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| Qeury # | **P** – Patient, Problem or Population | **I** – Intervention | C - Comparison, control or comparator | O - Outcome |
| **A** | **Impact of fasting duration in clinical or simulated fasting setting** | **a defined fasting prescription** | **alternative fasting regimens** |   |
| 1 | Children undergoing elective anaesthesia,Children with or without co-morbidity, pre-anaesthesiahealthy volunteers  | Preoperative fasting for **clear fluids** less than 2 h and at least 1 h ORPreoperative fasting for clear fluids less than 1 hour | Preop fasting for clear fluids at least 2 h ORany other duration of fluid fasting OR(overnight) fasting | Incidence of pulmonary aspiration ORSymptoms / morbidity / treatment of pulmonary aspiration ORincidence of fasting time (> x hours)/effective fasting time for clear fluids, non-clear fluids, breast milk, formula milk, solids ORhunger ORthirst ORbehavioral changes ORcompliance at induction ORgastric content volume ORgastric residual volume ORgastric emptying half life ORgastric antral area (antral cross sectional area) ORgastric motility ORgastric pH ORintragastric pressure ORaccomodation/gastric tone OR(pre-/intra-op) hypoglycaemia or other metabolic effectsmetabolic state including surrogates (blood glucose, ketone bodies, BE, ph, lactate) ORstress level and surrogates (cortisole, ?) OR impaired stress response ORpostop insuline resistance ORneed for inotropic support ORSubjective well being OR PONV OR Length of stay |
| 2 | Preoperative fasting for **human breast milk** < 4h and at least 2 hours ORPreoperative fasting for human breast milk < 6 h and at least 4 h | Preoperative fasting for human breast milk at least 4 h ORPreoperative fasting for human breast milk at least 6 h ORany other duration of human breast milk fasting OR(overnight) fasting |
| 3 | Preoperative fasting for **formula milk** < 4 h and at least 2 h ORPreoperative fasting for formula milk < 6 h and at least 4 h | Preoperative fasting for human breast milk at least 6 h ORany other duration of human breast milk fasting OR(overnight) fasting |
| 4 | Ingestion of of **non-clear fluids / solids / semi-solids / "light breakfast"** < 6 h before measurement | Ingestion of solids / semi-solids / "light breakfast" > 6 h before measurementOR(overnight) fasting |
| **B** | **Impact of co-morbidity, medication and other environmental factors in clinical or simulated fasting setting** | **a defined fasting prescription** | **similar fasting regimen in patients with differing / no co-morbidity / medication** |   |
| 5 | Obese children, pre-anaesthesia ORObese children, healthy volunteers  | Ingestion of clear fluid or solid food, any defined fasting regimen | Healthy children | Incidence of pulmonary aspiration ORSymptoms / morbidity / treatment of pulmonary aspiration ORincidence of fasting time (> x hours)/effective fasting time for clear fluids, non-clear fluids, breast milk, formula milk, solids ORhunger ORthirst ORbehavioral changes ORcompliance at induction ORgastric content volume ORgastric residual volume ORgastric emptying half life ORgastric antral area (antral cross sectional area) ORgastric motility ORgastric pH ORintragastric pressure ORaccomodation/gastric tone OR(pre-/intra-op) hypoglycaemia or other metabolic effectsmetabolic state including surrogates (blood glucose, ketone bodies, BE, ph, lactate) ORstress level and surrogates (cortisole, ?) OR impaired stress response ORpostop insuline resistance ORneed for inotropic support ORSubjective well being OR PONV OR Length of stay |
| 6 | Children with co-morbidities:gastro-intestinal (motility or other) disordersfunctional abdominal painGER (reflux)renal failurecereberal palsydiverse neuropathiesdiabetesburn diseasepre-anaesthesia or any other clinical or simulated setting | Ingestion of clear fluid or solid food, any defined fasting regimen | Healthy children, other co-morbidity |
| 7 | bed-ridden' children | Ingestion of clear fluid or solid food, any defined fasting regimen | Healthy children |
| 8 | Children with or without co-morbidity, pre-anaesthesiahealthy volunteers Adults | Ingestion of clear fluid or solid food, any defined fasting regimen AND (Administration of opioids ORanalgesisc ORbenzodiazepines ORtranqulizers ORanesthetic agents) | only observational OR comparison with other drugs OR NO drugs(in identical / similar ingestion & fasting situation as well as patient situation) |
| 9 | Premature Children, pre-anaesthesia or any other clinical or simulated setting | Ingestion of clear fluid or solid food, any defined fasting regimen | Newborn children at term |
| 10 | Children of different age / age category, pre-anaesthesia or any other clinical or simulated setting | Ingestion of clear fluid or solid food, any defined fasting regimen | Healthy children of other age category, adults |
| 11 | Children under stress | Ingestion of clear fluid or solid food, any defined fasting regimen | Healthy children |
| **C** | **Impact of composition, amount and consistence of food / fluid in clinical or simulated fasting setting, other physiologic conditions** | **defined fluid and/or food ingestion with fasting duration** | **alternative fluid / food ingestion with identical or similar fasting duration** |   |
| 12 | Children with or without co-morbidity, pre-anaesthesiahealthy volunteers  | Ingestion of **fluid** with - specific calory content- specific composition- carbonated/carbonic acid- different brands |   | Incidence of pulmonary aspiration ORSymptoms / morbidity / treatment of pulmonary aspiration ORincidence of fasting time (> x hours)/effective fasting time for clear fluids, non-clear fluids, breast milk, formula milk, solids ORhunger ORthirst ORbehavioral changes ORcompliance at induction ORgastric content volume ORgastric residual volume ORgastric emptying half life ORgastric antral area (antral cross sectional area) ORgastric motility ORgastric pH ORintragastric pressure ORaccomodation/gastric tone OR(pre-/intra-op) hypoglycaemia or other metabolic effectsmetabolic state including surrogates (blood glucose, ketone bodies, BE, ph, lactate) ORstress level and surrogates (cortisole, ?) OR impaired stress response ORpostop insuline resistance ORneed for inotropic support ORSubjective well being OR PONV OR Length of stay |
| 13 | Children with or without co-morbidity, pre-anaesthesiahealthy volunteers  | Ingestion of **food** with - specific calory content- specific composition- different brands | only observational OR comparison with other foods that differ with respect to - specific calory content- specific composition- different brandsOR comparison with fluids  |   |
| **D** | **Validity or reliability of surrogate parameters** | **defined fluid and/or food ingestion with fasting duration** | **application of standard investigation in same patient or identical or similar fluid/ food ingestion and fasting duration** |   |
| 14 | Children, with or without co-morbidity, undergoing anaesthesia or healthy volunteers | Investigation of gastric contents with gastric US (gastric antral area) after Ingestion of clear fluid or solid food, any defined fasting regimen | Endoscopy, MRI, scintigraphy, CT, Gastric tube aspiration | (Calculated) gastric content volume OR(calculated) gastric residual volume ORgastric emptying half life ORgastric antral area (antral cross sectional area) ORany any qualitative or quantitative gastric US outcome measureCorrelation between above mentioned parameters OROR validity/reliability/bias/precision of any of the above mentioned parameters |
| **E** | **Identification of at risk patients** | **preanesthetic diagnostic tool** | **clinical decision making** |   |
| 15 | Children, undergoing urgent or emergency anaesthesia | Preoperative gastric Ultrasound | Children undergoing urgent or emergency anaesthesia | Full stomach diagnosed by gastric US, change of airway management plan |
| 16 | Children, undergoing urgent or emergency anaesthesia | Preoperative gastric Ultrasound | Children undergoing urgent or emergency anaesthesia | Empty stomach diagnosed by gastric US, change of airway management plan |
| F | **Impact of postoperative fasting duration in clinical setting** | **A defined postoperative fasting prescription** | **alternative fasting prescription** |   |
| 17 | Children undergoing anaesthesia | Early access to postoperative fluid intake | Postoperative nausea and vomiting OR opioid consumption OR lenght of PACU stay | Postoperative nausea and vomiting OR opioid consumption OR length of PACU stay |