



## NEW PRODUCT PROPOSAL

A.S.P.E.N. is a scientific society whose members are health care professionals -- physicians, dietitians, nurses, pharmacists, and researchers--dedicated to improving patient care by advancing the science and practice of nutrition support therapy. A.S.P.E.N. envisions an environment in which every patient receives safe, efficacious, and high quality patient care.

A.S.P.E.N. strives to bring valuable resources to the health care community through new products and publications. In the 30-year history of A.S.P.E.N., the society has published numerous books, manuals, monographs, journals and CDROMs. In the spirit of new idea development, A.S.P.E.N. is utilizing this ongoing proposal process overseen by A.S.P.E.N.'s New Product Development Think Tank. Potential editors interested in publishing with A.S.P.E.N. are encouraged to submit ideas using the proposal format outlined below. The Think Tank will give feedback to the proposal developer and forward proposals for consideration to the A.S.P.E.N. Education and Professional Development Committee, and from them to the Board of Directors.

New Products may include any type of print or electronic media offering to be published or posted and marketed for the purposes of educating members, other health care providers or consumers about specialized nutrition support or related information.

### **Proposal Format**

The following criteria must be addressed in the proposal.

#### **Criteria for Existing A.S.P.E.N. Products that require updating:**

1. Available sales data and current price
2. Any available reviews (print or online)
3. Age of publication (should be no older that 5 years between updates)
4. Usefulness of format
5. Relevance to current practice or education
6. Potential changes from previous edition
7. Niche in market and potential audiences for future sales
8. Proposed timeline for project
10. Suggested task force/editors

#### **Criteria for New Product Proposal**

1. Purpose of publication
2. Rationale for product development
3. Audience
4. Any Market Research-Niche in Market
5. Outline of Content
6. Format- print vs. electronic

## NEW PRODUCT PROPOSAL/2

7. Timeline for project
8. Suggested task force/editors

### **Editor Responsibility**

Once the development of a new product is approved, an editor will be appointed. The editor will be responsible for developing the product, including appointing co-editors, author selection, material procurement, peer review process, content editing and formatting material within a prearranged timeline. The editor will perform these tasks with the assistance of the publisher. If necessary, the editor may propose an honorarium structure from A.S.P.E.N., which will be subject to the approval of the Board of Directors.

### **A.S.P.E.N. Responsibility**

- The Board of Directors has final approval of all proposals and financial arrangements.
- The president will appoint the editor after consultation with appropriate individuals within A.S.P.E.N. The development of a proposal does not necessarily guarantee that the submitter will be named editor of that product.
- A.S.P.E.N. staff will develop timeline with editor and act as liaison between editor and A.S.P.E.N.; will contract with publisher; and will develop marketing plan.

### **Example of Proposal**

#### **.S.P.E.N. *Pediatric Nutrition Core Curriculum Proposal 2005***

#### **A.S.P.E.N. Pediatric Section**

**Purpose:** Nutrition is a critical component of pediatric health care. Unfortunately, the nutritional education provided to pediatric caregivers tends to be arbitrary, depending on several didactic lectures and the random nutritional needs of patients who were admitted during their training. Currently there is no defined curriculum which states explicitly what a pediatric caregiver *must* know. There are only general guidelines that allude to the importance of nutrition and the need for training in nutrition. We feel that a coordinated effort to produce an actual organized core curriculum containing appropriate nutrition education content for pediatric caregivers is sorely needed. This is in line with two of the purposes that A.S.P.E.N. has delineated for itself. 1) The promotion of the proper application of clinical and research experience to the practice of nutritionally sound medicine and encouraging the professional competence of practitioners and investigators in the field of clinical nutrition, including parenteral and enteral nutrition. 2) The improvement of patient care through specific postgraduate and continuing education programs.

**Rationale:** A pediatric nutrition core curriculum would have applicability to many fields. A search was performed for pediatric databases for nutrition curricula or guidelines. The European and North American Societies for Pediatric Gastroenterology have published guidelines for fellow training. The North American Society recommends a core curriculum that provides "an understanding of the biochemistry, digestion, absorption, and metabolism of macronutrients and micronutrients, including proteins, carbohydrates, lipids, vitamins, minerals, and trace elements".<sup>1</sup> These recommendations sound like a good basis for all pediatric caregivers. The European Society is slightly more clinical, recommending nutrition skills that include "assessing nutritional status, dietary requirements of children, pathophysiology of malnutrition, theory and techniques of enteral and parenteral nutritional support, role of nutrition support teams and special therapeutic diets".<sup>2</sup> The Accreditation Council for Graduate Medical Education (ACGME) in the program requirements for pediatric

### NEW PRODUCT PROPOSAL/3

residencies recommends training experiences of a “longitudinal nature of general pediatric care, including aspects of physical and emotional growth”.<sup>3</sup> The ACGME also requires that pediatric residents learn normal infant nutrition during their normal newborn experience and the importance of nutrition management during their intensive care experience.<sup>3</sup> The American Board of Pediatrics deems that nutrition is important for pediatric caregivers. The General Pediatrics certifying examination has an emphasis of 4.5% of the questions on nutrition and nutritional disorders, second only to infectious diseases at 5% of the questions.<sup>4</sup>

Is nutrition a key clinical concern in pediatric patients? The applicable literature is rather thin on the incidence of nutrition difficulties in children. The study that created awareness that there was even a problem is now very old. In 1981, Cooper et al published a study where they took a single day at the Children’s Hospital of Philadelphia and assessed the nutritional status of every single inpatient.<sup>5</sup> They found mild malnutrition in 14%, moderate malnutrition in 17% and severe malnutrition in 23% for a total of 54% of all inpatient pediatric patients.<sup>5</sup> A more recent study assessed children admitted to the intensive care units at a tertiary care center found 24% were malnourished.<sup>6</sup> The outcome of malnutrition in children has longstanding implications. A study that examined patients with cystic fibrosis that were diagnosed late and had prolonged malnutrition found significantly decreased cognitive scores.<sup>7</sup> A prospective study that followed patients from 3 to 11 years of age and controlled for psychosocial factors found that significant malnutrition resulted in a greater than 15 point decrease in IQ.<sup>8</sup> This data would indicate that nutrition problems are common and have significant long-term implications. As the premier clinical nutrition society, it is imperative that A.S.P.E.N. provide the resources necessary to prepare clinicians to deal with the often complex nutrition issues in pediatrics.

**Market Research:** There is currently no pediatric-specific nutrition curriculum available. There are several reference texts on pediatric nutrition available such as the American Academy of Pediatrics *Pediatric Nutrition Handbook*. There is also the A.S.P.E.N. *Pediatric Nutrition in Your Pocket* published in 2002. It has not been definitively determined if this handbook will be revised. As they are different types of publications, they could compliment each other. These current publications serve as sources of information and are useful to briefly review a topic. These texts can be used for personal reading as source of individual nutrition education but are not formatted for this purpose. Most of the available texts strive for a more encyclopedic approach rather than a logical readable format. Additional market research will be completed in order to better identify the optimal audience.

**Audience:** There are a variety of fields that need a working knowledge of pediatric nutrition. These include dietetics, nursing, pharmacy, and medical and surgical caregivers. Programs that have trainees in the various residency programs currently must create their own nutrition curriculum. A.S.P.E.N., with its mission and position in the healthcare community would benefit from serving as the source of these documents to pediatric caregiver training programs. The membership of the Pediatric Section in discussions held during the annual meeting have indicated an apparent need for such a curriculum and expressed enthusiasm for creating such a document.

We propose that an Editor in Chief be appointed who can then appoint associate editors and that the Pediatric Section act as a resource for the development of a Pediatric nutrition core curriculum. The majority of the work could be done by E-mail with several phone conferences. Such a project would provide visibility for A.S.P.E.N. among the pediatric community and establish A.S.P.E.N. as leaders in pediatric nutrition education.

## **Proposed Pediatric Nutrition Core Curriculum Outline**

### Introductory and Basic Information

- I. Mechanics of Nutrient Intake
  - A. Appetite
    - 1. Cephalic input
    - 2. Social/Cultural
    - 3. Hormonal
  - B. Mastication (Dentition?)
  - C. Swallowing
- II. Gross digestion principals
  - A. Gastric grinding
  - B. GI motility
- III. Carbohydrates-- changes with development
  - A. Digestion
  - B. Absorption
  - C. Metabolism
- IV. Fats-- changes with development (i.e. more fat early in life)
  - A. Digestion
  - B. Absorption
  - C. Metabolism
- V. Proteins-- changes with development
  - A. Digestion
  - B. Absorption
  - C. Metabolism
- VI. Minerals – absorption/metabolism, changes with development (i.e. more calcium as get older)
- VII. Vitamins – absorption/metabolism, changes with development
- VIII. Fluid - changes with development and clinical conditions

### Age Specific Nutrition

- I. Nutrients and Fetal Development
  - A. Maternal diet and fetal development
  - B. Fetal determinants of adult disease
  - C. Fetal nutrient metabolism
- II. Nutrition and Growth and Development
  - A. Infancy
    - 1. Human milk:
      - a. Benefits for infant development
      - b. Bioactive factors in human milk
      - c. Supporting and encouraging breastfeeding in different populations
    - 2. Weight issues
      - a. Which growth chart to use
      - b. Limitations of special growth charts
    - 3. What to feed and when, appropriate solids and their introduction

## NEW PRODUCT PROPOSAL/5

4. Special infant formulas
    - a. Situations for use
    - b. Evaluation of special formulas
  5. Special situations
    - a. Inborn errors of metabolism
    - b. The chronically ill child
    - c. Failure to thrive
    - d. Other problems
- B. Childhood/adolescence
1. Fad diets
  2. Overweight and obesity
  3. Allergy
  4. Lipid disorders
  5. Sports nutrition

### Disease States and Nutrition

- I. Developmental delay
- II. Cardiac disease
- III. Renal disease
- IV. Hepatic disease
- V. GI disease
- VI. Pulmonary disorders
- VII. Eating disorders
- VIII. Home nutrition support, enteral and parenteral
- IX. Transplantation
- X. Obesity
- XI. Diabetes mellitus, type 1 and type 2

### Nutrition Care of the Pediatric Patient

- I. Assessment of nutrition status by age
- II. Need for enteral/parenteral nutrition
- III. Determination of nutrient requirements
- III. Determination of the best way to feed
  1. Use of feeding teams
- V. Implementation of the plan
  - A. Oral
  - B. Enteral
  - C. Parenteral
- VI. Evaluation and monitoring
- VII. Monitoring growth and development
  - A. Which charts?
    1. What's appropriate growth for various conditions
    2. How to provide oral stimulation with enteral/parenteral nutrition
  - B. Lab monitoring
  - C. Monitoring feeding tolerance, both enteral and parenteral
- VIII. Ethical issues in the provision of nutrition

## NEW PRODUCT PROPOSAL/6

### References

1. Rudolph CD, Winter HS. NASPGN guidelines for training in pediatric gastroenterology. *J Pediatr Gastroenterol Nutr* 1999; 29 Suppl:S1-S26.
2. Milla PJ. The European training syllabus in pediatric gastroenterology, hepatology, and nutrition. *J Pediatr Gastroenterol Nutr* 2002; 34:111-5.
3. Accreditation Council for Graduate Medical Education. Program requirements for residency education in pediatrics. [http://www.acgme.org/RRC/Ped\\_2001.asp](http://www.acgme.org/RRC/Ped_2001.asp) . 2001.
4. American Board of Pediatrics. General pediatrics certifying examination content outline. <http://www.abp.org/certinfo/genpeds/genped1st.htm> . 2002.
5. Cooper A, Jakobowski D, Spiker J, Floyd T, Ziegler MM, Koop CE. Nutritional assessment: an integral part of the preoperative pediatric surgical evaluation. *J Pediatr Surg* 1981; 16:554-60.
6. Hulst J, Joosten K, Zimmermann L, Hop W, van Buuren S, Büller H et al. Malnutrition in critically ill children: from admission to 6 months after discharge. *Clinical Nutrition* 2004; 23:223-32.
7. Kosciuk RL, Farrell PM, Kosorok MR, Zaremba KM, Laxova A, Lai H-C et al. Cognitive function of children with cystic fibrosis: deleterious effect of early malnutrition. *Pediatrics* 2004; 113:1549-58.
8. Liu J, Raine A, Venables PH, Dalais C, Mednick SA. Malnutrition at age 3 years and lower cognitive ability at age 11 years. *Arch Pediatr Adolesc Med* 2003; 157:593-600.

**Suggested Format** Product will be softcovered book publication with CD of PDFs.

**Timeline** Editor will be named Fall 2006. Final product to publisher Spring 2008. Published Fall 2008.

**Suggested Editor:** Suggest name.