

A NUTRITION COUNSELING GUIDEBOOK TO IMPROVE RDNS' CULTURAL COMPETENCE COUNSELING MIDDLE EASTERN ADULTS WITH CARDIOVASCULAR DISEASE

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Abstract

Cardiovascular disease (CVD) is a leading cause of mortality in men and women in the United States, including Middle Eastern adults. To help prevent or reduce CVD-related risk factors, the client/patient may receive nutrition counseling by a Registered Dietitian Nutritionist (RDN). For optimal patient care, it is essential for the RDN to feel competent. The purpose of the directed project was to create a guidebook that will enhance RDNs' cultural competence by integrating recommended eating patterns and Middle Eastern eating patterns to reduce CVD-related risk factors. The guidebook was achieved by integrating a literature review and pre/post survey responses from expert panelists who are practicing RDNs with a Middle Eastern heritage/background. Responses were primarily positive supporting the guidebook. Recommendations: improve the overall structure and content of the final guidebook. To determine if the guidebook improves RDNs' cultural competence, a research study should be conducted.

Introduction

Middle Eastern male and female adults are impacted by CVD. For improved patient care and quality, RDNs should practice cultural competence by delivering healthcare services that meet patients' cultural, social, and religious needs. Cultural competence improves RDNs' optimal care for patients by increasing their understanding of the patient's eating patterns to support behavior changes to reduce CVD risk factors.

Purpose: to create a guidebook that will enhance RDNs' cultural competence through the integration of recommended eating patterns and Middle Eastern eating patterns to reduce CVD-related risk factors.

Methods

The guidebook was created through a series of steps.

1. Obtained IRB approval to contact RDNs of Middle Eastern heritage who work with adults experiencing CVD-related risk factors and obtain their response to a pre-and post-survey.
2. Created a list of practicing RDNs with a Middle Eastern background, including their name and email.
3. Sent an invitation email followed by a consent for to those who agreed to participate.
4. Sent the pre-survey and guidebook outline to the RDNs.
5. Evaluated the pre-survey responses and made improvements to the outline and created the final guidebook.
6. Sent the final guidebook to the same RDNs with the post-survey.
7. Analyzed the survey responses from the post-survey of the RDNs' thoughts on the final guidebook to determine its accuracy and efficiency and made appropriate changes.

Results

TABLE 1. Pre-Survey Results from Expert Panelists, n=6

Item	Strongly Agree # (%)	Agree # (%)	Unsure # (%)	Disagree # (%)	Strongly Disagree # (%)
Guidebook beneficial	5 (83.3)	1 (16.7)	0 (0.0)	0 (0.0)	0 (0.0)
Short chapters	5 (83.3)	1 (16.7)	0 (0.0)	0 (0.0)	0 (0.0)
Relevant activity	2 (33.3)	3 (50.0)	1 (16.7)	0 (0.0)	0 (0.0)
Countries included	5 (83.3)	1 (16.7)	0 (0.0)	0 (0.0)	0 (0.0)
Patient mark Country	2 (33.3)	1 (16.7)	2 (33.3)	0 (0.0)	0 (0.0)
Fortified recipes	2 (33.3)	2 (33.3)	0 (0.0)	0 (0.0)	2 (33.3)
Photo of dish	6 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Dishes to include	1 (16.7)	2 (33.3)	3 (50.0)	0 (0.0)	0 (0.0)
Nutrition label important	4 (66.6)	0 (0.0)	1 (16.7)	0 (0.0)	1 (16.7)
Health benefits of dish	5 (83.3)	0 (0.0)	1 (16.7)	0 (0.0)	0 (0.0)
Food group identity	5 (83.3)	1 (16.7)	0 (0.0)	0 (0.0)	0 (0.0)
Proper portion	5 (83.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (16.7)

TABLE 2. Comments From Expert Panelists To Pre-survey, n=6

Respondent	Comment
1	Many dishes are also rice-based. I think those would be important to include especially in regards to portion sizes and possible ingredients substitutions for a healthier alternative.
2	In my current role as an RDN, I am not counseling patients. I run community based programs and provide general education focused on prevention
3	Instead of portion size (ex. "1 cup rice") I think it's important to include a MyPlate type example and to put a section for feelings of hunger/fullness to recognize differences in patient intake.
4	I like the incorporation of appropriate serving sizes and tips on portion control would be beneficial. In addition, describing food groups and ensuring a balance of macronutrients.

To be reviewed by RDN

Chapter 2

Macronutrients and Middle Eastern Dishes

Carbohydrates: Sugar molecules that the body breaks down and uses as the main source of energy. The three main types include sugars, starches and fiber.

Protein: Molecules obtained from meat, dairy, nuts and certain grains and beans, that help build and maintain our bones, muscle and skin.

Fats: Nutrient needed in moderate amounts to provide the body with energy and help absorb vitamins. Fat plays a major role in the body's cholesterol levels, and not all fat is the same.

Dietary Fiber: A type of carbohydrate that adds bulk into your diet, helps control weight, digestion and helps prevent constipation.

Water: A combination of hydrogen and oxygen that serves as a lubricant. It makes the saliva and fluids surrounding the joints, and helps regulate the body's temperature through perspiration.

Chapter 3

Heart Healthy Recommendations and Hunger Cues

Recommended by the Dietary Guidelines for Americans, the Dietary Approaches to Stop Hypertension (DASH Diet) "is a flexible and balanced eating plan that helps create a heart-healthy eating style for life."

Based on a 2,000 kcal daily intake, the DASH eating plan targets the following daily servings:

- 6-8 daily servings of **grains** (1 cup = 1 serving)
- 6 or less servings of **meats, poultry or fish** (1 oz = 1 serving)
- 4-5 servings of **vegetables** (1 cup = 1 serving)
- 4-5 servings of **fruit** (1 cup = 1 serving)
- 2-3 servings of **low-fat or fat-free dairy products** (1 cup = 1 serving fat free milk, 1 1/2 = 1 serving natural cheddar cheese)
- 2-3 servings of **fats and oils** (1 tsp = 1 serving)
- 2,300 mg of **sodium** (2 tbs)

To be reviewed by RDN

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To be reviewed by RDN

Listen to Your Body

Mindful eating is the practice of focusing on your meal without any environmental distractions. It is an approach to food where the individual is aware of the food they are consuming. With this comes the practice of listening to your hunger cues.

Listening to your hunger cues is one way to help determine your satiety. This can be practiced by using the hunger scale.



1- Starving, no energy, very weak
2- Very hungry, low energy, weak and dizzy
3- Uncomfortably hungry, distracted, irritable
4- Hungry, stomach growling
5- Starting to feel hungry
6- Satisfied, but could eat a little more
7- Full but not uncomfortable
8- Over-full, somewhat uncomfortable
9- Stuffed, very uncomfortable
10- Extremely stuffed, nauseous

It is best to start eating when a person starts feeling at a 3-4, but doesn't wait too long. The aim to stop eating is best when a person reaches a 7.

To be reviewed by RDN

MyPlate



TABLE 3. Post-Survey Results from Expert Panelists, n=5

Item	Strongly Agree # (%)	Agree # (%)	Unsure # (%)	Disagree # (%)	Strongly Disagree # (%)
Guidebook beneficial	3 (60.0)	2 (40.0)	0 (0.0)	0 (0.0)	0 (0.0)
Clarity of structure	3 (60.0)	2 (40.0)	0 (0.0)	0 (0.0)	0 (0.0)
Ease of understanding	2 (40.0)	3 (60.0)	0 (0.0)	0 (0.0)	0 (0.0)
Ease of administration	3 (60.0)	2 (40.0)	0 (0.0)	0 (0.0)	0 (0.0)
Activity relevancy	3 (60.0)	1 (20.0)	1 (20.0)	0 (0.0)	0 (0.0)
Countries listed	3 (60.0)	2 (40.0)	0 (0.0)	0 (0.0)	0 (0.0)
Activity appropriateness	3 (60.0)	2 (40.0)	0 (0.0)	0 (0.0)	0 (0.0)
Number of recipes	2 (40.0)	1 (20.0)	0 (0.0)	2 (40.0)	0 (0.0)
Design expectations	1 (20.0)	3 (60.0)	1 (20.0)	0 (0.0)	0 (0.0)
Dish appropriateness	3 (60.0)	2 (40.0)	0 (0.0)	0 (0.0)	0 (0.0)
Information accuracy	1 (20.0)	4 (80.0)	0 (0.0)	0 (0.0)	0 (0.0)
Clarity of dish benefits	1 (20.0)	4 (80.0)	0 (0.0)	0 (0.0)	0 (0.0)

TABLE 4. Comments From Expert Panelists To Post-survey, n=5

Respondent	Comment
1	Great Job, I think it would be great if you can add the country of origin for the featured recipe.
2	I think it was very nice to state the benefits you may receive from each of the recipes. I do think that there are many other common foods that would also make good examples, like "fatteh". Being that there aren't many food guides out there for Middle Eastern foods, that I'm aware of, adding a couple more recipes would make the food guide more comprehensive
3	I think it would be beneficial to include more recipes or even providing serving sizes of typical staples of foods eaten by middle easterners, this can maybe be put right under the appropriate serving sizes for the food groups.
4	Fantastic job! If you are open to sharing the final version with us, I would definitely like to pass it to my coworkers who specialize in CVD. A few things to note: I would love to see an even simpler description as to what a protein is ... I like the lighter red background color vs the dark red-it's easier on the eyes when reading. Let me just say how amazing it was to see a MyPlate with our culture foods!

Discussion

The guidebook was designed to improve RDNs' cultural competent counseling Middle Eastern adults with CVD. From the literature review, the content should focus on heart-healthy meals eaten by the Middle Eastern population. Responses from both the pre- and post- surveys showed a minimum of 50% & 60% agreement, respectively, for each item.

Limitations of the guidebook noted by the RDNs:

- inability to include all Middle Eastern dishes
- cannot generalize to all Middle Eastern adults with CVD-related risk factors as eating patterns are personalized
- does not measure RDNs' cultural competence or determine if the guidebook improves RDNs' cultural competence

Conclusion

The development of this guidebook was made possible through a series of essential steps. The feedback from six expert panelists and the integration of the literature review was extensively used to create the guidebook. Based on the literature review, the evaluation, and analysis of the pre and post-survey, it is determined that a guidebook catered to Middle Eastern adults with CVD-related risk factors is a beneficial instrument that can be used to help improve RDNs' cultural competence when counseling Middle Eastern adults with CVD. Although the guidebook received positive feedback and support, there are areas for improvement that can strengthen and ease its use. A research study should be conducted.

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