

An Education Program from ACCC's Center for Provider Education

Q&A

"Optimizing Enteral Nutrition for Oncology Patients" Webinar

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- What is the website that you mentioned that has a lot of EN info?
- The following websites/resources may be helpful: ASPEN website: www.nutritioncare.org; Dietitians in Nutrition
 Support Dietetic Practice group: http://www.dnsdpg.org; articles in practical gastroenterology; and
 http://www.medicine.virginia.edu/clinical/departments/medicine/divisions/digestive-health/nutrition-support-team/resources-page
- For our Medicaid patients that need to be sole source for coverage, how do you address continued swallowing in those patients?
- State that the patient is unable to take enough oral intake to be able to maintain weight and strength or that oral intake is for "comfort purposes". Prove this by showing evidence of the patient's weight loss and by the documented Dx of head and neck cancer, or esophageal cancer or dysphagia, or other cause for dysphagia or gastrointestinal malfunction. To my knowledge Medicaid coverage guidelines are the same as Medicare coverage guidelines. They allow coverage for patients who can eat very small amounts, but not enough to meet needs. I have not seen the word "sole source" in the guidelines. I recommend checking out the Medicare/Medicaid website to view the guidelines.
- How would you recommend designing a protocol to place a peg tube prophylactically? Hard to convince doctors to do so.
- No actual proof in the literature demonstrates whether or not prophylactic PEG is helpful for outcomes, but it does make sense in practice to do it, especially when patients cannot eat. I would pull articles to show them that patients can maintain weight, have less treatment interruptions, etc. I would make a set of criteria, based on the literature, that shows which patients are most likely to benefit from a PEG, and when you evaluate patients, recommend PEG if they meet several of those criteria. For example, low BMI, weight loss, surgery, chemotherapy planned, etc.
- What recommendations do you have for head and neck patients who suffer from mucositis while on EN?
- Don't push to eat orally if it is painful. Meet most nutritional needs via small-bore, soft nasoenteric tube.

 Use anti-diarrheal meds if necessary.



- Do you have a preference with type of protein? Whey vs casein? What about HMB, arginine or glutamine?
- No preference. I use standard enteral products. I do not add HMB, arginine, glutamine. No experience with that and have not seen proof in literature that it's worth doing.
- Can you address the safety/appropriateness of accessing the gut for short-term support with NGs or dobhoff tubes in patients with thrombocytopenia and mucositis or esophagitis?
- When I have a patient with severe mucositis or thrombocytopenia such that bleeding or injury is a potential factor, I leave the decision to the MD on whether they wish to have a small-bore soft feeding tube placed. I suggest giving info on safety and benefits of enteral feeding over parenteral feeding and make sure they understand the extent of the malnutrition/need for EN support.
- If patient is obese what weight are you using for fluid needs? Are you using adj. body to figure out fluid needs?
- For fluid needs in obese patients, I calculate 30-35 mls [ml?] per kg on adj. BW. I then follow to be sure they don't look dehydrated by labwork and or by patient telling me about urine frequency and color.
- What specific formula do you use for your Chyle leak patients?
- I use VivonexRTF which happens to be the lowest in long-chain fat on our formulary and it contains good proportion of MCT oil. If not that I'd probably use Vital HN, similar in fat content. I sometimes have also used "BoostBreeze" or "ResourceBreeze" fat-free beverages in the tube.
- What is the maximum flow rate you use for a J-tube feeding at home?
- In my experience, patients have tolerated 65-120 ml/hr well and a few will tolerate as high as 130-200 ml/hr. It's very individual. Some have trouble increasing beyond 65, and yet a few patients have tolerated a quarter- or half-can bolus and felt ok with that, but it's unusual.
- If you have a patient on bolus feeds at home with an odd volume—more/less than one can, what is the standard keep refrigerated time for an open can of TF?
- I do not think there is a "standard," but I typically tell them to cover the can and place in fridge for 1-2 days—treat it sort of like milk.
- You mentioned that it may be beneficial for patients without insurance to buy formula directly from pharmacy? This would depend on if they are a DME pharmacy, right?
- Some retail pharmacies and outpatient hospital pharmacies sell tube feed products to patients at a very reasonable price and much less than some infusion companies would need to charge.



- If a patient is malnourished, what level of D5 would prevent refeeding once a TF starts? We have surgeons/docs that wait several days on TF but will be receiving D5 at 75 or 100cc/hr.
- D5 would contribute to refeeding syndrome, (and can cause it). Refeeding syndrome is caused by the effects of insulin that is stimulated by dextrose infusion. If the patient is getting D5, I recommend that the MD decrease or omit dextrose from the IVF when the tube feeds begin. I recommend figuring out the amount of kcals that the patient is getting from the dex and let the MD know that you don't want to feed greater than a total of 15-20 kcals per Kg (total from tube feed and IVF) until risk for refeeding syndrome has passed.
- Which calculation do you use for adjusted body weight? Do you adjust the same for both overweight and obese patients?
- I want to clarify what I said on the webinar. I use the traditional method RDs have used for years. Actual minus Ideal x 0.25 and add that to IBW.
- Please discuss prokinectic medications.
- Reglan metoclopramide. It's useful to stimulate gastric emptying if a patient has gastroparesis or slow gastric emptying (not useful if there is a physical obstruction). It's not really useful for stimulating other parts of GI tract. There are a lot of situations in which it's contra-indicated, that's why I discuss with MD on that.
- With or without fiber on the J-tube standard formula?
- You can use fiber in J-tubes unless it's a very small-bore tube and you are concerned about clogging. If a patient has small bowel bacterial overgrowth, or at high risk for it, or if they c/o gas or distention, I'm likely to avoid fiber.
- With obese patients, do you look find they lose weight with 20-25 kcal/kg? What are your thoughts on gradual, controlled weight loss with obese patients receiving enteral feedings?
- I find that they do lose weight at that kcal level or lower, such as 15 kcals per Kg adj BW. I believe that gradual weight loss is ok and desirable for those who are obese and typically that's how I feed them.
- If anastamotic leak is indication for EN, wouldn't it be difficult to place a feeding tube distal to the leak without aggravating the area with passage of tube?
- Typically the patients who develop anastamotic leak after surgery already have a J-tube (jejunal feeding tube) in place. Our surgeons place JTs prior to ChemoXRT and surgery for some esophageal cancer patients and place the JT during the esophagectomy surgery in some other patients, depending on the stage, type of cancer, and treatment plan. If the patient did not have a tube yet, might need surgical placement.



- When a patient needs pancreatic enzymes, how do you dose and administer those with tube feeding?
- Can break open capsule, mix capsule contents with apple juice or thin applesauce, and instill into G tube at time of gastric feeding. If patient is fed via J-tube then open capsule and mix capsule contents with small amount of NaBicarb and water and instill via J-tube during tube feeding or mix with the enteral formula prior to feeding. Click here for more information.
- O you have slides for your calorie/protein needs?
- The information is on slide # 19. If you are asking for actual reference from literature I don't have one. It's based more on what I do in practice. Also in the ASPEN practice manual.
- What are the recommendations for alternative nutrition in a patient who is not eating but is also neutropenic/pancytopenic?
- You can use any standard EN and make sure aseptic technique are used in administration. I would recommend not using a mixed powdered formula as it's more likely to get contaminated.
- Could you please repeat or send me the recommendation for adding salt to the fluid flush when resident has gastric output from g-port. If refeeding gastric contents into J-tube, then extra salt is not necessary, correct?
- One-half to three-quarter teaspoon of table salt contains approx 60 mEq Na and Cl which is near the amount of Na found in 1 liter of gastric fluid. If refeeding gastric contents into J-tube, patient must be on PPI such as Lansoprazole or Prevacid to acid suppress. And, yes, if you are re-infusing gastric output then no need to add extra salt.
- What's your recommendation when a head/neck patient is complaining of additional secretions with the tube feeding and it decreases his or her compliance?
- Maybe have them take less water if they are having more fluid secretions. Try a higher kcal (2 kcal /ml) formula. Ask MD if there is a medication that might help with the secretions or ask for a suction machine to clear oral secretions.
- Some patients complain that their tube gets black on the inside. Should the tube be changed? What causes this?
- I think it might be a mold or bacterial growth. I've had cases in which it was stain from coffee or a med that they took via feeding tube and a case when we didn't figure out what it was. I ask them to have it checked in clinic by PA or RN who is experienced in GTs. I also recommend that they replace it if there is odor in it or if very old tube that is breaking down, cracking, etc. I think it's a good idea to swab and find out what the black material is.



- How are you administering pancreatic enzymes for someone who is not taking anything by mouth, via g-tube?
- Open pancreatic enzyme medication capsule, mix capsule contents with small amount of apple juice or thin applesauce, and instill into G tube during the bolus feed. If fed with J-tube, mix capsule contents with small amount of NaBicarb (baking soda) and water and instill in J-tube during the feed cycle or mix with the enteral formula, mix well and several times during feeding cycle if using bag/pump. Refer to similar Q/A on page 3.
- O you bill MNT in the outpatient setting?
- One of our clinics does. Some do not. I do not know much about MNT billing though as it's more of a management issue.
- Is the tap H_2O at the hospital okay to use for the imunocompromised patient? Or should we use truly sterile H_2O ?
- Good question. That is controversial. We use tap water. Some areas may have different water quality.
 In the ASPEN guidelines JPEN 2009;33(2):156 states that use sterile water if safety of tap water not reasonably assumed... it's a "grade C" recommendation-based on expert opinion and not actual research-based evidence. My personal opinion would be to use purified or sterile water if the patient is severely immunocompromized.
- You mentioned something on the kcal/pro/water slide about the NaCl 1/2 tsp/qt water, then something concerning the jejunum and PPI. Would you repeat that info please.
- One-half to three-quarter teaspoon table salt contains approx. 60 mEq Na and Cl to approximate the amount of Na found in gastric fluid. IF refeeding gastric contents into J-tube patient must be on PPI such as Lansoprazole or Prevacid to acid suprress. If your patient does not want to reinfuse gastric drainage or if they are not on PPI (acid suppression), you can mix some salt with water to replace that lost in gastric drainage. We do this if patients are losing > 500ml per day in gastric drainage.
- thought adjusted BW for calculations was not validated.
- A: I do not think it is validated. But we still do it for lack of a more reasonable way.
- Is there a difference in hang time for spike sets vs screw cap sets with RTH and why? (Your slide said 24 hrs. with screw cap?)
- Yes there is a difference but I'm not sure why likely because more chance of contamination if top opened up. I got that info from manufacturer website. http://abbottnutrition.com/FAQs/FAQs.aspx Reference for hang times: Preventing Microbial Contamination of Enteral Formulas and Delivery Systems (Hazard Analysis Critical Control Point (HACCP) in the Clinical Setting -- 63378/September 2003, Abbott Nutrition.



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• For nutrient needs, what formula do you use for 'adjusting body weight for obese'?

A:0.25 x (Actual Wt - IBW) + IBW

What rate do you feed in the jejuneum?

Anywhere from 10 to 200 ml/hr. In my experience most patients do well with rates of about 65 - 130 ml/hr. It's very individual.

Q: We have patients that want to puree food and put through the feeding tube. Is this appropriate?

If it's a G tube and if they flush well I think it's ok. Of course they are increasing clog risk. I do not recommend doing that with a J-tube because it will clog. If patients want to use other nutritional liquids in tube I think [it's] OK if tolerated well and the tube is kept flushed with water and clean. It can become a problem if they are taking things that prevent them from meeting nutritional goals though.

ls it ok to use Emsure or Boost as sole source tubefeeding?

A: Yes, you can use Ensure or Boost for sole source.

Have you ever used continuous water GJ feeds in addition to GJ formula feeds? Is there equipment that exists to do this, such as split tubing?

There is a pump that can do two bags, one with formula and the other for water flushes. For home patients we don't have that type of pump and patients usually flush water with a syringe. I think no need for machine to water flush, except that it is helpful for nurses and saves time in hospital.

Os you recommend Oxandrin for weight gain?

I have very little experience with oxandralone. I think that there are situations that it may be useful in, but I would recommend you to look elsewhere for answers on that subject

When adjusting for body weight, do you adjust for BMI >30 or IBW% >120%

Adjust for weight > 120% IBW.

What formula do you think is best for jejunal feedings for cancer patients?

Standard 1.5 kcal/ml formulas. The 1 kcal /ml ones if they are obese.



- What feeding schedule helps patients be most compliant? My patients have a difficult time with 2 cans 3 x day which is what they need and tell me it makes them too full.
- Try a more concentrated product (2 kcal/ml) or, try a gravity bag method for slower infusion. Another option: nocturnal cycled pump feed and smaller 1-can boluses during day. Another option, all day pump and backpack for ambulatory feeding. What patients decide to do is very individual.
- Oo you find that higher osmolality formulas cause GI distress? (osmolality 500-700)
- If patient has had partial gastrectomy and is being fed into stomach, or if fed into duodenum or Jejunum at a high rate, it can cause symptoms of dumping-syndrome. I think it's not an issue if feeding the stomach.
- Why do you use adjusted body weight for protein needs? I thought practice was moving away from using adj BW for needs due to it is not evidenced based that it is accurate?
- I use adjusted weight for protein needs because, if we based protein needs on actual weight, we would be giving too much, and if we base them on IBW, we could be giving too little. Don't know of a more reasonable way to do it, evidence or not. Sometimes we need to do a best guess if there is lack of evidence.
- I realize that magnesium and potassium can cause diarrhea, but what about IV supplements?
- If we are concerned about excessive diarrhea with enteral magnesium and potassium supplements, we can recommend IV supplementation if the patient is hospitalized or in clinic.
- What equation do you use for estimating fluid needs? And if a patient is obese how do you estimate fluid needs? (Some adjusted weights are still a BMI >30.)
- Generally 30-35 ml per Kg unless they have CHF or renal failure or other reasons to restrict it. I use adj. weight for fluid for obese pts. If the adj. weight is very high, I go with something reasonable such 25-30 ml per Kg Adj. weight—I do not have a specific way to do that for the extremely obese patient. I do ask them about urine output and color of urine and other signs of hydration status.