2023 Updates to the Summary



## References

ITE Keywords, True Learn

Open Anesthesia

UpToDate

Excerpts from Miller's Anesthesia, Barash's Clinical Anesthesia

- 2023 American Society of Anesthesiologists Practice Guidelines for Preoperative Fasting: Carbohydrate-containing Clear Liquids with or without Protein, Chewing Gum, and Pediatric Fasting Duration—A Modular Update of the 2017 American Society of Anesthesiologists Practice Guidelines for Preoperative Fasting.

- Practice Guidelines for Preoperative Fasting and the Use of Pharmacologic Agents to Reduce the Risk of Pulmonary Aspiration: Application to Healthy Patients Undergoing Elective Procedures: An Updated Report by the American Society of Anesthesiologists Task Force on Preoperative Fasting and the Use of Pharmacologic Agents to Reduce the Risk of Pulmonary Aspiration. (2017). *Anesthesiology*, 126(3), 376–393.



## Question 1

33 yo healthy woman BMI 27 presents for an elective breast mammoplasty. In the preop area during questioning you learned that she had 400 ml of a carbohydrate rich drink at 6:30 am for your case that starts at 7:30 am. What should you do next?

- A. Cancel/delay the case
- B. Start the case with normal induction
- C. Start the case with RSI



## Question 2

33 yo healthy woman BMI 27 presents for an elective breast mammoplasty. In the preop area during questioning you learned that she recently had 400 ml of a carbohydrate **and protein rich clear** drink at 6:30 am for your case that starts at 7:30. What should you do next?

- A. Cancel/delay the case
- B. Start the case with normal induction
- C. Start the case with RSI.



## Question 3

33 yo healthy woman BMI 27 presents for an elective breast mammoplasty. In the preop area when questioning you found out that she **is currently chewing “Bubblicious Bubble Gum”** What do you do next?

- A. Cancel/delay the case
- B. Start the case with normal induction
- C. Start the case with RSI



## Question 4

**4 yo healthy boy** presents to the preoperative clinic for an “abdominal surgical case” and the parents want to know what are the recommended fasting times for their child before surgery. What is the recommended minimum fasting time for carbohydrate rich clear liquids before the surgical case?

- A. 1 hr before the case
- B. 2 hr before the case
- C. 4 hr before the case





## Question 5

25-year-old male who had Arthroscopic Rotator Cuff Repair yesterday evening at 8 pm. The next morning, the patient is having shoulder pain. After discussion with the surgeon, the acute pain service (APS) team plans to provide a peripheral nerve block. However, when the APS team arrives with the supplies, the patient is finishing a light breakfast. What would be the best timing for the peripheral nerve block?

- A. Provide the peripheral nerve block now.
- B. Wait two hours before performing the peripheral nerve block.
- C. Wait at least six hours before performing the peripheral nerve block.



## 2017 Practice Guidelines for Preoperative Fasting

Food/Drink Consumed	Minimum Fasting Period
Clear Liquids (e.g., water, black coffee, carbonated beverages, clear tea, fruit juices without pulp, <b>carbohydrate and protein rich clear liquids</b> )	2 hours
Breast Milk	4 hours
Non-human milk, light meals, Infant formula	6 hours
Fried/fatty meals or meat	8 hours

Practice Guidelines for Preoperative Fasting and the Use of Pharmacologic Agents to Reduce the Risk of Pulmonary Aspiration: Application to Healthy Patients Undergoing Elective Procedures: An Updated Report by the American Society of Anesthesiologists Task Force on Preoperative Fasting and the Use of Pharmacologic Agents to Reduce the Risk of Pulmonary Aspiration. (2017). *Anesthesiology*, 126(3), 376–393. <https://doi.org/10.1097/ALN.0000000000001452>.



# Carbohydrate-containing clear liquids vs fasting and Carbohydrate-containing clear liquids vs Noncarbohydrate clear liquids (water)

Adults undergoing elective procedures with general anesthesia, regional anesthesia, or procedural sedation, what are the benefits and harms of carbohydrate-containing clear liquids ingested 2 h before the procedure compared with fasting and noncaloric clear liquids?

Carbohydrate-containing clear liquids 2 h preoperatively was superior to absolute fasting

Less hunger and thirst without evidence of increased risks.

Vs noncaloric clear liquids - Less hunger

**ABA Gaps In Knowledge Report, ITE 2014. "Ingestion of water 2 hours preoperatively does not cause a decrease in gastric pH"**





## Protein-containing Clear Liquids

- What are the benefits and harms of protein-containing clear liquids 2 h before the procedure compared with fasting and other clear liquids?
- Insufficient evidence to recommend protein-containing clear liquids preferentially over other clear liquids 2h before elective procedures
- Patients drinking protein clear liquids experienced less hunger vs fasting
- Less hunger and thirst compared to drinking other clear liquids
- No differences in aspiration or regurgitation



Practice Guidelines for Preoperative Fasting and the Use of Pharmacologic Agents to Reduce the Risk of Pulmonary Aspiration: Application to Healthy Patients Undergoing Elective Procedures: An Updated Report by the American Society of Anesthesiologists Task Force on Preoperative Fasting and the Use of Pharmacologic.

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## Effects of chewing gum on NPO status

- What is the recommendation with Chewing Gum?
- It is recommended **not** to delay elective procedures requiring general, regional, or procedural sedation in healthy adults who are chewing gum
- Gum should be removed before any sedative/anesthetic is administered.



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Practice Guidelines for Preoperative Fasting and the Use of Pharmacologic Agents to Reduce the Risk of Pulmonary Aspiration: Application to Healthy Patients Undergoing Elective Procedures: An Updated Report by the American Society of Anesthesiologists Task Force on Preoperative Fasting and the Use of Pharmacolog

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# One-hour Clear Liquid Fasting in Pediatric Patients

What are the benefits and harms of 1-h *versus* 2-h clear liquid fasting

No difference in hunger, thirst, aspiration, regurgitation, or gastric pH

There is insufficient evidence concerning the benefits and harms to recommend 1-h vs 2-h

An attempt should be made to avoid prolonged fasting and get children as close to the 2-h mark as possible





## Recommendations

Carbohydrate containing clear liquids until 2hr preop was superior to absolute fasting because better outcomes with less risk also they had less hunger and thirst (vs fasting), and less hunger (vs noncaloric clears).

“Insufficient evidence to recommend protein-containing clear liquids preferentially over other clear liquids 2 h before elective procedures”

There was a small increase in gastric volume when chewing gum but its not clinically relevant. Do not delay elective procedures in adults chewing gum.

“Insufficient evidence concerning benefits and harms to recommend pediatric patients drink clear liquids until 1 h *versus* 2 h”

“ABA Gaps In Knowledge Report, ITE 2014. "Ingestion of water 2 hours preoperatively does not cause a decrease in gastric pH“



# Questions