Needs Assessment

According to the nutrition manager and food service director, an in-service training is needed for the cooks and tray line staff on mechanical soft diet due to identified knowledge deficit related to this diet. There were few mistakes made by cooks and tray line staff, in which patients received whole meats when they were on a mechanical soft diet. Most of the cooks in the kitchen are recently hired, therefore there may be a lack of previous exposure to mechanical soft diets and unaware of the seriousness of making such mistakes. Although tray line staff (cart runners specifically) usually checks to ensure the food items are correct and nothing is missing on the tray before sending it to patients, it is noted that tray line staff seldomly checks the diet order to ensure the accuracy. Therefore, an in-service training would be beneficial to increase employee's understanding and raise their awareness of mechanical soft diet.

A study has shown that an in-service training may help to reduce food-related knowledge deficits of employees and improve patient satisfaction in food service (Dodd et al, 2013). Utilizing a pre-test and post-test during training may also help to assess employee's previous knowledge levels and evaluate the effectiveness of the training.

Program Goals and Objectives

- What will be the goals of the program?
 - The goal of this program will be to increase the knowledge regarding dysphagia 2 diets among hospital cooks and trayline staff to improve tray accuracy and dietary compliance.
- What will be the process objectives and learner objectives for your program? Write in the format of a well-written objective (relevant conditions, action verb, and target measures)
 - Learners will be able to recall the importance/definition of following the dysphagia
 2 diet with 100% accuracy by the end of the presentation.
 - Learners will be able to identify 2 way to modify foods to accomodate for a dysphagia 2 diet with 100% accuracy by the end of the presentation.

Logistics

- Format, duration, and location of program
 - The in-service training will take place at Carle Foundation Hospital in Urbana, IL on date and time
 - The in-service will be an informal presentation style and will incorporate a short pre-assessment verbal quiz to assess where the staff is at with their understanding regarding the diet. The training will then include a short presentation and will be concluded with a post-test in the form of a game to determine how much was learned.
- Who, what, when, where and why
 - The need for this in-service stems from a few mistakes made on a patient's tray who was on a mechanical soft diet. In two separate instances, the tickets were printed for ground meats and the patient received whole meats. The error passed 3 different employees without being noticed before reaching the patient's room. The nutrition manager and food service director indicated that an in-service

training would be beneficial to educate the cooks and tray line staff on this particular diet and it's seriousness as it presents a potential health hazard (i.e. choking) to the patient.

Lesson Plan Components

- Introductions-- yourself, the topic, each other (if appropriate)
 - Our names are Amanda and Amy and we are dietetic interns here at Carle. We are graduate students at Eastern Illinois University. Today we are going to be talking about the dysphagia 2 diet, or mechanical soft as you may see it on the tickets. We want to discuss the importance of tray accuracy and how crucial it is that patients are receiving food that is compliant with their diet.
- Body of the lesson
 - What background information (i.e. knowledge and/or references) will help the educator in completing the lesson plan? This will be written as a brief (2-3 paragraph) mini review of literature
 - Individuals who are experiencing difficulty swallowing, or clinically known as dysphagia, are placed on dysphagia diet depending on the severity (Alberta Health Services, 2012). There are three levels of dysphagia diets: level 1, which is dysphagia-pureed, foods are homogeneous, very cohesive and pudding-like requiring very little chewing; level 2, which is dysphagia-mechanically altered, foods are cohesive, moist and semi-solids requiring some chewing; then there is level 3, which is dysphagia-advanced, foods are soft and require more chewing (National Dysphagia Diet Task Force, 2002). The purpose of the dysphagia 2 diet is for individuals with temporary or permanent swallowing issues. Patients who may be placed on this diet may have experienced a stroke, head injury, or other conditions such as Parkinson's that may affect swallowing ability (Intermountain Healthcare, 2016). When patients have trouble swallowing, they also are at risk for aspiration, which is when food or drinks enter the lungs. This can lead to other health complications such as pneumonia (UC San Diego, 2017).
 - On a dysphagia 2, or mechanically altered diet, patients' food must be modified to be make it easier to chew, move in their mouth, and swallow ultimately to reduce the risk for aspiration and/or choking (The Ohio State University, 2018). Liquids consumed on a dysphagia 2 diet must be thickened to the recommended texture prescribed by the speech language pathologist, either thin, nectar-thick, honey-thick, or pudding-thick. The level of thickness depends on the patient's ability to swallow appropriately (The Ohio State University, 2018). Patients can still consume meats, however, they must be moist, ground or finely diced meats including meatloaf, hamburgers, chicken, scrambled eggs, or mashed beans. They should avoid foods like hot dogs, bacon, beef tips, and nuts or seeds (The Ohio State University, 2018). All breads or cereals

consumed must be hot cereals or pre-soaked, and foods like bagels, pizza, granola, popcorn, and chips should be avoided. Vegetables need to be cooked to be soft and tender and should be less than a half-inch in size. Raw vegetables, salads, and cruciferous vegetables should be avoided (The Ohio State University, 2018). Gravies and sauces should be added to food for extra moisture and ease in consumption (The Ohio State University, 2018).

- How is the lesson organized? Timing of activities?
 - The lesson is designed to be an informal, yet educational presentation on how to adhere to the dysphagia 2 diet and the importance of ensuring tray accuracy. We will start by introducing ourselves and the topic. The introduction of both should take about 5-7 minutes. We will then conduct a brief quiz, out loud, with participants to quickly gauge how familiar they are with the diet. This will take 2-3 minutes. After that we will move on to the bulk of the presentation, educating on the dysphagia 2 diet, how foods must be altered, and then how to ensure that the food is correct; this part should take about 10 minutes. The presentation will end with a brief quiz to assess how much they learned from pre- to post-test. The post-test will take about 5 minutes. The entire presentation will roughly take 20-30 minutes.
- What are the key messages (aka take-home messages) that you want the learners to remember from your program?
 - Be sure to understand the various components of a dysphagia 2 diet.
 - Be aware of dysphagia 2 diet order tickets.
 - Ensure diet order compliance and tray accuracy.
 - Be sure to understand the importance of following tickets and diet orders to ensure patient health and wellness.
- Educational Materials and Activities Used
 - What learning materials will you use? How will they help the learners to learn? Be sure to include the purpose and relevance of each material/activity?
 - Mechanical soft diet educational handout is developed to help learner to better understand the recommendations of mechanical soft diet with visual examples.
 - Pre/post test is developed to assess learner's understanding on mechanical soft diet before and after the training. Educators will also reveal the correct answers of all questions with detailed explanations to ensure learners with adequate understanding after the in-training service.
- Closure -- including a 1-2 sentence summary of the nutrition education session that reinforces the key nutrition messages.
 - Mechanical soft diet is designed for patients who have swallowing or chewing difficulties. Make sure the foods are soft and less than half-inch size.

Evaluation of Program Success

- How will you know that the program objectives will be achieved, i.e. that your learner learned something?
 - The learners will participate in a post-presentation post-test that will present them with questions regarding the dysphagia 2 diet and how food must be modified to comply with the diet.
 - These questions will determine how effective the lesson was in educating the participants on the importance of diet order compliance and tray accuracy by explaining a particular diet.
- What are the evaluation data collection tools and procedure?
 - The results for both pre-test and post-test will be collected to examine the success of this program.
 - An informal survey will also be given at the end of the presentation to assess any knowledge deficit regarding the mechanical soft diet. Learners will be asked questions to evaluate the helpfulness of the educational handouts and the presentation.
 - The success of the program will also be evaluated based on the tray accuracy and diet order compliance in the next 2 months.

References

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Mechanical Soft Diet Pre/Post Quiz

- 1. Mechanical soft diet can help patients with _____?
- a) Diabetes
- b) Hypertension
- c) Chewing and swallowing difficulties
- d) Heart failure
- 2. True or False. Foods should be cut into $\frac{1}{2}$ inch or smaller pieces for mechanical soft diet.
- 3. Which of the following should be avoided on a mechanical soft diet?
- <mark>a) Nuts</mark>
- b) Pureed carrots
- c) Soft pancakes
- d) Moistened, well-cooked ground chicken breast
- 4. Which of the following protein food would be allowed on a mechanical soft diet?
- a) Tough, dry fish
- b) Moistened, well-cooked ground beef
- c) Casseroles with large chunks
- d) Chunky peanut butter
- 5. Which of the following vegetable would be allowed on a mechanical soft diet?
- a) Mashed potato without skin
- b) Celery stick
- c) Fried okra
- d) Uncooked broccoli
- 6. Which of the following would be allowed on a mechanical soft diet?
- a) Applesauce
- b) Fresh apple
- c) Fresh orange
- d) Dried apricots
- 7. Which of the following dairy products should be avoided on a mechanical soft diet?
- a) Hard cheese cubes
- b) Yogurt
- c) Sour cream
- d) Cottage cheese
- 8. **True** or False. Mechanical soft diet does not restrict any spice/seasonings.

9. **True** or False. Foods that are allowed on a pureed diet would also be appropriate for a mechanical soft diet.

10. True or False. Pasta/noodles are recommended to be chopped to no longer than 1 inch for mechanical soft diet.