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Culinary Medicine in Puerto Rico: Bridging Nutrition, Behavior, and Practice

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ABSTRACT

Background: Diet-related chronic diseases represent a major global public health challenge, particularly within Caribbean populations. Puerto Rico experiences high prevalence rates of obesity, type 2 diabetes, cardiovascular disease, and hypertension. Traditional nutrition education strategies often fail to produce sustained behavior change due to limited integration of behavioral science and practical skill development.

Objective: To propose a culturally relevant, transdisciplinary framework for culinary medicine in Puerto Rico integrating culinary arts, nutrition, psychology, and medical science to improve dietary behaviors and health outcomes.

Methods: A conceptual framework was developed through integrative synthesis of literature on culinary medicine, behavioral science, lifestyle medicine, and public health. The framework was contextualized to Puerto Rico's sociocultural and epidemiological landscape.

Results: The Puerto Rico Culinary Medicine Framework positions culinary arts as the operational bridge between nutritional science and behavior change. The model integrates three levels: (1) scientific foundations, (2) behavioral mechanisms, and (3) implementation systems across academic, healthcare, and community settings.

Conclusion: This study presents one of the first conceptual culinary medicine frameworks tailored to the Caribbean context. Culinary medicine offers a culturally relevant, experiential strategy to improve dietary behaviors, enhance food literacy, and address chronic disease burden in Puerto Rico.

Keywords: Culinary medicine; Behavior change; COM-B; Teaching kitchens; Psychonutrition; Caribbean health; Lifestyle medicine

Introduction

Diet-related chronic diseases remain among the leading causes of morbidity and mortality worldwide. Conditions such as obesity, type 2 diabetes, cardiovascular disease, and hypertension are strongly associated with poor dietary patterns and lifestyle behaviors [1-2].

Puerto Rico reflects these global trends, with disproportionately high prevalence of metabolic diseases. Epidemiological estimates suggest obesity affects approximately 35–40% of adults, diabetes 15–17%, and hypertension nearly 40–45%. These outcomes are influenced by dietary transitions toward ultra-processed foods and reduced home cooking [3-5].

Traditional nutrition education approaches have emphasized knowledge transmission; however, evidence demonstrates that knowledge alone is insufficient to produce sustainable behavior change. Dietary behaviors are shaped by complex interactions between biological, psychological, social, and environmental factors [6-8].

Culinary medicine has emerged as a transdisciplinary field that bridges nutritional science with practical food preparation. By integrating culinary skills with evidence-based nutrition and behavioral science, it enables individuals to translate dietary recommendations into sustainable daily practices [9-11].

This paper proposes the Puerto Rico Culinary Medicine Framework, representing one of the first conceptual models for culinary medicine in the Caribbean, integrating scientific knowledge, behavioral theory, and cultural context.

Conceptual Framework

Culinary medicine represents an emerging transdisciplinary field integrating medical science, nutrition, psychology, and culinary arts to facilitate sustainable dietary behavior change and improve health outcomes. The foundation of the Puerto Rico Culinary Medicine is grounded in the integration of the biopsychosocial model, the Capability–Opportunity–Motivation Behavior (COM-B) model, and the emerging paradigm of psychonutrition, providing a comprehensive lens through which dietary behavior can be understood and modified [10,12-14].

BIOPSYCHOSOCIAL MODEL OF EATING BEHAVIOR

The biopsychosocial model provides a foundational perspective for understanding human health behaviors, recognizing that biological, psychological, and social factors interact dynamically to influence outcomes. Within the context of dietary behavior, this model highlights that food choices are not determined solely by nutritional knowledge or physiological needs, but rather by a complex interplay of metabolic processes, emotional states, cultural norms, and environmental conditions.

From a biological perspective, dietary intake influences metabolic regulation, inflammation, and disease risk. Nutrient composition affects glycemic control, lipid metabolism, and hormonal signaling pathways, all of which are central to the development and management of chronic diseases [8,15,16].

From a psychological perspective, eating behavior is shaped by cognition, emotions, habits, and learned experiences, with factors such as stress, emotional regulation, reward processing, and food-related beliefs significantly influencing dietary decisions and adherence to health recommendations [17-18].

From a social and environmental perspective, food environments, cultural traditions, socioeconomic status, and access to resources significantly influence dietary patterns. In Puerto Rico, food practices are deeply embedded within cultural identity, family structures, and communal experiences, underscoring the importance of culturally relevant interventions [29-21].

Culinary medicine operationalizes the biopsychosocial model by translating nutritional science into practical, culturally meaningful food preparation experiences. Through hands-on culinary education, individuals engage simultaneously with biological (nutrition), psychological (behavior and emotion), and social (cultural and environmental) determinants of eating behavior [22].

COM-B MODEL AND BEHAVIORAL MECHANISMS

The COM-B model provides a structured framework for understanding and influencing behavior by identifying three essential components required for behavior change: capability, opportunity, and motivation [12].

- Capability refers to an individual's knowledge and skills necessary to perform a behavior. In the context of culinary medicine, this includes food literacy, cooking techniques, meal planning, and understanding of nutritional principles.
- Opportunity encompasses external factors that facilitate or constrain behavior, including physical environments, food access, social support, and cultural norms. Teaching kitchens, community programs, and supportive institutional settings create environments that enable healthier food choices.
- Motivation includes both reflective processes (intentions, goals) and automatic processes (habits, emotional responses). Culinary medicine enhances motivation by leveraging sensory experiences, cultural familiarity, and the intrinsic satisfaction derived from cooking and sharing food.

Culinary medicine interventions are uniquely positioned to address all three components simultaneously. Unlike traditional educational approaches that focus primarily on knowledge acquisition, culinary medicine integrates skill development, environmental restructuring, and motivational engagement, thereby increasing the likelihood of sustained behavior change [9,10,22].

PSYCHONUTRITION AND THE GUT-BRAIN AXIS

Psychonutrition extends traditional nutrition science by incorporating the psychological and emotional dimensions of eating behavior, as well as the physiological connections between diet and mental

health. Central to this perspective is the concept of the gut–brain axis, a bidirectional communication system linking the gastrointestinal tract and the central nervous system.

Emerging evidence suggests that dietary patterns influence neurotransmitter synthesis, inflammatory pathways, and microbiota composition, all of which play a role in mood regulation, cognition, and behavior. Diets rich in whole foods have been associated with improved mental health outcomes, while high consumption of ultra-processed foods has been linked to increased risk of depression and anxiety [23-24].

Beyond physiological mechanisms, psychonutrition emphasizes the role of emotional regulation, mindful eating, and the psychological meaning of food. Eating behaviors are often influenced by stress, emotional coping strategies, and social experiences, which can either support or hinder healthy dietary patterns [24-25].

Culinary medicine provides a practical platform for integrating psychonutrition into intervention design. Cooking activities promote mindfulness, creativity, and self-efficacy, while also fostering positive emotional relationships with food. These experiences can transform food preparation into a therapeutic and empowering process, supporting both mental and physical health [9,22].

Culinary Arts as an Applied Health Technology

Culinary arts function as an applied health technology that translates scientific knowledge into actionable behavior. Culinary skills bridge the gap between knowing what constitutes a healthy diet and being able to implement it in daily life.

Food preparation is not merely a technical skill but a behavioral intervention. Through cooking, individuals engage in decision-making processes related to ingredient selection, portion control, flavor development, and meal composition. These actions reinforce learning, build confidence, and promote autonomy in dietary behavior [9,22].

Importantly, culinary arts also serve as a vehicle for cultural expression. In Puerto Rico, traditional cuisine reflects a rich blend of Indigenous, African, and Spanish influences [22,26-28]. Culinary medicine leverages this cultural foundation by adapting traditional dishes using healthier preparation methods while preserving cultural identity and organoleptic characteristics [22].

INTEGRATION OF THEORETICAL COMPONENTS

The Puerto Rico Culinary Medicine Framework integrates these components into a cohesive model in which culinary medicine serves as the central mechanism linking scientific knowledge with behavioral change and real-world application.

- The biopsychosocial model provides the overarching perspective on health and behavior
- The COM-B model offers a structured mechanism for behavior change
- Psychonutrition expands the framework to include emotional and mental health dimensions
- Culinary arts operationalize the model through experiential, culturally relevant practice

This integration establishes a translational pathway that moves from knowledge to behavior to measurable health outcomes, positioning culinary medicine as a comprehensive and scalable approach to addressing complex dietary behaviors and chronic disease burden[10,12,15,26-30].

Methods

STUDY DESIGN

This study employed a conceptual framework development design to construct a grounded and contextually relevant model for the implementation of culinary medicine in Puerto Rico. Such an approach is particularly appropriate for integrating multidisciplinary evidence and generating structured models that inform research, education, and practice, particularly in emerging fields where empirical data may be limited [31-33].

This study does not constitute a systematic review; rather, it follows an integrative, narrative-based conceptual synthesis methodology. The aim was not to exhaustively identify all available evidence, but to critically synthesize relevant multidisciplinary literature to inform framework development. This conceptual modeling approach facilitates the integration of knowledge from culinary medicine, behavioral science, nutrition, and public health, resulting in a translational model designed for real-world application.

LITERATURE INTEGRATION AND EVIDENCE SYNTHESIS

A targeted, integrative literature review was conducted to inform the development of the framework [31], synthesizing multidisciplinary evidence across four primary domains:

1. Culinary Medicine and Teaching Kitchens
   Literature describing the development, implementation, and outcomes of culinary medicine programs and teaching kitchen models in academic and clinical settings [10].
2. Behavioral Science and Health Behavior Models
   Foundational and applied research on behavior change theories, with emphasis on the Capability–Opportunity–Motivation Behavior (COM-B) model and its application to dietary behavior [12].
3. Lifestyle Medicine and Public Health Nutrition
   Evidence addressing the role of dietary patterns, lifestyle interventions, and preventive strategies in the management of chronic disease [32].
4. Psychology of Eating Behavior and Psychonutrition
   Research exploring emotional, cognitive, and behavioral determinants of eating, including the gut–brain axis and the relationship between diet and mental health [8,14].

The literature search included peer-reviewed journal articles, systematic reviews, and key policy reports from

international health organizations. Sources were selected based on relevance, methodological rigor, and applicability to dietary behavior and health outcomes.

Framework Development Process

The framework was developed through a structured, theory-driven, multi-step process integrating multidisciplinary evidence and behavioral science models to ensure conceptual coherence and translational applicability [12,31,33]:

1. Identification of Core Domains
   Key disciplines relevant to culinary medicine—medicine, nutrition science, psychology, and culinary arts—were identified as foundational components [7,10,12,14,15,34].
2. Integrating Behavioral and Multidisciplinary Models
   The biopsychosocial model, COM-B model, and psychonutrition paradigm were integrated to establish a comprehensive base explaining dietary behavior [7,10,12,14,15,34].
3. Behavioral Mapping
   Core elements of culinary medicine interventions were mapped to COM-B constructs:
   - Capability → culinary skills and food literacy
   - Opportunity → food environments and teaching kitchens
   - Motivation → sensory, cultural, and emotional engagement [7,10,12,14,15,34]
4. System-Level Structuring
   The framework is organized into three interrelated and hierarchical levels:
   - Scientific foundations
   - Behavioral mechanisms
   - Implementation systems [7,10,12,14,15,34]
5. Translational Alignment
   Culinary arts were positioned as the central mechanism translating knowledge into applied behavior [7,10,12,14,15,34].

Contextual Adaptation to Puerto Rico

This contextualization ensures that the proposed framework is both robust and contextually grounded, enhancing its applicability within Puerto Rico and its potential adaptability across Caribbean populations [19-21,34,35]:

- Epidemiological Data
  Prevalence of obesity, diabetes, hypertension, and cardiovascular disease.
- Dietary Patterns and Nutrition Transition
  Increased consumption of ultra-processed foods and reduced home cooking.
- Cultural Food Practices
  Influence of traditional cuisine, family structures, and communal eating patterns.
- Food Environment and Socioeconomic Factors
  Access to healthy foods, food insecurity, and structural determinants of dietary behavior.

This contextualization ensures that the proposed framework is not only theoretically sound but also applicable to real-world conditions in Puerto Rico and potentially adaptable to other Caribbean settings [19-21,34,35].

Results

THE PUERTO RICO CULINARY MEDICINE FRAMEWORK

The primary outcome of this study is the development of the Puerto Rico Culinary Medicine Framework, a transdisciplinary and translational model designed to connect scientific knowledge with behavioral change and real-world application. The framework positions culinary medicine as the central mechanism through which nutrition science, behavioral theory, and clinical practice are operationalized into sustainable dietary behaviors.

The model is organized into three interrelated levels:
(1) Scientific Foundations,
(2) Behavioral Change Mechanisms, and
(3) Implementation Systems.
These levels function synergistically to create a pathway from knowledge acquisition to behavior change and ultimately to improved health outcomes.

1. Scientific Foundations

The first level of the framework consists of four core disciplines that provide the scientific basis for culinary medicine [1,8,10,33]:

- Medicine
  Provides the clinical context for disease prevention and management, including understanding of pathophysiology, metabolic health, and therapeutic dietary interventions.
- Nutrition Science
  Translates nutrient requirements into evidence-based dietary patterns that support health and reduce disease risk.
- Psychology and Behavioral Science
  Explains the cognitive, emotional, and behavioral determinants of eating, including habits, motivation, and decision-making processes.
- Culinary Arts
  Serve as the applied discipline that transforms knowledge into practical food preparation and dietary behaviors.

Within this level, culinary arts function not merely as a skill set, but as an applied behavioral technology that operationalizes scientific knowledge into actionable practices.

2. Behavioral Change Mechanisms

The second level of the framework is structured around the COM-B model, which provides a mechanistic understanding of how culinary medicine facilitates behavior change [8,10,12,22].

Capability

Culinary medicine enhances both psychological and physical capability by developing [8,10,12,22]:

- Cooking skills
- Food literacy
- Meal planning abilities
- Understanding of healthy ingredient selection

These competencies enable individuals to translate dietary knowledge into practical action.

Opportunity

The framework addresses environmental and social determinants of behavior by creating supportive contexts for change, including [8,10,12,22]:

- Teaching kitchens and culinary laboratories
- Healthcare-based culinary programs
- Community cooking initiatives
- Access to culturally relevant, healthy ingredients

These environments reduce barriers to healthy eating and facilitate consistent behavioral engagement.

Motivation

Culinary medicine strengthens both intrinsic and extrinsic motivation through [8,10,12,22]:

- Sensory engagement (taste, aroma, texture)
- Cultural relevance of traditional foods
- Emotional connection to cooking and food preparation
- Increased self-efficacy and confidence

By making healthy eating enjoyable and meaningful, culinary medicine promotes long-term adherence to dietary changes.

3. Implementation Systems

The third level of the framework outlines the practical application of culinary medicine across three key sectors [9,10,11]:

Academic Institutions

Universities and training programs serve as foundational environments for integrating culinary medicine into curricula, enabling interdisciplinary education and the development of health-focused culinary competencies while preparing future professionals as agents of public health [9,10,11].

- Interdisciplinary education (chefs, dietitians, healthcare professionals)
- Development of health-focused culinary competencies
- Training of future professionals as agents of public health

Healthcare Systems

Clinical implementation of culinary medicine allows healthcare providers to move beyond traditional counseling toward experiential interventions [9,10,11]. Applications include:

- Teaching kitchen programs in hospitals and clinics
- Group-based culinary interventions
- Integration with medical nutrition therapy

These approaches enhance patient engagement and improve translation of dietary recommendations into daily practice.

Community-Based Programs

Community initiatives extend the reach of culinary medicine by promoting food literacy and behavioral change at the population level [9,10,11]. These include:

- School-based culinary education
- Family-oriented cooking programs
- Public health interventions targeting vulnerable populations

Such programs reinforce social support, cultural identity, and sustainable health behaviors.

CULINARY ARTS AS THE OPERATIONAL BRIDGE

Across all levels, culinary arts function as the central integrative mechanism linking knowledge, behavior, and application. Culinary practices transform abstract nutritional concepts into tangible experiences, allowing individuals to actively engage with food preparation and dietary decision-making [9,10,11].

This bridging function is critical in addressing the persistent gap between dietary knowledge and the consistent implementation of healthy behaviors in real-world settings [10].

Translational Pathway

The Puerto Rico Culinary Medicine Framework establishes a clear translational pathway:

Scientific Knowledge → Behavioral Mechanisms → Practical Implementation → Health Outcomes [9,10,11].

Through this pathway, culinary medicine facilitates:

- Improved dietary adherence
- Increased food literacy
- Enhanced self-efficacy in cooking
- Long-term lifestyle behavior change

Ultimately, this model supports the prevention and management of diet-related chronic diseases within Puerto Rico and provides a scalable framework for broader Caribbean application.

Discussion

The present study proposes the Puerto Rico Culinary Medicine Framework, a transdisciplinary and culturally grounded model designed to address diet-related chronic diseases through the integration of culinary arts, nutrition science, behavioral theory, and clinical practice. This framework responds to a critical gap in traditional nutrition interventions, which have historically emphasized knowledge dissemination while underestimating the behavioral, environmental, and cultural determinants of dietary change.

Bridging the Gap Between Knowledge and Behavior

A central contribution of this framework is its ability to address the longstanding disconnect between nutritional knowledge and real-world behavior. Although individuals may understand dietary recommendations, adherence remains limited due to barriers such as lack of cooking skills, environmental constraints, and low intrinsic motivation [6,10,11]. By positioning culinary arts as an operational and experiential bridge, the framework transforms passive knowledge into active behavior. Cooking and food preparation function as behavioral interventions that reinforce learning through practice, repetition, and sensory engagement [6,10,11]. This aligns with a growing body of evidence demonstrating that experiential learning approaches are more effective than traditional didactic education in promoting sustained dietary behavior change [6,10,11].

INTEGRATION OF BEHAVIORAL SCIENCE

The incorporation of the COM-B model strengthens the framework by providing a validated mechanism for

behavior change [12]. Unlike traditional nutrition education models, which often focus primarily on capability (knowledge), this framework simultaneously addresses:

- Capability through skill development and food literacy
- Opportunity through structured environments such as teaching kitchens
- Motivation through culturally meaningful and sensory-rich experiences

This multidimensional approach reflects contemporary behavioral science and provides a mechanistic explanation for how culinary medicine interventions can produce sustained behavioral change across diverse populations [6,10,11]. Compared to traditional nutrition education models, which primary target knowledge acquisition, this framework explicitly integrates behavioral, environmental and experiential components, thereby addressing multiple determinants of dietary behavior simultaneously [6,10,11].

CULTURAL RELEVANCE AND CONTEXTUAL ADAPTATION

A key strength of the Puerto Rico Culinary Medicine Framework is its emphasis on cultural relevance. Dietary behaviors are deeply embedded within cultural identity, traditions, and social relationships. In Puerto Rico, food serves not only a nutritional function but also a social and emotional one, shaping family interactions and community life [10,20,21].

Public health interventions that fail to account for these cultural dimensions often encounter resistance or limited effectiveness. In contrast, culinary medicine allows for the adaptation of traditional dishes using healthier preparation methods, preserving cultural authenticity while improving nutritional quality [10,20,,21].

This culturally responsive approach enhances acceptability, engagement, and long-term adherence, making it particularly suitable for Caribbean populations and other culturally rich food environments where dietary practices are closely tied to identity and social structure [10,20,21].

INTEGRATION OF PSYCHONUTRITION AND MENTAL HEALTH

The inclusion of psychonutrition within the framework represents an important conceptual advancement. Traditional nutrition interventions often overlook the psychological and emotional drivers of eating behavior, despite growing evidence linking diet quality to mental health outcomes [8,9,17,24].

By incorporating the gut–brain axis and emotional regulation into the framework, culinary medicine expands beyond physical health to include mental and behavioral well-being. Cooking activities themselves may promote mindfulness, reduce stress, and enhance self-efficacy, contributing to healthier relationships with food [8,9,17,24].

This integration aligns with the biopsychosocial model and supports a more holistic approach to health, recognizing that dietary behavior is influenced by both physiological and psychological processes [8,9,17,24].

IMPLICATIONS FOR EDUCATION, HEALTHCARE, AND PUBLIC HEALTH

The framework has significant implications across multiple systems [9-11]:

Academic Institutions

Culinary medicine offers a shift from traditional prescriptive counseling toward experiential, skill-based interventions that enhance patient engagement, improve adherence, and support chronic disease management through sustainable lifestyle modification [9-11].

Healthcare Systems

In clinical settings, culinary medicine offers a shift from prescriptive counseling toward experiential interventions. Teaching kitchens and culinary programs can enhance patient engagement, improve adherence, and support the management of chronic diseases through lifestyle modification [9-11].

Community and Public Health

At the population level, culinary medicine programs can improve food literacy, empower individuals to prepare healthier meals, and strengthen community resilience. These interventions may be particularly impactful among children and families, where early exposure to cooking skills can shape lifelong behaviors [9-11].

Collectively, these applications position culinary medicine as a scalable public health strategy capable of addressing both structural and behavioral determinants of diet-related disease across diverse populations [9-11].

OPERATIONAL AND CLINICAL IMPLICATIONS OF THE FRAMEWORK

Beyond its conceptual contribution, the proposed framework provides a practical structure for the design and implementation of culinary medicine interventions across diverse settings. In clinical practice, this model supports the transition from traditional counseling approaches toward structured skill-based interventions that can be integrated into chronic disease management programs [10,12,18,22]. For example, patients with diabetes or cardiovascular disease may benefit form culinary medicine interventions that combine medical nutrition therapy with hands on cooking education, thereby improving adherence to dietary recommendations and enhancing self-management capacity [10,12,18,22].

At the programmatic level, the framework allows for the development of standardized yet adaptable intervention models thar can be tailored to different populations. This includes the design of teaching kitchen curricula, community based culinary programs, and interdisciplinary training model for healthcare and culinary professionals [22,26-28]. Importantly, by aligning intervention components with COM-B constructs, the framework offers a clear mechanism for targeting specific behavioral barriers, enabling more precise and effective intervention design.

Form a public health perspective, the scalability of culinary medicine interventions represents a significant advantage. Programs can be implemented across

healthcare systems, educational institutions and community organizations, creating a multi-level approach to dietary behavior change [22,26-28]. This integrated strategy is particularly relevant in dietary patterns. By addressing these determinants simultaneously, the framework has the potential to produce more sustainable and population- level health improvements [10,18,21,22].

NOVELTY AND CONTRIBUTION TO THE LITERATURE

This study contributes to the growing field of culinary medicine by introducing one of the first conceptual frameworks specifically tailored to the Caribbean context, a region where such models remain underexplored despite a disproportionately high burden of diet-related chronic disease [5,10,21]. While culinary medicine programs have been established in North America and Europe, limited research has examined their adaptation to Caribbean populations, where cultural, environmental, and socioeconomic determinants of dietary behavior differ substantially [5,10,21].

By integrating behavioral science, cultural context, and culinary practice, the Puerto Rico Culinary Medicine Framework offers a regionally relevant model capable of informing future research, program development, and public health policy. To our knowledge, this represents the first conceptual framework for culinary medicine in the Caribbean and the first to explicitly integrate the COM-B behavioral model within a culinary medicine paradigm to operationalize dietary behavior change in the region.

This framework contributes to the conceptual advancement of culinary medicine by providing a structured, theory-driven model that bridges the gap between knowledge translation and real-world behavioral implementation in culturally diverse settings, positioning culinary medicine as a scalable strategy for public health intervention.

Limitations

Several limitations should be considered. First, this study is conceptual in nature and does not include empirical data to validate the proposed framework. As such, the effectiveness of the model in producing measurable health outcomes remains to be tested.

Second, although the framework is grounded in existing literature, the integration of multiple perspectives may introduce variability in how interventions are designed and implemented across different settings.

Third, the contextual adaptation to Puerto Rico, while a strength, may limit direct generalizability to other populations without further cultural modification.

Future research should focus on empirical validation of the framework through intervention studies, including evaluation of clinical outcomes (e.g., glycemic control, blood pressure), behavioral outcomes (e.g., cooking frequency, dietary adherence), and psychosocial outcomes (e.g., self-efficacy, food-related attitudes). Additionally, the absence of longitudinal or intervention-based validation limits the ability to establish causal relationships between the framework and health outcomes.

Conclusion

Culinary medicine represents a transformative and transdisciplinary approach to addressing diet-related chronic diseases by integrating medical science, nutrition, psychology, and culinary arts into a unified, behavior centered model [5,9,10,12,21]. The Puerto Rico Culinary Medicine Framework advances this field by providing a structured, culturally grounded pathway that connects scientific knowledge with practical dietary behavior and real-world application. By positioning culinary arts as an operational bridge and integrating behavioral science through the COM-B model and psychonutition, this framework moves beyond traditional education based intervisitations toward a more comprehensive and experiential approach to health promotion [5,9,10,12,21].

Importantly, this study represents one of the first conceptual frameworks for culinary medicine in Puerto Rico and the Caribbean, addressing a critical gap in region specific public health strategies. Its implications extend across academic, healthcare, and community settings, positioning culinary medicine as a scalable approach to improving dietary behavior and reducing development of culturally tailored interventions to strengthen its impact across the Puerto Rico and Caribbean population.

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