Evidence-based ICU feeding algorithm

At ICU admission: Should this patient be fed?

- **YES**
  - Can EN be started within 24 hours?
    - **YES**
      - Acceptable conditions:
        - tolerating adequate oral intake
        - < 24 hours to oral intake
        - palliative care
      - GASTRIC CHALLENGE
        - use full strength concentration
        - Consider prokinetic with challenge
        - GOAL: at least 80% of requirements at 72h
        - assess q12h
      - Will at least 80% of requirements be met by 72h?
        - **YES**
          - Use prokinetic and/or Use post-pyloric tube
          - Is Goal met?
            - **YES**
              - Increase rate to 100%
            - **NO**
              - Use prokinetic and/or Use post-pyloric tube
        - **NO**
          - Is Goal met?
            - **YES**
              - Continue EN to Max. tolerated
            - **NO**
              - Decrease rate until tolerance achieved
    - **NO**
      - Is diarrhoea present?
        - **YES**
          - Is stool clinically significant?
            - **YES**
              - Are medications the possible cause?**
                - **YES**
                  - Change medications, feed to tolerance
                - **NO**
                  - Is the patient receiving antibiotics?
                    - **YES**
                      - Check stool for C. difficile toxins, feed to tolerance
                    - **NO**
                      - Consider elemental formulation
        - **NO**
          - Is diarrhoea resolved?
            - **YES**
              - Continue same enteral feeding
            - **NO**
              - Advance to goal rate as tolerance improves
      - Begin TPN; consider TPN with glutamine
    - Reassess q12h for EN eligibility

Addressing tube feeding associated diarrhoea

Intolerant patients have:
- Clinically significant stools
  - liquid stools > 300ml per day or
  - > 4 loose stools per day or
  - risk of contamination of wounds or catheters
- readily apparent abdominal distension OR
- increased abdominal girth OR
- clinically detected girth OR
- gastric residuals > 200ml for nasogastric feeds

** Medications that commonly cause diarrhoea:
- metoclopramide
- aminophylline
- magnesium
- erythromycin
- xylitol
- phosphorus
- quinidine
- sorbitol

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