

Nutrition Education and Counseling Skills

Training Module

Group Facilitator Guide

Created by

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Acknowledgements

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Overview

What is the purpose of this module?

The purpose of this module is to strengthen communication skills that help dietetic students become more effective educators and counselors. This module is meant to supplement existing resources in the dietetic curriculum, and is not an all-inclusive curriculum by itself.

Who is the target audience for this module?

This module was created for dietetic students enrolled in an undergraduate or graduate nutrition program or dietetic interns preparing for their clinical, community or other nutrition-education or counseling rotations. The content may be applicable for training students enrolled in Dietetic Technician programs as well. During the development of this module, it is assumed that a student has completed coursework in medical nutrition therapy, nutrition counseling and community nutrition.

What are the core concepts of this module?

Dietetic students and interns are well educated in nutrition as a science and are expected to be effective educators and counselors. An effective educator and counselor is knowledgeable in nutrition and able to communicate food and nutrition information to help consumers understand and apply the principles of healthful diet and lifestyle choices using a 'guided' more often than a 'directed' counseling approach. Documentation of counseling employs the Nutrition Care Process as a framework, including the current coding system used by professionals.

During counseling, a total-diet approach broadens the client's understanding of healthy eating as it considers food patterns. The total-diet approach is preferred to one that focuses on single foods or single food groups, which often lead to unintended consequences.

What are the contents of this module?

The contents of this module are comprised of three parts, listed below:

1. **Online learning module** that can be used as a PowerPoint presentation in a classroom setting or completed individually via Dairy Council of California's website at HealthyEating.org. This module provides:
 - a) content to explain and reinforce the importance of considering total diet and food patterns when communicating with individuals,
 - b) audio counseling sessions demonstrating the use of client-centered counseling techniques while keeping in mind total diet and food patterns,
 - c) module knowledge-assessment questions that have been par-score tested for validity.
2. **Extension activities** give students the opportunity to discuss and practice the core concepts covered in the module. These activities are available through the online learning module and facilitator guide.
3. **Group facilitator guide** provides nutrition instructors and program directors with an overview of the core concepts used to develop the module, discussion questions with talking points, extension activities and sample test questions with answers for knowledge assessment.

The contents of this module are based on Academy of Nutrition and Dietetics position statements, the Nutrition Care Process, client-centered counseling techniques and other research-based resources and publications.

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Learning Objectives, Standards and Competency Alignment

Learning Objectives

- Convey the importance of embedding specific nutrition advice in a total diet context.
- Demonstrate the usefulness of dietary patterns as nutrition education tools.
- Increase awareness of the multiple factors by which clients and consumers assimilate nutrition information.
- Enhance the nutrition counselor's ability to use client-centered counseling techniques to motivate clients' dietary changes.
- Understand how the Nutrition Care Process can be aligned with the practice setting.

Alignment to Standards and Competencies

Dietetic Internships:

- DI 2.4 Use effective education and counseling skills to facilitate behavior change.
- DI 3.2 Develop and demonstrate effective communications skills using oral, print, visual, electronic and mass media methods for maximizing client education, employee training and marketing.
- DI 3.5 Deliver respectful, science-based answers to consumer questions concerning emerging trends.

Didactic Programs in Dietetics:

- KR 2.1a Students are able to demonstrate effective professional oral and written communication and documentation and use of current information technologies when communicating with individuals, groups and the public.
- KR 2.2a Students are able to demonstrate counseling techniques to facilitate behavior change.
- KR 3.2a Students are able to apply knowledge of the role of environment, food and lifestyle choices to develop interventions to affect change and enhance wellness in diverse individuals and groups.

Coordinated Program in Dietetics:

- CP 2.4 Use effective education and counseling skills to facilitate behavior change.
- CP 3.2 Develop and demonstrate effective communications skills using oral, print, visual, electronic and mass media methods for maximizing client education, employee training and marketing.
- CP 3.5 Deliver respectful, science-based answers to consumer questions concerning emerging trends.

Dietetic Technician Programs:

- DT 2.2 Use clear and effective oral and written communication.
- DT 3.3 Provide nutrition and lifestyle education to well populations.
- DT 3.5 Develop or select print and electronic nutrition education materials for disease prevention and health improvement that are culturally sensitive, age appropriate and designed for the educational level of the audience.

Background: Core Concepts

Total-Diet Approach to Communicating Food and Nutrition Information

- It is the position of the American Dietetic Association that the total diet or overall pattern of food eaten is the most important focus of a healthful eating style. All foods can fit within a healthy food pattern, if consumed in moderation with appropriate portion size and combined with regular physical activity. The American Dietetic Association strives to communicate healthful-eating messages to the public that emphasize a balance of foods, rather than any one food or meal. Just as the “whole” food can be more than the sum of its nutrient parts, the total diet can be more than the sum of individual foods. Looking at food patterns eaten by an individual rather than specific foods in isolation is needed to provide effective dietary advice.
- Food and nutrition professionals have a responsibility to communicate unbiased food and nutrition information that is culturally sensitive, scientifically accurate, medically appropriate and feasible for the target audience.

American Dietetic Association. *Position of the American Dietetic Association: Total Diet Approach to Communicating Food and Nutrition Information*. July 2007. Available at: <http://www.eatright.org/About/Content.aspx?id=8356>. Accessed on: August 13, 2010.

Dietary Patterns

- The complexity of any individual food is enormous. The “whole” food is more than the sum of its nutrient parts, and foods often convey benefits greater than their individual nutrients. Food patterns introduce an even greater complexity to dietary guidance, but with the potential to provide far-reaching benefits. The fact that each individual has a unique food pattern makes it essential that the dietetic professional consider the dietary patterns of an individual.
- Food and nutrition professionals have the opportunity to communicate with individuals the advantages of using a food-pattern approach to help consumers meet nutrition recommendations.
- Culturally diverse foods can fit in the context of current nutrition guidelines and food-grouping systems.

Dairy Council of California, *Health Connections Newsletter: Dietary Patterns: Important Templates for Nutrition Guidance*. Spring 2007. Issue 4, Vol. 3 Available at: <http://www.healthyeating.org/Portals/0/Documents/Health%20Wellness/Health%20Connections%20Newsletters/DASH-Dietary%20Patterns.pdf>. Accessed on: January 24, 2014.

Unintended Consequences

- While health professionals generally agree that simple nutrition recommendations can “do no harm,” more often than not this type of advice can be short-sighted and lead to unhealthy consequences if corresponding adjustments to one’s diet are not made. Nutrition advice is often condensed into very simple messages for the sake of consumer

education and the intent to change consumer behavior. Although these messages may be useful to some, they are not intended to provide complete dietary advice and, at times, may cause more harm than good.

- As nutrition professionals, we need to examine the outcomes of implementing simplified advice and assess the long-term, often unintended effects these could have on health. Rather than simplified messages, we need to provide individualized, comprehensive, yet feasible advice that promotes well-being.
- A balanced, individualized nutrition plan that includes a variety of foods from all food groups when counseling and educating individuals will help individuals make well-reasoned food choices and adopt behavior patterns that are sustainable over time.

Dairy Council of California, *2009 Monograph: Unintended Consequences of Simplistic Dietary Recommendations: Good Advice Gone Awry?* Available at: http://www.healthyeating.org/Portals/0/Documents/Health%20Wellness/Health%20Connections%20Newsletters/Unintended_Conseq_2012.pdf . Accessed January 24, 2014.

Ek L and Frank GC. Unintended consequences of simple messages – helping new RDs achieve balance. *Women’s Health Report*. Summer 2009. pp. 5-7.

Directive Counseling

- Appropriate for the acute-care setting when an immediate dietary change may remove a client from an emergency or high-risk situation; for example, a newly diagnosed type 2 diabetic patient or an individual being placed on renal dialysis. A directive style is not prominent when behavioral change is required for developing a new habit pattern.
- The dialogue a registered dietitian would use in directive counseling would include statements like:
 - You should ...
 - You must ...
 - You really need to ...
- Clients do not react in a positive manner to a directive-counseling style. Instead, they often develop anger and hostility toward the counselor. The client feels powerless, even shameful, and dislikes having no choice. In effect, the client is less receptive to what the registered dietitian has to say.

Guided Counseling

- Levels the playing field and creates a conversation with the client. Although the registered dietitian never loses control of the session, the dietitian guides the client with the tone, nature of the questions and the type of response.
- Resistance to dietary change can be reduced. For example, questions become open-ended rather than closed-ended; “What would you like to talk about today concerning your diet?” This casts a broad net, and allows the client to state what is on his or her mind. It provides a ‘menu’ of possible discussion points and issues that may be the root of the eating problem. The registered dietitian listens to what is said and reflects on it

only, not inferring or adding information. The client actually hears what the dietitian is saying and may qualify or alter it.

- Key elements of a guided counseling style include:
 - open-ended questions
 - asking permission
 - listening
 - reflecting
 - summarizing
 - assessing interest and confidence about dietary change
 - discussing pros and cons of a dietary change.

Motivational Interviewing

- The elements of guided counseling form the basis of a client-centered approach called Motivational Interviewing (MI). MI is a guided-counseling style designed to elicit behavioral change, helping clients uncover their internal motivation for change. Clients are led during the conversation to explore and resolve any ambivalence they have about changing a behavior, such as a pros-and-cons discussion.

Britt E, Hudson SM, & Blampied NM. (2004). Motivational Interviewing in Health Settings: A Review. *Patient Ed & Counseling*, 53, 147-155.

Cant R & Aroni A. Exploring dietitians' verbal and nonverbal communication skills for effective dietitian-patient communication. *J Human Nutr and Dietet.* 21:502-511.

Miller WR & Rollnick S. Motivational interviewing: Preparing people for change (2nd ed.) (2002). New York: Guilford Press.

Miller WR. (2004). Motivational Interviewing in Service to Health Promotion. *Am J Hlth Pro*, 18(3), A1-A10.

Rollnick S & Miller WR. What is motivational interviewing? *Behavioral and Cognitive Psychotherapy*. 1995. 23:325-334.

Rollnick S, Miller WR, & Butler CC. *Motivational Interviewing in Health Care: Helping Patients Change Behavior*. New York: The Guilford Press. 2008. 210 pages.

<http://www.motivationalinterview.org>. Accessed on August 13, 2010.

Cultural Sensitivity

Understanding the cultural significance of foods not only will help us relate better to clients but also to be more effective. We help clients create plans for improvement that honor their

cultural habits and family traditions. When a plan fits into the cultural framework of the family, long-term compliance is much more likely.

To be a culturally competent dietetic educator, you need to have:

- Cultural Awareness – to be aware of your cultural assumptions and acknowledge differences – even on non-dietary issues such as punctuality for an appointment.
- Cultural Knowledge – including cultural norms such as present moment orientation, values, world views, family relationships and family decision-making processes, health beliefs and habits such as Yin/Yang and Hot/Cold balance systems, cultural food habits and more.
- Cultural Skill – the ability to effectively collect culturally relevant information from clients. Use body language that respects cultural differences and reflects dignity. Some examples include using first and last names when you first meet a client, ask permission to enter a room or ask if you should reschedule when whole family is present.
- Cultural Encounter – is the process of actively seeking and engaging in cross-cultural exchanges.
- Cultural Desire – actively seeking cross-cultural encounters and greater cultural competence. Feel comfortable asking questions, admit if you don't understand, and apologize for any cultural missteps.
-

Goody, C,M and Drago, L. Cultural Food Practices. Diabetes Care and Education Dietetic Practice Group. American Dietetic Association, 2010.

Stein, K. J. Moving Cultural Competency from Abstract to Act, J Am Diet Assoc. 2010; 110: 180-187.

<http://ethnomed.org>

Nutrition Care Process (NCPM)

- A systematic problem-solving method for food and nutrition professionals to think critically and make decisions addressing practice-related problems. It provides a consistent structure or framework to deliver nutrition care. The NCPM can be used with patients, clients, groups and communities of all ages having any disease.
- NCPM is designed to add evidence-based information. When NCPM is used consistently, improved client health outcomes will enhance recognition of R.D.s and dietetic technicians, registered (D.T.R.s) as the preferred providers of nutrition services. The NCPM has four distinct, connected steps: nutrition assessment, nutrition diagnosis, nutrition intervention, and nutrition monitoring and evaluation.

Lacey K, Pritchett E. Nutrition Care Process and Model: ADA adopts road map to quality care and outcomes management. *J Am Diet Assoc.* 2003;103:1061-1071.

American Dietetic Association. Nutrition Care Process and Model Part I. The 2008 Update. *J Am Diet Assoc.* 2008; 108:1113-1117.

American Dietetic Association. Nutrition Care Process Part II: Using the International Dietetics and Nutrition Terminology to Document the Nutrition Care Process. *J Am Diet Assoc.* 2007;108: 1287-1293.

Group Discussion Questions

The following questions can be discussed as a class or in small groups and provides students with the opportunity to talk about the core concepts this module is based on.

1. After reading the Academy of Nutrition and Dietetics position paper on Total Diet, referenced above, discuss the psychosocial consequences of good and bad food messages on dietary patterns. List 3 ways this may lead to confusion and frustration.

Facilitator Discussion Points:

- *Categorizing foods as good or bad promotes dichotomous thinking and leads individuals to make judgments in terms of black/white or, all/none, or good/bad and do not incorporate abstract or complex options into their decision.*
- *An example is the quick fix approach to weight control and as long as someone stays on the diet the person feels a sense of perceived control. However when a tempting food is present loss of control may occur or interpersonal conflict or guilt if the food is eaten.*
- *To help the individual make well-reasoned food choices and adopt behavior patterns that are sustainable overtime is the food and nutrition professional's responsibility.*

2. Discuss how using a total diet approach may decrease or eliminate confusion and frustration.

Facilitator Discussion Points:

- *The value of a food should be determined within the context of the total diet because classifying foods as "good" or "bad" may foster unhealthful eating behaviors.*
- *No single food or type of food ensures good health. Rather, the consistent excess of food, or absence of a type of food over time, may diminish the likelihood of a healthful diet.*
- *Healthful eating may be blindly defined as eating according to the latest fad focusing on a few single foods to include or to delete from one's overall eating pattern*
- *Promote variety, proportionality, moderation, and gradual improvement that include foods from all five food groups. Emphasize food patterns, rather than individual nutrients or foods.*

3. Contrast a direct with a guided counseling style.

Facilitator Discussion Points:

- *When is each style appropriate?*
- *What would a registered dietitian say in a counseling session using the two different styles?*
- *What tools for conversation are unique for a guided counseling style?*

4. After reading [A Celebration of Culture—A Food Guide For Educators](http://www.healthyeating.org/Portals/0/Documents/Tip%20Sheets/CulturalFoodGuide.pdf)
<http://www.healthyeating.org/Portals/0/Documents/Tip%20Sheets/CulturalFoodGuide.pdf>
- a. Which cultural food traditions are you most familiar with? Which food traditions are you least familiar with?
 - b. Which foods are you not familiar with? Identify two ways that you could become more familiar with cultural foods commonly consumed by people residing in your community.

Online Module Outline

The online module introduces the core concepts using:

- an Unintended Consequences online continuing education course,
- two sample case studies with audio counseling sessions designed to demonstrate best practices,
- an activities for students to identify instances where the counselor is not keeping core concepts in mind and/or not using client centered counseling techniques.
- a chart note activity and discussion questions for each case study.

Online Module Outline

- I. Learner Objectives
- II. Purpose of Nutrition Education
- III. Keeping Total Diet in Mind
- IV. Client-Centered Counseling Styles
- V. Dietary Patterns
- VI. **Assignment 1:** Unintended Consequences Online Course
 - a. Available at: <http://www.dairycouncilofca.org/HealthProfessionals/UCcourse/index.htm>
- VII. **Assignment 2:** Case Study “Jessica” Private Practice
 - a. Assessment
 - b. Diagnosis
 - c. Intervention – audio counseling sessions
 - d. Discussion Questions
 - e. Chart Note and PES Statement Activity
 - f. Nutrition Monitoring and Evaluation
- VIII. **Assignment 3:** Case Study “Ms. Marco” Outpatient Clinic
 - a. Assessment
 - b. Diagnosis
 - c. Intervention – audio counseling sessions
 - d. Discussion Questions
 - e. Chart Note and PES Statement Activity
 - f. Nutrition Monitoring and Evaluation
- IX. **Additional Resources**

Chart Note Activity: Jessica

Below is a partially completed chart note for the dietitian's session with Jessica. Using the information you gathered from your observation of the counseling session, complete the shaded areas.

Nutrition Note— ADIME

5/4/10

Assessment:

16 y o female

Ht: 65" Wt: 125# BMI: _____ (55th %ile for age)

Relevant Labs: fasting blood glucose = 85

Relevant Meds: None

Wt hx:

Medical hx:

Diet recall notable for: _____

Physical Activity: Swim practice 5 days/w x 2 hours + swim meets on weekends x 3 hours + walk to and from school 30 minutes total 5d/w

Impression (your PES statement here): 16 yo female with

Expect (circle): POOR FAIR GOOD compliance with recommendations.

Plan:

1. _____
2. _____
3. _____
4. Pt to note times at swim practice next week.

_____ Date of Follow-up with RD 2-3 weeks:

Suzy S. Dietitian, RD _____

Date: May 4, 2011

Signature

Chart Note Activity: Ms. Marco

Below is a partially completed chart note for the dietitian's session with Jessica. Using the information you gathered from your observation of the counseling session, complete the shaded areas.

Nutrition Note—Initial Assessment	
5/4/10	
<u>Findings:</u>	
Ht: 61"	Wt: 167#
BMI: _____ c/w (circle) underwt / normal wt / overwt / obesity class 1 2 3	
Relevant Labs: fasting blood glucose = 115, LDL = 160, HDL = 23	
Relevant Meds: statin, blood pressure medications, and fish oil capsules	
<u>Wt hx:</u> _____	
Medical hx: HTN, dyslipidemia, impaired fasting glucose	
Diet recall notable for _____	

Physical Activity: <u>minimal, pt is mostly sedentary</u>	
<u>Impression:</u> 67 y o female with (your PES statement here) _____	

Today, discussed principles of carbohydrate-controlled diet for BG management (small frequent meals, moderate CHO q meal, avoidance of concentrated sweets and sweetened beverages). Gave recommendations for dietary changes to help pt decrease fat, calories, and sodium intake, while increasing nutrient-dense foods. Pt verbalizes good comprehension of concepts discussed and agrees to plan below.	
Expect (circle) POOR FAIR GOOD compliance with plan.	
<u>Plan:</u>	
1. _____	
2. _____	
3. _____	
4. _____	
5. Follow-up with RD 2 weeks.	
Suzy S. Dietitian, RD _____	_____ May 4, 2011
Signature	Date

CASE STUDY EVALUATION OF AN INTERVIEW

Student:

Date:

Module: _____ Jessica

_____ Ms. Marco

Instructions: Indicate your assessment of each interview component by writing J1, J2 (Jessica version 1 & 2) or M1, M2 (Ms Marco version 1 & 2) in the appropriate column.

Interview Component	Satisfactory	Fair & Improvement Needed	Unsatisfactory	Comments
1. Introduced self appropriately				
2. Established rapport appropriately using open-ended questions mixed with closed-ended questions				
3. Created agenda with client				
4. Verified medical or health issues as related to food, nutrition and lifestyle				
5. Used culturally-sensitive, open-ended questions appropriately				
6. Used reflective listening in response to client's responses				
7. Assessed interest, willingness and confidence				
8. Clarified/followed up on answers appropriately				
9. Established how the client wished to proceed				
10. Established follow-up activities and appointments				

Summary Comments/Evaluation: Indicate J1, J2 or M1, M2 next to your comments about the interview.

List two interviewing strengths noted for this counselor (version 1):

- 1.
- 2.

List two interviewing strengths noted for this counselor (version 2):

- 1.
- 2.

List two interviewing techniques that the counselor (version 1) needs to improve:

- 1.
- 2.

List two interviewing techniques that the counselor (version 2) needs to improve:

- 1.
- 2.

Give two constructive suggestions you could offer to the counselor (version 1):

- 1.
- 2.

Give two constructive suggestions you could offer to the counselor (version 2):

- 1.
- 2.

Group Discussion Questions Case Studies

1. What client-centered counseling techniques did the counselor use?
 - a. List techniques: (example open-ended, culturally sensitive questions, affirming, reflecting, summarizing, allowing client choice, asking about and focusing on what's important to the client, considering client's readiness to change, acknowledging resistance as a normal part of behavior change, assessing interest and/or confidence in making a behavioral change)
 - b. If no client-centered counseling techniques are noted, how did this affect the session?

2. What were the dietitian's main recommendations?
 - a. Did the dietitian frame specific nutrition advice in a "total diet" context?

3. What were problems with the client's dietary pattern?
 - a. Did the dietitian help the client make changes to her overall pattern? Or did she focus on mainly on specific foods or nutrients? What effect did this have on the outcome of the session?

4. What are the factors affecting the client's food choices?
 - a. Did the dietitian consider these factors when making recommendations?

Case Study Scripts

Print out 'Case Study Evaluation of an Interview' to help you evaluate the effectiveness each of the counseling session.

Case Study "Jessica"

Sample Session Script #1

Setting: Private Practice Office

Assessment

Jessica is a 16 y o white female, 5'5", 125#, competitive swimmer who has come to see the private practice RD because she wants to improve her times. Her diet recall is notable for skipped B, Power Bar and soda for L, and large dinner after practice, either pizza or burrito with teammates or balanced meal at home with her family (meat + salad + bread + milk or water.) She has a family history of type 2 DM. She reports not feeling hungry in the morning, but feels ravenous by dinner time and often overeats, feeling "stuffed" by the end of the meal. She feels low in energy a lot of the time, especially at swim practice, and worries that she is developing DM like her dad.

Intervention (Script)

REGISTERED DIETITIAN: Hi Jessica. I'm Toby. Tell me what brings you in today.

JESSICA: Well, mainly I want to improve my swimming. I have an important meet coming up and I really want to prove myself. My times have been dropping lately even though I've been working hard at practice. My coach seems to think it might have something to do with what I eat.

REGISTERED DIETITIAN: I see, so the swimming really is your primary concern.

JESSICA: Yep.

REGISTERED DIETITIAN: Is there anything else that we should focus on today?

JESSICA: Um, maybe. My dad has diabetes, and I'm worried that I might be getting it too. I know it runs in families. I feel really tired most of the time, even though I eat a lot. Do you think I might have diabetes?

REGISTERED DIETITIAN: Wow, I can understand your concern about that. Diabetes is a big deal. I see from your medical records here that you recently had your fasting blood sugar tested, and it was normal. So the good news is you *don't* have diabetes.

JESSICA: Oh, okay. That's a relief.

REGISTERED DIETITIAN: There may be some other factors making you feel tired, and we should talk about those things today. We can plan to talk more about diabetes—risks, signs and symptoms—next time you come, if you're interested. How does that sound?

JESSICA: Yeah, maybe we can talk more about it next time. That's fine.

REGISTERED DIETITIAN: Great. I see you brought your three-day food record for me, Jessica. That's very helpful—thanks! How about we take a look at that now?

JESSICA: Sure.

REGISTERED DIETITIAN: (Pause to look at food record.) I see there is no food until the energy bar and soda and lunch time. Tell me about your mornings.

JESSICA: Well, I'm always super tired in the morning so I sleep until the last possible minute. When I get up, I'm not hungry, plus I'm rushing to get to school. My mom's always nagging me to eat something before I go but I just don't have time. I just throw my energy bar and soda in my bag for later and take off.

REGISTERED DIETITIAN: I see. Hmm. Okay, tell me about lunchtime, when you have your bar and soda. Does that lunch satisfy you?

JESSICA: I'm usually pretty hungry by lunchtime, and I'm also busy because I'm on school council and we meet during lunch. The bar and soda are really quick and easy, and they do satisfy my hunger for a while.

RD. And tell me how you feel by swim practice after school? Are you usually hungry then?

JESSICA: Yes! I'm hungry, but I'm afraid to eat right before because I might get cramps. By the time practice is over—it's a two hour practice—I'm always totally starving. That's when I get the huge burrito or eat something at home. Sometimes I get a stomach ache because I eat so much. I'm like a bottomless pit. My friends even make fun of me for it.

REGISTERED DIETITIAN: (laughs) Well, teen athletes burn a LOT of fuel, so your hunger is not surprising to me.

JESSICA: It's not?

REGISTERED DIETITIAN: No, your body has a lot of demands on it, for calories, nutrients, and fluids, and my impression is that your current food routine isn't meeting those needs. Then, at dinner, you're trying to make up for it. I have some ideas that might help. Would you like to hear them?

JESSICA: Yeah, definitely.

REGISTERED DIETITIAN: First, I think you would benefit from eating more often. With your current routine, the only thing fueling your swimming is the one energy bar and one can of soda. You easily burn three times that many calories during your swim workouts.

JESSICA: Really?

REGISTERED DIETITIAN: Yep. So it would be great if you could find a way to shift more of your calories to earlier in the day. I must agree with your mom on this one, Jane, breakfast would be a great addition to your day. How would it be for you to get up 10 minutes earlier to have a bowl of cereal with milk and a piece of fruit before your leave?

JESSICA: Well, that's what my little sister eats anyway, so getting that would be no problem. Mom would be happy. Waking up earlier will be a pain, but if you think it'll help, I'll try it.

REGISTERED DIETITIAN: That's a good idea. You could try an experiment: for the next week, eat breakfast before school and see how it affects your energy throughout the day. You could write it down on the food record sheets you've been using. How does that plan sound?

JESSICA: That's doable. I'll do that.

REGISTERED DIETITIAN: Great. Now, how about lunch? The energy bar and soda are actually a snack, not a meal. What might a more balanced lunch look like?

JESSICA: Mmmm...you mean like it would have the food groups in it? Like fruit, starch, milk, vegetables, protein, that kind of thing?

REGISTERED DIETITIAN: That's exactly what I was thinking. Overall, your diet does seem to be low in some of those important food groups, especially the fruit, vegetables, and dairy groups. If you ate a more complete lunch, you could save your snack for the afternoon to fuel your practice, and I'm guessing you will have more energy for the day and for swimming.

JESSICA: That would be awesome.

REGISTERED DIETITIAN: What about leftovers? Your dinners at home sound balanced-- with protein, vegetables, and starch.

JESSICA: Yeah, there's always leftovers. And there's a microwave in the room where we meet at lunch. And we have plenty of bag lunch ingredients at home, too, because my dad packs lunches for my little sister. I could talk with him about getting extra for me too. So on the nights I eat out with friends, I could still pack a lunch.

REGISTERED DIETITIAN: Those are fantastic ideas, Jessica. We have few more minutes, so I'd like to talk about ways you could increase those food groups I mentioned a minute ago—fruit, vegetables, and dairy. Each of those food groups provides nutrients essential to your body's development and health.

JESSICA: I know, I remember from health class—fruit and vegetable have antioxidants, right? And dairy has calcium for my bones.

REGISTERED DIETITIAN: Right. Fruits and vegetables also offer fiber, and milk, yogurt, and cheese also provide protein. Most of these foods are also a good source of carbohydrates—your body's main fuel source, very important for athletes like you. How could you get in more of these particular kinds of foods?

JESSICA: Well, I love fruit, so that's no problem. I could have fruit with my breakfast—I like banana on my cereal—and then I could bring a fruit or juice to have with lunch. Maybe I could have the fruit with my snack, too. I really like fruit.

REGISTERED DIETITIAN: I like those ideas. Wonderful. Next time you come, we can focus on the other food groups we mentioned—the vegetables and dairy—but for this week, just focus on the fruit. Okay, help me remember what your plan is...you are going to experiment with breakfast...

JESSICA: (searching her memory) Yeah, I'm going to experiment with eating breakfast, like a bowl of cereal with milk and fruit, every morning for the next week and take notes. And for lunch, I'm going to bring leftovers or pack a lunch, and have my bar for snack instead. And I'm going to eat more fruit, by having it with my breakfast, lunch, and maybe with my afternoon snack.

REGISTERED DIETITIAN: That's a great plan. Also, you could make note of your times at swim practice this week and we can see if our plan is working. I look forward to hearing how it goes when we meet next week. It was nice meeting you, Jessica.

JESSICA: You too. See you then.

Case Study “Jessica”

Sample Session Script #2

Setting: Private Practice Office

Assessment

Jessica is a 16 y o white female, 5’5”, 125#, competitive swimmer who has come to see the private practice RD because she wants to improve her times. Her diet recall is notable for skipped B, Power Bar and soda for L, and large dinner after practice, either pizza or burrito with teammates or balanced meal at home with her family (meat + salad + bread + milk or water.) She has a family history of type 2 DM. She reports not feeling hungry in the morning, but feels ravenous by dinner time and often overeats, feeling “stuffed” by the end of the meal. She feels low in energy a lot of the time, especially at swim practice, and worries that she is developing DM like her dad.

Intervention

REGISTERED DIETITIAN: Hi Jessica. I’m Toby. I understand you’re here today to find out how to improve your swimming performance, is that right?

JESSICA: Yeah. It was mainly my coach’s idea—he thinks I need to eat better.

REGISTERED DIETITIAN: Well, he might be right. Let’s talk about your diet...

JESSICA: (interrupts RD) Wait, can I ask you a question about diabetes?

REGISTERED DIETITIAN: Okay. What’s your question?

JESSICA: My dad has diabetes, and I’m worried that I might be getting it too. I know it runs in families. I feel really tired most of the time, even though I eat a lot. Do you think I might have diabetes?

REGISTERED DIETITIAN: No, don’t worry about diabetes. Your blood sugar was normal so you don’t have diabetes. But it does run in families, so you should watch out for symptoms of high blood sugar. What happens is when you consume carbohydrate, it gets converted into glucose and is absorbed into the blood stream, which triggers your pancreas to secrete insulin that in turn reduces blood glucose. When you have diabetes your cells do not react to the insulin efficiently, causing glucose to remain in your bloodstream and over long periods of time this high blood glucose can lead to serious health problems, like heart disease, retinopathy, kidney failure, and nerve damage. Got it?

JESSICA: Yeah, I think so.

REGISTERED DIETITIAN: Good question. Let’s talk about your diet now. Could you please show me your three-day food record?

JESSICA: Yes, here it is.

REGISTERED DIETITIAN: (pauses to look over food record) Okay, hmmm...it seems that you are eating a lot of processed foods.

JESSICA: Yeah, I’ve heard processed foods are bad. So, do I have to eliminate soda?

REGISTERED DIETITIAN: Soda is not nutritious. You should drink water instead.

JESSICA: Oh, okay. I mean, I know water is better for me, but I really look forward to that soda every day. It's my favorite treat. But my dad says soda is really bad for diabetes, so I guess I should avoid it anyway.

REGISTERED DIETITIAN: Yes, you should listen to your dad on this one, soda is bad for you. And the energy bar is processed, too. I recommend that you replace it with a more wholesome snack.

JESSICA: Like something from a health food store? I'm not sure my mom and dad are willing to buy me those things. Aren't they expensive?

REGISTERED DIETITIAN: There are plenty of nutritious snacks that provide the right amount of fiber, vitamins and minerals, plus a balance of carbs, protein, and fat. Here's a list of snacks you should have instead. I recommend that you pick some from the list and start bringing these to school instead of your energy bar and soda. The other thing I notice from your food records is that you aren't eating enough fruit, vegetables, or dairy products.

JESSICA: Oh, I *love* fruit! I can definitely eat more fruit, no problem.

REGISTERED DIETITIAN: I'm glad you like fruit, because you should aim for five to nine servings of fruit and vegetables per day.

JESSICA: Wow, that sounds like a lot.

REGISTERED DIETITIAN: Well, eating right is important if you want to stay healthy.

JESSICA: I do want to be healthy, but right now I just want to do better in swimming. Will fruits, vegetables, and dairy products help me do that?

REGISTERED DIETITIAN: They might. They will also provide you with important nutrients that will help keep you healthy in the long run.

JESSICA: Yeah, I remember that stuff from health class. Antioxidants, right?

REGISTERED DIETITIAN: Mm hm. I see that our time is just about up, so to summarize, your goals are 1. Cut out the processed foods like soda and energy bar 2. Eat five to nine servings of fruit and vegetables each day. Why don't you work on these goals and we'll meet again in a week to talk about how it went?

JESSICA: Okay.

Case Study “Ms. Marco”

Sample Session Script #1 Best Practices (demonstrates patient-centered counseling techniques, focus on dietary pattern, and a total diet approach).

Setting: Outpatient Clinic

Assessment

Ms. Marco is a 67 y o Latina female, 5’1”, 167#, widow who lives alone. She has elevated LDL, low HDL, hypertension, and elevated fasting blood sugar (“pre-DM”). Her doctor has written a referral for “low salt, low cholesterol, and low sugar diet instructions.” She has come to see the RD in the outpatient clinic.

Intervention (Script)

REGISTERED DIETITIAN: Hi Ms. Marco. I’m Toby. Tell me what brings you in today.

MS. MARCO: My doctor told me I should talk to you. I’m confused, what *can* I eat? Everything I like is bad for me, it seems.

REGISTERED DIETITIAN: I know it sometimes seems like that. I’m glad you came in; I’ll try to help clarify things for you today. Now, looking at your doctor’s referral, it seems he is concerned about your blood pressure, your cholesterol, and your blood sugar. What do you want to talk about?

MS. MARCO: My blood pressure and cholesterol have been problems for many years, and he’s always telling me they’re too high. The blood sugar problem just happened last time I went to the doctor, but that’s what scares me the most—both my parents had a terrible time with diabetes and I don’t want to end up like that. That’s what I want to talk about.

REGISTERED DIETITIAN: Okay, you would like to talk about diabetes. You are scared because both your parents had diabetes. What do you think would help you keep your blood sugar low?

MS. MARCO: I need to find out what I *can* eat that will help me stay healthy and keep the sugar low.

REGISTERED DIETITIAN: Okay. May I ask you a few questions to give me information I need?

MS. MARCO: Yes, of course.

REGISTERED DIETITIAN: Has there been much change in your body weight?

MS. MARCO: I think I’ve gained about 20 pounds in the past 5 years or so.

REGISTERED DIETITIAN: What would you say has contributed the most to your weight gain?

MS. MARCO: I think it is just because I am getting older. Everything seems to slow down so my metabolism is slower. I am not interested in losing weight. Even though my doctor said to lose weight, I think I’m fine just the way I am. I don’t think I need to lose any weight. I don’t want to get too skinny.

REGISTERED DIETITIAN: You think your weight is ok but your doctor advised you to lose weight. Why do you think the doctor wants you to lose weight?

MS. MARCO: I guess he thinks my weight makes my blood pressure and cholesterol go up.

REGISTERED DIETITIAN: What we know from studying patients is that as body weight increases, so does blood cholesterol, blood pressure and blood sugar. That means blood pressure, cholesterol, and blood

sugar improve with weight loss. How interested are you in losing weight if it means your blood sugar would be lower and your risk for diabetes would go down?

MS. MARCO: I didn't think my foods could do all that. I am scared about the diabetes. I could try to change some foods.

REGISTERED DIETITIAN: I understand that you are scared about diabetes and would think about trying to change some foods to improve your health. Let's use this ruler and pick a number between 0 and 10 which shows how interested you are in making some changes. 0 is not interested at all and 10 is really interested. What number would describe your interest best?

MS. MARCO: Well, when you ask me like that, I guess I am a 5.....right in the middle. I may be really willing....like an 8 or 9....if it means I don't develop diabetes.

REGISTERED DIETITIAN: An 8 is high and shows strong interest. Would you like to review your 3-day food record and see what changes you might make in your foods?

MS. MARCO: Of course.

REGISTERED DIETITIAN: (Pause to look at food record.) I see that breakfast and dinner are your main meals. It looks like these meals are pretty consistent: cereal with whole milk and fruit for breakfast then canned soup and crackers for dinner. Is that right?

MS. MARCO: Yes, I don't mind eating the same thing every day. It makes my life easier. Plus, I'm on a tight budget.

REGISTERED DIETITIAN: Being on a tight budget, that makes sense. How do you like oatmeal?

MS. MARCO: I like oatmeal but my husband doesn't.

REGISTERED DIETITIAN: Oatmeal is not expensive and you have personal health needs so it would be ok to eat differently than your husband. Would you drink a lower fat milk?

MS. MARCO: Yes, I like low-fat milk. My husband wants the whole milk.

REGISTERED DIETITIAN: I understand and it is good you like the low-fat milk. In your food record, I see that in the afternoons you have a pastry and coffee. What do you put into your coffee?

MS. MARCO: I put about ¼ cup of whole milk and two spoons of sugar in a cup of coffee.

REGISTERED DIETITIAN: How many cups of coffee do you typically have in a day?

MS. MARCO: Oh, several. Maybe five.

REGISTERED DIETITIAN: Ten level spoons of sugar each day means about 160 calories. What do you think about changing your sweetener and using a low calorie sweetener and low-fat milk?

MS. MARCO: Oh, that many calories. I didn't realize it was so much. I have those yellow packets of sugar substitute at home. I guess I could use that instead. I am okay with using the low calorie sweetener, but I have to think about the low-fat milk.

REGISTERED DIETITIAN: Ok. What other things do you snack on during the day?

MS. MARCO: Hmm, let's see. Oh, of course there's my candies and nuts. I like to eat peppermint candies – see I have them in my purse right now – and I go through a lot of nuts, probably about two cups each day. I know those are fattening, but they have the healthy fat, right?

REGISTERED DIETITIAN: You're right. The fat that's in nuts is healthy for your heart. Too much of any kind of fat isn't healthy for you though, because fat has calories. You may be getting too many nuts each day. Since they're salted nuts, they may be raising your blood pressure.

MS. MARCO: Oh, I didn't think about that. You're right. No wonder they taste so good!

REGISTERED DIETITIAN: Ms. Marco, nuts are a good snack choice for you, but would you be willing to cut back on how much you're eating? Instead of 2 cups, how interested are you to cut back to one handful, or about ½ cup, of the nuts in a day and maybe you could buy the "lightly salted" version instead of the regular kind? Let's use a ruler again to estimate your willingness in cutting back on the amount of salted nuts you eat.

MS. MARCO: Wow, I can still have a handful? I am interested in doing that. I just go through them when I'm watching my TV and I don't even pay attention. Ok, I'm about a 7. If I measure them out into a bowl then I can keep it to ½ cup. And I think I've seen those less salt kind at the store—they probably don't taste as good, but I'll try them.

REGISTERED DIETITIAN: Great! You've chosen a 7 and are pretty willing to give that a try. How about the peppermints? How important are those to you?

MS. MARCO: Oh, I don't care about those. I just keep those around for my grandkids. But the kids don't even really like them, and now I just eat the candies out of habit, they keep my breath fresh and give my mouth a sweet taste. I can give them up. In fact, when this bag is gone, I'll stop. I know these aren't good for me and I've been thinking of giving them up for a while.

REGISTERED DIETITIAN: That's great, and cutting out all that sugar will really help your blood sugar levels.

MS. MARCO: Okay, I'll do it.

REGISTERED DIETITIAN: Great. How interested are you in changing the pastry every day in the afternoon, with your coffee? Other clients have found alternate snacks with less calories from fat and sugar. I have a list of some lower calorie options.

MS. MARCO: I could take the list, but I grew up eating an afternoon pastry my entire life, since I was a kid, and it's my favorite part of the day. Nothing else will taste good with the coffee.

REGISTERED DIETITIAN: Okay, that's fine. We can focus on other changes you can make.

REGISTERED DIETITIAN: So Ms. Marco, we have just a couple more minutes together and I am curious if you want to talk about lunch. I noticed on your food record that there's no lunch, no midday meal. Can you tell me about your daytime routine?

MS. MARCO: Well, I don't do much. I mostly stay at home, watch TV, and do a few chores around the house. Once in a while my children come over with their kids. But most of the time I'm just sitting. I don't really get hungry for lunch, so I figure I should just skip it. Plus, I spent my whole life cooking for my family, and I have no interest in doing it for myself now.

REGISTERED DIETITIAN: I understand. Studies with patients with diabetes show that blood sugar levels tend to be more stable when people eat small meals throughout the day, and don't skip meals. Even adding a simple lunch, like, for example, a cup of fruit with cottage cheese, or salad with half a tuna sandwich, or even a couple of eggs scrambled with some onions and mushrooms and one piece of toast, would be a great addition. What do you make of those ideas?

MS. MARCO: mmm...that does sound good. When you said lunch, I thought you meant a full meal, like with meat and things. The ideas you mentioned sound simple. I love cottage cheese and fruit. Actually all of the things you listed sound good to me, and they're not too hard to make. I sometimes make a salad to have with my dinner, so I could just save some leftovers to make for lunch the next day. That's easy enough.

REGISTERED DIETITIAN: That's a great idea. I think that since you'll be cutting back on the nuts and not eating the candies, you might find that you're hungrier around lunchtime. How confident are you that you could add lunch for the next two weeks, and see how your appetite is?

MS. MARCO: I don't promise I'll do it every day, but I can do it at least three times a week.

REGISTERED DIETITIAN: Three times a week is a great start. Let me summarize what you are willing to do: add lunch, cut back to one handful and try the lower salt nuts, give up the candies and use the sweetener instead of the sugar in your coffee. How did I do?

MS. MARCO: I think that's all. I have a lot of work to do, but am willing to get started. This is much less painful than I thought it would be. I need to go now so I'll see you in two weeks. Shall I keep my food record?

REGISTERED DIETITIAN: Yes, that would be a good way to know what you are able to change and keep yourself healthy. I'll see you in two weeks with your food record. Have a great day and thank you for coming in.

Case Study “Ms. Marco”

Sample Session Script #2 Needs Improvement (demonstrates an overly directive, non-patient centered counseling style, and does not skillfully incorporate concepts of overall dietary patterns and total diet approach).

Setting: Outpatient Clinic

Assessment

Ms. Marco is a 67 y o Latina female, 5’1”, 167#, widow who lives alone. She has elevated LDL, low HDL, hypertension, and elevated fasting blood sugar (“pre-DM”). Her doctor has written a referral for “low salt, low cholesterol, and low sugar diet instructions.” She has come to see the RD in the outpatient clinic.

Intervention (Script)

REGISTERED DIETITIAN: Hi Ms. Marco. I’m Toby. Tell me what brings you in today.

MS. MARCO: My doctor told me I should talk to you. I’m confused, what *can* I eat? Everything I like is bad for me, it seems.

REGISTERED DIETITIAN: I’m sure not *everything* you like is bad for you. Now, looking at your doctor’s referral, it seems he is most concerned about your blood pressure, your cholesterol, and your blood sugar. We probably can’t cover all of these topics today, but we can at least get started.

MS. MARCO: Okay.

REGISTERED DIETITIAN: How long have you been at your current weight?

MS. MARCO: Oh, I don’t know exactly. I think I’ve gained about 20 pounds in the past 5 years or so.

REGISTERED DIETITIAN: Your health issues are weight-related. So we should talk about weight loss today.

MS. MARCO: Honestly, I think I’m fine just the way I am. I don’t think I need to lose any weight. I don’t want to get too skinny.

REGISTERED DIETITIAN: Well, losing weight would be one of the best things you could do for your health. Let’s look at your food records.

MS. MARCO: Alright.

REGISTERED DIETITIAN: (Pause to look at food record.) I see that breakfast and dinner are your main meals. It looks like these meals are pretty consistent: cereal with whole milk and fruit for breakfast, then canned soup and crackers for dinner. Is that right?

MS. MARCO: Yes, I don’t mind eating the same thing every day. It makes my life easier. Plus, I’m on a tight budget.

REGISTERED DIETITIAN: And I see that in the afternoons you have a pastry and coffee. Is your coffee black or do you put something in it?

MS. MARCO: I put about ¼ cup of milk and two spoons of sugar.

REGISTERED DIETITIAN: Okay. How many cups of coffee do you typically have?

MS. MARCO: Oh, several. Maybe five.

REGISTERED DIETITIAN: That's ten spoons of sugar each day! That's too much. All that coffee isn't good for you anyway; you should be drinking water instead. So that's goal #1—to cut down to only one cup of coffee in the morning using diet sugar and drink herbal tea the rest of the day.

MS. MARCO: Oooh, I was afraid you were going to say that.

REGISTERED DIETITIAN: Are there other things you snack on during the day that you didn't write down here?

MS. MARCO: Hmm, let's see. Oh, of course there's my candies and nuts. I like to eat peppermint candies all the time—see I have them in my purse right now-- and I go through a lot of nuts, probably two cups each day—I know those are fattening, but they have the healthy fat, right?

REGISTERED DIETITIAN: These snacks aren't good for you. You are right; nuts are very high in fat. If you must have the nuts, get the unsalted kind and cut way down on the portion size. And the candies are just empty calories, raising your blood sugar and making you gain weight.

MS. MARCO: Okay, I'll think about it. Maybe I'll give up the candies and nuts.

REGISTERED DIETITIAN: That's probably for the best. Now, I also see that you have a pastry every day in the afternoon, with your coffee. Pastries are high in fat and sugar. I think you should avoid pastries and replace them with a healthy snack alternative, like fruits or vegetables.

MS. MARCO: You mean like apples and carrot sticks?

REGISTERED DIETITIAN: Yes, those would be examples. Ms. Marco, your diet is too high in saturated fat, sodium, and sugar, and low in fruits and vegetables. So if you want to improve your health, I recommend cutting out the pastry and eating at least five servings of fruits and vegetables each day.

MS. MARCO: Oh. Okay.

REGISTERED DIETITIAN: Good. And to lower your sodium intake, you could make soup from scratch instead of using canned soup.

MS. MARCO: Oh, I see. Okay.

REGISTERED DIETITIAN: If you're serious about getting your blood pressure under control, you should switch to homemade soup, or at least try the lower-sodium canned kinds. I have some low sodium soup recipes if you would like.

MS. MARCO: I guess I could try that.

REGISTERED DIETITIAN: Good. Lastly, I see that you are drinking whole milk. That has too much saturated fat and calories. To lower your LDL cholesterol and lose weight, you should switch to 1% or nonfat milk.

MS. MARCO: Oh, yes. Okay.

REGISTERED DIETITIAN: So, in summary, your plan for the next two weeks is to cut down to one cup of coffee and switch to herbal tea, give up the candies and nuts and add in fruits and vegetables, cook a wholesome dinner instead of having canned soup, and switch to nonfat milk.

MS. MARCO: Wow...that's a lot of changes. I'm not sure I can do all that but I'll do my best. (sounding skeptical)

REGISTERED DIETITIAN: Okay, great. I'll see you in two weeks, then, Ms. Marco.

Extension Activities

In-Class Options

- View online module as a class then ask students to work individually or pairs to complete a chart note and answer discussion questions related to each case study.
- Ask students to keep a 3 day food log and bring to class for another classmate to identify if their food pattern applies total diet concepts and where possible changes could be made.
- In groups of 3-4 discuss how you decreased confusion by utilizing a total diet approach and explaining the importance of dietary patterns while avoiding simplistic dietary recommendations and telling Erika what NOT to eat.

Case Study: Erika is a 35-year-old school teacher, wife, and mother of two who is interested in learning about healthy eating so she can be a good role model for her children. She has come to you because she would like to eliminate processed foods from her family's diet. Respond to each of the client's statements below.

Nutrition Educator: "Tell me about what brings you here to see me today."

Erika: "I am concerned that what I'm feeding my children is not healthy. I have read articles in the newspaper about children getting fat because they eat processed foods. I need to know what foods are good to eat."

Nutrition Educator: *Suggested Answers* "It sounds like you're primary concern is processed foods. Please tell me which foods you consider to be "processed" and therefore are unhealthy." Or "The good news is that all foods can fit into a healthy diet, even processed foods. We need to be sure foods from all the food groups are including in your dietary pattern." Or "Let's start by talking about the foods your family most often consumes from each of the food groups."

Erika: "I know eliminating all foods with sugar is important."

Nutrition Educator: *Suggested Answers* "Remember all foods can fit into a healthy diet when eaten in moderation." Or "By eliminating all foods with sugar you may unintentionally eliminate foods rich in nutrients. Let's talk about you current food patterns to see where we might be able to make some changes."

Out of Class Options

- Ask students to complete online module as homework and answer discussion questions from the Core Concepts section of this facilitator guide.
- Ask students to complete chart note and discussion questions for each case study as homework.
- Ask students to observe a counseling session conducted by a Registered Dietitian and note how the Dietitian keeps in mind total diet and food patterns. Also what client-centered counseling techniques are used?

- Visit a local food bank. Plan a balance menu using foods available from the food bank.
- Visit a local grocery store that sells cultural foods that you are not familiar with. Plan a class tasting party featuring recipes with foods include cultural foods from a variety of cultures.

Nutrition Education and Counseling Module Test Questions

This test can be taken online at:

<http://www.surveymoz.com/s3/383292/Nutrition-Education-amp-Counseling-Toolkit-Post-Test>

Students that score over 70% correct will get a certificate of completion.

Directions: Choose 1 answer for each question. Correct Answers are designated with an *.

Q1. Why should the value of a food be determined within the context of the total diet?

- A. actually it should not be determined within the context of the total diet
- B. classifying foods as 'good' or 'bad' may foster unhealthful eating behaviors *
- C. learning recommended values for nutrients is difficult but the individual should be able to memorize their nutrient needs and achievements based on all the foods they eat in a day

Q2. Eating practices are dynamic and influenced by many factors with major ones being

- A. temperature, time and volume
- B. geographic location, altitude and population density
- C. physiology, lifestyle and social/cultural influences *

Q3. What specific focus can help reduce consumers' nutrition confusion?

- A. time of meals and snacks
- B. moderation and proportionality in the context of a healthful lifestyle*
- C. frequency of meals and snacks

Q4. Why are nearly six in 10 consumers trying hard to eat healthfully?

- A. to avoid health problems later in life*
- B. to cut food costs
- C. to be considerate of the environment

Q5. There are many complaints that nutrition education is focused on what not to eat instead of what to eat. How does this confuse consumers?

- A. conflicting messages make it difficult to know what to do *
- B. it makes buying supplements difficult
- C. individuals usually eat from all the food groups so nutrition education is not necessary

Q6. What two situations diminish the likelihood of a healthful diet?

- A. eating a variety and balance of foods
- B. eating foods from the rainbow of colors and in small amounts
- C. consistent excess of food, or absence of a type of food over time*

Q7. In order to help learners adopt a total dietary approach that is sustainable and fits individual preferences, evidence supports what kind of dietary planning?

- A. identifying the waste after production of the food
- B. implementing behavior-oriented food and nutrition programs*
- C. incorporating different cultural foods weekly

Q8. The option of providing simple one-size-fits-all decision rules can be an expedient approach both to education and to counseling. How can this method mislead a consumer?

- A. Consumers may conduct pantry evaluation in their homes and discard important foods

- B. Consumers may think that a given type of food is always a positive or negative addition to the diet. *
- C. Consumers may eat everything when on a modified diet

Q9. Why is it important to choose a variety of nutrient-dense foods?

- A. to balance the calories
- B. to spread the only important nutrients, protein and carbohydrate, across meals and snacks
- C. to ensure adequate intakes of more than 50 nutrients *

Q10. Increasing one's food availability and variety may be one reason individuals overeat especially when the foods are energy-dense.

- A. True *
- B. False

Q11. Why should nutrition information be presented with sufficient context?

- A. to provide consumers with a broader understanding of the issues
- B. to determine whether it applies to their unique needs
- C. both*

Q12. If a counselor believes in and uses the 'Knowledge-Attitude-Beliefs' approach to counseling, the most important aspect about the approach is that,

- A. the approach will only be effective if the individual lives alone
- B. the counselor may assume that the client who receives new information will gain new knowledge, change attitude, and improve dietary patterns*
- C. the counselor must have all the facts correct for correct knowledge transfer before behavior change can occur

Q13. Using fat intake as an example, the four main constructs of the Health Beliefs Model are: 1) perceived susceptibility ("How likely am I to get heart disease and how soon?"), 2) severity ("How bad would it be to have heart disease?"), 3) benefits ("Will I feel better if I change the fats that I eat?"), and 4)

- A. non-food rewards ("How can I reward myself and not use food as the reward?")
- B. goals ("How realistic and attainable are my goals?")
- C. barriers ("How hard will it be to make these changes in my fat intake?") *

Q14. Regardless of the theoretical basis of communication, the main reason a counselor's messages must be consistent, emphasize a total dietary pattern, and guard against inadvertent oversimplified messages, is that, otherwise,

- A. counselors may not be effective in achieving educational goals *
- B. counselors may not see the patient for follow-up and continuity
- C. counselors may not be able to receive reimbursement for their consultation

Q15. A key consideration when evaluating and planning one's food choices is to

- A. promote seasonality and assess use of herbs and spices
- B. emphasize food patterns rather than individual nutrients or individual foods*
- C. focus on the individual's height, weight, BMI, and skinfold measure

Q16. It is thrilling to see health and nutrition information reach so many arenas. However, many single studies receive a major headline. A problem with this situation is that

- A. the public may believe that any topic given a headline is absolute truth*
- B. children and youth do not have access to health and nutrition information
- C. there is no consistent time table to know if the information will be of interest to the public

Q17. Focusing on one food group can be an effective way to encourage healthful eating. However, it is possible that people who follow simple messages may believe that they create a 'healthful diet' by achieving a single challenge. Such consumers may, however,

- A. neglect to eat a larger variety of foods integral to maintaining and promoting health *
- B. gain confidence in making one change and that should be sufficient to create healthful eating
- C. become obsessed with controlling foods as a safety net

Q18. When people attempt to eliminate a macronutrient for an extended period of time, they are neglecting to provide their bodies with the proper nutritional needs required for normal body function. For this reason it is important to define 'healthy eating' to clients and the public and

- A. refer them to websites for further information
- B. set up group meetings to dispel inaccurate information
- C. emphasize that the human body requires a wide variety of macro- and micronutrients*
- D. food costs

Q19. Given the multitude of factors influencing our health and the array of nutritional messages consumers are hearing from various sources, our role as health professionals is to help them prioritize and plan their health goals always taking into account

- A. disease risk *
- B. BMI
- C. waist hip ratio

Q 20. The Nutrition Care Process relies on an evidence-based approach and

- A. provides a framework for demonstrating that nutrition care improves outcomes
- B. provides a common language for documenting and communicating the impact of nutrition care
- C. includes both A and B *

Q21 The most credible source(s) of nutrition information, according to ADA's 2008 Consumer Trends Research, is:

- A. Television
- B. Magazines
- C. Doctors, dietitians and other health professionals *
- D. Internet

Q 22. Which of the following factors need *not* be considered when individualizing nutrition advice?

- A. Age and gender
- B. Physical activity level
- C. Health insurance provider *
- D. Smoking and other lifestyle choices
- E. Disease risk

Q23. Front-of-package (FOP) food labels are becoming popular as a way to:

- A. Provide food safety information
- B. Help consumers compare similar food products
- C. Provide simple, easy and fast nutrition guidance to the consumer at point-of-purchase
- D. Provide cost comparison information
- E. Both B and C *

Q 24. According to 2002 NHANES data, the three under-consumed food groups include:

- A. Meat, milk and grains
- B. Milk, grains and vegetables

- C. Vegetables, fruit and grains
- D. Milk, fruit and vegetables *

Q 25. Unintended consequences of using FOP food labels as the primary source of information in making food choices include:

- A. Consumers may revert to a philosophy of “good” and “bad” foods
- B. Consumers may feel pressure to purchase locally-produced food products
- C. Consumers may emphasize intake of certain nutrients to the detriment of others
- D. Consumers will end up spending more of their food dollars on packaged foods
- E. Both A and C *

Q26. Taking nutrient supplements can lead to unintended consequences by:

- A. Fostering a reliance on supplements for key nutrients and components instead of whole foods
- B. Increasing risk of nutrient toxicity
- C. Providing too much fiber, leading to constipation
- D. Both A and B *

Q27. What is a possible unintended consequence of a low-calorie diet, if care is not taken that it is balanced with adequate nutrients?

- A. Worsened lipid levels
- B. Bone and lean tissue loss *
- C. Blood sugar control
- D. Lower blood pressure

Q28. A common unintended consequence of a vegan diet, if care is not taken that it is balanced with adequate nutrients, is:

- A. Iron-deficiency anemia
- B. Weakened bones and osteoporosis
- C. Diabetes and/or Metabolic syndrome
- D. Weight gain
- E. A and B *

Q 29. The singular message to “eat more fruits and vegetables” is most likely to lead to the unintended consequence of:

- A. Pesticide toxicity
- B. Overconsumption of fiber
- C. Overconsumption of vitamins A and C
- D. Overlooking the need to consume adequate amounts of other food groups such as low-fat dairy and whole grains *

Nutrition Education and Counseling Module

Short Answer Scenario Questions

Directions: Use these questions as either short answer test questions or group discussion questions.

S1. Ms. Jones has an appointment with the Registered Dietitian to manage her high blood pressure. The MD diet order is written as a general “healthy diet with sodium restriction” which allows the RD to instruct on a blood pressure lowering eating pattern. What eating pattern or diet would you recommend and why?

Points to include in response: Research studies testing the DASH Diet show that blood pressure can be reduced with an eating plan that is low in saturated fat, cholesterol, and total fat, and that emphasizes fruits, vegetables, and lowfat dairy foods. The preferred eating plan is the DASH eating plan. It also includes whole grain products, fish, poultry, and nuts and is reduced in red meat, sweets, and sugar-containing beverages and rich in magnesium, potassium, and calcium, as well as protein and fiber. The DASH eating plan is based on 2,000 calories a day. The number of daily servings in a food group may vary, depending on the caloric needs. See chart for menu planning.

Dietary Approaches to Stop Hypertension

Type of food	Number of servings for 1600 - 3100 Calorie diets	Servings on a 2000 Calorie diet
Grains and grain products (include at least 3 whole grain foods each day)	6 – 12	7 - 8
Fruits	4 - 6	4 - 5
Vegetables	4 - 6	4 - 5
Low fat or non fat dairy foods	2 - 4	2 - 3
Lean meats, fish, poultry	1.5 - 2.5	2 or less
Nuts, seeds, and legumes	3 - 6 per week	4 - 5 per week
Fats and sweets	2 - 4	limited

S2. A list of foods that are high in iron may be a successful trigger to dietary improvement for someone concerned over recent diagnoses of anemia. However, just memorizing a list of high-iron foods, could create what types of problems?

Points to include in response: Just memorizing a list of high-iron foods often fails to result in changed behavior. This is true especially if following the advice is neither convenient nor congruent with personal taste preferences.

S3. Food and nutrition professionals who counsel clients need continually to strengthen their skills, updating competencies, and documenting outcomes as they practice. What techniques do you recommend for professionals to stay up-to-date?

Points to include in response:

- Build coalitions with industry, government, academia, and organizations

- Use a full range of available and appropriate communication technologies and take advantage of opportunities to communicate with professional colleagues and the public, such as giving presentations and writing publications to influence social norms and public policy;
- Act as role models of active participation in local and professional associations;
- Maintain state-of-the-art knowledge through continuing education;
- Model a professional and unbiased approach to promoting healthful eating and physical activity patterns.

S4. Due to the volume of information that may swell around a single topic such as what occurred with trans-fats, many individuals may seek label information on foods they purchase. Although it is encouraging for women to learn of the dangers of ingredients such as trans-fats, what could be the problem with just focusing on ‘trans fat’?

Points to include in response: Many women may buy these products without considering other important components, total calories, total or saturated fat, grams of carbohydrate or additives in the list of ingredients.

S5. It is reasonable to assume that many consumers are eating larger portions than what is defined as one serving of food on a label. What information should nutrition professionals emphasize when educating clients about portion control of foods.

Points to include in response: There are various health consequences of an over-consumption of virtually any one food. It is important to emphasize that nutrient content and calories listed on a Nutrition Facts Panel are for one serving or portion of food in the quantity listed on the label. Individuals need to know how to measure their foods and keep their portions in check. It is likewise important to mention specific risks with food components, such as total fat and trans-fat, and emphasize moderation of all foods while including a discussion of the importance of variety and balance.

S6. Low-carb diets are the craze for many individuals. What would you say to explain the problems with low-carb eating?

Points to include in response: In adolescents, low-carb diets have been linked to suboptimal intakes of vegetables, fruit, vitamin C and fiber, and higher consumption of meat, cholesterol and total fat intakes. In adults, a study of popular diets found that diet quality, as measured by Healthy Eating Index (HEI), was highest for the high-carbohydrate group and lowest for the low-carbohydrate group. Individuals on low-carb diets had on average, a higher body mass index (BMI) than those on high-carb diets. Research shows that eating a diet rich in whole grains is associated with reduced risk of heart disease, certain types of cancer and type 2 diabetes, and may also help in weight management.

S7. Avoiding or limiting dairy products – in an attempt to reduce one’s fat intake, lose weight, avoid animal products or out of concerns for lactose intolerance may similarly result in what health problems?

Points to include in response: Short-term nutrient deficiencies and long-term health consequences. Intakes of calcium; magnesium; potassium; zinc; sodium; folate; thiamin; riboflavin; and vitamins B-6, B-12, A, D and E have been shown to be higher as more dairy is consumed. Deficiencies in calcium, often the result of suboptimal dairy consumption, can result in fractures in children and osteoporosis and osteomalacia in adults.

S8. Many individuals are searching for a quick fix or “magic bullet” to their body weight problems. The psychology of an individual who thinks his/her success only occurs when they follow a certain diet

(target behavior) has a dichotomous approach to thinking. For example, if this individual follows their diet for 5 days (has self-efficacy) and on the 6th day are in a shopping center and they smell fresh baked cookies, a high-risk situation may occur. Let's assume they can't resist buying 3 of the freshly baked cookies and devouring them quickly (loss of control). An hour later the individual professes to their best friend,

"I ate three cookies. I have blown my diet. I might as well go back and buy a dozen....they were so good!"

What could you say to guide this individual in the high-risk setting? How could you counsel this individual to regain their self-efficacy?

Points to include in response:

This is an example of dichotomous thinking which is the quick fix or "magic bullet" approach to weight control. As long as one stays on the diet (target behavior), the person feels a sense of perceived control (self-efficacy). If an individual experiences a high-risk situation, for example, tempting food like fresh baked cookies, then a loss of control may occur. Depending on the individual's emotional state, an interpersonal conflict takes over.

In this situation, the cookies are considered forbidden foods. The individual on the diet wants the 'forbidden' or 'bad' food and has a great desire for the cookies. This individual would likely say that they give up, just can't diet and loses their sense of self-efficacy. This pessimistic approach becomes self-fulfilling, because the person believes nothing can be done once they lose control.

S9. Using the scenario above, what client-centered techniques would be appropriate?

- a. Closed-ended questions
- b. Reflections *
- c. Stages of Change

S10. A primary care clinic was opened by new physicians who had learned client-centered counseling techniques while in medical school. They invited and interviewed a Registered Dietitian to join their practice. In the interview, the Registered Dietitian was asked if she used client-centered counseling techniques and she responded quickly, "Yes, of course!" Then one of the physicians asked if she would explain what she does. How would you respond?

Points to include in response:

Client-centered counseling is a way to talk to a client and learn by active listening, what their concerns are and how to approach the medical/nutritional concern. A client-centered approach may include motivational interviewing to uncover any conflicts that exist, e.g., an individual may want to lose weight, but have family members that always serve fried foods and baked desserts at mealtime. The family doesn't understand the client rejecting their 'love' in the form of food. With client-centered counseling, the counselor would explore the personal values of the client and any conflicts helping them to identify manageable goals and approaches for change.