Enteral Nutrition: How Does it Work?

Enteral nutrition is the delivery of nutrients into the gastrointestinal (GI) system through a feeding tube into the GI tract, bypassing the mouth and the esophagus.[1] Enteral feeding is usually done in patients who have a functional or partially functional GI tract but have an impairment that makes them unable or unwilling to take food orally. Conditions such as prematurity, malnutrition, neuromuscular disorders that affect swallowing, and anatomical and postsurgical malformation of the mouth and esophagus are some of the reasons for a patient to require enteral feeding.[2]

How is enteral nutrition different from normal feeding and parenteral nutrition?

Normally, people ingest food through the mouth. There, it is chewed and swallowed and delivered to the stomach where most of the chemical digestion takes place. In certain cases, there is an impairment in the ability of the patient to chew or even swallow their food, so another route is required so that they can get the nutrients they need. When a doctor deems a patient not able to ingest food safely due to certain conditions, nutrition could be delivered by enteral nutrition, that is, through a feeding tube, to bypass the “conscious” part of digestion.[3]

Parenteral nutrition is the delivery of nutrients and calories directly into the bloodstream, effectively bypassing the whole GI tract. Usually, the goal of parenteral nutrition is to correct and prevent further malnutrition. Since it bypasses the gut, nutrients and calories should be in the final digested form, so it is done by infusing a specialized form of food through the veins.[4] Parenteral nutrition is more complicated and expensive to do since it requires a special form of care and is far from normal, so parenteral nutrition is almost always done in cases where oral or tube feeding is not possible.[4]

How does it work?

Enteral nutrition may be provided via a tube, catheter, or a surgically made hole into parts of the GI tract. Usually, enteral feeding consists of a normal oral diet, only in the form of liquid supplements because its delivery is through a feeding tube. Since it bypasses the chewing process, it needs to be in a form acceptable to the stomach or intestines. Several routes of enteral access may be done: nasogastric and orogastric tubes are small tubes placed through either the nose or the mouth with the tip of the tube ending in the stomach. These tubes are for short-term use. Gastrostomy and jejunostomy tubes are inserted through the skin of the abdomen into the stomach and end either in the stomach or the intestines of the patient and are good for long-term use.[4-6] The nutrients received by the GI tract through these feeding tubes are digested normally like how foods taken orally are digested. Enteral feeding is usually preferred over parenteral feeding since it is closer to normal feeding, and the body could keep its normal GI functions, such as its functions in immunity.[4]

How should I care for a patient undergoing enteral feeding?

When taking care of a patient who is enteral feeding, close monitoring of fluid, glucose, and electrolyte levels is essential in the first few days after initiation.[7] Monitoring the patient's feeding tolerance and assessing and listening for bowel sounds should be done. Regularly check for rigidity, distention, and tenderness in the abdominal area. Any bloating, vomiting, nausea, and pain should be reported to your healthcare provider.[8] Keep the insertion site dry and clean, and check for signs of infections. Do not put table foods through the tube or force anything through the tube.[9]

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This does not substitute the advice of your HCP.

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