



Culinary Medicine: A Sustained Eating Behavioral Change

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Use the QR code to access information on all diabetes programs at ARH

Abstract

Appalachian Regional Healthcare's (ARH) Diabetes Support Group serves as a beacon of hope for sustained behavior change through culinary medicine. From the heart of the Central Appalachian region, ARH applies a community-based approach to diabetes self-management. The meetings combine food-related activities, clinical diabetes education and lifestyle solutions as a multidisciplinary yet approachable solution to create results across eastern Kentucky and southern West Virginia. Through multi-sector collaboration with the county extension offices for cooking demonstrations, private philanthropy funding, participant testing and various healthcare professionals from across the healthcare system network, ARH grounds a clinical solution in communities seeking healthy lifestyle education and dietary modifications through culinary medicine. The Diabetes Support Group has gained momentum across the system yielding better A1C outcomes and scaling from two locations with under 30 participants per month to nine locations, a virtual option and approximately 100 participants monthly.

Introduction

When a patient is diagnosed with diabetes, the impact it can have on their life can sometimes be overwhelming, isolating, and confusing. Support in all types of diabetes care has been shown to have a substantial effect in improving health outcomes for people with diabetes. With the diabetes rate in Appalachia a staggering 16%, 5% above national average¹, ARH identified the lack of diabetes support groups in our communities. In August 2022, ARH began offering free monthly meetings to create a culinary medicine model that serves as a tool for sustained lifestyle changes and chronic disease management and mitigation. The program implemented increased engagement resulting in the lowered A1C of participants.

¹2023 Kentucky Diabetes Report

Components

The meetings feature:

- ◆ Valuable insights from local experts across the healthcare network
- ◆ 30-minute healthy meal demonstrations
- ◆ Direct access to address success, challenges and questions
- ◆ Medically tailored food boxes and nutritional support through grocery gift cards
- ◆ Participant health screenings



Methodology



Farmer's Market Skillet Bake

1/2 small onion, finely chopped	2 cups shredded mozzarella cheese, divided	4 medium sized tomatoes, sliced
2 cloves garlic, minced	1 medium summer squash, sliced	1 teaspoon salt
4-5 small red potatoes, sliced	1 medium zucchini, sliced	1 teaspoon pepper
1 tablespoon olive oil		5 fresh basil leaves, finely chopped, divided

Preheat oven to 375 degrees F. **Prepare** onion, garlic and sliced potatoes (about 1/4 inch thick). **Heat** olive oil over medium heat in a 10 or 12-inch oven safe skillet. **Add** onion, garlic, and potatoes to pan and **stir** to coat with oil. **Cook** over medium heat, **stirring** occasionally until golden brown and tender. **Add** 1 cup mozzarella cheese. In a bowl, **toss** together the squash, zucchini and tomatoes with salt, pepper, and half of the finely chopped basil. **Layer** squash and tomato slices over the potato and cheese layer. **Top** with remaining mozzarella cheese. **Bake** 35 minutes or until vegetables are tender and cheese is melted. **Remove** skillet from oven and **top** with remaining basil.

Yield: 8, 1 cup servings
Nutritional Analysis: 200 calories, 8 g fat, 4 g saturated fat, 20 mg cholesterol, 490 mg sodium, 24 g carbohydrate, 3 g fiber, 5 g sugars, 10 g protein



Results

- ◆ 305 total individual participants
- ◆ 1,171 combined attendance, across all locations
- ◆ 573 medically tailored food bags and 98 grocery gift cards distributed
- ◆ Expanded to nine locations across two states and Zoom, tenth location July 2024
- ◆ 265 free health screenings:
 - 252 A1C tests
 - 10 foot exams
 - 3 grip strength
- ◆ 64% of participants in the Big Sandy region had their A1C screened
- ◆ 77% improved their A1C result, at least once
 - 3.9% greatest loss
 - 0.49% average loss
- ◆ 17% have sustained their A1C improvement – repeat testing with sustainment for longer than two months, average loss of 1.4%
- ◆ A participant's insight: "The meetings have been a big help in understanding more about diabetes and watching what I eat. Over the time I have attended, my A1C has improved."

Conclusion

The outcomes of the ARH diabetes support meetings demonstrate the program's effectiveness in attracting participants and filling a crucial gap related to the metabolic health solutions and lifestyle education needed for diabetes care support in rural eastern Kentucky utilizing culinary medicine.

The program's success both improved A1C levels in participants and delivered healthcare through a culinary lens, thus engaging a substantial number of participants.

The significance of community around food and addressing needs with support, highlights the program's potential to make a meaningful impact on diabetes management and care in underserved areas.

Community Partnerships

