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PRESIDENT'S WELCOME:

GASPEN has had a very busy summer! In June, we hosted our summer meeting at Emory Saint Joseph's Hospital with presentations on the EnFit® initiative and acid-base disorders. In August, we co-hosted a CE dinner symposium with the Academy of Continued Healthcare Learning (ACHL), sponsored by Baxter Healthcare. Dr. Todd Canada gave a wonderful presentation on the topic of IV lipid emulsions in diverse patient populations. We had representation from many different specialties at this presentation, including physicians, nurses, dietitians and pharmacists. Both meetings were well attended and well received. I would like to thank our wonderful active GASPEN board members for all of their hard work preparing for these meetings.

This winter, GASPEN has joined with the Southeast Chapter of the Society for Critical Care Medicine to provide a CE activity on nutrition in the ICU presented by Beth Taylor, a nutrition support specialist from Barnes Jewish Hospital in St. Louis MO. This activity will be held on December 10 from 5:30 – 7:30 at Grady. Please see the enclosed flyer for details for registration.

While GASPEN has been very busy planning continuing education activities, there are also many ASPEN activities available. A.S.P.E.N. continues to offer a robust selection of webinars. Don't forget to sign up for Clinical Nutrition Week 2016 in Austin, Texas! Early-bird registration is currently available until November 11, 2015.

GASPEN elections will be held this Fall. Please check your inboxes for the ballot. We are fortunate to have an active board committed to the growth of our chapter.

We welcome any suggestions and comments from GASPEN members for CE programs, newsletter articles and any other ways that we can benefit our members. Do you have an interesting case that you would like to present? Would you like to share a research project or quality improvement initiative? Consider sharing with other members by publishing in our newsletter by contacting Khatija Jivani at kjivani@gwinnettmedicalcenter.org.

We also would like to welcome any GASPEN members who would like to become involved on our board. I look forward to another wonderful year with GASPEN!

Adina Hirsch, PharmD, BCNSP

MEMBER SPOTLIGHT: Marlene Neville, RD, LD, CNSC

Marlene is the founding president of GASPEN. She began her nutrition support career at Northside Hospital in 1982 as the second nutrition support dietitian at Northside. She continues to work part-time at Northside and has been working at Coram as a nutrition support dietitian since 1997.

Marlene first became involved with GASPEN when it was still called ANIE (Atlanta Nutrition Information Exchange). ANIE was founded by nutrition support clinicians in the early 1980s and the group evolved into GASPEN in 1985. Marlene served as GASPEN's first president and has remained an active member since its inception serving in elected positions such as president (three times!), secretary and treasurer and as an active member-at-large when she was not holding an elected position.

Marlene is passionate about nutrition support and about GASPEN. Her contributions to our chapter and to the profession are innumerable. We celebrate Marlene's achievements and contributions and look forward to working with her for many more years!

MEET THE BOARD

President: Adina Hirsch, PharmD, BCNSP

Adina has been on the GASPEN board since 2011, serving as president-elect and then president. Adina began practicing nutrition support as a PGY1 resident at Atlanta Medical Center and continued to practice nutrition support as a clinical specialist at Saint Joseph's Hospital of Atlanta. She is currently an assistant professor of pharmacy practice at Philadelphia College of Osteopathic Medicine, School of Pharmacy, where she teaches nutrition, nutrition support, dietary supplements and therapeutics.

Treasurer: Jean Robinson, PharmD, BCNSP

Jean is a clinical pharmacist at Pride Medical. She worked as a nutrition support pharmacist for many years at Georgia Baptist Hospital (currently Atlanta Medical Center). Jean has been the treasurer for GASPEN for two years.

Secretary: Marlene Neville, RD, LD, CNSC

Marlene works at CORAM Specialty Infusion Center as a nutrition support dietitian and has been a member of GASPEN since its inception. Please see page 1 for this issue's Member Spotlight on Marlene!

Newsletter Editor: Khatija Jivani, PharmD

Khatija is a clinical pharmacist at Gwinnett Medical Center in Lawrenceville, where one of her specialties is nutrition support. She received her pharmacy residency training at Saint Joseph's Hospital after receiving her PharmD from the University of Georgia. Khatija is a Board Certified Pharmacotherapy Specialist is GASPEN's president-elect.

Membership Chair: Laura Still, MA, RD, LD, CNSC

Laura is a nutrition support dietician for Walgreen's Infusion Services in Atlanta with previous hospital experience at North Fulton and Kennestone Hospital. As the board's membership chair, Laura is responsible for member recruitment and GASPEN marketing.

Members at large:

Melissa Sugarman, MS, RD.

Melissa works at Abbott Nutrition as an Acute Care Specialist in Therapeutic Nutrition in hospitals in the Atlanta area. She previously worked as an inpatient clinical dietitian and spent many years working in home care. Melissa has been on the GASPEN board for seven years.

Kirsten Shell, PharmD, BCPS

Kirsten is a practicing clinical pharmacist in the community hospital setting at Atlanta Medical Center in Atlanta, GA. She completed her pharmacy residency training at Atlanta Medical Center after receiving her PharmD from the University of Georgia. Kirsten is a Board Certified Pharmacotherapy Specialist, and was voted a future leader for A.S.P.E.N. She is involved in several committees in A.S.P.E.N. including the Drug-Nutrient Interaction (DNI) committee and the Clinical Practice Committee.

Kathleen Crim, RD, LD, CNSC

Kathleen Crim works at Grady Memorial Hospital as a clinical dietitian seeing enteral nutrition patients and developing nutrition care plans for adult and geriatric patients. She is a graduate of Georgia State University with a Bachelor's degree in Nutrition and Dietetics. She completed her internship at Southern Regional Medical Center.

Ronald Spiegelman, PharmD, BCNSP

Ronnie has been practicing nutrition support as a clinical pharmacist since 1978. He has over 25 years of experience at Grady as a nutrition support clinician. Ronnie's other practice sites have included Barnes Healthcare Services, Healix Infusion Services, and Soleo Health. He has also worked as a research pharmacist at Emory University School of Medicine.

Azy Armaghan, PharmD, BCNSP

Azy completed a nutrition support residency at Emory and has been working as a nutrition support pharmacist at Northside Hospital. She served as GASPEN president for three years.

Yolanda Whitty, PharmD, BCPS

Yolanda is a clinical pharmacist at WellStar Cobb Hospital, where she chairs the Medication Use Safety Improvement Committee and specializes in cardiovascular medicine/anticoagulation in addition to managing parenteral nutrition. Prior to becoming a board certified pharmacotherapy specialist, she completed postgraduate training in drug information at Mercer University's Drug Information Center and a pharmacy practice residency at Atlanta Medical Center where she was introduced to the practice of nutrition support. Yolanda has been a member of GASPEN since 2014 and newly added to the board.

GASPEN Celebrates Our Members



- GASPEN turned 30! GASPEN was officially incorporated as a chapter of A.S.P.E.N. in November, 1985. We would like to honor and thank all of the nutrition support clinicians who founded GASPEN (originally ANIE (Atlanta Nutrition Information Exchange)).
- Laura Still, MA, RD, LD, CNSC: CNSC certification
- Kathleen Crim, RD, LD, CNSC: CNSC certification
- Rhonda Wiser, RD, CNSD: Recertified for CNSC
- Anna Oberste, PharmD, BCNSP, MPH: Recertification for BCNSP
- Khatija Jivani, PharmD gave a CE presentation at GSHP's Fall Meeting in Young Harris, GA on Malnutrition and Oral Nutritional Supplements
- Kathleen Crim, RD, LD, CNSC updated the Trauma and Metabolic Stress Chapter of the Georgia Dietetics Manual
- Adina Hirsch, PharmD, BCNSP published a chapter on nutrition support in the Manual of Critical Care Nursing, 7th Edition



The Importance of Lipids in Parenteral Nutrition

Evangelia Davanos, PharmD, BCNSP, CNSC

Parenteral nutrition (PN) may be composed of nearly 50 active ingredients which include dextrose, amino acids, lipids, electrolytes, and many other nutrients. While each component has its own functions within the parenteral nutrition solution, lipids play a particularly significant role. Lipids are a major, dense energy source that provide six times the energy as the same weight of stored carbohydrates such as glycogen, and can therefore meet large caloric needs with minimal volume compared to other parenteral nutrients. The lipid bilayer of cell membranes is made up of phospholipids, the main components of which are fatty acids. Fatty acids are required by cells for numerous functions such as regulation of gene expression and provision of components of cell membrane structure and fluidity. Prior to determination of the type of lipids a patient should receive within their parenteral nutrition formula, it is important to understand the characteristics of each lipid type and their respective fatty acid components.

Fatty acids are categorized according to three criteria:

- 1) Length of the hydrocarbon chain:
 - a. Long-chain fatty acids have ≥ 14 carbon atoms and form long-chain triglycerides (LCTs)
 - b. Medium-chain fatty acids are 6–12 carbon atoms long and form medium-chain triglycerides (MCTs)
 - c. Short-chain fatty acids are 2–4 carbon atoms long
- 2) Presence and number of double bonds within the fatty acid chain: Indicative of the degree of saturation (hydrogen atom content).
- 3) The position of the first double bond relative to the terminal methyl group: Defines their omega classification.

Fatty acids with one double bond are referred to as monounsaturated fatty acids (MUFA) and those with two or more double bonds are referred to as polyunsaturated fatty acids (PUFA). In addition, fatty acids may be categorized as essential or non-essential. Most fatty acids are synthesized by the organism, but in humans the fatty acids linoleic and alpha-linolenic acids must be supplied exogenously through the diet and are therefore referred to as essential fatty acids. Linoleic acid, an omega-6 fatty acid and alpha-linolenic acid, an omega-3 fatty acid are both PUFAs, while oleic acid, an omega-9 fatty acid is a MUFA.

Omega-3 fatty acids, referred to as PUFAs (i.e., alpha-linolenic acid), are metabolized into eicosapentaenoic acid (EPA), a precursor of the less inflammatory Class 3 Leukotrienes and Prostanoids, while Omega-6 fatty acids (i.e., linoleic acid), also in the PUFA family, are metabolized into the more inflammatory Class 2 and 4 Leukotrienes and Prostanoids. In contrast, Omega-9 fatty acids (i.e., oleic acid) referred to as MUFAs, do not act as a precursor for any eicosanoids (See Figure 1).

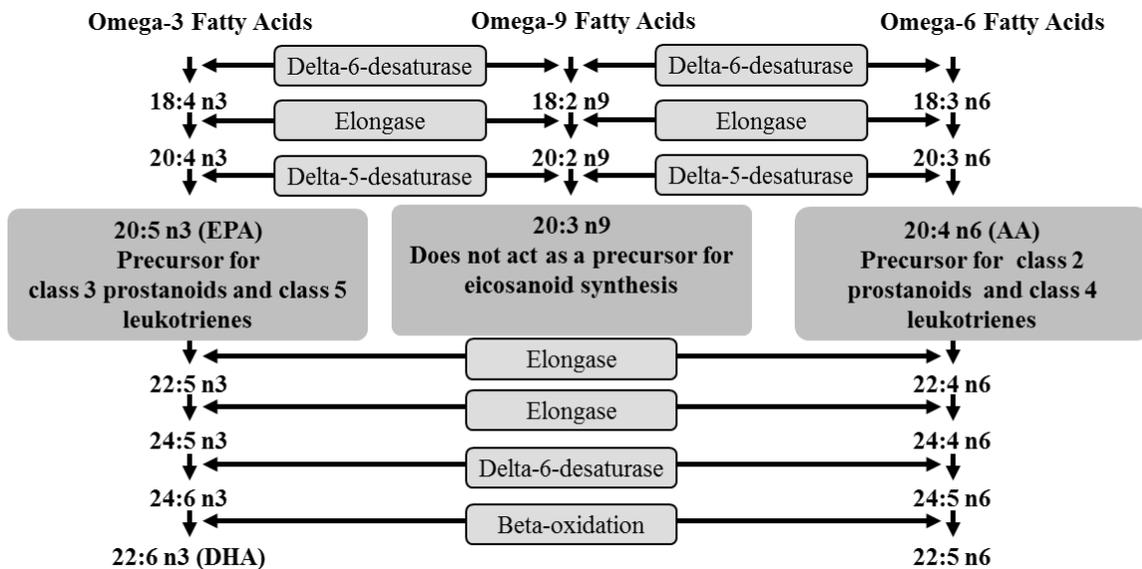
It is important when providing and/or withholding lipids in a patient's parenteral nutrition to consider all the factors discussed above and special attention should be paid to the provision of adequate amounts of essential fatty acids. Essential fatty acid deficiency (EFAD) may occur in patients with fat-free PN provision over 4 weeks; however, clinical symptoms may occur sooner than and as early as in 10 days. EFAD symptoms include dry, scaly skin rash, impaired wound healing and decreased susceptibility to infection.

There are currently three lipid emulsions that are FDA-approved in the United States for use in PN: Intralipid® 20% (Manufactured by Fresenius Kabi, distributed by Baxter), Nutrilipid® 20% (B.Braun), and Clinolipid® 20% (Baxter). Both Intralipid® and Nutrilipid® are composed of 100% soybean oil while Clinolipid® contains 80% olive oil and 20% soybean oil. While all three products are approved by the FDA, Clinolipid is not currently available on the market. In addition, there are other PN lipid products that are neither approved nor available in the U.S., but are available in other countries. To determine which lipid emulsion product would be most appropriate for a given patient, it is important not only to understand the metabolic pathways within which fatty acids participate, but to also ensure provision of appropriate amounts of essential fatty acids to prevent EFAD. To prevent EFAD, it is suggested that 2%-4% of total calories should be in the form of linoleic acid and 0.25%-0.5% of total calories should be in the form of alpha-linolenic acid. These percentages translate to a total weekly dose of 100g (500 mL of 20% emulsions) of 100% soybean oil lipid products.

However, this dose does not apply to other lipid products that contain a mixture of lipid substrates and one would have to calculate the appropriate dose based on the minimum percentage of total calories listed previously. As more research and products are becoming available, clinicians should also be aware of the guidelines and recommendations provided by national and international organizations (See Table 1).

In conclusion, lipids are an integral part of parenteral nutrition and it is essential for all clinicians involved in nutrition support to be familiar with the properties and dosing related to each type of lipid emulsion.

Figure 1. Metabolic pathways from fatty acids



References:

1. Hise M, Brown JC. In: Mueller C, et al., eds. The ASPEN Adult Nutrition Support Core Curriculum. 2nd ed; 2012:63-82. Silver Springs, MD: American Society for Parenteral and Enteral Nutrition.
2. Schneider SM. *Mediterr J Nutr Metab* 2011;4:87-91.
3. Wanten GJ, Calder PC. *Am J Clin Nutr* 2007;85:1171-84.
4. White B. *Am Fam Physician* 2009;80:345-50.
5. Calder PC. *Braz J Med Biol Res* 2003;36:433-46.
6. Vanek WV, et al. *Nutr Clin Pract* 2012;27:150-92.
7. McClave SA, et al. *JPEN J Parenter Enteral Nutr* 2009;33:277-316.
8. Clinical Practice Guidelines Committee. *Critical Care Nutrition*, 2013. Available at: http://www.criticalcarenutrition.com/index.php?option=com_content&view=category&layout=blog&id=21&Itemid=10
9. Singer P, et al. *Clin Nutr* 2009;28:387-400.

Angie Davanos is a Medical Science Liason for Baxter Healthcare Corporation. For more information about this article or for Angie, please contact Khatija Jivani at kjivani@gwinnettmedicalcenter.org.

A Summary of The Standardized Competencies for Parenteral Nutrition Prescribing: The A.S.P.E.N. Model

Kacie Waters, PharmD, PGY-1 Resident (Gwinnett Medical Center)

Prescribing parenteral nutrition (PN) comes with a high risk for errors that can be detrimental to patient safety. Providing PN to patients requires one to interpret data, communicate effectively, and monitor for complications. PN orders are further complicated by different formats, order transcription, and following multiple lines of communication between case manager, dietitian, nurse, pharmacist, or physician. There are several practices and safeguards that should be put in place to uphold patient safety. Recent A.S.P.E.N. guidelines recommend educating prescribers on appropriate indications, formulation design for patients of differing weights and medical conditions, metabolic complications management, and vascular access devices. A.S.P.E.N. now recommends using standardized competencies for PN prescribing. Providing a model for standardized competencies for PN prescribing allows for more consistency between institutions as well as a template for educating a variety of nutrition professionals on prescribing this complex drug therapy.

A.S.P.E.N. Model for PN Prescribing Competencies was developed to assess competencies across all of the clinician groups. It is recommended that this should be a 7-day process offered by an experienced PN prescriber. A.S.P.E.N. defines the following 6 competencies that should be met for institutions to allow PN prescribing:

1. The prescriber may be certified as a nutrition support clinician or other related nutrition board certification.
2. If not certified in nutrition support, the prescriber should complete a didactic/interactive course such as the A.S.P.E.N. PN Order Writing Workshop of a facility-developed or organization-developed program for initial competency. Such a program should include the following:
 - PN indications
 - PN venous access
 - Volume, macronutrient requirements, and micronutrient requirements
 - Fluid, electrolyte, and acid-base balance basic concepts and principles
 - Drug-nutrient interactions
 - PN ordering
 - Monitoring and complication prevention and management
 - A pretest and post-test to evaluate learning
3. The prescriber will complete at least 10 PN orders for the initial competency evaluation (via patient case scenarios and/or actual patients) under the supervision of an experienced preceptor. These cases should reflect the spectrum of medical and nutrition conditions, body weights, and age range.
4. The prescriber should follow these patients and modify daily PN orders over a period of several days. This allows demonstration of the ability to modify PN orders as needed for changing clinical conditions.
5. During evaluation of competency, the preceptor should use the A.S.P.E.N. PN Order-Writing Competency Tool.
6. For annual or every other year competency reevaluation, completion of ongoing continuing education requirements on nutrition support combined with PN order assessment of at least 5 cases or patients should be reviewed using the PN Order-Writing Competency Tool.

Competency programs may be individualized for each institution and each type of prescriber with the ultimate goal being to achieve a culture of safe PN prescribing by evaluating each patient individually and having effective communication between multidisciplinary teams.

PN prescribing is a complex process that may be completed by multiple disciplines. It is important for institutions to develop policies and procedures to assess PN prescribing competency. Prescribing competency should be assessed on at least an annual basis initially. The A.S.P.E.N. model presented in this article may be used to develop and implement these policies and procedures.

Parenteral Nutrition Product Shortage: November Update

Ron Spiegelman, Pharm.D. BCNSP

According to A.S.P.E.N., sterile injectable medication shortages, including parenteral nutrition (PN) components, have been ongoing since 2010. These medications are manufactured by a limited number of pharmaceutical firms, and the supplies of PN components have fluctuated significantly over the past 5 years. Healthcare professionals have seen times when parenteral additives are in abundant supply and become scarce shortly thereafter. Presently, a number of PN components are in short supply (see table below). A.S.P.E.N. has recently published recommendations to assist clinicians in managing shortages of PN components.

Guidelines for managing specific shortages can be found on the ASHP and A.S.P.E.N. web sites.^{1,2} Specific guidelines for managing injectable phosphorus and trace element shortages were published in the 2014 G.A.S.P.E.N. Fall Newsletter.³ For the most up-to-date supply information, see these web sites:

[American Society of Health-System Pharmacists \(ASHP\), Drug Shortages Resource Center U.S. FDA Drug Shortages](#)

[A.S.P.E.N. Latest News and A.S.P.E.N. Product Shortage Latest News](#)

As of November 2015, the American Society of Health-System Pharmacists (ASHP) considers the following PN components in short supply:

Item	Description*	Resolution Date	Recommendations
Amino Acids	M, S (Hospira & Baxter: various adults & prem.)	Hospira: 11/15 Baxter: allocation	Use alternative product size of Mfg
Calcium gluconate	M, S (Fresenius & Am. Regent)	Check wholesaler	Use alternative size
Calcium chloride	M, S (Fresenius & Am. Regent)	Check wholesaler	Limited stability. limit to 5 mEq/L in TPN
Electrolyte concentrate	A (Am. Regent Nutrilite & Nutrilite II)	Check wholesaler	Use individual additives or premixed products
MVI: Adult	M, S (Hospira: MVI w/o Vit. K)	Check wholesaler	Baxter MVI available
Potassium Cl: 2 mEq/ml vials	M, S (Fresenius & Hospira)	Fre.:11/15	B-Braun & Baxter available
Sodium chloride concentrate 23%	M, S (Fresenius & Hospira)	Hos.: check wholesaler Fre.: 11/15	Baxter available.

* **A** = all **M** = specific manufacturers **S** = specific sizes

Following is a list of general guidelines from A.S.P.E.N.

- Use oral or enteral preparations whenever possible.
- Use of pediatric intravenous multivitamins and trace elements for adults are not recommended and may result in a shortage of pediatric products.
- When all supply options are exhausted, ration intravenous nutrients in parenteral nutrition or administer individual parenteral vitamins.
- Purchase only the supply needed, do not stockpile.

References:

1. www.ashp.org
2. www.nutritioncare.org
3. Current Shortages, Local Practices: Managing Trace Elements and Phosphate Salt shortages in the Atlanta: Hirsh A, Shell K; GASPEN News Letter. August 2014.

New Resources for Nutrition Support Clinicians

Adina Hirsch, Pharm.D. BCNSP

Nutrition Support clinicians are often challenged with complicated patient care issues that require immediate resolution. These issues have been compounded by ongoing PN and drug shortages. Recently, the FDA, ASHP and ASPEN have created resources to help NST clinicians provide safe and effective PN while managing critical drug shortages. Here is a brief summary of available online links and Apps to give us much of the information that we need to care for our patients at the click of a button or a mouse.

FDA Drug Shortages App

How do I access the App?

The App can be downloaded via iTunes for Apple devices or via the Google Play Store for android devices.

What can I use the App for?

You can browse for shortages by generic name, active ingredient or therapeutic category. You can also report shortages or supply issues to the FDA via the App. You can also sign up to receive email alerts about new or resolving shortages.

How much does the App cost? There is no charge for the App

ASHP Drug Shortages Resource Center:

How do I access the resource center? Go online to www.ashp.org/menu/drugshortages

What can I use the resource center for?

You can browse by brand or generic name or therapeutic category. The resource center also gives you guidance on managing drug shortages, including therapeutic alternatives.

Is there a charge to access the Drug Shortages Center? No, the Drug Shortages Center is free of charge.

ASHP PN Resource Center: This is a new initiative sponsored jointly by ASHP and A.S.P.E.N. in order to provide NST clinicians with guidelines and tools to ensure the safe delivery of PN.

How do I access the resource center?

Go online to www.pnsafeuse.org.

What can I use the resource center for?

The online resources tab provides the NST clinician with a wide variety of tools to ensure safe delivery of parenteral nutrition. There are links to the most up to date guidelines and recommendations from both ASHP and A.S.P.E.N. for the entire continuum of care from assessing your patients' PN requirements, PN ordering, compounding, administration, management of PN shortages, PN business planning and transitions of care. There is also a FAQ's tab that addresses many other questions that may arise in the clinical setting such as dosing insulin in PN and recommendations for frequency of lab monitoring in the home setting. You can also post a question to be answered by a panel of nutrition support experts and sign up for email updates.

How much does it cost to access the resource center?

The resource center is free to access. Most of the guidelines and other resources on the website are free of charge. However, there are some links that require purchase, such as links to the A.S.P.E.N. Nutrition Support Core Curriculum and webinars.

A.S.P.E.N. Connect: The A.S.P.E.N. website has many resources for clinicians including access to journals, guidelines and standards, clinical tool kits, CE programs and more! A.S.P.E.N.connect (ASPENet) is a forum for nutrition support clinicians to collaborate, network, share knowledge and post questions.

What can I use the resource center for?

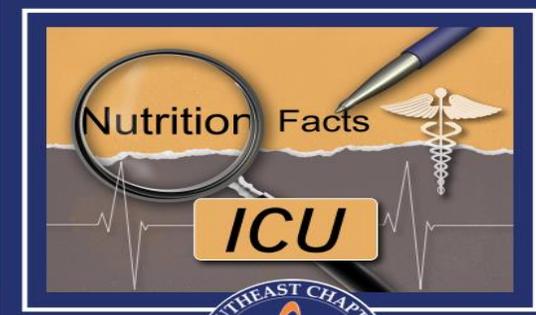
Use ASPENet to post questions to your colleagues or to join in on current discussions, or search the library of questions to see if your question has already been posted in the past.

How do I access ASPENet? Click on the ASPEN link (www.nutritioncare.org) and go to the "communities" tab and then click on "ASPENet Forum."

How much does it cost to join ASPENet? All A.S.P.E.N. members may join ASPENet for no charge.

Upcoming Events

**THE SOUTHEAST CHAPTER OF THE
SOCIETY OF CRITICAL CARE MEDICINE**
PROUDLY PRESENTS A BI-MONTHLY LECTURE AND DISCUSSION ON
"NUTRITION IN THE ICU,
WHEN, WHERE AND HOW -
WHAT THE NEW DATA TELLS US!"
PHYSICIAN, NURSING, PHARMACIST AND DIETITIAN
CE/CME CREDITS WILL BE PROVIDED.



GUEST SPEAKER
BETH TAYLOR, DCN, RDN, LD, CNSC, FCCM
NUTRITION SUPPORT SPECIALIST
BARNES-JEWISH HOSPITAL, ST. LOUIS, MO

THURSDAY, DECEMBER 10, 2015 | 5:30 – 7:30 P.M. EST
GRADY MEMORIAL HOSPITAL | TRAUMA AUDITORIUM
GROUND FLOOR, MAIN HOSPITAL (NEAR PRATT STREET)
80 JESSE HILL JR. DRIVE SE, ATLANTA, GA 30303

DINNER | NETWORKING | EXHIBITORS BOOTHS
KEYNOTE SPEAKER PRESENTATION/DISCUSSION
Q&A | RAFFLE ANNOUNCEMENT | CLOSING

THANK YOU TO OUR CO-HOST:






*Registration is required for dinner.
This event is not commercially sponsored.
Register today at
<http://tinyurl.com/sesccmatlanta12-10-2015>
Live web cast will be available for remote
participation. Register at the website
listed above.*

 LEADING THE SCIENCE AND
PRACTICE OF CLINICAL NUTRITION
American Society for Parenteral and Enteral Nutrition
A.S.P.E.N. Enduring Webinar Series

Did you miss any of the wonderful A.S.P.E.N. webinars in 2015? A.S.P.E.N. is now offering enduring webinars!

What does this mean? Access any of the 2015 webinars such as the popular Fluids, Electrolytes, and Acid-Base Disorder Series and Certificate of Training program, "Micronutrients: Assessment of Deficiency and Guidelines for Replacement," and "Temporary Enteral Access Placement Verification in Pediatric Patients: A Continuing Conundrum," or even the highly-attended 2014 PN Safety Series and Certificate of Training program.

You can access the webinars by logging into the eLearning center. CE is available for most recorded webinars. A.S.P.E.N. members receive discounts on all webinar prices!

Here is a list of the webinars that were offered in 2015:

- **A.S.P.E.N. Clinical Nutrition Informatics Webinar: PN Prescribing and Electronic Health Record Systems (NO CE Credit – informational content only)**
- **Temporary Enteral Access Placement Verification in Pediatric Patients: A Continuing Conundrum**
- **Assessment of Growth in the Pediatric Patient with Chronic Disease**
- **Building a Hospital Structure to Enhance Clinical Ethics and Quality of Life Care**
- **Top Nutrition Research and Implications for Practice**
- **Nutrition in Renal Disease, Part 1: Acute Kidney Injury**
- **Nutrition in Renal Disease, Part 2: Chronic Kidney Disease**
- **Pediatric Nutrition Support: Challenging Cases**
- **Micronutrients: Assessment of Deficiency and Guidelines for Replacement**
- **Addressing Pediatric Malnutrition: A Carepath from Admission to Discharge**
- **Adult Malnutrition: Tools and Algorithms to Optimize Early Recognition of Malnutrition**
- **Peri-Procedure Feeding and Enhanced Recovery After Surgery**

Medical Practice Section Webinar

December 7, 2015 4:00 p.m. to 5:30 p.m.

Webinar: Preventing Malnutrition: Innovative Clinical and Nutrition Intervention

Speakers: Gerard Mullin, MD, CNSP

Refaat Hegazi, MD, PhD, MPH, MS

Robert Martindale, MD, PhD

Cost free to members!

For more information, please visit www.nutritioncare.org/events

Clinical Nutrition Week 2016

Clinical Nutrition Week 2016 (CNW15) will be held on January 16th through 19th in Austin, TX. Several highlights of CNW16 include:

- Preconference courses in topic areas including pediatrics, critical care, and acid-base disorders.
- Education sessions on topics such as: Nutritional Metabolomics In Critical Illness

Advanced registration ends January 6th.

For more information, please visit nutritioncare.org/cnw.

Contact the Board

Get involved with G.A.S.P.E.N.!

Do you have any ideas for programming?
Do you want to present your research or poster?
Would you like to have more networking events?

We encourage our members to volunteer for committees, become involved as board members and speak at meetings and present posters and abstracts.

Would you like to contribute an article to our newsletter?

Feel free to contact our board members for more information.

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