SPRING 2015

La Carta

New Mexico Academy of Nutrition & Dietetics

President's Address

Our NMAND President sends her regards from Paris, France! Stayed tuned for our next issue of La Carta for her next President's address.

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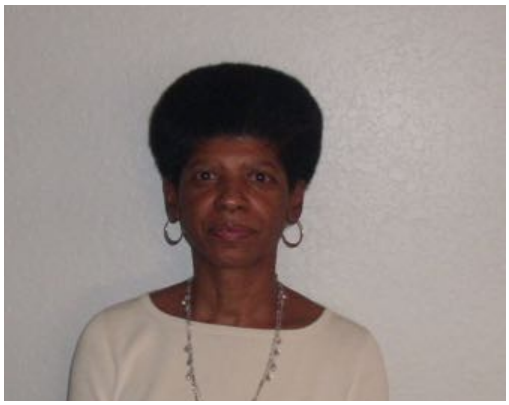
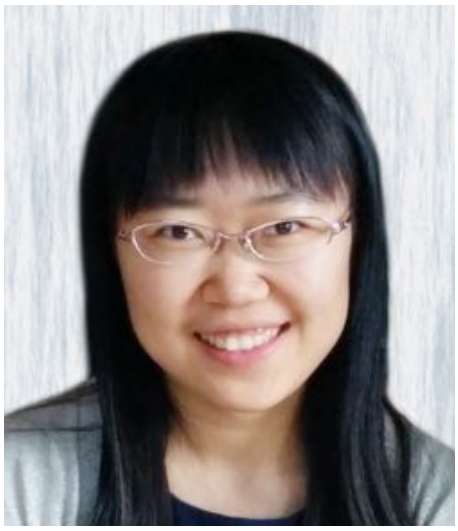
New Board Members



PIC Elect: Valari Fauntleroy

Valari began her career in food and nutrition as a Public Health WIC Nutritionist. While earning her under graduated degree from Loyola University, Chicago, IL, she worked as an assist to a cooking instructor, as a cold foods chef, and conducted some product testing and food photography. During this time she realized that she was a teacher and made a career shift, earning a master's in Special Education, at Dominican University, River Forest, IL. After 12 years in the classroom she returned to graduate school at Indiana State University, Terre Haute, IN, and earned a second master's in Dietetics. Her passion is in public health with an emphasis on weight management (adults and children), DSME and prevention and geriatric nutrition. What she loves most about public health is the diversity in clients.

She continues to enjoy cooking, volunteering and giving her time to several originations and causes, such as AADE, Sierra Club, Nature Conservancy, LWV, NOW and the DNC, just to name a few. She has held several offices in the capacity of secretary and treasurer and have been a delegate in the Illinois Academy of Nutrition and Dietetics and plans to bring the same energy and zest to the NMAND PIC-elect position and feels it's an honor to serve.



Nomination Committee Chair-Elect: Lingxia Sun

Lingxia Sun is enthusiastic dietitian, passionate about nutrition and promoting healthy lifestyle. She works at UNM Hospital as Pediatric Clinical Dietitian for Pediatric ICU and Special Care Units. She received a Master of Science Degree in Nutrition from Tufts University and finished her dietetic internship at France Stern Nutrition Center at Tufts Medical Center. Before she joined UNM Hospital, she worked at Harvard T.H. Chan School of Public Health for childhood obesity prevention research.

She has volunteered as a nutrition lecturer in various nutrition and health promotion community programs. As an advocate for UNICEF, she cares about children's health and rights. She also held a couple leadership roles in several professional organizations. Originally from China, she loves travelling and exploring new cultures. In her spare time, she likes hiking, playing the harp, hanging out with friends, and enjoying delicious food.

Secretary: Tabitha McKay

Tabitha McKay is a native New Mexican by way of an Air Force family. She began studying nutrition beginning with a nutrition elective in 2007 that turned into a passion for food, cooking, and helping others find health through eating. She completed a Bachelors in Science in Nutrition and Dietetics in 2012 and began a graduate career at UNM. In April 2015 she completed her Master's in Science in Nutrition. She will be completing her Dietetic Internship this coming May. During her graduate studies, she concentrated on nutrition counseling and improving academic success in the

Nomination Committee Member: Janna Key

Janna Key is a native New Mexican, who grew up in various rural committees throughout the state. She completed both her Bachelors of Science in Nutrition and Dietetics and her Dietetic Internship from the University of New Mexico. Janna is also graduated with her Masters of Science in Nutrition from UNM this May. Janna works full-time as an inpatient pediatric dietitian at UNM hospital, covering the General Acute Care and Intermediate Neonatal Care Nursery. Her nutrition related passions outside of clinical pediatrics include food accessibility in rural communities, increasing physical activity in youth and getting kids interested in gardening and cooking.

PUBLIC POLICY UPDATE

Licensure

Licensing of dietitians and nutritionists has been renewed in NM with the passing of SB 318, which was signed into law by Gov Martinez on April 9th. This bill extends our licensure board until July 1, 2022. Thank you again for all of your calls to legislators as well as to the Governor in support of this important bill. This is an important step for our profession. While NMAND is a smaller affiliate within the academy, we enjoy wide spread participation from our members. NM is a great place to be an RDN!

PPW

June 7-9th, 2015 WAS the Academy's Public Policy Workshop in DC. We WERE excited to be sending three representatives from NM to this year's event. This year's focus is on the Treat and Reduce Obesity Act, Preventing Diabetes in the Medicare Act, and the Reauthorization of the Older American's Act.

Thank you for promoting good nutrition in NM! We are proud to be NMAND.

CDR's Competency-Based Professional Development Protofolio Coming in 2016

Barbara Grant, MS, RDN CSO, FAND, Chair, CDR's Competency Assurance Panel, and Donna G. Pertel, MEd, RDN, LD, Consultant

Have you considered taking a new job, expanding your social media presence, or obtaining a new certification? Initially you might feel confident about the knowledge and skills that you will need to be competent in your role. After taking on the new role or responsibility, you might feel humbled to discover that you have more to learn.

Being in a profession that is accountable to the public means achieving initial, entry-level competence and registration as an RDN or RD or NDTR or DTR *and* engaging in a professional development plan and lifelong learning. As nutrition and health evidence changes, so do the knowledge, skills, judgments, and attitudes needed for each practice role.

For more than a decade, the Commission on Dietetic Registration (CDR)-credentialed practitioners have completed the Professional Development Portfolio (PDP). Although these practitioners identify learning needs and document knowledge attained and how it applies to practice, the current PDP process does not always identify actual learning needs relevant to practitioners' roles or responsibilities. Furthermore, the PDP learning need codes (LNCs) broadly emphasize knowledge, but not the profession's skill, judgment and attitude requirements.

In 2012, CDR endeavored to identify the essential practice competencies that define the knowledge, skill, judgment, and attitude requirements across nutrition and dietetics practice and within focus areas necessary for competent, ethical, and safe practice. Over 2 years, stakeholder consultation and national validation survey research was conducted. CDR involved more than 12,000 practitioners in the research, writing, and validating of the distinct RDN/RD and NDTR/DTR competencies, which encompass the range of activities in the profession and recognize that practitioners fulfill many unique roles. The study generated two additional practice tools:

- Performance indicators: Leveled action statements that begin with phrases such as, "Evaluates the impact of…" (for RDNs or RDs) and "Identifies the impact of…" (for NDTRs or DTRs).
- Practice illustrations: Examples of the competencies in day-to-day practice.

Based on the research, CDR is making three changes to the PDP**:**

- 1. Streamline the current five-step PDP process to three steps,
- 2. Implement an online Goal Wizard to help practitioners identify their learning goals, and
- 3. Replace the LNCs with practice competency performance indicators.

See the *What's New* side bar for more on what is and what is not changing in the PDP.

There is a 5-year phased implementation of the new PDP process. The first group includes RDNs or RDs and NDTRs or DTRs credentialed June 2, 2015-May 31, 2016, and those recertifying June 1, 2016-May 31, 2021. The last group to begin using the new PDP process will be credentialed practitioners recertifying June 1, 2020-May 31, 2025.

Numerous resources regarding the practice competencies are available for practitioners, educators, and continuing professional education (CPE) accredited providers on CDR's websit**e.**

What's New in the Competency-Based PDP Process?

Three important changes:

1. The PDP process is now three steps instead of five. Step 1 is the Learning Plan, Step 2 is the Activity Log, and Step 3 is Professional Development Evaluation.
2. To complete Step 1: Learning Plan, CDR has developed an online Goal Wizard, which uses a step-by-step decision algorithm to assist credentialed practitioners with identification of essential practice competencies and performance indicators that are relevant to their practice. Practitioners tailor their Learning Plans by adding or deleting practice competencies and performance indicators. A demonstration version of the Goal Wizard, called the Dream Wizard, is available for students or current practitioners who want more information about the Goal Wizard.
3. The knowledge-based LNCs that practitioners have identified in their Learning Plans will be replaced with the essential practice competencies and performance indicators that practitioners select. Accredited CPE providers will include applicable LNCs and competencies for each CPE offering throughout the transition to the new PDP process.

Questions?
Email competencies@eatright.org or cdr@eatright.org.

*There are **no** changes to the following:*

- Learning activity types for CPE.
- Total number of CPE units required. RDNs or RDs need to complete 75 CPEUs whereas NDTRs or DTRs need to complete 50 CPEUs in every 5-year recertification cycle.
- Requirement to keep certificates of completion. Practitioners still need to maintain records of these certificates in case of audit.

Farm-to-WIC intervention increases availability of produce for low-income families

Claire LeGault
NMSU

On average, Americans are not consuming the recommended amounts of fruits and vegetables. However, when comparing income with fruit and vegetable intake, those with the least amount of income eat the least amount of produce. The Supplemental Nutrition Assistance Program for Women, Infants, and Children (WIC) was developed to address this disparity, and with the increase in farmers' markets across the country, the WIC Farmers' Market Nutrition Program (WIC FMNP) was established in 1992. Multiple studies have shown that an incentive program similar to WIC FMNP checks can increase fruit and vegetable purchases at farmers' markets. Currently, the Farmers' and Crafts Market of Las Cruces (FCMLC) accepts WIC FMNP checks from WIC participants in the amount of $5 every month from July to November to purchase fresh fruits and vegetables and dried chiles. The purpose of this study was to determine if the Farm-to-WIC program at the FCMLC affects the availability of produce for low-income families. To determine this, a seven-question survey was administered electronically to the farmers at the FCMLC who accept WIC FMNP checks. The director of the FCMLC distributed a URL to the survey three times over the course of two weeks. The results showed that Farm-to-WIC appears to increase the availability of produce for WIC participants. Through increased sales and an expanding customer base, stands/stalls are able to grow in the amount and variety of produce available. Farmers also view the Farm-to-WIC program positively because reimbursement for the WIC FMNP checks is fast and easy. The major limitation of this study was the small sample size (four responses of a possible twenty-four). In conclusion, the Farm-to-WIC program should be continued and enhanced through multiple strategies to further increase produce availability and consumption for low-income families.

CLINICAL CASE STUDIES

A Pediatric Case Study

Kelsey Bullard, 2014-2015 UNM Dietetic Intern

I looked down at the innocent baby resting in front of me, tangled in a sea of tubes and pumps. At this point these machines were the only things keeping this baby alive. This was a scary visual to a new intern but also a fascinating one; every line had a different, yet equally important job. The largest machine, the high frequency oscillatory ventilator was helping to oxygenate all the organs, the five tubes descending from hanging pumps were all delivering the vital pressor medications needed to control the blood pressure. Maybe not a surprise to many, but at week two of life, this infant was not growing and was unfortunately only a few grams above birth weight (quite possibly only due to the fluids being pumped in).

In preparing this case study, an interesting issue came to light. The questions asked at the table regarding the feeding regimen of this infant, while important, were deflected to an alarming fact of the case … the dietitian was not in charge or even in consultation of this infant's feeding. There was limited contact and trust between the numerous professions that occupied the NICU. The discussion that ensued regarded the up hill battle that many dietitians face daily. We are taught in school how valuable an interdisciplinary team is in patient-centered care, which was reflected daily throughout my internship rotations. The bottom line that I will always remember is to never give up. An effective and efficient work environment consists of an interdisciplinary team, with maximum communication. How is that achieved? The answers I have received thus far are to be present, speak up, always refer to evidence based practice, and don't be afraid. The biggest disservice I can see to not only ourselves/profession but more importantly to our patient's is to sit back and watch. We can be our patients' biggest advocates, and we should.

My clinical nutrition rotation came to end before this infant was discharged. The patient's condition was slowly improving and the hope is that this baby was able to recover and thrive.

Baby Girl Sophie ***(name has been changed)***

Born at 40.3 weeks, AGA

Birth weight: 3.374kg	Birth length: 52cm	Birth FOC: 35cm

Admit diagnosis: Meconium aspiration and persistent pulmonary hypertension of the newborn.

Day of Life #2	
Weight: 3.500kg	**Diet order**: NPO. TPN (D5, 1g protein) @ 3mL/hr **Providing:** 8kcal/kg/day and 1g/kg/day protein
Medications: Ampicillin, Gentamicin, Hydrocortisone, Fentanyl, Vecuronium, Dobutamine, Dopamine, Epinephrine	

CLINICAL CASE STUDIES

Day of Life #9	
Weight: 3.510kg Growth over 7 days: 0.4g/kg/day	**Diet order**: NPO. TPN (D7, 3.5g protein) @ 16.7mL/hr + lipids @ 1.3mL/hr **Providing:** 57kcal/kg/day and 3.5g/kg/day protein
Medications: Heparin, Hydrocortisone, Fentanyl, Dobutamine, Dopamine, Epinephrine	

Recommendations left in electronic medical record:

1. When medically indicated per MD start trickle feeds 1mL q 8hr.
2. Consider increasing TPN to meet 90kcal/kg for growth.

Case Study: Enteral Nutrition and Older Adults

Nicole Chavez, 2014-2015 UNM Dietetic Intern

S:

Per police, pt was involved in a 1-car motor vehicle accident and found wandering on the street. Pt stated he "was in an accident in Oklahoma 1-2 weeks ago" and was brought to UNMH by police for AMS. After admission, the son reported pt drinks 1-2 scotches/wk, lives at home with his wife, is retired, still drives, has a history of smoking, and pt's mother has hx of Alzheimers. Son also reported that both the pt and pt's wife are noticeably more confused with age. Pt reported usual body weight (UBW) of 136 kg and height of 188 cm.

O:

86 year old white male
Ht: 188 cm (Dosing ht)
Admit wt: 71 kg (Dosing wt)
Meds PO: Metoprolol, Vancomycin, Valproic acid, Zosyn, Haldol PRN
Active IV Meds: Normal Saline @ 75 mL/hr
Dx: AMS, dementia, sepsis 2/2 aspiration PNA, complicated UTI, traumatic foley, Atrial Fibrillation
Primary medical condition: sepsis 2/2 aspiration pneumonia, UTI , traumatic foley
Significant PMHx: HTN, hyperlipidemia, early dementia
Diet Rx: Mechanical soft ground
NKFA

A:

IBW: 80.5 kg
%IBW: 88%
BMI = 20.09 kg/m2

CLINICAL CASE STUDIES

EER: 1420-1774 kcals (20-25 kcals/kg)
Estimated Protein Requirements: 106-121 gm/d protein (1.5-1.7 g/kg)
Estimated Fluid Requirements: 1 mL/kcal fluid
MSJ x 1.25=1834 kcals (26 kcals/kg)
HBE x 1.3=1822 kcals (26 kcals/kg)
Significant wt loss: 6% x 1 wk
PO intake: 26% average PO intake mechanical soft diet(4 meals) x 8 days
At risk for severe malnutrition given 6% wt loss x 1 wk and 26% average PO intake x 8 days

Diet hx PTA was unable to obtain and reported UBW was unreliable given AMS.
Speech following; pt at risk of aspiration with PO intake and requires mechanical ground diet restrictions.
RD consulted for TF recommendations. DHT tube was placed.
Enteral nutrition is indicated: TF consult from MD; inadequate PO intake since admission; significant wt loss; and risk for severe malnutrition.

PES statement: Inadequate oral intake (NI-2.1) related to worsening AMS and aspiration risk with PO intake as evidenced by food record reporting 26% average PO intake x 8 days and SLP recommendations.

P:

1. Promote w/Fiber @ 75 mL/hr x24 hrs via DHT
   - Start TF at 20 mL/hr and increased 10-20mL q 4 hours until goal rate is met
   - Provides 1800 kcals (25 kcals/kg), 113 grams protein (1.6 gms/kg), 249 gm Dextrose, 28 gms Fiber, and 1496 mL water meeting estimated needs
2. Adjust MIVF with initiation of TF
3. If IVF KVO, 100 mL TID additional water needed for fluid maintenance
4. Monitor weights and chem 10 daily

CB at final follow-up/discharge

S:

Per team, pt aspirated enteral formula and team wanted to try a more calorically dense formula. Per inpatient note, pt continues to pull at his DHT; team questioning placement of PEG tube. Per palliative team, enteral nutrition may be decreasing quality of life and a family meeting is arranged to determine plan of care.

O:

86 year old white male
Current wt: 66.3 kg
Ht: 188 cm (Dosing ht)
Admit wt: 71 kg (Dosing wt)
Dx: AMS, dementia, sepsis 2/2 aspiration PNA (now resolved), complicated UTI (now resolved), traumatic foley, Atrial Fibrillation

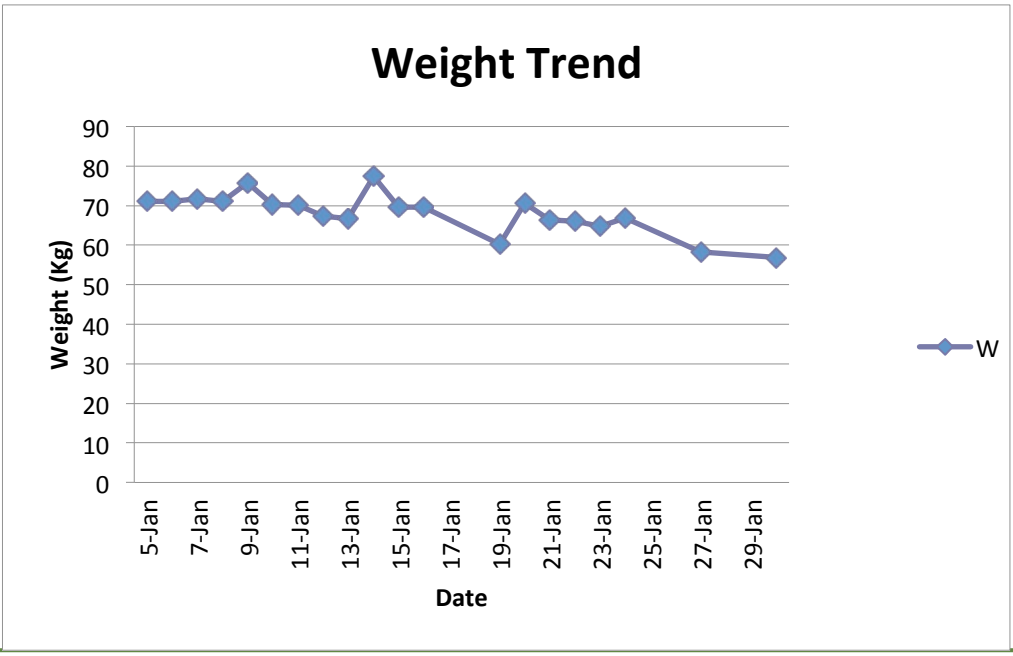
CLINICAL CASE STUDIES

Primary medical condition: worsening dementia, stage 3 pressure ulcer on coccyx
Significant PMHx: HTN, hyperlipidemia, early dementia
Active meds: Augmentin, Bicasodyl, Docusate, Lisinoprilol, melatonin, Metoprolol, Senna, Simvastatin, Trazadone
TF Rx: Isosource1.5 @ goal rate of 45 mL/hr x 24 hrs + 1 packet Beneprotein QID to provide 1720 kcals (24 kcals/kg), 97 g protein (1.4 g/kg), 1200 mL free water

A:
Wt loss since admit: Significant 7% wt loss x 2 weeks
BMI = 18.76 kg/m2: pt is underweight as evidenced by BMI.
Re-Estimated Energy Requirements: 1775-1988 kcal/day (25-28 kcal/kg)
Re-Estimated Protein Requirements: 92-106.5 g/day (1.3-1.5 g/kg)
Re-Estimated Fluid Requirements: 1 mL/kcal fluid

Since admission, pt AMS worsened, pt pulled out foley, pt attempted to pull out his DHT causing epistaxis and inability to place another DHT, and pt is not meeting estimated nutrition needs from enteral nutrition. Since enteral nutrition was initiated, TF did not remain at goal rate and was consistently stopped. Tube feed provided ~10% of estimated nutrition needs since initiation of enteral feeds (x 8 days) resulting in additional 4.1 kg wt loss since admit.
Family (fully aware that pt is unsafe for PO intake) elected to stop enteral feeds because it was decreasing QOL. Pt started mechanical soft ground diet.

P:
1. Transition pt to comfort care: family has decided to pursue inpatient hospice
2. Diet Rx: mechanical soft ground
3. Will follow per inpatient protocol



CLINICAL CASE STUDIES

Diabetic Ketoacidosis and Acute Respiratory Distress Syndrome in the Intensive Care Unit

Bryn Smith, 2014-2015 Dietetic Intern, Graduate Student: University of New Mexico

Patient Background

Patient CS presented to Urgent Care complaining of shortness of breath with a non-productive cough for several days. He was given a Medrol Dosepak and albuterol inhaler to help alleviate his symptoms. He presented to the ER three days later, where he became unresponsive. He was diagnosed with diabetic ketoacidosis and acute respiratory distress syndrome and admitted to the ICU.

Patient Demographics:
48 year-old white male
Ht: 77 in
Wt: 108 kg
BMI: 28.5
Ideal Wt: 94.5 kg

Admission Labs and Vitals:
Heart rate: 146
Respiratory rate: 40
O2 saturation: 85%
Blood glucose: 494
HgbA1c: 13.9%

Assessment
CS was intubated and sedated with Propofol at a rate of 12.7 mL/hr.
Needs were estimated to be 2675-3210 kcals/day (25-30 kcal/kg) per the Critical Care Guidelines and 3112 kcals/day per the Penn State equation.
Protein needs were estimated to be 128-160 grams/day (1.2-1.5 g/day) per the guidelines for ARDS.

Diagnoses
Inadequate oral intake related to his intubation and sedation as evidenced by his need for enteral nutrition support.

Inadequate enteral nutrition infusion (NI-2.3) related to no advancement of tube feeding as evidenced by infusion rate of 20 mL/hr compared to the ordered goal of 40 mL/hr.

Less than optimal enteral nutrition composition related to ARDS as evidenced by Nutren 2.0 having an omega 6:omega 3 greater than 2:1 and critical care guideline recommendations.

Impaired nutrient utilization related to T2DM and AKI as evidenced by BUN of 134, creatinine of 5.32, and HgbA1c of 13.8.

CLINICAL CASE STUDIES

Intervention

Peptamen AF at 88 mL/hr to provide 26.5 kcal/kg and 1.5 g/kg.
CS now on Dilantin TID and diagnosed with AKI. He had been receiving Impact Peptide 1.5 at 20 mL/hr for almost two days. This provided 9.9 kcal/kg and 0.4 g/kg. Recommended Nutren 2.0 at 88 mL/hr with 3 packets of Beneprotein TID to provide 25 kcal/kg and1.3 gm/kg. Stop tubefeed 2 hours before Dilantin is given and hold for 2 hours after Dilantin is given.
CS off Dilantin and started on hemodialysis. Impact Peptide 1.5 at 70 mL/hr to provide 23.5 kcal/kg and 1.5 gm/kg.
Once CS was extubated and passed his swallow test, he was put on a diabetic, dysphagia 3, thin liquids, 75 gm CHO diet. Doctors diagnosed him with protein-energy malnutrition. We provided a diabetic education and he was excited to learn and start changing his lifestyle!

Monitoring and Evaluation

CS gained about 5.6% of his body weight while in the hospital, but was likely due to fluid. He left with a positive fluid balance of 15 liters.
His BUN and creatinine remained elevated throughout his stay, due to his AKI, but it was resolving at the time of discharge. His blood sugars were stabilized with insulin on the third day of his stay. Once extubated, CS ate ≥ 75% of all his meals.

Discussion

The American Society for Parenteral and Enteral Nutrition (ASPEN) and the Society for Critical Care Medicine (SCCM) release guidelines for feeding patients in intensive care units. These guidelines lay out the basics of initiating feeding, the use of parenteral nutrition, dosing and tolerance, and disease-specific recommendations, among other things (1). Permissive underfeeding is a common practice in the ICU setting, especially in an obese population. The critical care guidelines recommend not exceeding 60-70% of energy requirements determined by 11-14 kcal/kg of actual body weight (1). However, recent research has pulled this practice into question, especially in patients requiring a ventilator. Rice, et al., found that feeding mechanically ventilated patients with a trophic feed or with a full feed resulted in similar outcomes in days in the ICU, days on the ventilator, and mortality (2). Research has shown that providing patients with a trophic feed, especially for extended periods of time, may lead to protein-energy malnutrition and possibly more medical complications (3). While trophic feeds increase EN tolerance, they may not be the best choice for ICU and ventilated patients in the long run.

References

Martindale RG, McClave SA, Vanek VW, et al. Guidelines for the provision and assessment of nutrition support therapy in the adult critically ill patient: Society of Critical Care Medicine and American Society for Parenteral and Enteral Nutrition Support. JPEN. 2009; 33(3).

Rice TW, Mogan S, Hays MA, et al. Randomized trial of initial trophic versus full-energy enteral nutrition in mechanically ventilated patients with acute respiratory failure. Crit Care Med. 2011; 39: 967-974.

McClave SA, Martindale RG, Rice TW, Heyland DK. Feeding the critically ill patient. Crit Care Med. 2014; 42: 2600-2610.

Recent NMAND Publications

Pica in Pregnancy - Sera Young, Jean T Cox - Published in UpToDate

For those of you with access to UpToDate, you might want to know about an article we recently got published on pica in pregnancy. It is designed to be useful for clinicians. UpToDate is an online clinical desision support resource according to their website. Their focus is on giving evidence-based, comprehensive overviews of medical topics, including practical suggestions that a clinician can use, all in a format that can be accessed quickly and easily. Locally, it is available through the UNM Health Sciences Library. It's one of my "go to" spots when I'm investigating the current thinking on a particular medical issue.

Jean

Jean Cox, MS, RD, LN
Department of OB/GYN

Editor's Note

This issue is late (my fault) but so full of relevant content. Yay NMAND! Thank you to everyone who submitted content!

If you would like to submit a piece to the next issue of La Carta, please email me at meghan.c.womack@gmail.com.

Enjoy your next meal!
Meghan Womack
Publications Coordinator