European Society of Anaesthesiology ESA

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Summary of recommendations for Perioperative Fasting in Adults and Children: Guidelines from the European Society of Anaesthesiology

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Grades of evidence and recommendation are listed in the Table at the end of this document.

Fasting in adults and children	Evidence	Recommendation
Adults and children should be encouraged to drink clear fluids (including water, pulp-free juice and tea or coffee without milk) up to two hours before elective surgery (including caesarean section) *All but one member of the guidelines group consider that tea or coffee with milk added (up to about one fifth of the total volume) are still clear fluids*	1++	A √
Solid food should be prohibited for six hours before elective surgery in adults and children	1+	A
Patients with obesity, gastro-oesophageal reflux and diabetes and pregnant women *not* in labour can safely follow all of the above guidelines *However, these factors may alter their overall anaesthetic management*	2-	D
Patients should not have their operation cancelled or delayed just because they are chewing gum, sucking a boiled sweet or smoking immediately prior to induction of anaesthesia *The above is based solely on effects on gastric emptying and nicotine intake (including smoking, nicotine gum and patches) should be discouraged before elective surgery*	1-	B √
Fasting in infants		
Infants should be fed before elective surgery. Breast milk is safe up to four hours and other milks up to six hours. Thereafter, clear fluids should be given as in adults	1++	A

Prokinetic and other pharmacological interventions		
There is insufficient evidence of clinical benefit to recommend the routine use of antacids, metoclopramide or H_2 receptor antagonists before elective surgery in non-obstetric patients	1++	A
An H_2 receptor antagonist should be given the night before, and on the morning of, elective caesarean section *The guidelines group recognises that most of the evidence relates to surrogate measures, such as changes in gastric volume and pH, rather than a clear impact on mortality*	1++	A
An intravenous H_2 receptor antagonist should be given prior to emergency caesarean section; this should be supplemented with 30 ml of 0.3 M sodium citrate if general anaesthesia is planned *The guidelines group recognises that most of the evidence relates to surrogate measures, such as changes in gastric volume and pH, rather than a clear impact on mortality*	1++	A
	Evidence	Recommendation
Oral carbohydrates		
It is safe for patients (including diabetics) to drink carbohydrate-rich drinks up to two hours before elective surgery *The evidence for safety is derived from studies of products specifically developed for perioperative use (predominantly maltodextrins); not all carbohydrates are necessarily safe*	1++	A
Drinking carbohydrate-rich fluids before elective surgery improves subjective well-being, reduces thirst and hunger and reduces postoperative insulin resistance *To date there is little clear evidence to show reductions in length of postoperative stay and mortality*	1++	A
Fasting in obstetric patients		
Women should be allowed clear fluids (as defined above) as they desire in labour	1++	A
Solid food should be discouraged during active labour *The guidelines group recognise that it may be impractical to stop all women from eating during labour, especially low-risk women. Consideration should be given to easily digestible, low-residue foods*	1+	A
Postoperative resumption of fluids		
Adults and children should be allowed to resume drinking as soon as they wish after elective surgery. However, fluid intake should not be insisted upon before allowing discharge from a day or ambulatory surgery facility	1++	A

√ Recommended best practice based on the clinical experience of the guidelines development group

KEY TO EVIDENCE STATEMENTS AND GRADES OF RECOMMENDATIONS	
1^{++}	High quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias
1^{+}	Well conducted meta-analyses, systematic reviews, or RCTs with a low risk of bias
1^{-}	Meta-analyses, systematic reviews, or RCTs with a high risk of bias
2^{++}	High quality systematic reviews of case control or cohort studies
2^{+}	Well conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal
2^{-}	Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal
3	Non-analytic studies, e.g. case reports, case series
4	Expert opinion
GRADES OF RECOMMENDATION	
Note: The grade of recommendation relates to the strength of the evidence on which the recommendation is based. It does not reflect the clinical importance of the recommendation.	
A	At least one meta-analysis, systematic review, or RCT rated as 1^{++}, and directly applicable to the target population; or A body of evidence consisting principally of studies rated as 1^{+}, directly applicable to the target population, and demonstrating overall consistency of results
B	A body of evidence including studies rated as 2^{++}, directly applicable to the target population, and demonstrating overall consistency of results; *or* Extrapolated evidence from studies rated as 1^{++} or 1^{+}
C	A body of evidence including studies rated as 2^{+}, directly applicable to the target population and demonstrating overall consistency of results; *or* Extrapolated evidence from studies rated as 2^{++}
D	Evidence level 3 or 4; or Extrapolated evidence from studies rated as 2^{+}