

## Enteral Nutrition Therapy

Enteral Nutrition Therapy is a dietary treatment for Inflammatory Bowel Disease (IBD). With this treatment, food is replaced by a formula that is nutritionally complete. These formulas contain a balance of all the energy, protein, vitamins, and minerals that a person needs for good nutrition and growth. Benefits of this treatment are it does not suppress the immune system; it improves growth, nutritional status, and bone health; and it heals the lining of the bowel in addition to decreasing inflammation. ENT is the most studied dietary treatment for IBD. It has been demonstrated by research to be as effective as steroids at inducing remission.

### How does ENT work to treat IBD inflammation?

There are several hypotheses about how ENT works to treat inflammation and heal the bowel, but the exact way it works is unknown. One theory is that an unidentified characteristic of the formula has a direct anti-inflammatory effect on the bowel. Another theory is that when replacing food with formula, something possibly harmful in our diet is removed and this leads to improvement of IBD. Regardless of how ENT works, we know that it changes the microbiome or bacterial balance in the gut. It is possible that this change in the microbiome is what reduces inflammation and heals the bowel.

### What does ENT look like?

An important factor in the success of ENT remission is adherence to the therapy outlined by your IBD team. There can be slight differences in ENT between IBD Centers and physicians but overall treatment is similar. The amount of formula needed is individualized for each child by a dietitian and growth should be monitored during ENT. The formulas used are always nutritionally complete and manufactured in a sterile facility. Differences in brand of formula and types/amounts of ingredients such as protein or fat do not seem to change remission rates. This makes taste preference an important factor in deciding which formula to use. The formula can be taken by mouth, or if this is

difficult because of taste, a nasogastric (NG) tube can be used. An NG tube is a thin, soft tube that is inserted into the nose and down the throat into the stomach to deliver formula. NG tubes are very safe and parents and older children can learn how to insert them at home. Often the NG tube is used at night to provide the formula with many kids removing it during the day for their normal activities and school. Feeding schedules can vary depending on what works best for the child and family. ENT is needed for 8-12 weeks until remission is reached.

### Challenges with ENT

The obvious challenge of ENT is replacing food intake with formula for 8-12 weeks. However, for a sick child that doesn't feel well after eating anyway, the possible benefits can outweigh this challenge. For children that choose to drink the formula by mouth, flavor "burn out" can be a challenge. Alternating between different flavors of a formula can help with variety. Water to drink for thirst is always allowed. Many IBD Centers and physicians are okay with allowing the occasional hard peppermint candy to freshen the mouth. As with any dietary treatment for disease, ENT will change the meal environment at home, school, and at social events. Discuss this with your child ahead of time and create a plan.

### Is ENT right for my child?

ENT is an effective treatment for IBD that lessens exposure to medication. Studies show that overall children have improved quality of life on ENT when their symptoms are better or resolved. For more information on this treatment and how it can help your child, please talk with your child's gastroenterologist.

**IMPORTANT REMINDER:** This information from the North America Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) is intended to provide general information and not as a definitive basis for diagnosis or treatment in any particular case. It is very important that you consult your doctor about your specific condition.