Comprehensive Overview of Enteral Nutrition and Its Role in Patient Care

Mariana Thomas^{*}

Department of Pediatrics and Child Health, Stellenbosch University, Cape Town, South Africa

Corresponding author: Mariana Thomas, Department of Pediatrics and Child Health, Stellenbosch University, Cape Town, South Africa, E-mail: thomas.ana@googlemail.com

Received date: September 27, 2024, Manuscript No. IPCTN-24-19923; Editor assigned date: September 30, 2024, PreQC No. IPCTN-24-19923 (PQ); Reviewed date: October 15, 2024, QC No. IPCTN-24-19923; Revised date: October 23, 2024, Manuscript No. IPCTN-24-19923 (R); Published date: October 30, 2024, DOI: 10.36648/ipctn.9.5.69

Citation: Thomas M (2024) Comprehensive Overview of Enteral Nutrition and Its Role in Patient Care. J Nutraceuticals Food Sci Vol.9 No.5: 69.

Description

Enteral nutrition involves delivering nutrients directly into the Gastrointestinal (GI) system, bypassing oral intake, through a tube placed into the stomach or intestines. This method provides essential nutritional support for patients unable to consume enough food orally but who have a functioning GI tract. Enteral nutrition plays a vital role in healthcare, offering an effective alternative for patients with conditions like stroke, head injuries, cancer or digestive disorders. With ongoing advancements in medicine, enteral nutrition remains a cornerstone in clinical care, significantly aiding in managing malnutrition and supporting recovery.

Importance of enteral nutrition

Malnutrition is a common issue in healthcare settings, particularly among critically ill patients. It is linked to increased morbidity, prolonged hospital stays and higher healthcare costs. Enteral nutrition helps prevent or treat malnutrition in patients unable to meet their dietary needs through regular eating. Unlike parenteral nutrition, which introduces nutrients directly into the bloodstream, enteral nutrition utilizes the body's natural digestive processes, making it a preferred method when the GI tract is functional. Patients who may require enteral nutrition include those with neurological issues like strokes or traumatic brain injuries, which may impair swallowing; patients with head and neck cancers who cannot eat due to surgery or radiation and those with conditions like Crohn's disease, ulcerative colitis or other GI disorders. Enteral nutrition is also used in pediatrics, particularly for children with congenital or developmental conditions that make oral feeding challenging. The method of enteral nutrition depends on the patient's condition and nutritional requirements. The most common routes include a simple, non-surgical option typically used in hospitalized patients or those needing short-term feeding support. These are preferred for patients needing long-term support, as they provide a more comfortable and stable solution

than nasogastric tubes. A key benefit of enteral nutrition is its ability to maintain the integrity of the GI tract. By using the GI system, enteral feeding stimulates digestive enzymes and preserves gut barrier function, lowering the risk of bacterial translocation, which can lead to infections. In contrast, parenteral nutrition bypasses the GI tract, which may lead to intestinal atrophy and a higher risk of complications like sepsis.

Malabsorption issues

Enteral nutrition generally has a lower risk of complications compared to parenteral nutrition, particularly regarding infection risk. Central venous catheters used in parenteral nutrition are associated with a higher rate of bloodstream infections, whereas enteral feeding tubes, though not without risks, typically pose fewer systemic complications. Nutritionally, enteral formulas are tailored to meet patients' specific needs, from standard formulations for general nutrition to specialized ones for patients with conditions like diabetes, kidney disease or malabsorption issues. These formulas provide a balanced mix of macronutrients, vitamins and minerals to ensure adequate nutrition even when oral intake is not possible. Despite its benefits, enteral nutrition has some challenges. One primary concern is the risk of aspiration, especially in patients with impaired swallowing or gastroesophageal reflux. Tube-related complications, such as clogging, dislodgment or infection at the insertion site, are also possible. Proper care and maintenance of feeding tubes are essential to reduce these risks. Healthcare teams must also educate caregivers and patients on the correct use and care of feeding tubes, especially for long-term home enteral nutrition. Patients receiving enteral nutrition may also experience gastrointestinal side effects, such as bloating, diarrhea or constipation. Adjustments to the feeding rate, formula composition or hydration levels can help manage these symptoms. Ongoing monitoring and personalized care are vital to ensuring that patients tolerate enteral feeding well and receive its full benefits.