4 Symptom Management: Nausea Control
Dealing with symptoms like nausea make it difficult to enjoy normal daily activities. In this article, learn about the various triggers that cause nausea and associated vomiting as well as suggestions for controlling it.

6 Caution! Looking Good Can Be Hazardous to Your Health
Sometimes having a chronic medical condition that does not affect your outside appearance can be a danger to your health. Learn what you can do to keep physicians not familiar with your medical history informed about your special needs.

7 Tube Feeding: Alleviating a Common Complaint
A frequent complaint from individuals receiving their formula via a tube is diarrhea. Discover the various reasons diarrhea occurs and what you can do to help resolve the problem.

8 How Parenteral Nutrition is Made
Have you ever wondered how your personal parenteral nutrition solution is made? We take you through the detailed PN process step-by-step from the physician’s orders to packaging and delivery.

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Dear Readers:

Brrr — feel that chill in the air? Fall is here! I hope you are enjoying the changing colors of the leaves and the crispness of the air.

As the seasons change we can look forward to the holidays. As with all of the holidays, however, food is associated with our celebrations. If you can eat, even if only a little bit, you may be looking forward to holiday parties. However, if you cannot eat, or are limited in what you can consume, you may be worried or feel that you cannot go to a party. Not true! Parties seem to be about food but they are really about the people! Here are some helpful hints:

• If you are unable to eat, and know dinner will be served at a big table, call your host or hostess ahead of time and let them know that you will not be eating. Mealtime is still a great opportunity to sit and interact with people.

• If you can eat, and want to know what is on the menu, you can also call your host or hostess. If it is something you do not tolerate well, you can always bring items you can tolerate which can be served with the other food. It is really okay! Your delicious meal of broth, served at the same time as the other food, allows you to participate in the socializing.

• If you wish to keep your situation private, you may need to make some adjustments, such as arriving late for dinner parties or luncheons.

Remember — if you are not eating, you can do a lot more talking! So don’t let yourself miss out on a good time. If you have questions or need additional helpful hints, contact your dietitian or your Coram Partner, Linda Gravenstein. We can help!

We arranged quite a bit of information for you in this issue of *Celebrate Life*. First, we continue our feature on symptom management. We hope you find Dr. DeLegge’s medical information and the clinical coping ideas on this issue’s featured topic beneficial. Also, if you look healthy, watch out — doctors may not realize you need specialized care. Linda Gravenstein provides a humorous, yet important, take on a consumer’s “appearance” and dealing with clinicians. For our enteral consumers, Melissa Sugarman provides an informative article about a “messy” issue that is also useful for caregivers. Finally, if you ever wondered how we get your HPN from your doctor’s orders to your home, you will find our article on how we compound parenteral nutrition very interesting.

There have been so many great comments from our readers about our newsletters this year! It has been our pleasure to provide these articles, recipes and fun items for you. Your feedback is always appreciated so please don’t hesitate to contact us (see page 10 for a list of contacts).

Wishing you lots of fun, happiness and health as you coast into 2009!

Carol Ireton-Jones
*Editor-in-Chief*
Many chronic diseases have associated symptoms that can be unpleasant and prevent people from carrying on with their normal daily activities. It is these activities, from washing clothes and taking care of kids, to an evening out or a day of shopping, that make life fun. If you have symptoms that keep you home, you may not have the full enjoyment of life that you deserve. In this article, learn the causes of nausea and what you can do to minimize it. As always, check with your doctor before changing any current activities.

Nausea and Its Causes

There is nothing worse than a queasy feeling of being on a roller coaster that won’t stop! For a few individuals this is common — however, for most of you this feeling occurs infrequently. Nausea is often due to either medications you are taking or your medical diagnosis and can occur with tube feeding or parenteral nutrition. For the general public, there are many recommendations to settle the stomach. However, things are more difficult for people who receive parenteral or enteral nutrition.

There are some simple steps to follow that can reduce your nausea before having to resort to medication. Before you take these steps, it is important to try to determine what triggers your nausea. For some it may be the type of food itself, for others it can be smells, stress or eating too quickly. Keep a journal and note what you are doing, eating and feeling when you get nauseated. Also note the time. Some individuals experience a greater level of nausea in the morning and evening.

Solutions

Once you identify your triggers, consider the following:

**Slow down.** Activity can make nausea worse. At least 30 minutes before you plan on eating, rest or participate in a sedentary activity.

**Avoid food odors.** Smells from the kitchen or in restaurants can trigger nausea. Ask to be seated outside or away from the kitchen. You can
also have a family member or friend make food for you when you are not home or in another location. Some individuals find sniffing a lemon before they eat helps quell their nausea after smelling an unpleasant food aroma.

**Eat slowly.** Take a bite, set your fork down and chew at least 10 times before swallowing. Also, take in bland foods. If seasoned foods seem to trigger your nausea, try foods such as gelatin, crackers, pretzels, chicken broth, white rice and toast.

**Avoid hard digesting foods.** Foods high in fiber and cruciferous vegetables (broccoli, cabbage, cauliflower, etc.) can promote gas and bloating. High fat foods may also stay in your stomach longer and promote nausea. Ginger tablets (available from the health food store) may help reduce nausea. Ginger is also available in real ginger ale and pickled, which you can find in most supermarkets.

**Medications**

Nausea medications (anti-emetics) can be taken orally, rectally, subcutaneously, intravenously or through intramuscular injection depending on the medication. Over the counter motion sickness medications, such as Dramamine®, are worth a try. For patients who cannot take or absorb medications orally or through a tube, scopolamine is available in patch form (Transderm Scōp®). Other common medications used to control nausea and vomiting include promethazine (Phenergan®), prochlor-perazine (Compazine®), droperidol (Inapsine®) metoclopramide (Reglan®), and ondansetron (Zofran®). Deciding which medication to use depends on the specific situation and physician recommendation.

Intravenous anti-emetics are useful for acute episodes of nausea and vomiting. The long-term use of these medications is dependent on the physician’s comfort level with the medication and the patient’s tolerance of the medication. For members of the HPN population who are unable to ingest and/or absorb oral medications, a few medication regimens have proven useful. The use of either ondansetron via intramuscular (IM) injection followed by continuous subcutaneous (SQ) infusion or metoclopramide via SQ infusion may provide more consistent suppression of symptoms while being managed safely and easily by patients in their own homes. Additionally, IV fluids may be added to therapy as needed if dehydration is suspected or nausea and vomiting persist.

Have your physician or pharmacist review your complete medication profile to see if an individual medication, or a combination of medications, is resulting in nausea and/or vomiting. If you notice that your vomit contains blood, contact your physician or care team immediately.

Nausea and vomiting can be controlled through a variety of dietary, behavioral and medication adjustments. Your home infusion pharmacist can assist you and your physician by making dosing recommendations and suggesting medication regimens. Your home infusion nurse is available to ensure the most comfortable intravenous access for your anti-emetic needs and provide the necessary instruction for correct administration. Finally, your home nutrition support dietitian can assist in evaluating your trigger journal and work with you to create the necessary dietary modifications to control your nausea.

You can have a high quality of life and participate fully in your daily activities, simply by talking to your physician and home care team about your symptoms and asking for help to control them.
Looking Good Can Be Hazardous to Your Health

by Linda Gravenstein, Coram Partner

**Being a caregiver,** I have observed a strange phenomenon that seems to occur when my daughter seeks medical care outside her regular circle. This might be a dentist, dermatologist, or most recently her orthopedic team. I have come to dread an all too common statement, “She looks perfectly normal to me.” I wanted to make sure that my daughter and I were not the only ones dealing with this issue, so I asked several consumers if they too had experienced this. The response was unanimous — everyone I asked had this happen.

I wondered why well-meaning and qualified individuals would make such a statement. Is it to be nice? To make her “feel better” about herself? I have come to a conclusion that maybe she just looks healthy. This is not a scientific answer. I just asked the individuals why they would make such a statement. Everyone said just about the same thing — she looks good.

I started to think what she could do to avoid this situation. No makeup? Wear a bathrobe to see the doctor? If getting the proper route of medication or hydration was not so vital, then it would not matter what impression she makes, but it does. I remember being told that people develop an impression about you within 20 seconds of seeing you. A colleague, who is not on home parenteral and enteral nutrition (HPEN), went to the doctor during a workday in her business suit. When she went to check in at the physician’s office they told her, “We don’t see reps on Wednesdays.” She had to explain that she was a patient! Just as my colleague had to do, you too must explain your unique needs.

If you came into an emergency room without a leg due to an injury, no one would expect you to walk without an aide. Most HPEN consumers suffer from an affliction that is not visible. To some it might be a diseased digestive tract, even an amputated portion of the digestive tract — but it is hidden. Since it is a chronic condition, you strive not to be identified by this. However, sometimes we even fool our clinicians!

When you go into a medical facility, always take a copy of your most recent labs, the names of your treating physicians, a list of medications and route of delivery, and your HPN or HEN orders. My daughter Megan does this, and in fact, she recently added a sheet that has a simple diagram of her digestive tract. On the diagram she marked areas that have been removed with a solid line, a dotted line for areas that have been resected, and a star indicating damage or disease. It is a very simple explanation and in this situation the old saying, “A picture is worth a thousand words” really applies. You could also try an open letter to all medical personnel or you could use the dining out card from the Oley Foundation that states you have a medical problem that affects your digestive tract.

When meeting with medical personnel, these suggestions may be beneficial in drawing the attention away from your outward appearance and toward your underlying condition that might require special treatment. This might save you precious time in getting the appropriate care you need.
“My formula is giving me diarrhea.” This is a frequent complaint voiced by some people receiving their nutrition via a tube feeding formula. Diarrhea, a condition characterized by excessive water in the stool and/or an increased frequency of stools, can be problematic and uncomfortable for anyone experiencing this condition.

When the tube feeding formula is believed to be contributing to the diarrhea, it may be due to several reasons: formula being delivered too quickly, formula that is too concentrated and formula that is contaminated with bacteria. If you use a syringe to bolus tube feeding formula into the stomach and you are experiencing loose stools, the administration rate may need to be slowed. An easy way to do this is using the gravity delivery method where the tube feeding is allowed to drip in over a period of several minutes to a half hour.

Using a formula that is highly concentrated, a very high-calorie formula for example, may also cause diarrhea. Using a less concentrated formula may help improve the problem. If you do try a less concentrated formula, it is important to remember that you may need to use more cans of formula to meet your same calorie goals.

Additionally, ingesting a tube feeding formula that has become contaminated with bacteria could potentially lead to gastrointestinal (GI) distress. Try following these tips to decrease the risk of bacterial contamination:

- Always rinse off the top of the tube feeding can prior to opening it.
- Wash your hands thoroughly before administering feedings.
- Follow the manufacturer’s guidelines for how long a formula can be left in a feeding bag.
- Do not add new formula to old formula (topping off).
- Remember to change the feeding bag and administration set (tubing) every 24 hours.

Antibiotics can also change intestinal flora, reducing “good bacteria” and causing overgrowth of “bad bacteria,” making someone more susceptible to GI problems. Drugs such as magnesium containing antacids and phosphate supplements may have a laxative effect on the bowel. Sorbitol, found in medications in elixir/liquid form, may also cause diarrhea. Other medications such as H2 blockers, anti-hypertensives, anti-arrhythmics and non-steroidal drugs have potential known side effects of diarrhea.

If you are experiencing frequent loose stools when using a tube feeding formula, be sure to talk to a medical professional. Your doctor may be able to identify the cause of the diarrhea and if appropriate, recommend some anti-diarrheal medications that are safe for you to use. A pharmacist may be able to let you know if any medications you are currently taking may be promoting loose stools. Finally, a dietitian can help by reviewing the tube feeding formula you are currently using.
Parenteral nutrition (PN) is the provision of nutrition support through the vein. PN is usually initiated in the hospital after surgery or a prolonged illness where the gastrointestinal tract cannot be used. Many patients transition quickly back to an oral diet before they are discharged from the hospital. However, some patients may need PN therapy for a prolonged period. For these patients, PN therapy may continue at home (HPN). This article details the processes involved in providing PN solution to the patient at home.

Prior to discharge, the hospital case manager or discharge planner coordinates the patient’s infusion needs with Coram. Next, the admissions team member verifies that home PN services are a covered benefit under the patient’s health insurance policy. The discharge planner then provides Coram with the physician’s orders for laboratory monitoring, PN formula and plan of care from the physician overseeing the PN patient. Once the physician order is received by Coram, the pharmacist reviews the order for stability and compounds the prescription for patient use. At Coram, we have designated home nutrition teams for patient management. The Home Nutrition Support dietitian, pharmacist and nurse jointly review the PN order and the physician plan of care to ensure they are safe, effective and practical for home administration.

Your home care nurse’s role is to provide therapy administration related to education including catheter care, pump operation, correct parenteral nutrition hook-up, safe provision of PN related additives and proactive self-monitoring techniques. Your home care nurse also works with the registered dietitian and pharmacist to develop an encompassing patient care assessment and monitoring protocol that focuses attention on the appropriateness of the prescribed drug and dosage, anticipates possible interactions, side effects, educational needs and frequency of clinical interactions.

Your Home Nutrition Support dietitian’s role in evaluating the PN solution is to verify the calories, protein, fat, vitamins, trace minerals and fluid are appropriate based on each of their patient’s unique needs. The dietitian also obtains the supportive medical documentation from the hospital to aid in qualifying the patient for insurance coverage for this therapy.

The clinical pharmacist’s role is to review all components of the PN solution. The pharmacist evaluates the solution by reviewing the type and quantity of each component in the solution and ensures that none of the components interact...
with each other, form a precipitate or inactivate any of the components of the PN. The stability of the solution is ensured through the use of an admixture assessment checklist combined with the clinical judgment of the pharmacist. After reviewing the safety and stability of the components in the solution, the pharmacist enters the PN prescription into the computer. The computer generates a compounding document or recipe used by the pharmacist to mix or compound the prescription. This compounding document includes a list of all components and the quantities needed for the PN solution. Each calculation, computer entry, product selected and step in the production of the home PN solution is checked by one pharmacist and double checked by a second pharmacist to ensure complete accuracy of the solution with the physician order.

The goal of the compounding pharmacist is to prepare the PN solution without introducing any impurities such as bacteria or small particles called particulate. To accomplish this, the compounding pharmacist prepares the PN in a sterile environment. Special precautions are taken to prevent contamination of the solution during compounding. The aseptic or sterile technique of the person compounding the solution is validated every three months and special air circulation and purification techniques are used in the clean room to ensure air purity. In addition, all compounding staff must wear special gowns, bonnets, shoe covers, masks and gloves when preparing PN solutions. All compounded PN solutions meet the USP standard.

Prior to entering the compounding room, the compounding pharmacist assembles all the appropriate supplies and product to prepare seven to 14 bags of PN. After the compounding process is complete, the pharmacy technicians label each bag of PN. The pharmacist rechecks the order to make sure all the products are correct and the labels are accurate.

Before the PN bags are sent to the consumer, the Clinical Support Specialists determine what home PN supplies are necessary to administer the PN solution. A list of the supplies specific to each consumer is developed and sent to the warehouse. An experienced warehouse technician assembles the required supplies and packs them into a delivery container. A separate container is packed with the PN bags and ice packs to keep the solutions cool in transit. All boxes of PN and supplies are checked by the pharmacist or pharmacy supervisor prior to the boxes being sealed and delivered to the patient.

The entire PN process, from the time the referral is called into Coram, to sealing the delivery containers with the finished PN product and supplies, takes about three to four hours. This time frame does not take into account the time and interventions of ongoing clinical monitoring by the Home Nutrition Support Team, which significantly adds to the time spent on each unique patient case.

If you have any questions about your home PN formula or its preparation, contact your Home Nutrition Support nurse, dietitian, clinical support specialist or pharmacist at your nearest Coram location.

by Melissa Tulchinsky, MS, RD, CNSD and Kevin McNamara, Pharm.D.
Coram is a consumer-focused company that strives to educate and empower the consumers it serves. Our *2008 Home Parenteral and Enteral Nutrition Support Educational Conference Call Series* is a great way to share, listen and learn about topics that affect nutrition consumers. You never have to leave your home, and there is never a charge for participating.

To call in to a conference, simply follow these steps:

- Call **866.213.1962**
  *Allow five minutes before the call is scheduled to begin.*

- When prompted, enter the access code **9917809**

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**Upcoming Calls**

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**2009 Conference Call Series**

Dates and topics will be announced in upcoming issues!
Patient Update:
Nutrition Product Changes

Effective October 1, 2008, you will notice that your parenteral nutrition (PN) bag will look a little different. The manufacturer of the bags Coram uses to provide your PN has changed. Our new bags are manufactured using a non-DEHP, medical grade plastic. The bag may look and feel slightly different.

You should have received a brief letter with instructions on how to add medication to your PN bag. This letter outlines which port you will use to spike your bag, as the port position has changed from the bags you previously used. The educational material also demonstrates how to connect the bag and tubing. Ask your Coram representative for a copy of this letter if you have not received it, or would like to review the information again.

Additionally, Coram recently entered into a contract with the Baxter Corporation to provide our consumer nutrition solutions. While you may notice a change in the names of the ingredients in your parenteral solution, there has been no change in the nutritional value of your formula. Our goal at Coram is to partner with companies that will provide the highest quality products to our patients. Baxter is an international corporation that is a leader in intravenous solutions, especially nutritional solutions. Your pharmacist and dietitian have discussed the above changes with your physician and your parenteral nutrition prescription has been updated.

If you have any questions about the new bag or formula changes, please feel free to contact your Home Nutrition Support Team. ♦
Celebrate Life