

Building Nutrition into Your Enhanced Recovery Program

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Department of Clinical Nutrition

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Disclosures

The speakers have no actual or potential conflicts of interest in relation to this presentation.

Objectives

1. Educate on the dietitian's role in enhanced recovery
2. Discuss how dietitians can impact a patient's outcomes with enhanced recovery
3. Provide tips on how to engage dietitians as part of the enhanced recovery super team

Perioperative Quality Initiative

American Society for Enhanced Recovery and Perioperative Quality Initiative Joint Consensus Statement on Nutrition Screening and Therapy Within a Surgical Enhanced Recovery Pathway

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POQI Nutrition Six

1. **Pre-op/Post-op Nutrition Screening Essential**
2. **Protein more important than calories**
3. **Stop feeding late pre-op, restart early post-op**
4. **Consider Oral Nutrition Supplements for All**
5. **Oral before enteral before parenteral**
6. **Nutrition management is a team game**

Figure 2. Summary of key recommendations for perioperative nutrition care. POQI indicates Perioperative Quality Initiative.

Role of the Dietitian

Pre-Procedure Interventions

- Baseline Assessments
- Specific Goals for nutrition optimization prior to procedure
- Education on specific dietary interventions patient may need after procedure
 - i.e. Tube Feeding, GI first foods diet, Tips for faster bowel function return, etc.

Dietitian Pre-Procedure Interventions

ER-SCT Clinic

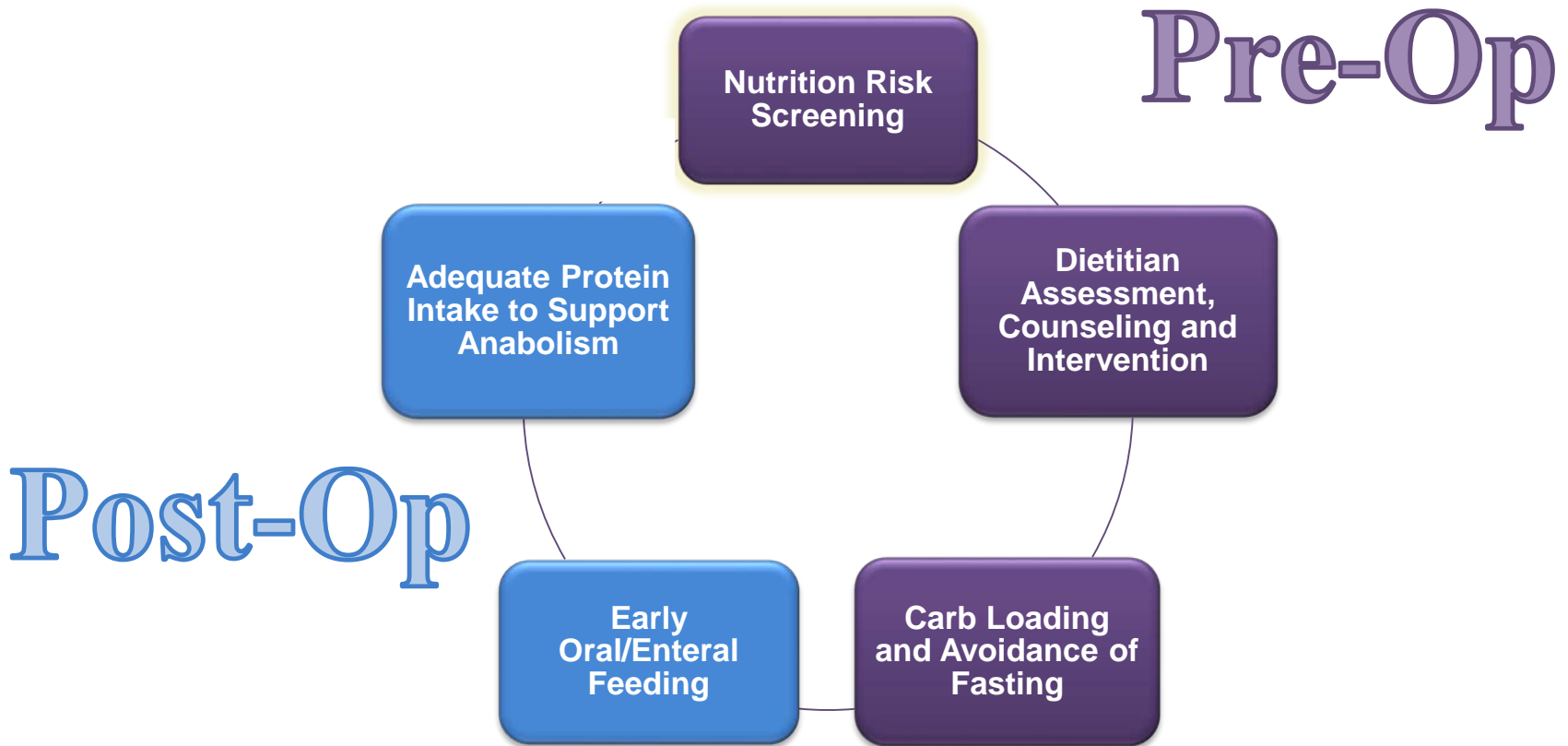
- Started as a clinic to see patients as a team approach to enhanced recovery
- Physical Therapy, Geriatrics, Occupational Therapy, Pharmacy, Dietitian, Service Mid-level
- Eases burden of appointments, reduces patient anxiety, allows us to communicate more effectively as a team

Dietitian Post-Procedure Interventions

Continuity of Care

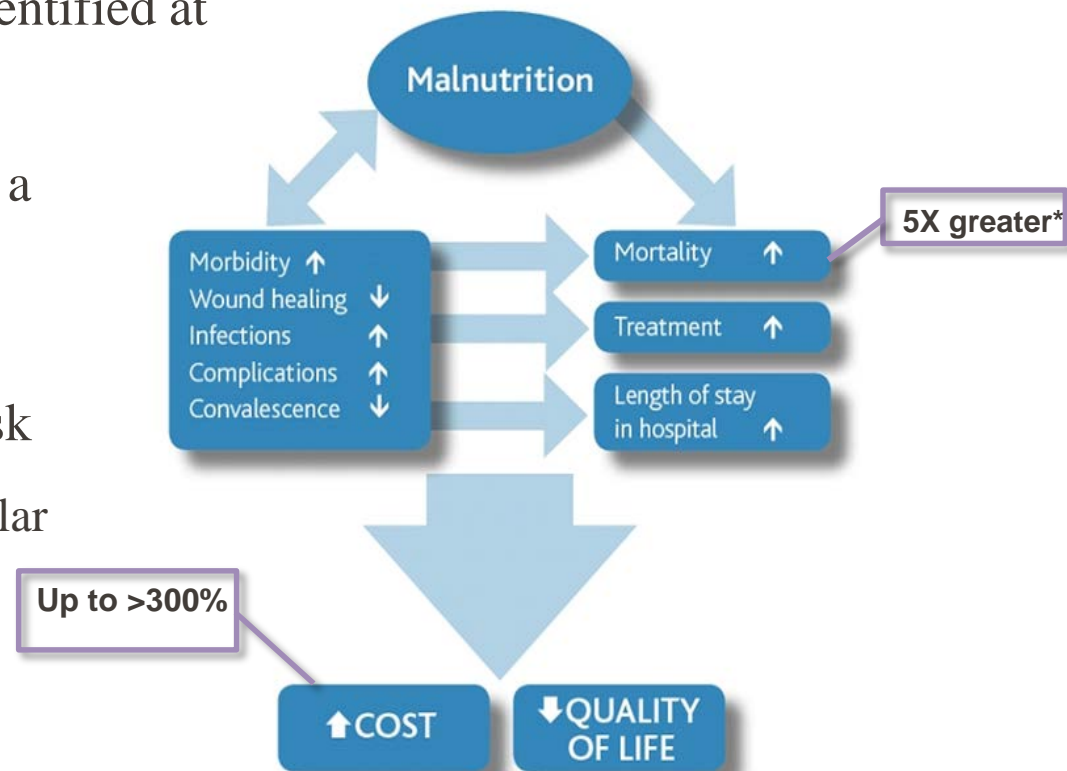
- Patient is aware they will be followed by a dietitian, they understand nutrition is important to their recovery
- Baseline providers more insight to patient status while admitted
- Faster more effective nutrition interventions
- Long-term follow-up if needed

Key Nutrition Components of Enhanced Recovery



Nutrition Risk Screening & Dietitian Referral

- Screen for malnutrition risk
- Automatically refer patients identified at risk to Clinical Nutrition
- Assessment and counseling by a Registered Dietitian
- Aggressively treat those with malnutrition or malnutrition risk
- Oral supplements, protein modular and/or enteral nutrition



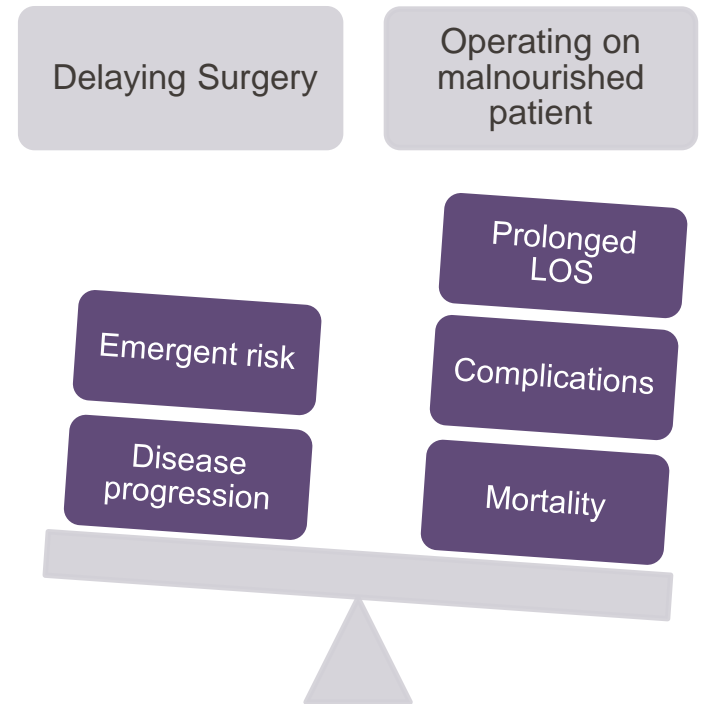
Dietitian Counseling and Intervention

When to Focus on Nutrition Optimization?

The earlier the better...

Minimum of 5-7 days pre-op

6+ weeks post-op



NOTE: 5–7 days of pre-op nutrition therapy in the malnourished patient associated with up to 50% reduction in post-op morbidity

Optimize Nutrition Status – Protein

Reaching protein goal MORE IMPORTANT than total Calories

Protein goals can be achieved with:

1. Protein-focused diet
2. High protein oral nutrition supplement
 - 2-3x/day, 18g protein/dose
3. Immunonutrition formulas
4. Feeding tube placement and enteral nutrition if unable to orally achieve goals
 - Initiate enteral nutrition at least 7 days pre-op

Immunonutrition

Formulas that modulate metabolic response to stress by enhancing immune function

Formulas contain:

- Arginine
- Omega-3 fatty acids
- Nucleotides



8 oz serving
45g CHO per bottle
Does Not contain nucleotides



6 oz serving
15g CHO per bottle
Contains all 3 nutrients

Recommended use:

- 5-7 days pre-op and 5-7 days post-op, especially if malnourished
- Should be considered for all major elective surgeries

Outcomes include: ↓ infectious complications, ↓ length of stay, ↑ wound healing

Optimize Nutrition Status – Minimize Peri-Op Fasting

Pre-Op:

- Clear liquid diet starting midnight through 2 hours before anesthesia
- Carb loading
 - Complex carbohydrate (maltodextrin) beverage evening before and 2-3 hours pre-op
 - Reduce catabolic response to overnight fasting and surgery



Bottom Line: Avoid going into surgery starved and dehydrated

Post-Op:

- Resume normal oral diet early (day of surgery), supplemented with oral nutritional supplements
- Medical management of post-op N/V

Engaging the Nutrition Professional

Early Dietitian involvement is beneficial for helping to plan, revise, and provide nutrition expertise for an Enhanced Recovery (ER) protocol/program.

Find a Dietitian who can commit to regular involvement in the ER program

Nutrition Champion- another member of the team who will advocate for Dietitian involvement.

The Dietitian will share information on nutrition interventions and practices supported by current literature.

Examples of Dietitian Involvement in Enhanced Recovery at MD Anderson

ERAS-GYN: During the development of the program Dr. Ramirez approached the outpatient Dietitian assigned to the MDACC Gynecological Oncology clinic. She agreed to be involved, and then advocated to have the inpatient Gynecological Oncology Dietitians involved.

ER-SCT: Dr. Popat invited several Dietitians (1 clinical, 2 managers) to be involved in the creation of his team's ER program.

ERAS-Urology: The inpatient Urology Dietitian inquired about involvement in this ER program. Previous Dietitian involvement had not occurred. Several more Dietitians became involved, and were able to provide beneficial information for the revision of one standing ERAS program, and the creation of a new ERAS program.

SUMMARY: Key Nutrition Components of Enhanced Recovery Programs

1. Interdisciplinary development and implementation of nutrition protocols
2. Pre-op nutrition risk screening & dietitian referral
 - Order sets can help automate this process
3. Dietitian assessment and counseling/intervention to optimize nutrition status before surgery
4. Minimize the peri-op fasting period
 - Reduce NPO duration
5. Ongoing dietitian assessment and follow up during healing window
6. Optimize protein intake post-op
 - Regular diet with automatic inclusion of high-protein oral nutrition supplements

Thank you