

Survey on the fasting of enteral feeding prior to anaesthesia and intensive care unit (ICU) procedures in critically ill, intubated patients

Background

In the UK, it is standard practice to hold enteral nutrition (EN) for at least 6 hours for anaesthesia. This practice is based on recommendations intended for healthy elective surgical patients eating solid food and does not refer to fasting in critically ill intubated patients being enterally fed. There is currently an absence of recognised guidance on how long EN needs to be stopped prior to anaesthesia and ICU procedures. Frequent fasting for diagnostic procedures, surgery and airway management result in significant daily and cumulative nutrient deficits. These contribute to underfeeding and malnutrition, which in turn result in an increased risk of all-cause mortality, bloodstream infections, and longer ICU and hospital stays.

Purpose of the survey

The aim is to gain a detailed perspective of UK fasting practices on ICUs.

The objectives are:

1. To establish national trends in fasting
2. To identify any existing guidelines and protocols that highlight safe practice
3. To identify if the amount of dietetic input to the ICU influences fasting practices
4. To publish the survey findings

You may need to discuss fasting guidelines with your ICU team prior to completing the survey, if you are unfamiliar with current practice on your unit.

Where fasting practices vary within your unit (e.g. different consultants do different things), please enter the most common fasting time and then add comments to explain the variation of your unit's fasting practices in the free text boxes at the end of Q6 or in Q17.

Please complete one survey per hospital unless there is more than one ICU within a hospital, and the fasting practice varies between the different units, in which case please complete one questionnaire for each unit.

Thank you for your time in completing this survey

Rebecca Jordan, Charlotte Proctor, Eileen O'Neill, Wendy Bispham, Sarah Harkess, Tracy Lovejoy, Bethan Jenkins and Ella Segaran

BDA Critical Care Specialist Group Members

Questions

1. Do you have ICU specific guidance for fasting enterally fed patients with a protected airway (tracheostomy/ETT)?
 - a. Yes
 - b. No
 - c. Don't know

2. Do you have ICU specific guidance for fasting enterally fed patients without a protected airway (self-ventilating)?
 - a. Yes
 - b. No
 - c. Don't know

3. *If you have fasting guidance on your unit, please go to question three. If your unit does not have fasting guidance, please go to question five.*

4. In your fasting guidance how many hours does your unit recommend withholding enteral feed for, in intubated patients undergoing the following procedures (please fill in all that apply)? Please state whether the guidance is routinely adhered to and if not, why not.

Procedure	Fasting time	Adhered to Y/N, if N, reason
Extubation		
Surgical tracheostomy		
Percutaneous tracheostomy		
Abdominal surgery		
Non-abdominal surgery		
Radiological procedures		
Transoesophageal echocardiogram		
Upper gastrointestinal tract endoscopy		
Rigid bronchoscopy		

5. Have your fasting guidelines changed over the last 12 months and if so why?

6. If your unit does not have fasting guidance, please describe the usual fasting times for intubated patients undergoing the following procedures (please fill in all that apply). Please state who makes the ultimate fasting time decision for each procedure (intensivist, surgeon, anaesthetist, other).

Procedure	Fasting time	Decision made by
Extubation		
Surgical tracheostomy		
Percutaneous tracheostomy		
Abdominal surgery		
Non-abdominal surgery		
Radiological procedures		
Transoesophageal echocardiogram		
Upper gastrointestinal tract endoscopy		
Rigid bronchoscopy		

7. Do you undertake 'catch up' feeding for the following procedures?

Procedure	Y/N
Extubation	
Surgical tracheostomy	
Percutaneous tracheostomy	
Abdominal surgery	
Non-abdominal surgery	
Radiological procedures	
Transoesophageal echocardiogram	
Upper gastrointestinal tract endoscopy	
Rigid bronchoscopy	

8. What are the main patient types seen on your unit (tick all that apply)?
- a. Cardiology
 - b. Cardiothoracic
 - c. Neurosurgery
 - d. Neuromedical
 - e. Trauma
 - f. Vascular
 - g. Gastrointestinal surgery
 - h. Oncology/Haematology
 - i. Liver
 - j. Pancreatitis
 - k. Respiratory
 - l. ECMO
 - m. Surgery other
 - n. Transplants
 - o. General mixed ICU
 - p. Other - please state
9. Does gastric emptying in the last 24 hours influence your fasting decisions, i.e. if the patient has large gastric residual volumes (GRVs), would you fast for longer?
- a. Yes, if yes please comment
 - b. No
 - c. Don't know
10. What volume do you use for a cut off for a 'large' GRV?
- a. Less than 200mls
 - b. 200ml
 - c. 250ml
 - d. 300ml
 - e. 350ml
 - f. 400ml
 - g. 450ml
 - h. ≥ 500 ml
 - i. Not using GRV's
11. If your GRV guidelines changed over the last 12 months, please indicate how?
- a. Cut off increased (state what you are increase from and new volume)
 - b. Cut off decreased
- If other, please describe

12. Do you allow water via the NGT during the fasting period?

- a. Yes
- b. No
- c. Don't know

13. Do you allow medication via the NGT during the fasting period?

- a. Yes
- b. No
- c. Don't know

14. How is the correct position of an nasogastric tube confirmed in your ICU?

- a. Chest X-ray only
- b. pH only
- c. pH first line, chest Xray second line
- d. Other- please describe
- e. Please leave any other comments you wish to make

15. If chest X-ray is used, who is allowed to confirm the position (tick all that apply)?

- a. All junior ICU Dr's
- b. ICU registrars
- c. ICU consultants
- d. Radiology
- e. Other – please describe & share any other comments.

16. When would you confirm nasogastric tube position (tick all that apply)?

- a. Initial placement
- b. Re-insertion of tube
- c. After vomiting
- d. Suspicion of displacement
- e. Movement of the tube e.g. change in the measurement at nose
- f. Re-starting enteral feeding after a break in feeding
- g. Unexplained change in patients respiratory status
- h. After endoscopy
- i. After transoesophageal echo
- j. After tracheostomy
- k. After surgery
- l. After extubation
- m. After physiotherapy
- n. After re-positioning
- o. After transfers
- p. Other – please describe.

17. Do you have any other comments related to fasting that you would like to share?

18. If you have fasting guidance, are you happy to share it?

19. *What is the whole time equivalent (WTE) dietetic input per bed?*

20. *Name of dietitian completing survey (optional):*

21. *Name of hospital:*

22. *Name/type of unit (if more than one ICU in your hospital):*

Thank you so much for your time.