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Piloting a Cooking Demonstration Curriculum for Dietetics

Students

By

Jill Henderson

Submitted in partial fulfilment of the requirements for the degree

Of

MASTER OF PUBLIC HEALTH

In

Public Health Nutrition

Approved:

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ABSTRACT

Piloting a Cooking Demonstration Curriculum for Dietetics Students

by

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Utah State University, 2019

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Department: Nutrition, Dietetics and Food Sciences

Cooking demonstrations are a unique and effective way to teach nutritional concepts and basic cooking skills in a community setting. They have been found to be beneficial for participants in attendance as they improve confidence in the kitchen, cooking skills development, and the promotion of healthier foods into the diet. Classroom learning facilitates critical thinking but does not necessarily provide a platform for hands-on learning. In planning and executing community-involved cooking demonstrations, students are able to connect content learned in the classroom to professional practice. Over the last decade the field of dietetics has involved more community-based programs designed to promote a healthy lifestyle and the prevention of chronic disease using farmers markets, sustainable farming practice, gardens, and cooking classes. With the increasing focus on these programs and the decrease in preceptors willing to teach other concepts, dietetic students are not receiving as much education in cooking and gardening. Because these skills are not part of the current dietetic curricula in most universities, students are finding themselves lacking in these skills once they are in the workforce. This project added a platform for dietetics students to create and execute cooking demonstrations in a community setting through a practicum class in the dietetics program at Utah State University. These cooking demonstrations allowed students to develop skills needed to engage and teach community members about ways to achieve better health through cooking healthful foods.

(20 Pages)

PUBLIC ABSTRACT

Piloting a cooking demonstration curriculum for dietetic students

Jill Henderson

Cooking demonstrations are a unique and effective way to teach nutritional concepts and basic cooking skills in a community setting. They have been found to be beneficial for participants in attendance as they improve confidence in the kitchen, cooking skills development, and the promotion of healthier foods into the diet. Classroom learning facilitates critical thinking but does not necessarily provide a platform for hands-on learning. In planning and executing community-involved cooking demonstrations, students are able to connect content learned in the classroom to professional practice. Over the last decade the field of dietetics has involved more community-based programs designed to promote a healthy lifestyle and the prevention of chronic disease using farmers markets, sustainable farming practice, gardens, and cooking classes. With the increasing focus on these programs and the decrease in preceptors willing to teach other concepts, dietetic students are not receiving as much education in cooking and gardening. Because these skills are not part of the current dietetic curricula in most universities, students are finding themselves lacking in these skills once they are in the workforce. This project added a platform for dietetics students to create and execute cooking demonstrations in a community setting through a practicum class in the dietetics program at Utah State University. These cooking demonstrations allowed students to develop skills needed to engage and teach community members about ways to achieve better health through cooking healthful foods.

Piloting a Cooking Demonstration Curriculum for Dietetics Students

Introduction

The Problem. Registered dietitians play an important role in the prevention and treatment of chronic disease as the population experiences a growing obesity epidemic and low adherence to dietary recommendations (McWhorter, Raber, Sharma, Moore, & Hoelscher, 2018). A diet low in saturated fat and high in fruits and vegetables can help prevent or improve three of the major causes of death in the United States: diabetes, cardiovascular disease, and cancer (McWhorter et al., 2018). Diet is also a main contributor to a healthful lifestyle and can impact quality of life by effecting energy balance and weight management (McWhorter et al., 2018). According to the Academy of Nutrition and Dietetics, dietary interventions possibly have the greatest impact on health outcomes and is the most affordable and effective method of primary prevention (McWhorter et al., 2018).

Over the last decade the field of dietetics has involved more community-based programs designed to promote a healthy lifestyle and the prevention of chronic disease using farmers markets, sustainable farming practice, gardens, and cooking classes (McWhorter et al, 2018). Federal programs have supported and extended some of these programs with “farm to school” and “farm to work’ grant funding from the United States Department of Agriculture (McWhorter et al, 2018). With the increasing focus on these programs and the decrease in preceptors willing to teach these concepts, dietetic students are not receiving as much education in cooking and gardening (McWhorter et al., 2018). Because these skills are not part of the current dietetic curricula in most universities, students are finding themselves lacking in these skills once they are in the workforce (McWhorter et al., 2018).

Under the current requirements to become a registered dietitian, students are required to maintain 55 professional competencies that span 14 spheres of practice, which are identified through 352 performance indicators (McWhorter et al., 2018). In addition to completing coursework, students must also complete a 1200-hour internship program accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) (McWhorter et al., 2018). Despite the increasing demand for dietitians in both the community and clinical settings, the availability of preceptors and internship rotation sites are becoming increasingly narrow (McWhorter et al., 2018). While more training opportunities are needed and desired to expand student knowledge and training in fields such as cooking and gardening, the resources to provide such training during and internship are limited (McWhorter et al., 2018).

Cooking demonstrations are a unique and effective way to teach nutritional concepts and basic cooking skills in a community setting (Birson & Singleton, 2017). There are numerous curricula published by the USDA's SNAP-Ed program for use in the community nutrition setting. However, cooking demonstration curricula specifically designed for dietetic students are not readily found in the literature. Cooking demonstrations have been found to be beneficial for participants in attendance as they improve confidence in the kitchen, cooking skills development, and the promotion of healthier foods into the diet (Garcia et al, 2016).

Classroom learning facilitates critical thinking but does not necessarily provide a platform for hands-on learning (Harman et al., 2014). In planning and executing community-involved cooking demonstrations, students are able to connect content learned in the classroom to professional practice. For example, students participating in designing and conducting food demonstrations in a past dietetics practicum class at Utah State University recently stated to their

instructors they spent two years learning about the Mediterranean diet but did not fully understand it until they were tasked to teach community members about the benefits.

Objectives

The objective of this project was to create a cooking demonstration curriculum specifically for senior students in a dietetics program. This curriculum guided them as they created and conducted cooking demonstrations in a community setting bridging the gap between classroom learning and professional practice. The program was then be evaluated for its effectiveness and feasibility through the use of a retrospective questionnaire.

Significance and Rational

This project added a platform for dietetics students to create and execute cooking demonstrations in a community setting. These cooking demonstrations allowed students to develop skills needed to engage and teach community members about ways to achieve better health through cooking healthful foods. To our knowledge, there was not a current curriculum specifically for dietetics students published in the literature. Because there is a shortage of opportunity for hands-on learning of this type, especially during internships, it was important for dietetics students to obtain experiences that would help them gain the skills necessary to be successful dietitians. This curriculum also contributed to the service learning requirements set forth by the university. Because there was a need at Utah State University for this type of curriculum, the need may exist in other institutions. Therefore, the goal would be to make this curriculum widely available in the future.

Literature Review

Need for hands-on learning and skill-based learning. Confucius once said, “I hear and I forget. I see and I remember. I do and I understand.” (Link-Mullison, 1995, p. 1). Strategies

that promote active involvement of participants help to promote deeper learning, attitude modification, and behavior change (Link-Mullison, 1995). To maximize learning there is a need for hands-on and skill-based learning (Link-Mullison, 1995). As the ultimate goal for nutrition education is making changes to dietary practices and behaviors, hands-on learning has been shown to be the most effective way of teaching (Link-Mullison, 1995).

Anghel, et al (2017) summarized the need for hands-on learning by outlining the theory of experiential learning. “Learning must be seen from the perspective of the adaptation process of the individual to the environment” (p. 817). This is accomplished by the individual acquiring knowledge through accommodation and assimilation (Anghel Gorghiu, Buruleanu, & Gorghiu, 2017). Experiential learning is generated as a response to learning based on the reproducing on information gained through memorization (Anghel et al, 2017). Taken a step farther, the students then take concepts learned in the classroom and develop hands-on food experiences to be taught to members of the community or to other students and university employees (Anghel et al, 2017).

The theory of experiential learning allows students to take concepts learned in the classroom and apply them in real life, hands-on situations. There are four steps required in the learning process (Anghel et al., 2017). First, there must be *reflexive observation* where the student plays the role of the neutral and objective learner based on lectures, narratives, and stories (Anghel et al., 2017). The second step is that of *abstract conceptualization*. In this learning process, the students are able to focus on the objective learning based on analytical and the conceptual approach of learning based on the logical reasoning (Anghel et al., 2017).

Active experimentation is the third component of the experiential learning theory. This component is the active approach to learning where the student participates in homework,

projects, and small group work (Anghel et al., 2017). Active experimentation is action oriented where students tend to learn more than in traditional classrooms with only lectures. The final component of the experiential theory is *concrete experience* where each student has the opportunity to succeed and learn from specific examples related to classroom learning (Anghel et al., 2017). These experiences can be anything that involves competency-based planned learning experiences that allow them to interact with others (Anghel et al., 2017). Often the concrete experience changes the attitude, feelings, relationship, and judgement of the student toward the subject of learning as they are involved in the reality vs the reflexive observation (Anghel et al., 2017).

Many Universities are leaning to a service learning approach in their curricula. This is an educational method that enables students to develop and learn through active participation in organized service experiences that also meet community needs (Du Plessis, Koornhog, Daniels, Snowden, & Adams, 2014). The Dietetics Program at Utah State University is one of these institutions to adopt service learning. Three criteria have been identified for service learning (Du Plessis et al, 2014). First, the service to the community should be relevant and meaningful. Second, the service should provide enhanced academic learning for students. Third, the experience should provide an opportunity for reflection on the activity to gain a deeper understanding of the content, gain a deeper appreciation for the subject content, and to increase a sense of responsibility and personal values (Du Plessis et al., 2014). Service learning provides a platform for dietetic students to interact with the community, allowing for the bridging of the gap between theory learned in the classroom and real-world practice (Nettles & Blackwell, 2001).

A study of dietetics students at Stelonbosch University was conducted to assess the experiences and opinions of senior dietetic students in regard to service learning performed at a

local high school for teachers and administrators (Du Plessis et al., 2014). The curriculum used involved incorporating more fruits and vegetables into the diet and overall healthier eating patterns. The dietetics students created the curriculum based on information learned in their Community Nutrition class (Du Plessis et al., 2014).

Seventeen dietetics students were asked to keep a reflective journal in which they recorded their experiences. A survey was given to the dietetics students at the end of the project gauging their thoughts and perceptions of teaching nutrition concepts in this platform (Du Plessis et al., 2014). Teachers and students in the high school were also surveyed pre and post-project to determine their level of knowledge, attitude about the project, health-beliefs, and practices to improve their health (Du Plessis et al., 2014). The results were divided into two categories: Experiences and opinions of undergraduate dietetics students, and the knowledge, attitude, and behavior of those they served in the school (Du Plessis et al., 2014). The dietetics students were positive about their ability to successfully teach nutrition concepts, even before they entered the school. However, students indicated that they did not fully understand the implementation and practice until they worked with the teachers and students in the school setting (Du Plessis et al., 2014). The experience was deemed an invaluable way to take part in health promotion that goes beyond just learning the concepts in a classroom (Du Plessis et al., 2014).

The teachers and school principals surveyed described the experience as positive and stated they had a better understanding of healthy foods and the need for increased fruits and vegetables (Du Plessis et al., 2014). They stated in their surveys that the dietetics students played a crucial role in the nutrition education provide to the school as they lacked the knowledge themselves (Du Plessis et al., 2014). Teachers and administrators also stated they

saw a difference in the children's concentration level and started an initiative to start producing vegetables in school gardens (Du Plessis et al., 2014).

Need for Cooking Demonstrations. There is a great need to shift the focus of health from a curative aspect to preventative (Du Plessis et al. 2014). A poor diet is a major risk factor for obesity and other comorbidities such as cardiovascular disease, type 2 diabetes, stroke, among others (Garcia, Reardon, McDonald, & Vargas-Garcia, 2016). Current research indicates that only 54-57% of adults cook on a regular basis due to lack of time or ability (Birlson & Singleton, 2017). Because the evidence supporting home cooking with healthier dietary choices, including higher intakes of fruits, vegetables, and whole grains (Birlson & Singleton., 2017). Cooking demonstrations are steadily gaining popularity as a vehicle to improve confidence in the kitchen, cooking skills development, and the promotion of healthier foods into the diet (Birlson & Singleton, 2017). Cooking demonstrations are also an effective way to interact with vulnerable groups to provide inclusive social activities while promoting healthier dietary profiles resulting in better health outcomes (Garcia et al., 2016).

Many people of all ages attribute poor eating habits to demanding schedules, low nutrition knowledge, and limited cooking skills (Ellis et al., 2018) Although there is literature regarding cooking demonstrations in the community, particularly from SNAP-Ed, the research on the effectiveness of cooking demonstrations designed specifically for dietetics students is very limited. A 2018 study out of the University of Idaho was designed for student athletes but can be translated and applied to community members as well (Ellis, Brown, Ramsay, & Falk, 2018). A curriculum was designed in a dietetics class to teach athletes how to create nutritious meals that were quick and inexpensive (Ellis et all., 2018). The curriculum, entitled "Performance Plate", included recipe demonstrations and hands-on food preparation activities combined with an

education component. The conclusion of this study found that exposure to different healthful foods and improved cooking skills may encourage the consumption of more healthful foods to improve the quality of the athletes' diets (Ellis et al., 2018).

Few studies exist on the effectiveness of short-term or single cooking demonstrations. Information retrieved after a food demonstration gathered from the 2017 Connecticut farmer's market season show positive results. The demonstrations were under the direction of the USDA's Snap-ed program presented by registered dietitians and University of Connecticut students and included information about selecting healthy produce, family mealtime, calcium and healthy snacks, food safety, and other information from MyPlate.

In evaluating the program, 96.5% of attendees reported learning something useful, specifically, 82.7% learned useful produce preparation ideas and 65.5% of attendees intended to make the featured recipe. Another 53.6% of attendees reported they would buy three or more types of vegetables at the market, while 51.7% reported they will buy three or more different types of fruit at the market. Finally, 72.4% of attendees reported they usually eat two or more vegetables at their main meal daily (Snap4CT.org, 2018).

Methods

Curriculum Design. The students enrolled in NDFS 5750 Advanced Dietetics Practicum at Utah State University had been teaching cooking demonstrations for years in various community settings. With the opening of a new state-of-the-art facility on campus, the Sorenson Center for Clinical Excellence (CCE), faculty members involved desired to expand the scope of the project as there was a greater potential for community outreach. The development of a standardized cooking demonstration curriculum allowed for the compilation of resources from past semesters as well as the inclusion of tips and tricks for better presentations learned over the years. The

curriculum was also expanded to include examples and additional instructions designed to guide students through the planning process. The curriculum was made available for students to access through Canvas.

The cooking demonstration curriculum was designed for students to create a presentation that was presented in Beth's Bistro, located in the CCE on the campus of Utah State University. The participants that attended the class were members of the community, clients who attended programs at the CCE, fellow university students, and other professionals. This demonstration could either be part of a series involving other classmates, or as a stand-alone class.

Twelve students created and delivered cooking demonstrations to other students and community members over a two-week span in March. When given a preference, students chose to work in groups of three instead of the traditional groups of two. All other budgetary and logistic constraints remained the same. Students were provided with access to the cooking demonstration curriculum on Canvas and were instructed to use it as a guide throughout the planning process.

The first stage of the planning process encouraged each group to teach a concept using supporting recipes and information. Students could use a topic of their own choosing as long as it fit the following criteria:

- Plant based
- Recipes should be quick, inexpensive, use common whole and seasonal foods, and create minimal dirty dishes
- Incorporate healthy fats and oils
- Use minimally processed food ingredients

Each class was 45 minutes to one hour in length including time for questions and sampling.

Students created an outline of the class using a provided template that included developing learning objectives, a catchy title and description of the class, a detailed description of the class

and talking points to be used during the class, three recipes that support the concept to be taught, and a draft of the handout.

Each group of students tested and perfect recipes at home before finalizing the plan. A preliminary meeting was scheduled with the class instructors to approve the class and to offer feedback and suggestions to the students.

The second stage of planning involved the students designing a coordinating handout for the audience and gathering the materials needed for their class. Approximately 10 days prior to the cooking demonstration day they had a practice session in the kitchen of the Nutrition and Food Science (NFS) building with their instructors. This practice session was crucial in order to reduce nerves and to make any last adjustment to content or flow.

Each group was responsible to transport all their supplies to the CCE on the day of the demonstration. They prepared samples for the participants, arranged the room, and distributed handouts and performance evaluations to those attending. After the demonstration they were required to clean and lock the facility. One week after the conclusion of all cooking demonstrations, a post survey was administered to the class as per the IRB.

Budget. The budget for the cooking demonstrations came from course fees associated with the practicum class for senior dietetics students. With 12 people in the class, there were four cooking demonstrations during the semester. Each group was allotted \$100 for food supplies. This allotment was split between home recipe development, practice, and the actual cooking demonstration. There was be an account set up in a campus copy center for students to print out handouts. Students procured their own food supplies using a course P-Card. All kitchen equipment and other supplies were provided using the existing staples from the NDFS

kitchen or Beth's Bistro. There was no charge to use the CCE facility. Marketing was also handled by the CCE and the USU extension office free of charge.

Evaluation. Approval from the USU Institutional Review Board was obtained in March of 2019. Each student who participated in the cooking demonstrations participated in a retrospective questionnaire measuring the effectiveness and feasibility of the curriculum used to create their demonstrations. The questionnaire also measured their self-efficacy in developing future presentations. The questionnaire was administered after all cooking demonstrations were completed in April 2019.

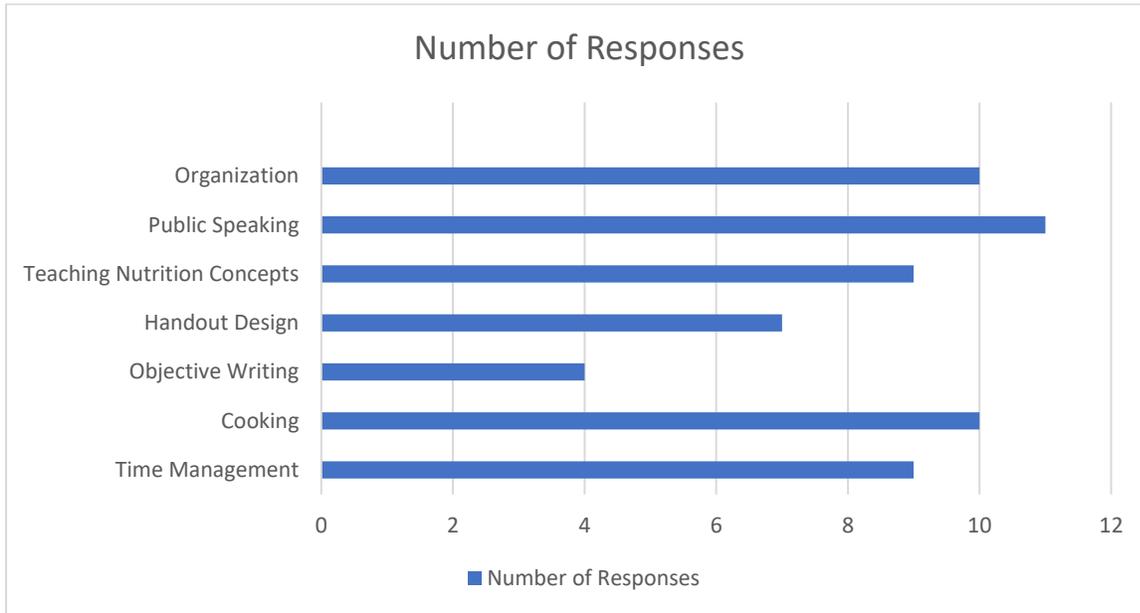
Results

Eleven out of twelve student responses were collected. Of those eleven responses, 55% (n=6) responded that the cooking demonstration curriculum was extremely helpful, 36% (n=4) students responded with very helpful, and 9% (n=1) responded with somewhat helpful. Of those who responded with extremely or very helpful, 90% (n=10) students stated they read through the curriculum a few times during the semester. The student who responded that the curriculum was only somewhat helpful only perused it once or twice.

As per their responses, 64% (n=7) of the students reported they would feel extremely comfortable presenting more cooking demonstrations in a community setting in the future while 36% (n=4) reported feeling very comfortable. When polled regarding confidence in their ability to teach nutrition concepts through cooking demonstration, 55% (n=6) of respondents were extremely confident in their ability while 45% (n=5) reported feeling very confident.

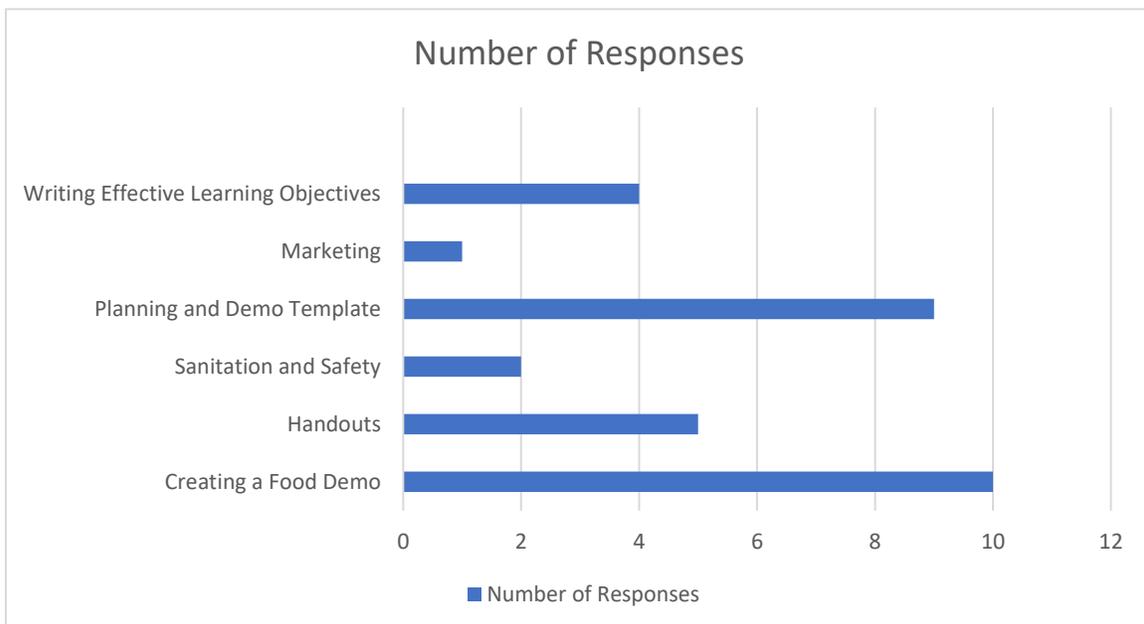
Students were asked to state which skills they practiced and felt more confident in as a result of their cooking demonstration. The results are indicated on the following table:

Skills Practiced and Developed During Cooking Demonstration



Reflecting on the Curriculum. Students were asked which sections of the curriculum were the most helpful to them. The following table depicts the results:

Sections of Cooking Demonstration Curriculum Found to be Most Helpful



Students involved in the cooking demonstrations, overall, felt the curriculum was invaluable.

One student reflected the following:

“Following the cooking demonstration curriculum was extremely helpful! Gaining the skill of being methodical and prepared was an important thing I gleaned from that document. I honestly felt very prepared the day of, having already determined equipment lists, grocery lists, foods to assemble prior and having had established choreography and discussion points. This coordination made for pretty smooth transitions and, in my opinion, an overall quality demonstration.”

Discussion and Future Implications

The cooking demonstration Curriculum developed for senior dietetic students was a culmination of many years of trial and error in working with students to help them develop and present cooking demonstrations. By implementing the curriculum, students had all of the information they needed to present knowledgeable and professional quality demonstrations to the public and their peers. Groups who used the curriculum were more prepared, had more directions, and were able to use the resources available to create professional hand-outs, perfect healthful recipes, and successfully convey their nutrition knowledge to an audience while teaching them how to prepare quick meals packed with the goodness of whole grains and produce. From a teacher’s perspective, the flow and level of quality increased within groups that had the curriculum compared to those of previous classes who did not.

The Cooking Demonstration Curriculum could be used in other classes as a resource for specific sections or in its entirety to fit their needs. Providing the curriculum to other universities allows them to help their students move from classroom knowledge to applied professional practice. It is comprehensive enough that any instructor and students could follow it to create exceptional presentations in the future.

Future research involving the curriculum would involve testing its efficacy between classes who did not have access to the document and classes who were given access. Given the time constraints of this project this evaluation was not possible. It seemed to the instructors that this group of students were more prepared and consistently produced higher quality of demonstrations compared to previous groups, but that may have been the difference in personalities among the students. Comparing cooking demonstration outcomes from different semesters may be valuable for that reason.

After all evaluation was finished, no major changes were needed to the curriculum other than taking out information specific to Utah State University. In hindsight, rephrasing questions on the post survey would have been good to combat confusion. It would have been beneficial to create the survey after the demonstrations were complete to have a more comprehensive questionnaire.

Conclusion

Cooking demonstrations are an exceptional way to bridge dietetic student classroom knowledge to professional practice. They provide a platform for teaching nutrition concepts in a community setting as a way to prevent disease and promote healthy lifestyles. The Cooking Demonstration Curriculum is a comprehensive document that guides students through all processes involved in creating and delivering cooking demonstrations to the public. This demonstration can be used to supplement other classes or as a guide for other universities to implement in their own dietetics programs to give their students hands-on experience outside of the classroom. Students will find the skills learned through presenting cooking demonstrations can be translated into other aspects of their careers and will ultimately help them be better professionals.

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Appendix: Proposed Curriculum

Cooking Demonstration Curriculum



Specifically Designed for
Utah State University Dietetics Students

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Introduction

Food demonstrations can be a great delivery method of nutrition education and to share what you have learned. They can be used to strengthen cooking skills, teach basic nutrition, or focus on specific health issues. They can also be an effective tool to introduce people in the community to foods they may not be familiar with.

This guide is designed to assist Dietetic Students at Utah State University in presenting food demonstrations to the community and in other areas of the university. With some modification this guide can be used in other institutions. This curriculum contains resources for planning, executing, and evaluating the success of a food demonstration.

AZ Health Zone, 2009
Daniels & Michigan State University, 2018

Types of Food Demonstrations

There are four different types of cooking demonstrations. The type you choose depends on the location of your demo, the audience, availability of equipment, and the availability of power, water, or the ability to hold hot or cold foods properly.

Precooked

Involves fully preparing a recipe in advance and transporting it to the demonstration site for sampling, ensuring the food is held at the proper holding temperature. Precooked demonstrations are best for sites with limited resources or equipment.

Single Ingredient

Vegetables, fruit, or other simple foods cut into bite-sized pieces for sampling. Single ingredient demonstrations are best used in supermarkets, farmers' markets, static displays, or other places with limited space and resources.

Same-Ingredient Recipes

Involves demonstrating multiple recipes using the same main ingredients. This type of demonstration is best for teaching people how to use ingredients, such as fresh produce, in a variety of ways. It can also be used to teach how to shop and prepare food once in order to eat many times. Same-Ingredient Recipes can easily combine other types of demonstrations

Multiple Dishes

Preparing multiple dishes, usually about 3, that reflect the same concept. This type of food demonstration requires a facility with adequate resources and equipment. Consideration should be given to time and flow of the presentation. Dietetic students commonly present multiple dish demonstrations in the community.

Creating a Food Demonstration

- Work in pairs or groups of three to plan and present a vegetable and/or plant based, relatively inexpensive cooking demonstration to be presented in the CCE building
- Class should be 45 minutes to one hour (including samples and discussion)
- Your goal is to teach a nutrition **concept and cooking techniques** while relating the subject back to health.
- Recipes should be quick, cheap, use common whole and seasonal foods, and create minimal dirty dishes
- Incorporate healthy fats and oils
- Use whole, minimally processed food ingredients. Canned foods are OK. Seasoning packets (ranch, taco, etc.) are NOT ok. Try to use ingredients most people would have in their pantries already.
- Recipes should be high in flavor, low in added sugar and salt
- Provide ways recipes can be altered to taste and preference, allergies, and turned into tasty left-overs
- Plan on about teaching to about 30-40 people

Teach a concept and have recipes that support the concept

- A catchy and interesting title and description that will entice people to attend your class
- Come up with 2-3 learning objectives you would like to focus on
- Briefly outline step-by-step procedures to be followed in your presentation. These should reflect your learning objectives
- Outline all equipment you will need for your demo
- A draft of your handout for the audience
- A copy of your recipes

Each group will:

- Meet with instructors to finalize plan
- Test recipes at home
- Practice full demonstration in the NDFS kitchen with instructors at least 10 days prior to actual demonstration

Keys to a Successful Food Demonstration

- Know your audience- How much experience or knowledge do they have? What do you want them to learn during the demonstration?
- Have a clear and simple nutrition message
- Be organized and well-prepared
- Use appropriate recipes and handout
- Be sure the demonstration area is colorful and attractive and will capture the audience's attention
- Be cautious there is a direct line of sight so all audience members can see everything you are doing
- Incorporate nutrition information throughout the demonstration
- Provide samples of the recipes demonstrated. Ask questions: Do you like it? What could you add, substitute, or change?
- Always follow food safety guidelines.
- Give the participants recipes to take home and any additional flyers or brochures that will help reinforce the nutrition message.
- Use evaluations to help direct future demonstrations.
- Look at the demo kitchen to plan the most effective way to present your information (ie positioning, scheduling, standing position, sample distribution, etc).
- When planning for your samples, consider whether you will have time to make enough for everyone during your demo OR if you should have samples pre-made. We are not providing a meal, just a taste
- Keep the audience view as unobstructed as possible. Move all ingredients and visual aids to the side of the counter. Use the clear bowls so they can see what you are doing. Please don't allow children to stand in front of the counter
- Premeasure most of your ingredients into smaller bowls/cups so that there are fewer lulls in the demo
- Use visual aids: Show packages, unusual ingredients, vegetables/spices that may be unfamiliar
- Ask questions and encourage audience participation throughout the demo. The more participation the better
- Include fun facts, tidbits, and kitchen tips in your presentation
- Remember to have fun! If you are upbeat and positive the audience will be a lot more receptive to what you are teaching them

Budget and Acquiring Supplies

Funds are available through course fees. Each group is allowed a total budget of \$100 for food used in the cooking demonstration.

- Recipe testing at home
- Demonstration practice at least 10 days prior to scheduled demonstration with instructors
- Actual food demonstration and samples

Please check the NDFS kitchen for ingredients and use what stocked before making any purchases. Check out a class P-Card for tax-exempt purchases and turn in the receipt and card to instructors.

Handouts and recipes can be printed at the TSC copy center and charged to the class account

Writing Effective Learning Objectives

- A learning objective should answer the question: What is it that the participants should be able to do at the end of the cooking demonstration that they could not do before (Writing Effective Learning Objectives, 2015)? Learning objectives aid in planning the sequence for the class, what topics to devote time to, and plan the outline for the class. The process of writing learning objectives helps to gain new insights on how to help participants in the cooking demonstration gain new skills.
- The first step in creating a successful food demonstration is to clearly define what you would like your audience to learn (Hall, 2016). These goals are the broad, overarching expectations for learning and performance.
- The second step is to determine your learning objectives by writing clear statements that describe what the students/participants will be able to do at the end of the course. Think about what concepts you want them to learn or skills you would like them to acquire (Hall, 2016).
- Use S.M.A.R.T attributes (Hall, 2016):
 - Specific-** Concise, well-defined statements of what participants will be able to do
 - Measurable-** Start with action verbs that can be observed: These goals will determine how assessments will be made
 - Attainable-** Participants will be able to get the skills and knowledge to achieve the objectives through what is presented in the demonstration
 - Relevant-** The skills or knowledge described are appropriate for the demonstration
 - Time-bound-** State when the participants should be able to demonstrate the skill (end of the demonstration)
- Use behavioral verbs that are observable and measurable. Using concrete verbs will help keep your objectives clear and concise
 - Examples of verbs: assemble, construct, create, develop, compare, contrast, appraise, defend, judge, support, distinguish, examine, demonstrate, illustrate, interpret, solve, describe, explain, identify, summarize, cite, define, list, name, recall, state, order, perform, measure, verify, relate

Additional Resources:

Bloom, B., Englehart, M. Furst, E., Hill, W., & Krathwohl, D. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York, Toronto: Longmans, Green.

Writing learning objectives. <http://sites.uci.edu/medsim/files/2015/03/Writing-learning-objectives.pdf>

Planning the Demonstration Template

Title of Class

Audience:

Setting:

Subject matter:

Class Description:

Bios:

LEARNING OBJECTIVES:

- 1.
- 2.
- 3.

Equipment Needed:

PROCEDURES:

Time Needed	What is happening?	Talking Points

Recipes:

Handouts:

Additional Resources:

Example of Demonstration Planning Sheet (Appendix A)

Instructor Grading Criteria for Demonstration Planning (Appendix B)

Handouts

Handouts are an effective way to support what you are teaching in your food demonstrations. They should reinforce what you are teaching and help the audience members remember your message (Witt, 2018).

Rules for effective handouts:

- Simplicity is key. Focus on the key concept of your presentation. Do not include anything you do not cover in the demonstration. Avoid unnecessary details so class members glance at the handout as you speak, but don't get so absorbed that they tune you out.
- Organize your handout so it has the same flow as your demonstration. Leave room for notes. The handout should be able to stand alone. If someone did not attend the class and picked up the handout, they should be able to understand what was taught.
- Make handout appealing to the eye.
 - Use design websites to make your handout visually appealing and professional. Canva is a great free resource that is user friendly
 - Leave plenty of white space and clear, simple headings and subheadings to cluster related information. This makes your handout more approachable
 - Include interesting graphics
 - Use consistent fonts
 - Colors should have adequate contrast. Be sure to do a test print to ensure all words are easily read
 - Left justify rather than center
 - Include USU Dietetics logo and presenter names on all handouts
- Simplify all directions. Remove any "extra" words such as "the"
 - Have someone (or several people) proofread carefully.
 - Create consistent look/feel (brand).
 - Consider your audience when choosing font size. Use 12-point size for body type for general public, but perhaps larger for "mature" eyes.
 - Include references and additional resources (websites)

Additional Resources:

Handout example (Appendix C)

Dietetics Logo (Appendix D)

<https://www.canva.com/>

<http://wittcom.com/effective-handouts/>

<https://tlatnd.wordpress.com/2015/10/27/7-elements-of-visually-appealing-handouts/>

<http://www.speakingaboutpresenting.com/delivery/presentation-handouts/>

Witt, 2018

Marketing

Write a short bio for each of you. Make yourself sound professional and interesting without sounding like a text book. You could include interests and hobbies, why you chose the topic, etc.

- Example: Betty Long is a senior in the Nutrition and Dietetics program at Utah State University. Betty's love of nutrition and cooking developed from a young age, growing up in a home where most foods were prepared from scratch (even pancakes, pasta, and pies). Betty believes in whole foods, ice cream, oregano, bananas, balanced diets, garlic, chocolate, lemons, and peanut butter. When she is not eating or cooking, Betty loves hiking, handstands, paper snowflake making, mopping, and wrapping presents. She is excited to be a registered dietitian and solve the world's nutrition problems, one family at a time.
- Example: Jane Brown is a senior at Utah State University in the Didactic Program of Dietetics. She grew up in small town Oakley, Idaho on her family's cattle ranch where she learned to love working hard and cooking. She enjoys all facets of cooking and loves to make things that are not only nutritious but also delicious. However, Jane is a firm believer that there is always room for chocolate and ice cream in a healthy diet. When Jane isn't at work or busy with school she enjoys playing sports, playing the piano, spending time with friends and family, and trying new recipes. Because of her love of food, Jane thoroughly enjoys her program and is very excited to one day be a dietitian to help people learn about the joys of cooking and eating food in a way that is sustainable and enjoyable.

Marketing on campus is facilitated through Dining Services, the Center for Change and Excellence (CCE), and through USU Extension. ****All classes must be finalized with: catchy title, class description, presenter bios, date, and time at least one-month prior so advertising can be done in a timely manner.**

Additional Resources:

Dining Services Contact: Alan.Anderson@usu.edu

Beth's Bistro Manager: Alek.Majeski@usu.edu

CCE Contact: Katelyn.Oliver@usu.edu

USU Extension Contact: Adrie.Roberts@usu.edu

Before Demonstration

- Purchase any food supplies needed
- Gather equipment and paper products needed from the NDFS kitchen
- Prepare foods for samples
- Arrive at least one to two hours early depending on the amount of preparation time needed
- Set up cooking station and preparation area
- Turn on audio/visual equipment and test
- Arrange chairs
- Place handouts and evaluation forms on chairs
- Premeasure any spices or other ingredients into small, clear bowls
- Turn on microphones

During Demonstration

- Introduce yourselves
- Give the audience an overview of the demonstration
- Serve small samples (just a taste)
- Recruit at least 2 helpers to pass out samples and collect trash
- Have samples proportioned or have helpers prepare them behind the scenes during demo
- Ask audience questions about the food: What did they like? Dislike? What would they change? Add?
- Ask audience open ended questions
- Show food packages used
- Use visual aids
- Come in front of counter while talking and engage audience

After Demonstration:

- Do Dishes
- Wipe down counters
- Sweep floor
- Take out trash
- Return chairs and tables to original places
- Lock up kitchen if applicable
- Return any NDFS supplies as quickly as possible

Sanitation and Food Safety

General Rules to Follow:

- Wear a clean apron. Remove when leaving the kitchen area for any reason
- Wear disposable gloves throughout the presentation. Wash hands before and after gloves. Gloves must be changed before starting any new task
- Limit jewelry to wedding band and small earrings
- Hair should be pulled back with no “stragglers”
- Keep hands away from face, eyes, hair, or arms
- Do not sit or stand on food preparation tables
- Use clean utensils each time food is samples
- Keep produce and meats separate. Take care to not cross contaminate
- Wear close-toed shoes
- Long sleeves should be fitted close to the body

Serving:

- Hot foods should be held at 140°F or warmer
- Cold foods should be held at 40°F or colder
- Perishable foods should not be left out more than 2 hours at room temperature
- Place food into shallow containers and immediately put in the refrigerator or freezer for rapid cooling
- Reheat leftovers to 165°F

References

- Daniels, P., & Michigan State University. (2018, October 02). The benefits of going to a cooking class. Retrieved from https://www.canr.msu.edu/news/the_benefits_of_going_to_a_cooking_class
- AZ Health Zone. (2009, October). Food Demonstration Guide. Retrieved from <https://www.azhealthzone.org/uploads/media/documents/aznn-food-demonstration-guide.pdf>
- Hall, M. (2016). Writing Effective Learning Objectives. Retrieved from <https://ii.library.jhu.edu/2016/07/20/writing-effective-learning-objectives/>
- How to make a visually awesome handout. (2015, October 27). Retrieved from <https://tlatnd.wordpress.com/2015/10/27/7-elements-of-visually-appealing-handouts/>
- USDA. (2018). Food Safety and Inspection Service. Retrieved from <https://www.fsis.usda.gov/>
- Witt, C. (2018) Effective Handouts. Witt Communications. Retrieved from wittcom.com/effective-handouts/.
- Writing learning objectives. (2015). Retrieved from <http://sites.uci.edu/medsim/files/2015/03/Writing-learning-objectives.pdf>

Appendix A

Example *Used by Permission

Keen About Quinoa

Audience: Anyone in Cache Valley community

Setting: Natural Grocers grocery store

Subject matter: Quinoa: How to purchase, prepare, cook, bake, and substitute + nutrition

DESCRIPTION:

Keen About Quinoa is a free cooking demonstration and education event held on November 11th at 6:00 pm in the Natural Grocers Demo Kitchen. Here you will learn all about quinoa:

Nutritional benefits, versatility, how to purchase, and how to prepare. Please come join us for a fun, free, and tasty evening at Natural Grocers. We are excited to prove to you that quinoa can be the next fun food in your everyday diet!

LEARNING OBJECTIVES:

1. Nutrition

Community members will understand the nutrition basics of quinoa.

2. How to purchase

Community members will be able to recognize quinoa from other grain types by the end of the presentation.

3. How to cook and bake

Community members will feel confident cooking quinoa according to package instructions by the end of the presentation.

4. How to substitute quinoa

Community members will be know when and where to use quinoa in a recipe.

EQUIPMENT:

- Stock pot with lid
- Large wooden spoon
- Rubber/plastic whisk
- Metal whisk
- Strainer
- Portion ladle
- Clear bowls for ingredients (6 oz glass prep bowls, pyrex)
- 8x8 baking dish
- 4 Glass mixing bowls (Josie and Chelsea have)
- Rubber spatula (Chelsea has)
- Parchment paper (8x8 size piece)
- Small sauce pan

- Liquid measuring cups (2 cup size)
- Dry measuring cup (1 cup)
- Oven
- Stove top
- Oven mitts
- Hot pads
- People to help pass out samples
- Sampling cups/bowls, spoons and forks, small plates
- Food handling gloves

PROCEDURES:

00:00	Pass out handout before presentation starts	
00:00-00:02	Introduce ourselves: name, major/what makes us qualified	Brief little speech about ourselves
00:02-00:12	Introduce our subject matter and state objectives and... <ul style="list-style-type: none"> ● Brief intro of what quinoa is, where it is grown (sample of plain quinoa passed out by someone helping us), nutrition ● Quick demo of making quinoa according to package instructions, rinsed vs. unrinsed quinoa tip info 	<ul style="list-style-type: none"> ● A intro and first bullet point ● B making quinoa and second bullet point <ul style="list-style-type: none"> ○ Rinse quinoa to ride of removes natural coating called Saponin which can taste bitter or soapy ○ Then cook 1 cup quinoa with 2 cups water for 15 to 20 minutes
00:12-00:22	Preparing Quinoa Corn Chowder till soup is just simmering Talking points during soup prep: <ul style="list-style-type: none"> ● Different types of quinoa ● What quinoa we're using ● Why we toast quinoa ● Why quinoa substitutes really well in soups: texture, nutrition ● How to reduce sodium in a soup by using a low to no sodium broth and then adding in your own salt in. 	<ul style="list-style-type: none"> ● A Demo cooking and talking points ● B assist with talking points
00:22-	Preparation of Maple Balsamic Quinoa	<ul style="list-style-type: none"> ● A cooking demo

00:33	<p>Salad</p> <p>Talking points:</p> <ul style="list-style-type: none"> ● Why you would want to use quinoa in a salad: nutrition, texture ● Versatile use of this recipe for different meals (lunch, dinner, snack, party food, picnics) ● Substituting in different dried fruits, nuts, dressings ● Steaming quinoa --fluffy, softer texture 	<ul style="list-style-type: none"> ● B assist in talking points
00:34-00:44	<p>Preparation of Flourless Banana-Quinoa Breakfast Bars</p> <p>Talking points during prep:</p> <ul style="list-style-type: none"> ● Why quinoa substitutes well in baked goods (cookies, bars, crumbles, granola): nutrition, texture ● Thrown in cooking tips as needed 	<ul style="list-style-type: none"> ● A cooking demo ● B assist in talking points
00:45-01:00	<p>Wrap-up: stating objectives again, sampling, questions/discussion, and advertise for next cooking demo :)</p>	<ul style="list-style-type: none"> ● B wrap up --state objectives, ask for questions and start passing out samples <ul style="list-style-type: none"> ○ Alright, so now you all have been taught about the nutritional benefits, how to purchase, cooking and baking and lastly how you can substitute and incorporate into a variety of meals. ○ Are there any questions about quinoa or some of the ingredients and procedures we did tonight? ○ We will now taste the three different entrees we created. Please feel free to mingle and ask us questions.

HANDOUT:

- Recipes
- Objectives
- Title
- Subject
- What types of recipes quinoa would easily be substituted in: Soups, bars, cookies, salads, rice, pasta

BIOS:**A:**

A is a senior in the Nutrition and Dietetics program at Utah State University. **A's** love of nutrition and cooking developed from a young age, growing up in a home where most foods were prepared from scratch (even pancakes, pasta, and pies). **A** believes in whole foods, ice cream, oregano, bananas, balanced diets, garlic, chocolate, lemons, and peanut butter. When she is not eating or cooking, **A** loves hiking, handstands, paper snowflake making, mopping, and wrapping presents. She is excited to be a registered dietitian and solve the world's nutrition problems, one family at a time.

B:

B is originally from a small town just outside of San Antonio, Texas. At a very young age **B** learned to love nutrition and food while watching her Grandma create meals from scratch using ingredients grown in her garden. Her grandma's cooking taught her the basics of balanced meals and how to cook/bake at home. **B** is now a senior in the Dietetics program at Utah State University and hoping to inspire change in others through nutrition.

RECIPES:Quinoa Corn Chowder

PREP TIME: 5 mins

COOK TIME: 25 mins

TOTAL TIME: 30 mins

A rich, creamy, comforting chowder that's packed full of protein and fiber from quinoa and beans!

Serves: 6-8 servings

Ingredients

- 2 cups cooked quinoa
- ¼ cup butter
- 1 medium onion, diced
- ¼ cup gluten-free flour
- 1 red pepper, diced
- 1 tsp minced garlic
- 3 cups chicken broth
- 3 cups milk
- 4 cups frozen corn (or fresh)
- 2 (15 oz) cans white kidney beans (cannellini), drained and rinsed
- 1 tsp dried parsley
- ½ tsp dried thyme
- 1½ tsp salt
- Optional: shredded cheese to garnish

Instructions

1. In a large pot, toast quinoa over medium heat for 3-5 minutes. Remove from the pan.
2. In the same pot, melt butter. Add onion and pepper and saute over medium-high heat for 3-5 minutes, until soft and starting to brown. Add garlic and cook 1 minute.
3. Stir in flour until combined (you don't want to see any white left -- add gradually and if there's a little left over that's okay). Whisk in broth and then milk one cup at a time, whisking and waiting until the soup has thickened slightly before adding the next cup.
4. Add corn, beans, quinoa, parsley, thyme, and salt. Bring to a boil, stirring frequently. Reduce heat to medium (or medium-low) and simmer uncovered for 15-20 minutes until quinoa is cooked, stirring often.

Maple Balsamic Quinoa Salad (By Jennifer Munoz)**INGREDIENTS:**

- 3 cups cooked white quinoa
- 1/3 cup extra-virgin olive oil
- 1/4 cup balsamic vinegar
- 1/4 cup pure maple syrup
- 1 cup dried cranberries or cherries (TIP:Look for unsweetened or naturally sweetened varieties.)
- 1 cup raw unsalted chopped nuts (walnuts, pecans, almonds)
- 4 to 5 scallions, thinly sliced
- 1 Whole diced apple
- 1 tsp sea salt, plus additional to taste

INSTRUCTIONS:

1. Cook quinoa according to package directions. Let cool completely.
2. Prepare dressing: In a small bowl, whisk oil, vinegar and maple syrup.
3. Add 3/4 cup dressing to quinoa. Stir in cranberries, pecans, scallions and salt. Refrigerate overnight. Serve cold or at room temperature; just before serving, stir in remaining 1/4 cup dressing and season with salt.

Flourless Banana-Quinoa Breakfast Bars

Prep Time: 10 Cook Time: 20 Yield: 12-16 Serving Size: 1- 2

Ingredients

- 1½ cups quick cooking oats (gluten-free optional)
- 1 cup cooked quinoa
- ⅓ cup coconut sugar
- 1 teaspoon baking powder
- 1 teaspoon cinnamon

- ½ teaspoon nutmeg
- ½ teaspoons salt
- 1 chicken egg or 2 flax eggs (2 tablespoons flaxseed meal + 6 tablespoons warm water)
- 1 cup mashed bananas (2 medium bananas)
- 1 tablespoon vanilla extract
- ¼ cup nut (or seed) butter of choice

Instructions

1. Preheat the oven to 350 degrees F. Line an 8"x8" baking sheet with parchment paper and grease the sides with cooking spray.
2. Start by whisking together the flax and water. Let this stand while you prepare the remaining ingredients.
3. In a large mixing bowl, whisk together the oats, quinoa, sugar, baking powder, spices and salt.
4. In a separate bowl, mix the banana, vanilla and nut butter together. Stir in flax eggs and pour this mixture over the dry ingredients, mixing everything together until fully incorporated. The batter should be moist, but not runny.
5. Pour the batter into the prepared pan and smooth with a spatula.
6. Bake on the center rack for 15 - 20 minutes until the bars are golden brown and firm to the touch.
7. Remove and let cool completely in the pan, then remove and slice into squares (or rectangles). Store in an airtight container for 4 - 5 days.

**Next pages = information we had available during our presentation. A wrote majority of her topics to talk about on a separate sheet of paper.

PROCEDURES:

00:00	Pass out handout before presentation starts	
00:00-00:02	Introduce ourselves: name, major/what makes us qualified	<p>Brief little speech about ourselves and Objectives</p> <p>B --objectives:</p> <ul style="list-style-type: none"> • Tonight you will learn about the nutritional benefits of quinoa, how/where to purchase, proper cooking techniques and ways to substitute into recipes. A is going to talk about the background of quinoa
00:02-00:12	Introduce our subject matter and state objectives and....	<ul style="list-style-type: none"> • A: <ul style="list-style-type: none"> o What Quinoa is: a seed eaten like a grain.

		<ul style="list-style-type: none"> o 117 million pounds of Quinoa grown annually in South America. The chief growing areas being Peru and Bolivia o Amino Acids: <ul style="list-style-type: none"> • B: • <u>Variety of quinoa colors:</u> 120 different varieties known but only 3 are commonly cultivated (Red, Black, “White”/Plain quinoa), even though the colors are different there is no nutritional difference between them and they all cook the same. Grows to be about <u>6-9 feet tall</u> • <u>High soluble Fiber</u> 1 cup cooked = 5 g, Soluble fiber is not digestible in our bodies which is beneficial to our health because you can think of it as being this truck that goes through our digestive system that clean/scraps our intestines which in return helps to keep us regular. • <u>NASA has proposed quinoa</u> as an ideal food for long duration flights, relating back to quinoa being a super food. • When <u>cooking quinoa</u> there are two steps to think about before you start the actual cooking process. <ul style="list-style-type: none"> ▪ <u>First toasting quinoa:</u> Using no oils or moisture place quinoa in a sauté pan and allow to toast. Remove from eat when you can smell the nutty aroma of the quinoa. ▪ <u>Secondly</u> you may want to rinse the quinoa. Using a sieve you can clean the quinoa without losing any quinoa. • Rinsing quinoa removes a natural coating called <u>Saponin</u>, which can taste bitter or soapy. You would want to do this once you have toasted the quinoa. This should not harm the nutty flavor you created during toasting. • Once rinsed take 1 cup quinoa and pour into 2 cups boiling water (like pasta) let simmer for 20 to 25 minutes. Allow quinoa sit for about 5 minutes aids in fluffy texture. Fluff with fork. • <u>Pass out plain quinoa</u> to lead into why quinoa can be used in a variety of dishes because of its neutral yet subtle nutty flavor. Quinoa can be flavored just about any way you want it to taste
--	--	--

		<ul style="list-style-type: none"> • <u>Storage</u>: once cooked quinoa can be stored for future use in little batches and pulled out when needed. about 1 month long
<p>00:12-00:22</p>	<p>Banana-Quinoa Breakfast Bars</p> <ul style="list-style-type: none"> • Provide Sample of bar 	<ul style="list-style-type: none"> • A: Discuss ingredients • B: <ul style="list-style-type: none"> o Get tray of bars and give to helper to pass out o Start talking about salad
<p>00:22-00:33</p>	<p>Maple Balsamic Quinoa Salad</p> <ul style="list-style-type: none"> • Provide sample of salad 	<ul style="list-style-type: none"> • B: <ul style="list-style-type: none"> o Discuss ingredients • Dressing is very simple it contains 1/3 cup EVOO, 1/4 cup balsamic vinegar, 1/4 cup maple syrup. <ul style="list-style-type: none"> • Olive Oil --high MUFAs <u>Oleic acid (Omega 9 --not essential)</u> and small amounts of PUFAs (essential FAs) <u>Linolenic acid (Omega 3 --smallest amount)</u> and <u>Linoleic acid (Omega 6 --more than omega 3)</u> <ul style="list-style-type: none"> o Compare to store bought dressings: no extra ingredients thickeners, emulsifiers, preservatives, etc. • <u>Apples</u> peak season June-November: best flavor and juice content, crispy too • <u>Dried Cranberries</u> add color but also a sweet addition that soaks up the dressing and gives a nice texture difference when bit into. • <u>Green onions</u> add mild onion flavor without being overpowering, good for adding green/color to dishes • <u>Salt</u> to enhance all of the flavors within the dish.
<p>00:34-00:44</p>	<p>Quinoa Corn Chowder</p> <ul style="list-style-type: none"> • Provide soup sample 	<ul style="list-style-type: none"> • A:Discussion of eat ingredient • Corn: June-August • B: <ul style="list-style-type: none"> • <u>Butter</u> -palmitic (raise HDL and LDL) Steric (Lower HDL and LDL) <ul style="list-style-type: none"> • Recipe only contains about 1/2 tablespoon per 1 cup serving (4 tbsp / 8 cups = 1/2 tablespoon) about 4 g sat. fat in 1/2 tbsp. • One reasons that we need fat in our diets are for the absorption of fat soluble vitamins (A, D, E, K)

		<ul style="list-style-type: none"> • Using 1% milk to balance fat within soup, about 6 tbsp of milk per 1 cup serving (not a significant amount of sat. fat added) • B help with adding and stirring ingredients
00:45-01:00	Wrap-up: stating objectives again, sampling, questions/discussion, and advertise for next cooking demo :)	<ul style="list-style-type: none"> • B: wrap up --state objectives, ask for questions <ul style="list-style-type: none"> o Alright, so now you all have been taught about the nutritional benefits, how to purchase, cooking and baking and lastly how you can substitute and incorporate into a variety of meals. o Are there any questions about quinoa or some of the ingredients or procedures we did tonight?

Equipment List

- Stockpot with lid
- 3 wooden spoons
- 1 Rubber/Plastic Whisk
- 1 Metal Whisk
- 1 strainer
- 2 Cutting boards
- 2 Knives
- Portion Ladle
- Clear bowls for ingredients
- 8x8 baking dish
- 4 glass mixing bowls
- 2 Rubber spatulas
- Parchment paper
- Small saucepan (demo of quinoa cooking)
- Clear liquid measuring cups
- Dry measuring cups
- 1 pair Oven mitts
- 2 hot pads
- Food handling gloves
- Sample cups (about 40)
- Spoons
- Forks
- Knives
- 1-2 people to pass out food samples

Ingredients for Recipes

Quinoa Corn Chowder (simmer for 15-20 minutes)

- 1/4 cup butter --back wall in Dairy cooler
- 1 medium onion, diced --front produce aisle
- 1 Red pepper, diced --front produce aisle, Peak Aug-Dec
- 1 tsp. minced garlic --front produce aisle
- ¼ cup flour, gluten free, aisle 3
- 3 cups chicken broth, aisle ____
- 3 cups milk, back wall in Dairy cooler
- 4 cups frozen corn (or fresh), Peak June-Aug, aisle ____
- 2 (15 oz) cans white kidney beans (cannellini), drained and rinsed, aisle ____
- 1 tsp. dried parsley, aisle 3

1/2 tsp. dried thyme, aisle 3
1 tsp. salt, aisle 3
2 cups cooked quinoa, aisle 3 bulk section
optional: shredded cheese to garnish

Maple Balsamic Quinoa Salad

2 cups cooked quinoa, aisle 3
1/3 cup EVOO, aisle ____
1/4 cup balsamic vinegar, aisle ____
1/4 cup pure maple syrup, end cap on aisle 3
1 cup dried cranberries or cherries (TIP: look for unsweetened or naturally sweetened varieties), aisle 3 bulk section
1 cup raw unsalted chopped nuts (walnuts, pecans, almonds, peanuts, cashews), back wall refrigerated bulk section
4 to 5 scallions, thinly sliced, front produce aisle
1 whole apple, diced (Fuji or honeycrisp), Peak June-November, front produce aisle
1 tsp. sea salt, kosher, aisle 3

Flourless Banana-Quinoa Breakfast Bars (350 degrees F for 15 - 20 minutes)

1 ½ cups quick cooking oats (gluten free), aisle 3
1 cup cooked quinoa, aisle 3
1/3 cup coconut sugar, aisle 3
1 tsp. baking powder, aisle 3
1 tsp. cinnamon, aisle 3
1/2 tsp. nutmeg, aisle 3
1/2 tsp. salt, aisle 3
1 egg, back wall near dairy
1 cup mashed banana (2 medium bananas), front produce aisle
1 tbs. vanilla extract, aisle 3
1/4 cup nut (or seed) butter of choice, aisle 3 end cap
1/2 cup chocolate chips, aisle 3

Appendix B

Instructor Grading Criteria

Cooking Demo Planning Meeting: 50 points

PRESENTERS:

TOPIC/TITLE: (Plant-based & appropriate for general public)

Learning Objective 1:

By the end of the class, learners will:

Learning Objective 2:

By the end of the class, learners will:

Learning Objective 3: (optional)

By the end of the class, learners will:

Describe topic and brief outline of presentation

Describe 3 recipes and/or techniques you are planning to demonstrate to support learning objectives.

Briefly describe handout. Provide draft if possible.

Criteria	Comments/Suggestions	Points Possible	Points Earned
Objectives: Are clear, measurable, and appropriate for general public		20	
Recipes are: Simple Seasonal Flavorful Include ONLY whole foods Pre-tested Non-noisy (blender) Supports objectives		20	
Handout: Draft provided Supports objectives		10	
TOTAL POINTS		50	

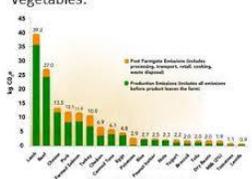
Appendix C

Do This:



Plant-Powered Planet

The Sustainability of a Plant-Focused Diet

<p>Environmental Benefits</p> <p>Animal food production results in a number of environmentally harmful byproducts including:</p> <ul style="list-style-type: none"> Greenhouse gas emissions Toxic manure lagoons Deforestation Pollution of groundwater, rivers, streams, and oceans <p>Full Lifecycle Greenhouse Gas Emissions from Common Proteins and Vegetables:</p> 	<p>How Eating Less Meat Measures up in One Year</p> <p>If you eat one less burger a week... It's like driving 320 miles less.</p> <p>If your four-person family skips meat and cheese one day a week... It's like taking your car off the road for five weeks.</p> <p>If everyone in the United States ate no meat or cheese for just one day a week... It would be like driving 91 billion miles less, or taking 7.6 million cars off the road.</p> 	<p>Social and Economic Benefits</p> <p>A more plant-focused diet will reduce your risk for multiple diseases including:</p> <ul style="list-style-type: none"> Heart Disease Stroke Type two diabetes Cancer  <p>Direct health care costs attributable to heavy meat consumption are estimated to be:</p> <ul style="list-style-type: none"> \$ 2.8-8.5 billion for hypertension \$ 9.5 billion for heart disease \$ 16.5 billion for cancer \$ 14.0-17.1 billion for diabetes
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Instead of This:

 <h3>Plants on the Road</h3> <p>"Whether you're a plant-powered vegan, vegetarian, or omnivore your goal is to include more plant-based meals in your lifestyle for optimal health." — Sharon Palmer, RD</p> <p>Don't forget to pack delicious plant-based snacks for travel whether it is by train, plane, car or bicycle!</p> <p>A good starter list is:</p> <ul style="list-style-type: none"> Dried fruit Nuts/mixed nuts Granola Whole-food nutrition bars Plant based milks (soy, oat, rice, etc...) Whole grain crackers Seaweed snacks <p>"You'll find some of the most delicious plant-powered meals awaiting you in ethnic restaurants, from Vietnamese and Mexican to Indian and Middle Eastern" — Sharon Palmer, RD</p> <p>When you're out to eat, don't think meat! Try something plant-based full of natural whole foods.</p> <p>Some great ideas for plant-based ethnic foods are:</p> <ul style="list-style-type: none"> Vegetable stir-fry Curry with vegetables Rice Pilaf (served at USU Marketplace) Rosemary Potatoes (served at USU Marketplace) 	 <h3>The Plant Exchange</h3> <p>"Since the beginning of time, humans have had a unique relationship with plants. From the first time our early ancestors plucked wild seeds, grasses, herbs, grains, and fruits and saved them in pouches for the future, they realized that these powerful plants have the ability to nourish and sustain them." — Sharon Palmer, RD</p> <p>Try at least one meatless day a week, replace the meat with:</p> <ul style="list-style-type: none"> Beans Tofu Veggie/black bean burger Seitan Tempeh <p>Give the cows a break and drink plant-based milk, remember there is a large variety from soy to oat milk.</p> <p>Try some 'egg-cellent' replacers:</p> <ul style="list-style-type: none"> Apple sauce (baking) ½ banana (baking) 1 Tbs. ground flax seed with 3 Tbs. water (baking) Scrambled tofu with seasonings makes delicious 'scrambled eggs' <p>Don't be so cheesy, add nutritional yeast to your sauce for a cheesy flavor, or use vegan cheese.</p> <p>Replace gravy or cream sauces with blended nut recipes, and mayo, sour cream, or cream cheese with tofu based recipes.</p>
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Appendix D



Appendix E

Cooking Demonstrations: Peer Evaluation

Class Title and Presenters: _____

Rank each subject 5=excellent, 3=average, 1=Needs improving.

Criteria:	Score:	Explanation:
Well prepared, planned ahead		
Professional appearance		
Followed food safety and sanitation		
Used strong, clear voice		
Good stage presence		
Engaged audience		
Clear theme throughout class		
Knowledgeable about topic		
Clear and visible demo area		
Started and ended on time		

1. Something you learned?

2. Something you thought that presenters did well?

3. Something for improvement?

Handout Evaluation

Criteria	Score	Comments
Content		
Layout and Design		
Free of typos/lingo		
Amount of information		

Suggestions?

Evaluation Form for Presenters

We'd like to improve our skills as presenters. Please rank us in the following areas and provide feedback below. Rate by circling 5=excellent to 1=needs improvement

Well prepared	5	4	3	2	1
Professional appearance	5	4	3	2	1
Safe and sanitary food handling	5	4	3	2	1
Used strong, clear voice	5	4	3	2	1
Good stage presence	5	4	3	2	1
Engaged audience	5	4	3	2	1
Clear theme throughout class	5	4	3	2	1
Knowledgeable about topic	5	4	3	2	1
Clean and visible demo area	5	4	3	2	1
Started and ended on time	5	4	3	2	1

Specific things you enjoyed:

Areas for Improvement:

Evaluation Form for Presenters

We'd like to improve our skills as presenters, please rank us in the following areas and provide feedback below. Rate by circling 5=excellent to 1=needs improvement

Well prepared	5	4	3	2	1
Professional appearance	5	4	3	2	1
Safe and sanitary food handling	5	4	3	2	1
Used strong, clear voice	5	4	3	2	1
Good stage presence	5	4	3	2	1
Engaged audience	5	4	3	2	1
Carried theme throughout class	5	4	3	2	1
Knowledgeable about topic	5	4	3	2	1
Clean and visible demo area	5	4	3	2	1
Started and ended on time	5	4	3	2	1

Specific things you enjoyed:

Areas for Improvement:

Student Post-Cooking Demonstration Survey

1. On a scale of 1-5, with 1 being the least helpful and 5 being the most helpful, overall, how well do you feel the cooking demonstration curriculum helped you with your demonstration?

1 2 3 4 5

2. What skills did you practice or feel confident in during this cooking demonstration? Check all that apply

- Time management Organization Public Speaking
- Cooking Skills Designing Handouts Teaching Nutrition Concepts
- Objective Writing Other _____

3. Which sections of the cooking demonstration curriculum did you find most helpful? Check all that apply

- Creating a food demonstration Writing Effective Learning Objectives
- Handouts Marketing
- Sanitation and Safety Planning and Demonstration Template

4. On a scale of 1-5, with 1 being not confident and 5 being extremely confident, how confident are you in your ability to teach nutrition concepts through cooking demonstration?

1 2 3 4 5

5. Do you feel the skills gained through teaching a cooking demonstration align with your future goals?

- Yes
- No
- Somewhat

6. How often did you use the curriculum during the course of planning and presenting your cooking demonstration?

- Not at all
- I perused it once or twice
- I read through it a few times
- I used it at least 5 times
- The curriculum was my constant companion through this process

7. On a scale of 1-5, 1 being not at all comfortable and 5 being extremely comfortable, how comfortable do you feel about presenting more cooking demonstrations in a community setting in the future?

1 2 3 4 5

8. On a scale of 1-5, 1 being not at all confident and 5 being extremely confident, how confident are you in your ability to use the knowledge gained through the dietetics program to prepare and present a cooking demonstration?

1 2 3 4 5

9. Was there anything lacking from the curriculum you would have liked to have known before you presented your cooking demonstration?

- No
- Yes: _____

