Ensuring Nutrition: Reducing the risks associated with decreased appetite in the inpatient geriatric population
By Raenique Brewton, BSN, RN & Elizabeth Kakouris, BSN, RN

PICOT Question
In the geriatric population admitted to inpatient medicine units, would providing dietary supplements (ensure, glucerna, boost, etc.) in between meals instead of with meals, improve food intake at meal times and improve overall nutrition?

Objectives
• Discuss the effectiveness of timing dietary supplements around/between meal times.
• Discuss how to increase nutritional intake and prevent malnutrition in the geriatric population on medicine units.

Introduction/Background
“Older adults are at risk for malnutrition, with 39% to 47% of hospitalized older adults malnourished or at risk for malnutrition” (DiMaria-Ghalli, 2012).

• Dry mouth and a decrease in taste receptors, that occur with aging, may cause malnutrition. (Boltz, 2014)

• Malnutrition can lead to increased length of stay, increased rates of infection, delayed wound healing, and increased mortality rates (Au et al., 2012).

• Supplements should not be used as a replacement for meals but in addition to meals. Supplements should not be administered at the same time as meals (DiMaria-Ghalli, 2012).

Methods

Results

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Level of evidence</th>
<th>Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>McColl, J., Potter, J., Reilly, J., &amp; Roberts, M.</td>
<td>Can prescription of sip-feed supplements increase energy intake in hospitalised older people with medical problems?</td>
<td>Level II</td>
<td>High</td>
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<tr>
<td>Morley, J., Purushothaman, R., Wilson, M.</td>
<td>Effect of liquid dietary supplements on energy intake in the elderly.</td>
<td>Level IV</td>
<td>Moderate</td>
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Discussion
Review of the literature shows that oral supplements provided to geriatric patients can prevent malnutrition (Au et al., 2012). Administering supplements at least an hour prior to meals prevents premature satiety at meal time (Morley, Purushothaman & Wilson, 2002). Supplements were perceived as more important when administered along with medication opposed to with meals. Smaller volumes of supplements were shown to prevent a decrease in food intake at meal times (Roberts, Potter, McColl, & Reilly, 2003).

Recommendation/Strategies:
• Collaborate with dietary, nutrition, and geriatric resource nurses
• Initiate a protocol to administer oral nutritional supplements (ONS) 3 times a day at least 1 hour before meals
• Educate nursing staff and nursing techs on implementation strategies
• When administering medications use ONS for swallowing
• Encourage patients to drink with straws and sip periodically through the day
• Make sure to encourage patients to eat meals supplied on the trays
• Have a supply of different ONS on the unit, just as we stock juices and other pantry items, making ONS readily available at all times.
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Implementation/Next Steps
Evaluation
• A comparison of BMI throughout admission (normal range 23-27 for older adults) (Ignatavicius & Workman, 2013)
• Documented intake of meals, ONS, and calorie counts
• Assessing daily lab values that are effected by malnutrition: serum albumin (3.5-5.0 g/dL), transferrin (16-45%), and pre-albumin (15-36 mg/dL) (Ignatavicius & Workman, 2013)

Future Research
• Which types of oral supplements have the least effect on satiation?
• Effect of food textures and food preference on satiation.

References
Boltz, M. (2014). What patients and their families need to know before going into the hospital: Meals and nutrition. NICHE Need to Know for Patients and Families. NICHEprogram.org