Why Nutrition is Important:
Adult Patient with Cancer

The purpose of this document is to highlight evidence on why nutrition is important in your adult patient with cancer and what can be done to implement an appropriate nutrition care plan.

KEY FACTS

Malnutrition is common in patients with cancer and is associated with poor outcomes

- Prevalence of malnutrition in patients with cancer is reported up to 80%.[1]
- Up to 20% of cancer patients die from malnutrition and not the underlying disease.[2]
- Negative outcomes associated with being malnourished include higher costs, longer hospital length of stay, and higher infection rates as compared to those who are well-nourished.[2]
- Malnourished cancer patients have a reduced quality of life, diminished functional status, and longer recovery times than well-nourished patients.[3-6]
- Patients with cancer become malnourished because of the disease process and treatments.[7,8] Side effects related to the disease and treatment that contribute to the development of malnutrition include anorexia, early satiety, fatigue, depression, pain, nausea, mucositis, malabsorption, and taste changes, all leading to inadequate oral intake.

Nutrition support improves patient outcomes

- The ASPEN Value Project demonstrated that the use of oral nutrition supplements and early enteral nutrition (EN) in GI cancer patients improved outcomes (shorter length of hospital stay and fewer infectious complications) which yielded a projected $242 million savings for Medicare patients.[9-11]
- Outcomes for patients with other types of cancer can be improved with nutrition care including:
  - » Head and neck cancer – improved treatment tolerance and fewer unplanned hospitalizations[12]
  - » Lung cancer – improved weight and intake with oral nutrition supplements[13]

Nutrition support yielded a projected

$242 MILLION

in savings for Medicare patients with gastrointestinal cancer

What Should Clinicians Do? ▶

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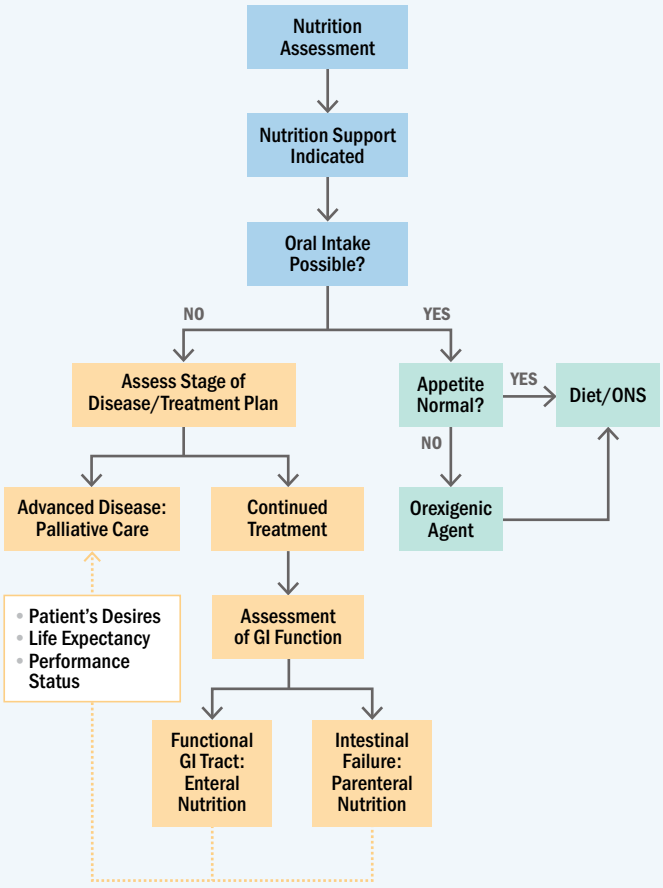
KEY ACTIONS: WHAT SHOULD THE CLINICIAN DO?

Oncology Patient Nutrition Care Pathway



Nutrition Support here is considered oral diet, oral nutrition supplements, enteral and/or parenteral nutrition.
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- Perform nutrition screening and have a registered dietitian conduct a nutrition assessment in those at high risk for malnutrition
- Consider use of Patient-Generated Subjective Global Assessment (PG-SGA) as a well-recognized method for assessing nutrition status in patients with cancer
- Assess ability to tolerate oral intake and if possible, supplement with oral nutrition supplements and fortified foods
- Assess appetite and if decreased, consider orexigenic agent (appetite stimulants and anti-inflammatory agents, as appropriate)
- If oral intake is inadequate, assess disease stage and treatment plan
- If EN is desired and indicated, place a feeding tube and begin EN
- If unable to meet nutritional needs with EN, consider parenteral nutrition (PN) as a supplement to EN or sole source of nutrition
- Monitor for tolerance of nutrition support and improvement in nutritional status along with monitoring for changes in clinical status and quality of life
- Continue ongoing dietary counseling and nutrition support as needed

References

[1] Trujillo EB et al. Closing the gap in nutrition care at outpatient cancer centers: ongoing initiatives of the Oncology Nutrition Dietetic Practice Group. *J Acad Nutr Diet.* 2018;118(4):749-760.
[2] Arends J, Baracos V, Bertz H, et al. ESPEN expert group recommendations for action against cancer-related malnutrition. *Clin Nutr.* 2017 Oct;36(5):1187-1196.
[3] Neumann SA, Miller MD, Daniels L, et al. Nutritional status and clinical outcomes of older patients in rehabilitation. *J Hum Nutr Diet.* 2005;18(2):129e36.
[4] Rasheed S, Woods RT. Malnutrition and quality of life in older people: a systematic review and meta-analysis. *Ageing Res Rev* 2013;12(2):561e6.
[5] Izawa KP, Watanabe S, Oka K, et al. Differences in daily in-hospital physical activity and geriatric nutritional risk index in older cardiac inpatients: preliminary results. *Aging Clin Exp Res* 2014;26(6):599e605.
[6] Flicker L, Mead K, MacInnis RJ, Nowson C, Scherer S, Stein MS, et al. Serum vitamin D and falls in older women in residential care in Australia. *J Am Geriatr Soc* 2003;51(11):1533e8
[7] Donnelly S, Walsh D. The symptoms of advanced cancer. Semin Oncol. 1995; 22(2Suppl 3);67
[8] Arends J, Bachmann P, Baracos V, et al. ESPEN guidelines on nutrition in cancer patients. *Clin Nutr.* 2017;36:11-48.
[9] Tyler R, Barrocas A, Guenter P, et al. Value of nutrition support therapy: impact on clinical and economic outcomes in the United States. *JPEN J Parenter Enteral Nutr.* 2020;44(3):395-406.
[10] Yeung SE, Hilkewich L, Gillis C, Heine JA, Fenton TR. Protein intakes are associated with reduced length of stay: a comparison between Enhanced Recovery After Surgery (ERAS) and conventional care after elective colorectal surgery. *Am J Clin Nutr.* 2017;106(1):44-51.
[11] Wang G, Chen H, Liu J, Ma Y, Jia H. A comparison of postoperative early enteral nutrition with delayed enteral nutrition in patients with esophageal cancer. *Nutrients.* 2015;7(6):4308-17.
[12] Paccagnella A, Morello M, Da Mosto MC, Baruffi C, Marcon ML, Gava A et al. Early nutritional intervention improves treatment tolerance and outcomes in head and neck cancer patients undergoing concurrent chemoradiotherapy. *Support Care Cancer* 2010;18:837–45.
[13] Sánchez-Lara K, Turcott JG, Juárez-Hernández E, Nuñez-Valencia C, Villanueva G, Guevara P, et al. Effects of an oral nutritional supplement containing eicosapentaenoic acid on nutritional and clinical outcomes in patients with advanced non-small cell lung cancer: randomised trial. *Clin Nutr.* 2014 Dec;33(6):1017-23.

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