Gastrointestinal nutrition: A practical guide for healthcare professionals.

Duran Mitc*

King Juan Carlos University Hospital, Faculty of Health Sciences, King Juan Carlos University, Madrid, Spain.

Abstract

Gastrointestinal Nutrition: A Practical Guide for Healthcare Professionals" is a resource designed to provide healthcare professionals with practical information and guidance on the nutritional management of patients with gastrointestinal disorders. The book covers a range of topics related to gastrointestinal nutrition, including Endoscopic Ultrasound (EUS) is a procedure where an endoscope is used to examine the walls of the esophagus and nearby organs, such as the stomach and pancreas. It is used to diagnose conditions such as esophageal cancer and to stage tumors Endoscopic Mucosal Resection (EMR) procedure is used to remove abnormal tissue from the esophagus. It is used to diagnose and treat conditions such as Barrett's esophagus, a condition where the lining of the esophagus changes and becomes more like the lining of the intestine.

Keywords: Perioperative, Peripheral parenteral nutrition, Surgery, Gastrointestinal.

Introduction

Anatomy and physiology of the gastrointestinal tract the gastrointestinal tract, also known as the digestive system, is a long tube-like structure that begins at the mouth and ends at the anus. It is responsible for breaking down food into nutrients that can be absorbed by the body, and eliminating waste products. The gastrointestinal tract is composed of several organs and structures, including the mouth, pharynx, esophagus, stomach, small intestine, large intestine (colon), rectum, and anus. The mouth is the first structure of the digestive system and is responsible for breaking down food mechanically and chemically through the action of enzymes in saliva. The food then passes through the pharynx and esophagus into the stomach. The stomach is a muscular sac that mixes and grinds the food with digestive enzymes and acid, breaking it down into a liquid mixture called chyme. From the stomach, chyme enters the small intestine, where the majority of nutrient absorption occurs. The small intestine is a long, narrow tube lined with finger-like projections called villi and microvilli, which increase its surface area for absorption [1].

The large intestine, or colon, absorbs water and electrolytes from the remaining indigestible material, forming solid feces. The rectum stores feces until they can be eliminated through the anus. The gastrointestinal tract is controlled by a complex network of nerves, hormones, and muscles that work together to regulate the digestive process. Dysfunction of any part of this system can lead to digestive disorders and related health problems [2].

Nutrient absorption and malabsorption Nutrient absorption is the process by which nutrients from the food we eat are taken up by the body and used for various metabolic processes. The majority of nutrient absorption occurs in the small intestine, where nutrients are absorbed into the bloodstream and transported to the liver and other organs for processing and distribution. Malabsorption is a condition in which the body is unable to absorb certain nutrients properly, leading to deficiencies and related health problems. Malabsorption can be caused by a variety of factors, including gastrointestinal disorders, such as celiac disease, inflammatory bowel disease, or pancreatitis, as well as surgeries or other medical treatments that affect the gastrointestinal tract. Common nutrients that may be affected by malabsorption include: Carbohydrates: Malabsorption of carbohydrates can lead to symptoms such as bloating, gas, and diarrhea. This is often seen in patients with lactose intolerance or celiac disease [3].

Proteins: Malabsorption of proteins can lead to deficiencies in essential amino acids, which can affect growth and development. This may be seen in patients with inflammatory bowel disease or pancreatitis. Fats: Malabsorption of fats can lead to deficiencies in fat-soluble vitamins, such as A, D, E, and K, and may lead to symptoms such as diarrhea and malnutrition. This may be seen in patients with chronic pancreatitis or cystic fibrosis. Treatment of malabsorption depends on the underlying cause and may include dietary changes, such as avoiding certain foods or taking digestive enzymes or supplements. In some cases, enteral or parenteral nutrition support may be necessary to ensure adequate nutrient intake. Medical nutrition therapy for gastrointestinal disorders such as inflammatory bowel disease, celiac disease, and pancreatic insufficiency [4].

***Correspondence to:** Duran Mitc, King Juan Carlos University Hospital, Faculty of Health Sciences, King Juan Carlos University, Madrid, Spain, E-mail: cappe.mtc@helpie.ac

***Received:** 05-Mar-2023, Manuscript No. JGDD-23-94030; **Editor assigned:** 07-Mar-2023, Pre QC No. JGDD-23-94030 (PQ); **Reviewed:** 21-Mar-2023, QC No. JGDD-23-94030; **Revised:** 24-Mar-2023, Manuscript No. JGDD-23-94030 (R); **Published:** 31-Mar-2023, DOI: 10.35841/aajmha-7.2.139*

***Citation:** Mitc D. Gastrointestinal nutrition: A practical guide for healthcare professionals. J Gastroenterology Dig Dis. 2023;8(2):140*

Enteral and parenteral nutrition support for patients with gastrointestinal disorders:

Enteral and parenteral nutrition supports are two methods of providing nutrition to patients with gastrointestinal disorders who are unable to meet their nutritional needs through oral intake alone. Enteral nutrition involves delivering liquid nutrition directly into the gastrointestinal tract, typically through a feeding tube inserted through the nose or mouth and down into the stomach or small intestine. Enteral nutrition may be used for patients with conditions such as inflammatory bowel disease, gastroparesis, or esophageal strictures, who have difficulty eating or absorbing nutrients. Parenteral nutrition, on the other hand, involves delivering nutrition directly into the bloodstream through a central venous catheter. This method is typically used for patients with severe malabsorption or bowel obstruction, who cannot tolerate enteral nutrition or whose gastrointestinal tract cannot absorb nutrients. Both enteral and parenteral nutrition support require careful monitoring and management by a healthcare team, including a registered dietitian and a physician. Complications may arise, such as tube dislodgement, infection, or metabolic abnormalities, which require prompt management. For patients with gastrointestinal disorders, enteral and parenteral nutrition support may be used as a short-term or long-term strategy to improve nutrition status, promote healing, and improve quality of life [5].

Conclusion

In conclusion, experts in the field of gastrointestinal nutrition and is intended to be a comprehensive resource for healthcare professionals, including registered dietitians, physicians, nurses, and other members of the healthcare team. It provides evidence-based recommendations and practical tips for managing the nutritional needs of patients with gastrointestinal disorders, with a focus on improving patient outcomes and quality of life.

References

1. Savage DC. Gastrointestinal microflora in mammalian nutrition. Annu Rev Nutr. 1986;6(1):155-78.
2. Bozzetti F, Braga M, Gianotti L, et al. Postoperative enteral versus parenteral nutrition in malnourished patients with gastrointestinal cancer: a randomised multicentre trial. The Lan. 2001;358(9292):1487-92.
3. Garth AK, Newsome CM, Simmance N, et al. Nutritional status, nutrition practices and post-operative complications in patients with gastrointestinal cancer. J Hum Nutr Diet. 2010;23(4):393-401.
4. Celi P, Cowieson AJ, Fru-Nji F, et al. Gastrointestinal functionality in animal nutrition and health: new opportunities for sustainable animal production. Anim. Feed Sci. Technol. 2017;234:88-100.
5. Bozzetti F. Nutrition and gastrointestinal cancer. Curr Opin Clin Nutr Metab Care. 2001;4(6):541-6.

Citation: *Mitc D. Gastrointestinal nutrition: A practical guide for healthcare professionals. J Gastroenterology Dig Dis. 2023;8(2):140*