Nutrition For Children With Special Health Care Needs

Module 1

Module 1 focused on the growth assessment aspect, and since I took the Lifecycle Nutrition course during my undergraduate studies, this was a pleasant refresher course. I recognize that it contains a lot of data to comprehend, but I know we have access to many of these charts when we need to use them. This refresher course helped me refine techniques to obtain anthropometric data, apply guidelines, understand which conditions affect growth, and use appropriate data to interpret a patient's growth. The first section assisted me in defining the measuring techniques and the measurements themselves, which include head circumference, weight, and stature, along with estimates of stature and body composition. I like to try to teach people about these measurements using the methods my former professors used, such as employing useful mnemonics to help them remember. For example, the measuring tape for head circumference is similar to being measured for a dress shirt size, but with a different application. Since each measurement technique—weight and stature—varies with each child, I found it crucial to remember the fine details to ensure I select the correct technique. Something I recalled from this module is that length is not equivalent to height, a critical distinction that must be remembered. The assessment guidelines are developed by the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC), covering ages 0–24 months and 2–20 years. Another valuable refresher was that weight-for-length is used for children under 2 years, while BMI is used for ages 2–20 years. I think memorizing all the percentiles would be challenging, but it should be mastered, along with understanding why each percentile is significant, to accurately assess what actions are needed based on this data. Finally, there are both drawbacks

and benefits to these charts, and the ability to interpret and apply the data to provide patients with the best possible evidence-based care should be the top priority.

Module 2

The next module, which captured my interest more than most of the other modules, focused on diet recall, recording, dietary history, and Food Frequency Questionnaires (FFQs). We have been working on these in almost every project, and during my undergraduate studies, I also completed many of these assignments. Even though I have experience with these tasks, this module served as a pleasant refresher, as it discussed the strengths and limitations of each method. As we delved into more case studies and research studies, I recognized that each method had its own set of limitations. Unfortunately, in most nutrition studies, the recall method has flaws but can also be very valuable. After exploring these methods, we moved on to the Dietary Reference Intakes (DRIs), which we have also been studying. I was eager to learn about these, as I am passionate about statistics, and I enjoyed discovering the year each DRI was established, which provides insight into why each was created. I found it interesting that electrolytes, along with water, were among the last nutrients to receive DRIs. When discussing nutrition with family and friends, I noticed that most people were familiar with the Recommended Dietary Allowance (RDA), but when I inquired, many had never heard of the Estimated Average Requirement (EAR), Adequate Intake (AI), Tolerable Upper Intake Level (UL), Total Energy Expenditure (TEE), or Estimated Energy Requirement (EER), all of which are significant. For day-to-day nutrition, knowing how to meet daily needs is a good starting point, but I believe, with the rise of influencers and online information, the UL should also be widely understood because supplement use, often adopted without proper guidance, could push individuals into that range if they are not cautious.

Although I do not cook for children and typically cook for my wife and myself, I found it valuable to relearn portion sizes for children aged 1 to 3 and beyond, as I will need to adapt eventually. Something I consistently advocate for is individualized nutrition, and learning about increased, decreased, and altered nutritional needs reinforced my approach. I understand that these considerations are critical, and for most patients, we should adopt a similar individualized approach. Overall, I found this module informative and engaging, and I believe it is essential for advancing my knowledge.

Module 3

Moving to this next module, it felt like a continuation of what we learned in the previous assignments. However, it delved into the importance of age, reflexes, oral-motor skills, self-feeding behaviors, positioning, and appropriate foods to consume. As previously learned, each age group has its own unique aspects, but this module broke them down into specific ranges: 0–2 months, 2–4 months, 4–6 months, 6–8 months, 8–10 months, 10–12 months, 12–18 months, and 18–24 months. I appreciated the detailed breakdown and the opportunity to explore the characteristics of each age group and understand why certain factors are significant. The next topic, choking hazards, is, I believe, crucial. While it may sound simple, avoiding the seven or more foods identified as risks is essential to minimize unnecessary dangers to the child. When interacting with my nieces and nephews, I have observed some of these special health care needs, and I've learned that it's vital to proceed patiently, understand each condition, and collaborate with appropriate healthcare professionals to anticipate potential feeding issues. The conditions mentioned, I believe, are less well-known than more familiar conditions but are often overlooked in relation to nutrition. The final section, which I understand will be relevant during

the clinical component of this program, focused on tube feeding, an important aspect of nutrition. I have studied this in the past, but never in such detail. I am grateful that we are required to work through these comprehensive modules, and I believe they will be beneficial as I progress.

Module 4

After absorbing all the information thus far, I find it cohesive and relatively easy to understand. This next section covered normal bowel function and fluid status, the potential effects of medications, medical conditions, and eating patterns, along with the interventions we can implement to address alterations to baseline function. Throughout this course, I believe we have not previously explored these topics, and I was very excited to learn about a new subject. We have studied the digestion process and each macronutrient, but I don't recall delving deeply into bowel functions. The module began by explaining severe fluid imbalances and how they could relate to fluid status and bowel function. Before discussing fluid further, I should note that much of my knowledge about fluid intake comes from the Dr. Galpin hydration equation, which I typically follow to stay hydrated during workouts and daily activities. Beyond water and hydration, we have explored the duration of the digestion process, but I don't believe we covered this in detail for infants and young children. While the information presented was familiar, I was particularly interested in how these conditions influence children with special health care needs. The module broke down each condition again, providing greater detail on how it can impact fluid and bowel function. When moving to the intervention aspects, I was familiar with this topic due to my family history. They highlighted the importance of fiber, fluid, physical activity, and laxatives, and I believe the use of all these has its time and place. However, without proper guidance from healthcare professionals, it could be counterproductive and potentially harmful if patients lack proper direction.

Module 5 and 6

While Module 6 integrates all the concepts, Module 5 focuses on services and programs. I feel that this information, at least currently, may have the greatest impact because I am preparing to start my community nutrition internship. These programs have existed for some time, but, to my knowledge, they occasionally change names. However, they all share the same core foundation. I believe each resource and program is interconnected in some way, as they span the lifecycle and impact the lives of millions. It is critical for dietitians to understand these programs and resources to effectively guide patients based on their individual needs. With these programs in mind, I moved on to Module 6, which, as I mentioned earlier, emphasizes patient-centered care but extends to a broader, more inclusive family-centered care approach. I recall, during my numerous surgeries, having to consult approximately 10 healthcare professionals for related issues. I can't imagine coordinating with 10 or more professionals for diverse needs, all within limited time or with limited understanding. Dietitians need to be able to direct patients while providing them with the necessary information to prepare them for interactions with each professional, within reason. I believe educating families, or at least parents, facilitates trickle-down education. By integrating what we have learned, we can guide, educate, and direct patients to meet their needs and implement interventions, ultimately helping them achieve their desired goals and outcomes, not only for children but also for grandparents or other family members.