The Oasis Institute
Virtual Healthy Habits (VHH)
American Society on Aging
On Aging Conference
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Presenters

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Group Questions

• What virtual educational programs do you currently offer in your community?
• Are you currently implementing a nutrition education program in your community?
Project Overview

- Funded by Administration for Community Living under the “Innovations in Nutrition Research” grant

- **Research Goal:** Randomized control trial assesses participant changes in knowledge, self-efficacy, attitudes, and behaviors related to dietary guidelines and healthy eating; and social connectedness

- The project includes partnerships with:
  - **Aging Ahead** to assist with recipe development, participant recruitment, and implementation
  - **Texas A&M University** to assist with evaluation
Project Overview

- Create the Virtual Healthy Habits Program
- Create research protocol and evaluation methodology
- Develop program material:
  - Facilitator manual
  - Participant workbook
  - Cooking videos
  - Training manuals
  - Implementation and fidelity manuals
- Establish sustainable models for meal kit/grocery delivery
- Analyze results and disseminate findings
What is Virtual Healthy Habits?

- **Virtually Healthy Habits (VHH)** is a virtual, interactive group-based program designed for older adults to learn about healthy nutrition and provide an opportunity for social engagement.
Virtual Healthy Habits Goals & Objectives

Program Goal:
• To educate older adults about current dietary guidelines and assist with behavior change to match the MyPlate method designed by the U.S. Department of Agriculture and offer an opportunity to prepare and enjoy a nutritious meal in the company of other older adults

Program Objectives:
• **Increase** knowledge about dietary guidelines and healthy eating
• **Improve** attitudes and self-efficacy towards healthy eating
• **Improve** eating behaviors to match current dietary guidelines
• **Decrease** nutritional risk
• **Increase** Social connectedness
Program Design

• 10-session program, classes are held twice a week for 5 weeks
• Led by a trained lay-leader
• Zoom and phone groups available
• Groups are highly interactive
• 4-10 participants per group
• Participants get to learn through reading, sharing, and practicing
Program Design
Weekly Education Sessions

• MyPlate for Older Adults developed by the U.S. Department of Agriculture based on the Dietary Guidelines for Americans, 2020-2025

• Educational sessions are 2 hours long

• Weekly topics:
  • Week 1: Introduction to Healthy Eating, Fruits, and Vegetables
  • Week 2: Whole Grains and Fiber
  • Week 3: Protein, Dairy, and Eating Healthy on a Budget
  • Week 4: Sugar and Fluids
  • Week 5: Fat and Salt
Weekly Social Sessions

• Meant for participants to come together and socialize on weekly meals prepared, pre-selected topics, or any topic the group is interested in

• Most conversations tend to be around the weekly meal's participants prepared

• Participants are encouraged to have their prepared meals during the social session (but not required)
Weekly Grocery/Meal Kit Delivery

• Groceries/meal delivered to participants to prepare a healthy meal at home based on recipe they selected
  • Participants pre-select meals during the registration process
• Recipes meet federal guidelines for older adult nutrition per Older American Act Title III-C guidelines
• 20 total recipe options with 10 dessert options
  • Chicken (5 options)
  • Beef (5 options)
  • Pork (5 options)
  • Vegetarian (5 options)
• Each week participants have a choice of chicken, beef, pork, or vegetarian
Weekly Grocery/Meal Kit Delivery

• Fresh groceries/meal kits are delivered weekly to participants

• Delivery options could be Instacart, volunteers, or through the Area Agencies on Aging

• Participants have access to the recipe book (participant workbook) and professional recorded cooking demo videos (website)
Examples of recipes:

- **Chicken**: Strawberry Pecan Salad with Chicken
- **Beef**: Ground Beef Burrito Bowls
- **Pork**: Sesame-Style Pork Lettuce Wraps
- **Vegetarian**: Creamy One-Pot Vegetable Pasta
- **Dessert**: Frozen Chocolate Banana–Berry Clusters
Recipe Book Development
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Discussion Questions:

- Does your agency or program offer nutrition-based skill building courses or sessions?

- What barriers to access nutritious meals do you observe in your service area?
Based on dietary recommendations for an average 70-year-old

Meal Pattern:
- 2-3 oz Protein
- 2.5 cups servings of vegetables
- 4 oz Fruit
- 2 oz Grain
- 8 oz Dairy
Virtual Healthy Habits Menu Building

Project Needs:

• Meals that meet OAA nutrition requirements
• Meals that were relatively easy to prepare
• Offers a variety of foods and styles of cuisine
• Ability to cook all items in a cooking demo
Recipe Considerations

- Variety
- Cost and Accessibility
- Offering foods clients would be familiar with
- Minimal equipment
- Time and efficiency
- Ease of use and potential barriers to cooking at a certain age
- Menu requirements and nutrition criteria
- Align with the VHH lesson plan
Recipe Development

• Includes all considerations above
• Begin with a protein and build out
• Inspired by cookbooks, websites, and family recipes
• Participant feedback welcomed
• Ongoing expansion of the recipe book

STRAWBERRY PECAN SALAD WITH CHICKEN & TOASTED PITA WEDGES

INGREDIENTS
6 oz Boneless Skinless Chicken Breast (Cut into bite-sized pieces)
1 cup Strawberries (sliced)
2 cups Mixed Greens
1 Small Red Pepper (chopped)
0.25 cup Chopped Pecans
0.25 cup Feta Cheese Crumbles
2 Whole Grain Pita Rounds
2 tbsp Balsamic Vinegar
2 tbsp Honey
0.25 cup Olive Oil
1 tsp Dried Parsley
Spice Blend:
Salt & Pepper (to taste)
1 tsp Onion Powder
1 tsp Paprika

BEFORE YOU START
Wash all vegetables. Cut green leafy toss from strawberries before slicing lengthwise to create slices. Cut around top of pepper to remove seeds. Turn pepper upside down and shake to remove remaining seeds. Cut bottom off of pepper and cut pepper in half. Lay sides inside down on cutting board and make cuts from top to bottom, then turn and cut from side to side to dice pepper.

Cut chicken into bite sized pieces (no greater than 1”). Wash hands after handling meats.

DIRECTIONS
Step 1: In a medium sauté pan, heat 2 tbsp olive oil on medium-high heat. Cover chicken pieces in spice blend and 1 tbsp of oil to coat chicken evenly, and add to pan. Cook chicken for 8-10 minutes or until golden brown on all sides. Remove from heat.
Step 2: Preheat oven to 350°F. Brush pita rounds on both sides with about 2-3 tbsp olive oil. Sprinkle with dried parsley. Place on baking sheet and bake in oven for 5 minutes or until rounds are golden brown. Pull from oven and cut into triangles.
Step 3: In a small bowl, whisk together equal parts oil and balsamic vinegar, then stir in honey until completely blended.
Step 4: To serve, place 1 cup mixed greens in a large bowl, top with diced red pepper and strawberries, then pecan and feta. Finally, top with chicken and drizzle balsamic vinaigrette. Serve alongside warm pita triangles.

ALLERGENS
Wheat, Dairy, Tree Nuts
Program Material: Participant Workbook
Program Material: Cooking Demonstrations
Program Material: Facilitator Guide
Target Population

- Lives in service area
- Ages 60 years and older
- Lives independently
- Low to moderate nutrition risk
PROGRAM PARTICIPATION
5 Steps

01 SCREENING

02 DOCUMENTS
- Consent form
- Baseline survey
- Meal order form

03 GROUPS
Randomization into immediate or delayed groups

04 WORKSHOP
5-week program

05 SURVEYS & INCENTIVES
- Post-survey
- 6-month survey
- Gift card
PARTICIPANTS SURVEY COMPLETION

100% Baseline survey

94% Post-survey

92% 6-month follow-up survey
Testing the Secret Sauce
Matthew Lee Smith, PhD, MPH, CHES
School of Public Health
Center for Community Health and Aging
Center for Health Equity and Evaluation Research
Texas A&M University
A Randomized Trial

Delayed Control Group

Immediate Group

Pre-Baseline → 6 Month & Baseline → VIRTUAL HEALTHY HABITS → Post-Workshop → 6 Month

Baseline → VIRTUAL HEALTHY HABITS → Post-Workshop → 6 Month
Participants at Baseline (n=104)

- On average, age 71 (range from 55 to 90)
- 83% Female
- 71% Non-Hispanic white
- 27% Black or African American
- 52% Live alone

![Health and Nutrition-Related Risk](image)

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Poor or Fair Appetite</td>
<td>10%</td>
</tr>
<tr>
<td>Skip Meals (often or almost daily)</td>
<td>10%</td>
</tr>
<tr>
<td>Difficulty Walking, Climbing Stairs, Dressing, Errands</td>
<td>14%</td>
</tr>
<tr>
<td>Cough, Choke, or Painful Swallowing (sometimes/often)</td>
<td>15%</td>
</tr>
<tr>
<td>Poor or Fair General Health</td>
<td>18%</td>
</tr>
<tr>
<td>Poor or Fair Health of Overall Diet</td>
<td>33%</td>
</tr>
<tr>
<td>Eat 1+ Meal with Others Daily (never/rarely)</td>
<td>33%</td>
</tr>
<tr>
<td>Think Weight is More Than It Should Be</td>
<td>79%</td>
</tr>
</tbody>
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![Baseline U-SIRS-13 Risk Categories](image)
Sustained benefits trending in the ‘right direction’ after 6 months

Significant improvements also seen for: General Health Status

- Health of overall diet
- Eat more meals with others
- Daily fruit consumption
- Daily fluid intake
Participant Feedback

- 83% Reported "excellent" Quality of ingredients or meal kits
- 80% Reported "excellent" Class overall
- 80% Reported "excellent" Quality of class material
- 80% Reported "excellent" Process of receiving ingredients or meal kits
- 88% Reported "definitely" Likelihood of recommending program to loved ones
Participant Quotes:

“Wonderful program. Enjoyed it very much!”

“I really enjoyed having good, high-quality food and motivation to prepare it.”

“This was a wonderful experience for me. I am much more aware of healthy eating and being proactive about my choices for better physical well being!”

“THANK YOU!! for this opportunity! It was a highlight of my summer! I have recommended this class to my sister, and she is now enrolled!”

“I have learned and reviewed so much to provide healthy eating and living habits. Sharing with other participants made the whole idea of the program easier.”

“Really a wonderful program for adults. Even at my age I gained a lot of information that I thought was very helpful. Avery excellent program.”

“Overall, it was a good class. I learned about cooking new recipes, with food items that I would have never picked out to cook myself. I enjoyed the class size, the discussions about the weekly topics and hearing about how the recipes turned out. It was a wonderful experience!”

“I would like to express my deep appreciation for this program. It was highly recommended by a family member. Garrett and I have been rather isolated as he had knee replacement surgery and has been consigned to the house for 2 weeks. This program was a gift for the companionship, the instruction and the food when I only got out once to get groceries in over 2 weeks as needed to stay home with my husband during his recuperation. Many thanks.”
Emir Kandzetovic

Stay in Touch

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https://st-louis.oasisnet.org/health/virtual-healthy-habits/