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Abstracts
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Please note there are gaps in the abstract numbering. There are no missing abstracts.

P2 CREATING A CULINARY MEDICINE EXPERIENCE FOR DIETETICS STUDENTS DURING COVID

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PURPOSE: A peer-education, cross-course project was designed to engage students in a culinary medicine simulation.
METHODS: COVID restrictions prohibited conducting a lab-based quantity food production course. An innovative pilot project was designed for students concurrently enrolled in quantity food preparation and medical nutrition therapy (MNT). Three-member teams planned, prepared, and served a medically tailored meal for patients with renal disease, hypertension, or low fodmap for irritable bowel syndrome, respectively. Graduate students in advanced food service management served as consultants to the undergraduate teams, overseeing menu and recipe selection/testing. These students served as ''dietitians'' during the culinary medicine education session. Second year graduate students served as ''patients''. The more experienced students provided peer-education for the two junior groups. All culinary medicine sessions were shared via zoom, allowing all students to learn about each of the 3 meals and respective nutrition education. Qualitative assessment of learning outcomes was collected and analyzed from a student survey.
RESULTS: Data was collected from 9 undergraduate and 4 graduate students. All students reported enhanced learning in medical nutrition therapy and culinary nutrition. Undergraduates applied culinary skills to create medically tailored meals. Finding and testing recipes and creating appealing and nutritionally appropriate menus was challenging. Students acquired empathy and deeper understanding of the complexities patients face when trying to adhere to restrictive diets. Graduate students integrated classroom knowledge and field experience when applying MNT as the ''patient'' or ''dietitian''. Peer education was a positive learning experience.
CONCLUSION: To comply with COVID restrictions, a quantity cooking course was converted into a small-scale teaching kitchen. Dietetic students applied management and clinical skills in culinary medicine in a patient simulation project. This culinary medicine project can be adapted for a volume cooking experience, as well as potentially serving the broader community through a culinary medicine outreach program.

P3 THE TEACHING LANDSCAPE IN CANADA AND THE UNITED STATES: A SCOPING REVIEW

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PURPOSE: The role of diet and nutrition in the prevention and management of disease is concretely established across all population levels. While many programs exist to enhance the nutrition literacy of participants, there may be an opportunity to promote programs who seek to translate nutritional knowledge on a practical level with the use of teaching kitchens. For this review, teaching kitchens were defined as those that provide hands-on culinary instruction with concurrent education in other domains intended to promote health. The breadth of research on the use of such programs has not been well documented; this scoping review was undertaken to reduce this gap. The objective of this project was to describe the literature on the use of teaching kitchens in Canada and the United States.
METHODS: A scoping review (Arksey and O'Malley framework) of peer-reviewed and grey literature was conducted to explore the use of experiential culinary programs within Canada and the United States.
RESULTS: 1862 articles were retrieved, with 343 studies meeting criteria for inclusion. Data is currently being extracted including location, funding structure, population served, qualifications of those providing intervention, program duration, evaluation method, and process outcomes. Descriptive statistics will be used to interpret and examine data.
CONCLUSION: Preliminary findings suggest that programs combining nutrition education with hands-on, culinary components are being utilized in Canada and the United States in a variety of contexts. Improvements in perceived nutrition and culinary knowledge, food literacy and security, and in the management of a variety of health conditions across multiple demographic groups have been documented in the literature. These findings may assist in guiding future initiatives to actively map teaching kitchen resources in Canada and provide a useful tool for collaboration and advancement within this field.

P4 PLANTING SEEDS OF LIFESTYLE MEDICINE STARTING WITH THYSELF

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PURPOSE: Do ''how to'' culinary medicine demonstrations in a Lifestyle Medicine Implementation CME, improve personal behavior changes amongst providers in a large multi-specialty care medical group by improving adherence to the Mediterranean dietary pattern?
METHODS: 6 weekly 1h virtual sessions for ''how to'' culinary medicine was taught by a culinary medicine physician within our multi-specialty group. The week topics were: 1: The Intro to Culinary Medicine focused on the role of healthcare providers as trusted messengers. 2: Vegetables, fruit and fats. 3: Whole grains demonstrating nutritional label reading tips, overnight oats and bulgur wheat. 4: Plant-forward approaches to proteins and introducing the Menus of Change 'Protein Flip'. 5: Intro to Menus of Change 'Dessert Flip'. 6: The final week a panel of multi-specialty experts answered questions related to evidenced-based culinary medicine approaches. A shopping bag with pantry staple items used throughout the 6 weeks was provided along with cutting boards. Participants were encouraged to cook along or follow the recipe and give feedback.
RESULTS: Health Risk Assessment Data was collected from 145 health professionals. This was self-reported by participants pre-

and post CME series. Results show that the most significant personal behavior change was in increasing the number of servings of fruits and vegetables/day. Only 31.6% were consuming the recommended 5 servings of fruits and vegetables per day. By the end of the CME, almost 50% of participants (47.27%) were consuming 5+ servings daily.
CONCLUSION: Nutrition was not taught in medical school for most practicing physicians. Virtual ''how to'' CME is an effective and simple way to improve the tools physicians have to engage with their patients related to risk factors that lead to increased morbidity and mortality. Healthcare systems around the country need to focus on ''how to'' aspects of nutrition education.

P5 REVIVING EMBODIED FOOD CULTURES FOR A VISCERAL AGROECOLOGY – THE CASE OF THE GRANVILLE COMMUNITY KITCHEN (GCK) IN LONDON

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One of agroecology's ten core interdependent principles is ''culture and food traditions''; however, a lack of understanding of how these intersect with the field of agroecology is a re-surfacing systemic concern (Morgan & Trubek, 2020). Contemporary food cultures are complex, diverse and ever-changing as they evolve in in relation to globalisation and migration patterns. The challenge therefore lies in conceptualising food culture as being an inherently agroecological affair that is crucial for building localised regenerative food systems. A point of entry into this research via visceral methods, which are also under-researched in agroecology, presents a promising angle to uncover embodied knowledge around food culture. In the context of the UK, where over 13.5% of households are currently reported to be experiencing moderate to severe food insecurity (Barber, 2022), an intriguing phenomenon involving one particular type of social eating space – community kitchens – is increasingly visible. This research looks at a case study in London and examines how it serves as conduit for knowledge-making around food culture at the crossroads of a crisis-stricken, historically imperial nation.

P6 WITHDRAWN

P7 COMPARABLE EFFICACY OF A VIRTUAL CULINARY MEDICINE ELECTIVE FOR MEDICAL STUDENTS

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Cooking up Health (CUH) elective, in partnership with Common Threads, was created in response to the lack of adequate education within medical schools surrounding clinical nutrition and cooking. In response to the undergraduate medical education request for more virtual opportunities the original CUH curriculum was transitioned from a semester-long course to a 2-week elective, which was held virtually due to the COVID-19 pandemic. Students completed daily asynchronous learning activities including readings, reflections, videos, and quizzes, and met with faculty for discussion and four virtual cook-together sessions.
Twenty-two students completed the virtual CUH elective: cohort 1 (N = 9; Level: M1; 5 Female, 4 Male), cohort 2 (N = 6; Level: M3; 4F, 3M), and cohort 3 (N = 8; Level: M2; 6F, 2M). To examine whether students showed changes over the course of the elective in their preliminary efficacy outcomes as a function of participating in the elective, we conducted repeated measures analysis of variance (ANOVA) models on the outcome measures with assessment (pre vs. post elective) as a within-subject factor and cohort as a between-subject factor. Descriptive summary statistics were conducted on the questions on engagement with the virtual elective format. In particular, we focused on the confidence in medical student's ability to counsel patients prior to the program and their cooking confidence.
All three groups showed significant increases in their confidence in their cooking skills from pre course to post course ($p < .05$), significant increases in their confidence in basic nutrition counseling from pre course to post course (ps <.01), and significant increases in their confidence in obesity counseling from pre course to post-course (ps <.001).
Culinary medicine training can successfully be translated from in-person to virtual format. Students reported being able to stay engaged in the course, even with virtual delivery.

P10 A VIRTUAL TEACHING KITCHEN PROGRAM, SURVIVORS OVERCOMING AND ACHIEVING RESILIENCY (SOAR), TO IMPROVE EATING BEHAVIORS OF BREAST CANCER SURVIVORS

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PURPOSE: Excess body weight is common among breast cancer survivors and associated with adverse health consequences. Mindful eating relates to internal awareness of experience to make healthier food choices and reduce emotional eating. Survivors Overcoming and Achieving Resiliency (SOAR) is a 9-week virtual teaching kitchen program incorporating art, meditation, yoga, and mindfulness, with weekly cooking classes. The objective of this study was to examine changes in self-reported eating habits and facets of eating mindfully in response to participating in SOAR.
METHODS: Participants (n = 35) were breast cancer survivors enrolled in SOAR who completed the Mindful Eating Questionnaire (MEQ) and Food Attitudes and Behaviors (FAB) survey pre- and post-intervention. Linear regression analyses examined relationships between aspects of mindful eating and body mass index (BMI). Linear Mixed Models examined longitudinal outcomes and compared women with normal weight (BMI $<25 kg/m^2$) vs overweight/obesity (BMI > or = $25 kg/m^2$).
RESULTS: At baseline, BMI related positively to emotional eating (e.g., when I'm sad I eat to feel better) ($\Delta R2 = .18$, $p = .023$), and negatively toward a mindful eating total score ($\Delta R2 = .12$, $p = .069$). Following SOAR participation, participants improved in mindful emotional eating scores ($F = 4.5$, .045), with

no differences over time between women of normal weight vs overweight/obese. However, compared with overweight/obese, women with normal weight reported greater changes in their eating habits ($F=6.4$, $p=.018$), increased mindful awareness in relation to eating (e.g., I taste every bite of food that I eat; $F=4.7$, $p=.039$) and a trend towards increased noticing external cues related to eating (e.g., I recognize when I'm eating and not hungry; $F=3.7$, $p=.068$).
CONCLUSION: SOAR may increase the understanding of strategies to improve eating behaviors in breast cancer survivors of normal weight. However, enhanced interventions are needed for breast cancer survivors with overweight/obesity.

P13 PERSONALIZED COACHING IN A CULINARY AND NUTRITION PILOT INTERVENTION: THE SUKALMENA-INAGE STUDY

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INTRODUCTION: Personalized coaching (PC) has been signaled as an effective tool in dietary interventions. Although PC is used as part of nutritional interventions, this approach has been hardly used in culinary-nutritional interventions. Furthermore, limited information is provided about how the PC procedure has been conducted in these studies.
PURPOSE: To design a protocol to conduct a PC as part of a culinary-nutritional intervention.
METHODS: One-month culinary and nutritional intervention was conducted among overweight and obese participants. During the intervention, PC was delivered through phone calls by nutrition educators. In the second week of the intervention, every participant received one phone session, lasting between 10 and 30 minutes. A protocol for PC was designed where questions were organized into four frames, each one with a specific aim. First, to set a personalized goal in relation to nutrition or culinary change. Second, to identify barriers and solutions to increase nutrition knowledge. Third, to identify barriers and to provide resources needed to improve culinary skills. And fourth, to provide additional support to solve specific problems related to the personal situation of each participant.
RESULTS: A total of 31 volunteers received the PC. Sixteen participants detected at least one nutritional barrier, and 13 found a solution to face the barrier. Twenty-three participants reported barriers related to cook at home, and 22 were able to face difficulties after the PC session. Positive feedback about the usefulness of the phone call was reported, with a mean punctuation of 9.7 points out of 10.
CONCLUSION: Information obtained from the phone calls showed that culinary barriers were more frequent compared to nutritional barriers. PC in culinary-nutritional interventions might be a significant support for participants to help them to improve the adherence to healthy eating and cooking.

P14 APPLICATION OF THE FOOD IS MEDICINE MAP

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PURPOSE: The Food is Medicine Map was developed to congregate Food is Medicine (FIM) programs into one unified platform. The FIM map can help uncover regional ''hotspots'' that could lead to new collaborations, insights, and research involving food as it relates to human health and the health of the planet. This dynamic global map has the potential to serve as a powerful public resource - not only for the FIM community- but, importantly, for those programs that it seeks to reach.
METHODS: The FIM map was catalyzed by the Teaching Kitchen Collaborative and operated in partnership with Geisinger, God's Love We Deliver, Gretchen Swanson Center for Nutrition, and Wholesome Wave who collectively represent 5 program types: Teaching Kitchens (TK), Medically Tailored Meals, Fresh Food Farmacies, Produce Prescriptions and Nutrition Incentives. Each organization helps act as a ''spokesperson'' for their domain type: reviewing applications, verifying programs and soliciting members of their respective domains to register on the map.
RESULTS: The map is intended to be highly visual - each pindrop shows the physical location while differing colors identify domain types (TK, produce prescription, etc.). Pindrops expand to provide users with contact information and photographs. A location search feature helps users identify programs within specified areas. Since the initial launch in November 2020 to TK programs, the map now shows 138 verified TK organizations in 10 countries.
CONCLUSION: Through this cross collaborative FIM map, we hope to increase community awareness, inter-organizational collaborations and partnerships for programs with individuals, providers and others seeking to improve health through food. In addition, these collaborations could launch more robust scientific inquiry into how FIM programs (1) prevent, treat and manage disease; (2) reduce the overall costs of healthcare; (3) improve the quality of life for all; and (4) enhance our food systems and protect our shared planet.

P15 TEACHING KITCHENS AS A RESOURCE FOR UNDERGRADUATE EDUCATION

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PURPOSE: Food and cooking provide a powerful platform to make challenging concepts across fields accessible to students from diverse backgrounds, while training them to be critical thinkers, activists, and scholars positioned to solve complex social challenges including health equity, climate change, science literacy, and social justice. Teaching kitchens have potential to integrate with academic undergraduate coursework to enhance student engagement. Previous work also shows taste tests increase student engagement in science, further motivating the use of food to engage students in learning science. We aim to build upon this foundation by using teaching kitchens to engage undergraduate students in science and interdisciplinary coursework at UCLA.
METHODS: In the 2021-2022 academic year, we introduced the UCLA Teaching Kitchen into two interdisciplinary courses: 1) PhySci 7 'Science & Food: The Physical and Molecular Origins of

What We Eat', with the goal to develop students' critical thinking in science; and 2) Food Studies 181 'Soil, Land, and Transforming Foodways', which engages students in critical discussions of systemic disparities through food. To begin to assess the potential value of the Teaching Kitchen in course curriculum, we used pre-post surveys (PhySci 7) and informal qualitative observations (Food Studies 181).
RESULTS: Preliminary results indicate hands-on experiments and live demonstrations enhance student learning, enthusiasm, and engagement in both courses. Findings will help refine future studies to ultimately establish teaching kitchens as a resource for undergraduate curriculum.
CONCLUSION: This work demonstrates how teaching kitchens can provide a powerful platform to engage undergraduate students in experiential learning and interdisciplinary discourse, ultimately preparing them to tackle food-related research questions and grand societal challenges. Interdisciplinary learning around foodway practices and food systems facilitates understanding toward what a more equitable society could look like across fields and discipline.

P16 BCP NUTRITIOUS: INCREASING COOKING CONFIDENCE, FAMILY MEALTIME PARTICIPATION AND HEALTHY EATING HABITS IN PEDIATRIC PRIMARY CARE

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PURPOSE: Boston Community Pediatrics (BCP) is the first nonprofit, pediatric private practice in Massachusetts. BCP's intersectional model includes behavioral health as well as pediatric wellness and care navigation. Wellness programming focuses on equity and includes healthy after school options. BCP has been hosting virtual cooking classes for patients called BCP Nutritious, where all ingredients are delivered to families at no cost. In this study, we evaluated patients' experiences attending the virtual cooking classes; the efficacy of the program in increasing cooking confidence, impacting family mealtime participation and improving healthy eating habits.
METHODS: Following 10 virtual classes between June 2022 and August 2022, participants completed an online survey. Quantitative data were descriptively analyzed. Each Likert-scale question was individually analyzed for deeper insights into specific attributes.
RESULTS: 56 patients enrolled in 10 cooking classes. Of patients enrolled, 61% are Hispanic/Latinx and 45% are Black or African American. Participant age ranged from 5-16 years old. There were 27 participant responses to our survey. Cooking self-efficacy was moderate, as 53% rated their cooking skills as great. BCP Nutritious encouraged family mealtime, as 89% reported the program or probably promotes cooking as a family. Healthy eating habits were enforced, as 78% of participants reported they are willing to try new foods due to attending the program. The most well-liked activities included trying new recipes (70%), improving cooking skills (56%) and cooking independently (48%). Feedback included to include more kitchen skills, food safety and nutrition concepts as well as diversifying recipes.
CONCLUSION: BCP Nutritious is an innovative program that builds cooking confidence, promotes family mealtime participation, and increases family capacity to implement healthy eating habits. Virtual classes and the ingredient distribution model removes barriers for families and allows for equitable access across our patient population. Virtual sessions allow families to interact together in an empowering space.

P17 A RETROSPECTIVE EVALUATION OF A TEACHING KITCHEN CULINARY MEDICINE SESSION IN MEDICAL EDUCATION

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PURPOSE: With rising obesity, diabetes and food insecurity, nutrition and culinary education for healthcare professionals is increasingly recognized as imperative to facilitate effective chronic disease prevention and management. The Geisel School of Medicine at Dartmouth offers an integrated nutrition curriculum with culinary medicine objectives. Beyond didactics, a two-hour teaching kitchen session was required in a first-year GI, Metabolism and Nutrition course, aiming to provide students with evidence-based nutrition recommendations, the link between food choices and health, basic food/kitchen safety, culinary skills/techniques, and behavior change strategies for self-care and patient counseling.
METHODS: Retrospective analysis of programmatic data collected for course participation included de-identified; 1) session attendance; 2) skills assessment evaluating basic culinary competencies; and 3) class evaluation survey assessing improved confidence in culinary skills, nutrition competency, and self-care tools. Participant satisfaction and qualitative feedback were assessed.
RESULTS: 87 of 89 students (97.8%) attended the session, of which 100% passed the skills assessment. 84 of 89 students (94.4%) completed the class evaluation survey. Likert Score (range 1-5, not at all - extremely) was 4.45 for improved understanding of nutrition recommendations, 4.5 for understanding link between food choices, cooking and health, 4.4 for confidence in cooking from scratch, 4.35 for confidence in culinary skills/techniques, and 4.4 for self-care tools gained. Overall class rating was 4.65 (range 1-5, poor - excellent). Qualitative feedback was overwhelmingly positive.
CONCLUSION: The teaching kitchen session was well received and led to positive changes in self-reported nutrition knowledge, culinary skills, and confidence in guiding patients. Students were engaged and reported gaining wellness strategies. Results support the positive impact of a teaching kitchen model in building on core curriculum and providing medical students with a foundation of culinary and nutrition counseling skills for supporting patients in lifestyle change.

P18 IMPLEMENTING NUTRITION AND FOOD-RESEARCH MANAGEMENT EDUCATION FOR FIRST-YEAR MEDICAL STUDENTS: A PROCESS ANALYSIS

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PURPOSE: Traditional medical education falls short of nutrition training for physicians in most medical education programs.

Typical culinary medicine programs provide training to increase knowledge of disease and diet but do little to address the need for personal wellness of physicians in training. This analysis will examine the process used in the development of lessons and group cooking sessions for first year medical students in Huntington's Kitchen, a traditional teaching kitchen.
METHODS: A non-traditional approach to improve lifestyle during the initial years of medical training was implemented for first year medical students by faculty and dietetic interns in the Department of Dietetics at Marshall University in fall 2021. All materials were developed by graduate-level dietetic interns who were overseen by a registered dietitian nutritionist preceptor. Lessons focused on healthful eating practices and food-resource management with strategies including cupboard cooking, utilizing leftovers, and batch cooking. A cardiology faculty from the School of Medicine provided research-based information as an introduction to the session. A brief direct education lesson was provided, followed by four cooking cohorts to demonstrate information provided in the nutrition education lessons.
RESULTS: A total of 80 medical students participated in the session, along with six dietetic interns. Special attention was given to food allergies and cultural preferences when developing lessons and recipes. A communal meal was shared among dietetic interns, medical students, and faculty afterward, along with discussion of each recipe, nutrients in the prepared foods, and which specific food resource management technique employed.
CONCLUSION: Preliminary data showed positive feedback of the experience among both medical students and dietetic interns.

P19 EFFECTIVENESS OF ADDING ENVIRONMENTAL SCIENCE INTERLUDES TO SHORT COOKING TUTORIAL VIDEOS TO ENCOURAGE SUSTAINABLE AND HEALTHY EATING

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PURPOSE: While shifts in diet are generally recognized as necessary for achieving health and environmental sustainability targets, more information is needed on how to nudge dietary choices. The UCLA Teaching Kitchen, in collaboration with the UCLA Center for Human and Planetary Health, has created a series of instructional cooking videos demonstrating the preparation of simple meals with the intention of encouraging healthy, environmentally sustainable eating among students.
METHODS: The three-to-four-minute videos feature recipes such as southwestern black bean bowls and buffalo chickpea tacos, with sustainability-focused ''interludes'' that detail the respective recipe's environmental benefits and footprint. Two pilots were offered during food-related courses in the 2021-22 academic year. Each pilot had a control group whose class was run with the addition of cooking videos without environmental information, and an experimental group that received 4 cooking modules including environmental interludes. Students completed a survey before and after participating in their respective course reporting dietary habits and shifts in knowledge/perspectives on food sustainability and their confidence/intentions in incorporating healthy, sustainable food into their diets.
RESULTS: Results show that the intervention group exhibited a higher level of agreement than the control group with the statement ''I learned something valuable,'' and were more likely to try the recipe in both trials.
CONCLUSIONS: Results indicate that education-enriched videos supported students' knowledge and sense of agency regarding environmentally sustainable and nutritional eating. Food sustainability-oriented enhancement of cooking videos may positively influence healthy, environmentally-friendly eating habits and attitudes.

P20 FOOD CHOICE ARCHITECTURE: PROMOTING HEALTHY DECISION MAKING

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PURPOSE: Choice architecture or nudging interventions are promising methods to help people make healthier food choices and improve population health. One such intervention is to offer healthier options as the default.
METHODS: In this study, efficacy of default nudging intervention was tested in a university canteen setting by offering a standard meal of the day with additionally either i) salad or ii) fries as the side dish. To nudge consumers, three conditions were created: 1. salad presented in sight (default), and fries presented out of sight; 2. fries in sight, salad out of sight and 3. both options hidden for the consumers hence, they were pro-actively asked to choose between salad or fries as a side. Research consisted of two experimental conditions and a control condition. Each condition was executed for four days. A randomized sequence of conditions was used: 123321332112 (each number representing a different condition; 1 ''salad default,'' 2 ''fries default,'' 3 ''active choice condition''). Purchase data were used to register food choice.
RESULTS: When salad was presented as the default side dish, it was more likely that customers would choose salad (31%), compared to conditions when fries were presented as the default (7%) or compared to pro-active choice (11%). However, having salad as the default option did not make participants choose the healthier option more frequently vs. the less healthy one, i.e., 69% still chose fries, even though salad was the default option.
CONCLUSION: Default nudging can help to shift the food choice in a healthier direction, but would need to be complimented by other choice architecture interventions to achieve that healthier options are chosen more frequently than unhealthier ones. As such, we propose that making the healthy option equally delicious should be applied as a strategy to compete with unhealthy, yet delicious alternatives.

P21 THE RELATION BETWEEN BMI AND TASTE PREFERENCE

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PURPOSE: Overconsumption of unhealthy, ultra-processed food is perceived as one of the main causes of obesity. Taste preference is an underlying factor that affects food intake. As of now, the effect of taste preferences on body mass index (BMI) is unclear. Therefore, the objective of this study was to assess the relation between taste preferences and BMI by using the mouthfeel model. The mouthfeel model presents a novel way to classify taste, Three main categories of mouthfeel are distinguished: coating, contracting and drying. Each dimension can be scaled in intensity, which leads to a three-dimensional model with eight flavor styles: the flavor styles cube (FSC).
METHODS: In total, 35 volunteers (12 male, aged 36.4 ± 16.6 years) with a BMI between 18.1 and 31.4 ($23.1 \pm 3.0\,kg/m^2$) entered the study. Participants rated the taste profile and desire to eat of eight products differing in i) coating, ii) contracting, iii) drying and iv) intensity according to the FSC.
RESULTS: The findings indicate that nearly half (48%) of the observed variation in BMI was explained by taste preference. BMI had a significant effect on the drying dimension of the FSC, $b = 0.01$, $t(58) = 2.08$, $p = .04$, Moreover, BMI tended to be correlated with contracting dimensions of the mouth feel model, $b = -.11$, $t(58) = 1.72$, suggesting that participants with an elevated BMI scored lower on the contracting dimension compared to healthy participants.
CONCLUSION: Better understanding of the role of taste preference on food choice should be an integral part of obesity research. Incorporating taste preference as a tool could be a promising strategy in future studies directed at reformulating food products for specific target populations, e.g. by replacing undesirable ingredients with healthy substitutes, while paying attention for maintaining the desired taste profile of the food product.

P22 THE TASTE CHECK: A NEW TOOL TO MATCH FOOD TO PREFERENCE

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PURPOSE: Food-based dietary guidelines (FBDGs) tell consumers what (not) to eat. This type of advice focuses on the health aspect of eating but fails to include eating as a social event by ignoring convenience, attractiveness, and consumer preferences. Moreover, FBDGs do not provide advice on how to make food taste good. As a result, people have difficulty adhering to diets. Tailoring dietary patterns to social environments and individual preferences could increase dietary adherence.
METHODS: Ingredients and cooking methods can be categorized according to the mouthfeel model that was introduced previously, by Klosse. As a practical tool, the Taste Check allows matching taste profiles of dishes with personal preferences.
APPLICATIONS: Potential applications of the Taste Check are threefold: 1). To help people in understanding their personal food preferences. 2). To contribute to durable, personalized nutrition and lifestyle treatments that have the potential to reduce the incidence of chronic diseases. Healthcare organizations are steadily starting to choose lifestyle treatments over or alongside drugs to treat disease. Examples of such initiatives include Voeding Leeft (Netherlands), and FoodSmart (United States). Adding taste could increase compliance. 3). To improve the quality of life of consumers who experience changes in tasting and/or smelling capacities. While most research merely focuses on gustatory changes, our model lets people interpret flavor by means of mouthfeel instead.
CONCLUSION: We propose that personalization should match an individual's configuration, both health- and flavor-wise. Dietary recommendations however, prescribed by current initiatives are not tailored to individual flavor preferences. As a result, patients frequently abandon their diets and lifestyle plans for similar reasons as mentioned above. The present model offers opportunities for consumers, patients, and lifestyle medicine companies as it allows further personalization of diets, beyond mere health parameters, according to flavor preferences, hereby prolonging the compliance to and durability of such diets.

P24 TEEN VIRTUAL HANDS-ON COOKING WITH CHEFS SERIES: EMPOWERING TEENS, ONE MEAL AT A TIME

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PURPOSE: An established teen-cooking program in South San Diego County was modified to become a virtual hands-on series in response to COVID-19 pandemic. Participants were recruited from schools with cooking clubs and were provided ingredients. Each session included lessons in expanding culinary literacy and skills as well as plant-forward recipes.
METHODS: Participants included adolescents from schools reporting high rates of obesity and low socioeconomic status. The program included 8 fortnightly videos with lessons and recipes prepared at home with a family member or their cooking club via virtual platforms. An online survey utilizing Multiple Choice, Likert-type scales and open-ended questions was collected prior to the intervention and again at the completion of the program. The questions were divided into categories designed to assess the following categories relating to nutrition and healthy cooking: Knowledge, Behavior, Skills, and Attitudes. Quantitative data analysis included descriptive statistics to summarize the data and paired-sample t-tests.
RESULTS: After completion of the series, 100% of surveyed participants' score improved in one or more category, with significant improvement in Skills (72.9 +/- 11.1 vs 78.6 +/- 10.6, $p = 0.012$) and Attitudes (89.1 +/- 13.4 vs 95.2 +/- 7.4, $p = 0.096$). On average, 11.4 out of 12 total recipes were completed. 92% of participants would sign up for a second series, and 97% would recommend it to others. 50% are cooking more compared to prior, 58% are looking at nutrition labels 'often' or 'always', and 95% learned something new.
CONCLUSION: These pilot data show an innovative and virtual culinary program for teenagers positively increases nutrition and culinary-related outcomes. This suggests an effective method for cultivating a lifelong skillset and healthy relationship with food enabling positive modification to current behaviors and potentially facilitating future health benefits for themselves and their families.

P25 DINNER WITH YOUR DOCTOR, 6-WEEK 'FOOD AS MEDICINE' PILOT IN A FAMILY PRACTICE POP-UP TEACHING KITCHEN

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PURPOSE: Pilot a clinical, place-based ''food as medicine'' intervention. The intervention differs from other culinary medicine and nutrition training programs by embedding the cooking classes into a family medicine clinic.
OBJECTIVES: 1) To investigate whether a six-week cooking & food literacy program administered through a family medicine office can improve biometrics over a one-year on a patient sample cohort. 2) To identify whether changes in food literacy are maintained. 3) To identify whether dietary changes occur as a result of a cooking & food literacy program.
METHODS: 1-year, Prospective Cohort; subjects from Munson Family Practice patient pool. Utilized self-reported pre- and post-study surveys with validated questions pertaining to dietary habits Clinical data was collected before the study began, at the end of the 6-week course, and 1 year after the course (HbA1c, BMI, lipid panel, blood pressure, other labs deemed appropriate by PCP) Participants incentivized with kitchen equipment ($200 benefit).
RESULTS: (n = 6) 2 participants increased their use of fresh vegetables when cooking; 4 participants increased their use of whole fruits in meals; 2 participants felt more motivated to eat vegetables and fruit daily; 2 participants took more responsibility for food shopping; 4 participants recalled that herbs can be used to add flavor to food, rather than extra fat or salt; 2 participants learned that grazing throughout the day is not a good option for maintaining a healthy weight.
CONCLUSION: This project demonstrates that it is feasible to conduct a cooking program at a residency site. Chart review noted modest improvements in participant blood pressure at 1-year mark. A structured cooking program held at a Family Medicine residency has implications for improving patient wellbeing, through the development of home culinary skills, healthy lifestyle changes, using food as medicine.

P26 POP-UP KITCHEN CARTS: SMALL INVESTMENT, BIG IMPACT

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PURPOSE: For sites that do not have teaching kitchens, a mobile kitchen cart can be a good investment to test teaching locations, lessons, curricula and methods. By eliminating the financial barrier, a school, hospital or other non-profit organization can immediately begin teaching cooking classes without incurring significant costs.
METHODS: A fully stocked kitchen cart can be assembled for approximately $1,500. It is fully mobile and can accommodate cooking classes for 12 students. Classes can be taught at schools, hospitals, clinics, libraries, shelters, group homes, summer camps, etc. The mobile kitchen cart can be stored at a site for on-going classes, or can be transported from site to site. The cart's closed dimensions are 2' deep, 3' wide and 4' tall. The carts are fully customizable, containing equipment and supplies for: food prep (knives, cutting mats, measuring spoons and cups, mixing bowls and utensils); cooking (stove, pot, skillet, utensils); eating (plates, bowls, silverware, cups); cleaning (wash basins, soap, sponge, sanitizer); and other (first aid kit, tasting sticks, hair ties).
RESULTS: Four carts have been deployed at schools in Santa Barbara, CA in the 2021-2022 school year. In this time frame, 120 students took multi-week cooking classes (classes were 7-12 weeks long); 99 cooking classes were taught utilizing the carts. Depending on the frequency of classes, a cart set up for 12 students could be utilized to teach over 160 students per week, assuming 2 classes per day, seven days per week. The cart can pay for itself after five uses ($25 per student x 12 students = $300 for 1 class x 5 classes = $1,500)
CONCLUSION: The initial investment of $1,500 would purchase one cart and all the necessary equipment. Mobile kitchen carts are an affordable way to teach a large number of people hands-on cooking classes.

P27 DEVELOPING KNOWLEDGE, ATTITUDES & PERCEPTIONS TO ADVANCE CULINARY & LIFESTYLE MEDICINE & HEALTH EQUITY THROUGH INTERPROFESSIONAL COLLABORATIVE CARE

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PURPOSE: Immersive cooking experiences provide opportunity to explore the role of income/food cost, food availability, culture, education, religion, and morality on dietary habits and health outcomes through culinary and lifestyle medicine. Interprofessional education and collaborative practice address gaps in health equity and care conversations regarding weight, diet, and exercise to help patients incorporate realistic changes into daily life by emphasizing quality food choices, their preparation, and mindfulness for urge/purpose for eating rather than weight-based metrics.
METHODS: A 3.5-hr interprofessional teaching kitchen session consisting of orientation (Culinary Medicine (CM), Mediterranean/plant-based diet, mindfulness, basic kitchen skills/safety), an immersive cooking activity with case-based patient application, and debriefing discussion was conducted monthly as part of a campus-wide interprofessional curriculum requirement. Assessment included content knowledge and student perceptions of interprofessional collaboration using the Interprofessional Collaborative Competencies Attainment Survey (ICCAS) pre- and post- and summary evaluation using 5-pt Likert scale of learning objectives, immersive cooking experience, and simulated case. A constant, comparative thematic analysis was conducted for open response questions ''What aspects of the learning experience did you find most valuable?'' and ''Please share any other comments.''
RESULTS: 132 students from medical, pharmacy, health professions, public health, and nursing programs participated. Pre-/post-all ICCAS metrics increased. Knowledge mean scores increased 25%. Mean Likert scores (4.4-4.8) indicated students agreed this was an effective learning experience. Qualitative themes (count) were: Valuable/enjoyable experience (52), Collaboration/Teamwork (39), Better understanding CM/Mediterranean Diet (34), Cooking skills/hands on (26), Comparing nutrition facts across recipes (23), Application-patient (17), Supportive environment/facilitators (9), Application-personal (7), Suggested improvements (7), and Communication (6).
CONCLUSION: Interprofessional teaching kitchen activities positively impact students' attitudes and perceptions regarding: dietary practice and culinary skills, weight bias and food insecurity, interprofessional collaboration to provide healthy eating education, and importance of changing provider-patient care conversations from weight-based focus to healthy eating and activity.

P28 SCALING FOOD AS MEDICINE THROUGH TECHNOLOGY: A FEASIBILITY STUDY

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PURPOSE: Food as medicine initiatives, such as medically tailored meals, produce prescriptions, and Teaching Kitchens, are well-supported practices for preventing and managing chronic diseases. However, issues surrounding scalability, access, and inability to evaluate efficacy present major challenges and limit the impact of these initiatives. Research shows that most nutrition programs are only available on a limited basis (i.e., once per week or less), and many people face barriers to participation including time, transportation, and family responsibilities (Palmer, 2020). These barriers contribute to infrequent involvement and limited touch-points, thus preventing the engagement needed to change behavior.
METHODS: To address these issues, a mobile application (app) was created that (1) scales programs by providing resources for at-home use (2) individualize resources to accommodate culinary skill, time, equipment, cultural preferences and food budgets and (3) captures behavior data to both better support patient needs and inform their medical care. Feasibility of the app is being tested across YMCA centers in the northeast.
RESULTS: Early feasibility data (n = 6) suggests acceptability by participants and improved self-reported scores. Five out of six participants finished the eight weeks. Participants improved an average of 10-points on a self-reported wellness scale, and four out of the five completers reported improvements in their cooking confidence. The next cohort is expected to start August 2022.
CONCLUSION: Data from this study will be used to further investigate acceptability among a larger sample size, feasibility within hospitals and the Veterans Affairs (VA), and ultimately measure the impact on longitudinal behavior and associated health outcomes.

P29 INCORPORATING CULTURAL RELEVANCE INTO A TEACHING KITCHEN'S DIETARY GUIDELINES INTERVENTION FOR AFRICAN AMERICAN ADULTS

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PURPOSE: African American (AA) foodways, the intersection of food and culture, are a unique contributor to nutrition choices. The purpose of this study is to capture recommendations for improved cultural relevance of the Dietary Guidelines for Americans (DGA) via a healthy eating intervention for AAs delivered in a teaching kitchen.
METHODS: The Diet Guidelines: 3 Diets (DG3D) study seeks to understand the cultural relevance for AAs of the three dietary patterns outlined in the DGA. Participants (n = 63) were randomized to follow one of the three diet patterns presented in the DGA: Healthy US, Mediterranean, or Vegetarian. A 12-week, group randomized control trial pilot intervention was conducted virtually, by an AA nutrition interventionist, from an on-campus teaching kitchen to teach the DGA. Focus groups (6 total, 2 per dietary pattern) were conducted in person to understand participants' perspectives for tailoring the DGA to ensure cultural relevancy for AAs. Transcripts were analyzed for major themes across each dietary pattern regarding cultural relevance. Suggestions were incorporated into a one-year group randomized controlled trial intervention.
RESULTS: A total of 42 persons (out of 63) participated in the focus groups (16- Healthy US, 17- Mediterranean, 9-Vegetarian). Analysis from the focus groups revealed a consensus across each dietary pattern that DGA dairy recommendations were the most difficult to follow due to lactose intolerance/sensitivity. For improved cultural relevance, participants across each dietary pattern shared a desire to incorporate more plant-based/non-dairy alternative recommendations into the teaching kitchen's curriculum to meet calcium, potassium, vitamin D and protein needs.
CONCLUSION: Cultural factors of AAs' ability to adhere to the DGA include less emphasis on meeting dairy food group recommendations and more emphasis on non-dairy, plant-based alternatives to meet nutrient needs. The results of this study will help inform recipes chosen for the year-long teaching kitchen intervention of DG3D.

O30 THE VIRTUAL EMORY HEALTH KITCHEN COLLABORATIVE HAD SIMILAR HEALTH OUTCOMES AS THE IN-PERSON PROGRAM

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PURPOSE: To compare health behavior outcomes in dietary intake, mindful eating, global health and quality of life, and perceived stress between virtual and in-person delivery of the Emory Healthy Kitchen Collaborative (EHKC).
METHODS: The EHKC is a 12-month worksite wellness program and clinical trial originally designed and delivered in-person (August 2019-August 2020). In response to the COVID-19 pandemic, the program was adapted to a virtual format (April 2021-April 2022). The length and total curriculum hours were kept the same (20 hours over 10 weeks); however, activities occurred weekly instead of bi-weekly. Content was delivered via a flipped classroom model with pre-recorded a-synchronous didactic content and virtual live sessions that included small group, facilitator-led breakout sessions. We compared health behavior self-assessment survey results completed at baseline and at the end of the 10-week course (i.e., 3-months): 1) Starting The Conversation (STC), 2) The Mindful Eating Questionnaire (MEQ), 3) MOS/RAND Health 36-Item Short Form (MOS/RAND SF-36; global health and quality of life), and 4) Perceived Stress Scale (PSS). Virtual program results were compared to the in-person program results using t-tests.
RESULTS: 29 employees, mean age 47.45, 100% female participated in the virtual EHKC versus 38 employees, mean age 48.5, 94.7% female participated in the in-person program. Virtual participants had statistically significant improvements from baseline to 3-month average summary scores in STC (8.03, standard deviation (SD) 2.76 to 5.58, SD 2.47, p-value $p = 0.0001$), MEQ (2.64, SD 0.42 to 2.92, SD 0.39, $p = 0.0001$), MOS/RAND SF-36 (68.22, SD 16.58 to 78.66, SD 15.54, $p = 0.0002$) and PSS (17.03, SD 7.75 to 13.27, SD 7.13, $p = .002$). The results did not significantly differ from the in-person program.
CONCLUSION: The virtually delivered EHKC resulted in similar health behavior outcomes as the in-person EHKC. Our pilot program offers promising potential for virtually delivered teaching kitchen programs.

P31 THEORETICAL FRAMEWORK FOR FOOD AS MEDICINE INTERVENTIONS IN CLINICAL SETTINGS

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PURPOSE: Diet-related chronic diseases account for seven out of the ten leading causes of death in the United States (CDC, 2020). Food as Medicine interventions to enhance food agency can be effective adjuncts to standard medical care to increase healthy behaviors and thereby improve chronic disease management (Curtis, 2012; Eisenberg, 2018). Teaching Kitchens are an innovative setting for this enhanced nutrition care approach (Eisenberg, 2020). As more clinical settings incorporate Food as Medicine interventions, a framework is needed to guide clinical implementation, administration, outcomes tracking, and cost effectiveness analyses.
METHODS/STRATEGIES TO ADDRESS: This paper presents a theoretical framework for optimizing existing clinical services to provide Food as Medicine interventions, track associated improvements in patient outcomes and identify healthcare cost saving/revenue generation that can lead to a net Value on Investment.
CONCLUSION: This framework incorporates Teaching Kitchens into the current Food as Medicine strategies (to teach culinary skills and promote food agency) and describes how these interventions can be used in a clinical setting as adjuncts to clinical care.
RECOMMENDATIONS: While there is published evidence for each modality individually, the literature lacks evidence of the value of an integrated approach. The framework therefore provides a roadmap to both identify best practices and evaluate outcomes that will inform viable financial models.

P32 OPPORTUNITIES FOR ACADEMIC-COMMUNITY TEACHING KITCHEN COLLABORATION IN HEALTH PROFESSIONAL EDUCATION

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PURPOSE: In the development of the Cooking Up Health (CUH) culinary medicine (CM) elective, priority and intention was given to cultivate a rich academic and community-based organization partnership. Engaging future health professionals directly with the communities most impacted by health inequities and access to nourishing food has the potential to accelerate the impact of teaching kitchens: students allowed practical application of CM in communities negatively affected by SDOH would have better skill acquisition, and appreciation for cultural sensitivity and food insecurity; children taught nutrition through the lens of CM would highlight health-nutrition links, and expose them to health professional students as a career; culinary medicine for community members might stimulate their exploration of nutrition from their doctor/reputable sources; academic-community research collaborations have the potential to lead to novel community health initiatives, and develop critical data for policy advocacy; community organizations serve as a trusted bridge to engage community members, and ensure their lived experience is honored.
METHODS: Osher Center for Integrative Health at Northwestern University and nonprofit organization Common Threads received a partnership development seed grant from Alliance for Research in Chicagoland Communities in 2016. From the outset the team worked collaboratively to co-create a curriculum, adapt teachings for different audiences, led train-the-trainer workshops, fundraise, apply for grants, and co-author publications, posters and abstracts. Principles utilized include: shared decision-making, transparency, consistent points-of-contact, clear delineation of responsibilities, mutual respect and consistent communication.
RESULTS: CUH received the 2018 Community-Engaged Research Partnership Award in recognition of exemplary teamwork. Shared vision/mission has led to expansion of CUH with team oversight at multiple external sites.
CONCLUSION: Leveraging the knowledge, wisdom, and experience in community organizations and academic institutions can provide solutions for pressing issues. Teaching Kitchens operating in community or academic settings may enrich their offerings and impact through meaningful, thoughtful partnership.

P33 VIRTUAL VERSUS IN-PERSON ATTENDANCE IN A TEACHING KITCHEN DIETARY GUIDELINES INTERVENTION FOR AFRICAN AMERICAN ADULTS

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PURPOSE: Persisting COVID-19 restrictions have required interventions to make decisions to deliver interventions online or in-person. This study compared virtual and in-person attendance of a Teaching Kitchens dietary intervention for African Americans.
METHODS: The Diet Guidelines: 3 Diets (DG3D) study seeks to understand the cultural relevance of the three dietary patterns (i.e., Healthy US, Mediterranean, Vegetarian) outlined in the Dietary Guidelines for Americans (DGA) in African Americans. Intervention sessions for each dietary pattern are held once per week in the teaching kitchen. A 12-week, group randomized pilot intervention was conducted virtually from an on-campus teaching kitchen to teach the DGA (virtual group). Then, focus groups (6 total, 2 per dietary pattern) were conducted with participants to learn their perspectives on future delivery methods. Suggestions were incorporated into a one-year group randomized controlled trial in-person intervention (in-person group). Attendance during the first eight weeks were compared using dependent t-tests between the virtual and in-person interventions.
RESULTS: The virtual intervention enrolled 63 participants (83% female, average age 48.0 ± 10.6 years), and the in-person

intervention enrolled 68 participants (90% female, average age 49.1 ± 11.5 years). In the first eight weeks of each study, there was no significant difference in mean number of classes attended per person in the virtual (6.7 ± 2.0 classes) and in-person interventions (7.0 ± 1.5 classes, p = 0.24). Participants in the focus groups noted that the virtual modality was a barrier to engagement with others and lacked accountability.
CONCLUSIONS: Attendance of a virtual and in-person learning kitchen intervention were similar during the first eight weeks with a noted preference for in-person engagement by virtual attendees. Teaching kitchens interventions are a useful setting for engaging participants to teach cooking skills and have the potential to be taught in-person or virtually with similar attendance.

P34 BARRIERS, FACILITATORS, AND THE POTENTIAL ROLE FOR CULINARY MEDICINE IN EATING WELL FOR BONE HEALTH AMONG PERSONS ATTENDING AN OSTEOPOROSIS CLINIC

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PURPOSE: Dietary patterns rich in whole foods and nutrients are associated with favorable bone health outcomes. However, many adults do not follow dietary recommendations for bone health, even after didactic education. This study aimed to: 1) identify barriers and facilitating factors to adopting a bone-healthy diet among adults with or at risk of osteoporosis and fragility fracture, and 2) determine whether there is a need for practical, bone-focused Culinary Medicine (CM) programming among this population.
METHODS: We conducted virtual focus groups with women and men aged ≥45 years referred to our specialty osteoporosis centre for assessment of bone health and fracture risk. The focus groups explored barriers and facilitating factors to following dietary recommendations for bone health; participants were also asked whether they would be interested in attending a practical CM program for bone health.
RESULTS: Four focus groups were conducted with a total of 24 participants (21 women, age range: 56-87 years) from Jan-Feb 2022. Thematic analysis revealed several barriers and facilitating factors to adopting a bone-healthy diet. Barriers included: 1) uncertainty about where to obtain reliable evidence-based information, 2) low motivation to cook at home, especially when cooking for one, and 3) dietary restrictions due to medical comorbidities. Facilitating factors included: 1) advance meal planning and preparation, 2) online grocery shopping, and 3) exercise. Almost all participants expressed interest in attending a future CM program for bone health, with most indicating that they would prefer virtual programming. Participants were split regarding whether they would prefer a demonstration or cook-along format.
CONCLUSION: Adults with or at risk of osteoporosis and fragility fracture face multiple barriers to adherence with dietary recommendations for bone health. A bone-focused CM program may help to address these barriers and is likely to be well-accepted. Preferences for virtual delivery may relate to the COVID-19 pandemic.

P36 SECONDARY PREVENTION OF HEART FAILURE IN NON-DIABETIC STEMI PATIENTS WITH NORMOCALORIC DIET SUPPLEMENTED WITH BARLEY FLOUR ENRICHED MACARONI PASTA

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PURPOSE: The development of health-functional meals to prevent heart failure in non-diabetic patients with ST-elevation myocardial infarction (nd-STEMI) remains a desirable goal. We tested whether the daily intake of normocaloric diet supplemented with macaroni pasta made with durum and barley wheat flour blend (75:25) leading intake of 3g barley β-glucan (functional pasta, FP) promotes additional cardioprotection in infarcted patients.
METHODS: We randomized 37 consecutive nd-STEMI patients (mean age 57 y.o., 8 women) undergoing primary percutaneous coronary intervention (PCI). At the fifth day after PCI, FP group (n = 19) was daily fed for 3 months with normocaloric diet supplemented with 100g/day of functional pasta ''Al Dente'', whereas normocaloric diet of control group (n = 18) was supplemented with normal pasta (durum wheat 100%, NP, 100 g) similarly cooked. Echocardiography and blood analysis were performed at T0 (early after PCI), T1 (1 month after PCI) and T2 (3 months after PCI). Infarct size was measured at T0 and T2 by cardiac MRI with late gadolinium enhancement. Pharmacological treatment was the same in both groups.
RESULTS: At one month of diet, LV ejection fraction was significantly increased by 9% in FP group, but not in control group. In FP group, the global longitudinal strain, a more sensitive index of myocardial contractility, was significantly improved at T1 and T2 compared to T0 by 12.17 and 16.86 % respectively. No significant changes were observed in NP group. Infarct size was similar in both groups. Fibrinogen, nitrite/nitrate and oxidative-INDEX levels were significantly ($P < 0.05$) reduced only in FP patients. Despite LDL-c levels were reduced in both groups, HDL-c levels were increased only in FP group.
CONCLUSION: Normocaloric diet supplemented with FP ''Al Dente'' further improves LV function of reperfused nd-STEMI patients regardless infarct size by reducing levels of circulating oxidative and inflammatory mediators and improving lipid homeostasis.

O37 CULINARY MEDICINE CURRICULUM PILOT FOR FAMILY MEDICINE RESIDENTS

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PURPOSE: 1) Assess feasibility of conducting a culinary medicine pilot within the context of existing family medicine curriculum; 2) Determine impact of a culinary medicine curriculum combining academic, culinary and community components on nutrition competencies.
METHODS: 23 residents at the Northwestern Family Medicine Residency at Lake Forest were assigned asynchronous learning on the topics below in the form of videos and readings, followed by: 1) 3 weekly synchronous virtual culinary training sessions, led by Common Threads professional chefs, centered on topics and plant-based recipes relevant to patient care: Diabetes, Sugar and Carbohydrates - Sweet Potato and Black Bean Tacos; Satiety, Fiber, Plant-Based Proteins, and Gut Health - Red lentil curry; Inflammation - Vegetarian Pad Thai. These sessions were followed by a debrief/discussion of pre-work, led by residency faculty; 2) Residents teaching 3 weekly nutrition and healthy snack preparation classes at Round Lake Middle School, which serves 80% economically disadvantaged students and has a minority student enrollment of 87%.
RESULTS: Residents completed validated assessments and follow up surveys. There was a significant increase in resident confidence in nutrition counseling from pre course to post course ($p < .01$). Residents showed significant increases in their confidence in their cooking skills ($p < .05$), and ability to prepare plant-based meals ($p < .05$). There was also a significant increase in resident knowledge about plant-based diets ($p < .01$) and about substituting animal-based proteins with plant-based proteins ($p < .01$). 81% reported a positive or neutral impact on their knowledge due to the virtual nature of the cooking classes.
CONCLUSION: This pilot demonstrates feasibility and the positive impact of incorporating a culinary medicine curriculum into a Family Medicine residency. It is now mandatory annual curriculum for all residents in the program. This curriculum can serve a need to incorporate more effective nutrition curricula in resident training.

P38 "ZOOM"ING TO THE KITCHEN: A NOVEL APPROACH TO VIRTUAL NUTRITION EDUCATION FOR MEDICAL TRAINEES

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PURPOSE: To assess the impact of a 4-hour, interactive, virtual nutrition curriculum on medical trainees' attitudes regarding importance of nutrition, nutrition knowledge, comfort with and likelihood of performing dietary history and nutrition counseling, and personal dietary behaviors.
METHODS: 42 residents in the Yale Primary Care Internal Medicine and Medicine-Pediatrics (YPCMP) and 80 students in the Yale Physician Assistant (PA) Online program were offered a 4-hour, interactive, virtual nutrition curriculum via Zoom. Educational content included three 1-hour modules: ''Using a Plant-Based Diet for Chronic Disease Prevention and Treatment,'' ''Introduction to Behavior Change and Performing a 24-Hour Dietary Recall,'' and ''Introduction to Culinary Medicine.'' Trainees were surveyed pre- and post-intervention to determine the effect of the curriculum on nutrition knowledge and were scored on percentage correct out of ten questions. They were also asked about self-reported attitudes, history taking and counseling (residents), and personal dietary habits (PA students) using Likert Scale response options. Changes between pre- and post-test responses were analyzed using paired t-tests for continuous variables and McNemar or Chi-Square for categorical variables. The significance level was set as $p < 0.05$, two-sided.
RESULTS: 28 of 42 residents (67%) and 38 out of 80 PA students (47.5%) completed all surveys. Residents gained confidence in nutrition counseling (57% vs. 93%; $p = 0.002$) and reported higher likelihood of performing nutrition counseling (32.1% vs. 82.1%; $p = 0.0002$) and dietary history-taking in chronic disease visits (39.2% vs. 96.4% $p < 0.00001$). Online PA students had significant increases in knowledge scores (51% vs. 79% $p < 0.0001$) which persisted after 4-6 weeks (79% vs. 76% $p = 0.15$).
CONCLUSION: YPCMP residents and Yale PA Online students were largely satisfied with this novel, 4-hour, interactive, virtual nutrition curriculum that successfully improved proposed frequency of dietary history taking and nutrition counseling among residents and improved knowledge among PA students.

P39 IMPLEMENTING CULINARY MEDICINE AT AN ACADEMIC MEDICAL CENTER - MEDICAL EDUCATION, PATIENT CARE, HOSPITAL INSTITUTIONAL SUPPORT AND COMMUNITY OUTREACH

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PURPOSE: This session seeks to demonstrate how Culinary Medicine (CM) is being implemented at Weill Cornell Medicine New York Presbyterian (WCM/NYP) and NewYork-Presbyterian Hudson Valley Hospital (NYP HVH) within the clinical setting, institutional, medical education, and community levels to offer preventative care amidst the epidemic of lifestyle related chronic diseases.
METHODS: Virtual shared medical group visits were piloted by a physician at the Integrative Health Center at WCM/NYP in oncology, lifestyle change, and women's health in 2021.
RESULTS: Community collaboration, community education, and medical education were expanded at WCM/NYP: 1/2021-6/2022, there were 237 participants lifestyle change over 30 classes; 9/2021-6/2022, there were 229 participants for oncology over 18 classes; 3/2022-6/2022, there were 83 participants for women's health over 13 classes. All these visits included CM and nutrition literacy. Community collaboration included family cook, teen battle chef, oncology cook-alongs, supermarket tours, soup service at a cancer center (1,113 soups) and 100+ pounds produce donation to the hungry and homeless (CHHOP). Community education included Heart Smart lectures for the underserved (150 attendees), new CM module in an eCornell nutrition course, and physician talks at food festivals. Medical education included programs in NY and WCM-Qatar. In 2021 at NYP HVH the teaching kitchen held 142 programs, with a total of 5,496 viewers, two Healthy Heart Programs (8 classes), 17 Young Chefs Programs, 6 Health 4 Life Program in partnership with Cornell, 25 Physician in the Kitchen programs, 5 Bariatric Support Classes, and 6 Diversity & Inclusion Programming.
CONCLUSIONS: Using CM, students and professionals are more likely to integrate nutritional strategies into routine patient care, with anticipated improvements in patient and provider health outcomes, reduced health system costs, improved health equity, food cost savings to vulnerable families, and overall improved population health.

P40 THE KALE SALAD INTERVENTION: A PRACTICAL TOOL FOR WHOLE FOOD PLANT-BASED NUTRITION EDUCATION

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BACKGROUND: The importance of maintaining a healthy lifestyle to reduce cardiovascular disease risk is well known but equipping clinicians with practical tips to teach patients remains a challenge. The need for transformative approaches to workplace practice has been recognized by culinary medicine experts and the American College of Lifestyle Medicine.
PURPOSE: This culinary medicine program aimed to develop a conference workshop that could be used to teach Internal Medicine resident physicians the ''Kale Salad Intervention'' as a tool for introducing whole food plant-based (WFPB) dietary approaches in primary care practice.
INNOVATION: Faculty partners in Culinary Medicine and Endocrinology planned a workshop that combined didactic and experiential learning focused on food choices, WFPB diet, pantry stocking, and meal planning suitable for implementation during the COVID-19 pandemic. This included a brief virtual lecture by the Director of Culinary Medicine (LS) accompanied by a hands-on distanced classroom activity organized with Endocrine faculty (JL). Using a 2-gallon sealable plastic bag that served as a protected kitchen workspace, our recipe for the personal kit included: 3-4 large kale leaves (pre-washed), 1 avocado, lemon wedge, 4 strawberries, 2 cherry tomatoes, olive oil packet, condiment container with Kosher salt, food safe disposable plastic gloves, plastic knife, fork, and salad container. A YouTube Teaching Kitchen video featuring a physician chef (LS) allowed virtual teaching: how to massage kale and assemble the 7-ingredient salad (https://www.youtube.com/watch?v=c6mKDS7nHoc).
OUTCOME: Combining a virtual lecture followed by hands-on teaching kitchen activities can provide a fun, effective, and interactive culinary medicine workshop during the COVID-19 pandemic. The Kale Salad Kit is low cost, highly portable, and enables preparation and sampling of WFPB ingredients. Workshop instructions are easy to replicate and disseminate, pairing well with Teaching Kitchen videos. Activities such as the Kale Salad Intervention (with personal kits) have been integrated into Endocrinology Clinic wellness lunches.

P41 EFFICACY OF DELICIOUSLY HEALTHY: A VIRTUAL TEACHING KITCHEN INTERVENTION FOR CHRONIC DISEASE PATIENTS

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PURPOSE: This study is a pilot evaluation of Deliciously Healthy (DH), a virtual version of an adult TK program that was developed in 2021 during COVID-19. Participants met online and learned to cook with colorful, fresh ingredients using recipe templates that encouraged them to adapt recipes to their cultural preferences.
METHODS: The study is a longitudinal, mixed-methods design. Thirty-one patients with diet-related diseases were recruited through referrals from Gouverneur Hospital in NYC between April and June 2021. Patients were grouped into four cohorts, two English and two Spanish speaking. Participants were offered six sequential culinary nutrition sessions, plus monthly booster sessions for one year. Quantitative data were captured through pre- and post-surveys measuring participant changes in dietary habits and confidence in such skills as selecting fruits and vegetables and knife skills. Qualitative data were to be captured through interviews recorded over zoom at 3, 6 and 12 months post primary intervention.
RESULTS: Among survey completers (N = 14), 100% reported some improvement in their ratings on a Likert scale of 1- 6 for all questions. Despite the small sample size, paired t-tests showed statistical significance for: confidence in adjusting a recipe to make it healthier (p value <.001) and confidence in using the recipe templates (p value 0.023). Interviews shed light on such program components as recipe concepts, peer support and discovery of new ingredients as especially effective.
CONCLUSION: Deliciously Healthy participants reported they found the program beneficial overall to support dietary improvements. Despite a small sample size, the finding of statistical significance related to participants selecting fruits and vegetables, adjusting recipes to make it healthier, and use of the recipe templates are encouraging. The final set of interviews will take place summer of 2022 with results available by September.

P42 BARRIERS AND FACILITATORS TO VIRTUAL TEACHING KITCHEN INSTRUCTION FOR YOUTH

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PURPOSE: The onset of COVID-19 necessitated the re-design of the evidence-based curriculum, Teen Battle Chef (TBC) to a virtual format. This study is a process evaluation to examine the barriers and facilitators to achieve a successful, live, virtual format for a youth teaching kitchen program.
METHODS: TBC was delivered virtually to twelve cohorts of adolescents from April to August 2020 (n = 145). Quantitative process data examined participation barriers and facilitators through session observations and post-program surveys. Observation measures included attendance, cooking with instructor, use of visual aids, and prevalence of the Framework for 10 Experiential Drivers of Behavior Change. Qualitative instructor interviews revealed progress among youth to gain cooking skills, as well as behavioral and attitudinal changes.
RESULTS: Visual aids (PowerPoints/videos) were used by 92% of instructors to facilitate virtual learning (Youth attended a mean of 8.2 of 12 sessions. The percentage of adolescents cooking with the instructor was 37%. Youths post-survey (n = 28) revealed 93% of adolescents felt empowered to prepare meals on their own and 57% reported regularly trying to get more ''colors'' of fruits/vegetables in their meals. Difficulty obtaining ingredients was the largest participation barrier (43%). An average of 8.4 of the 10 Experiential Drivers of Behavior change were used in the virtual sessions. All of the 8 instructors felt they were effective in supporting students to cook at home. Seven instructors reported advantages of students using home kitchens.

CONCLUSION: The pandemic illuminated that live, virtual, teaching kitchen formats are a viable alternative to in-person classes to achieve student participation and skills development, despite some common barriers to participation. Instructors identified students being in their own homes was a facilitator to developing culinary skills and adopting them in their lifestyle as compared to classroom instruction. Additional evaluation of virtual teaching kitchen programs should be conducted as the pandemic wanes.

P43 IDENTIFYING HOW YOUTH REPORT SUSTAINED BEHAVIOR CHANGE AS MOTIVATED BY THE 10 EXPERIENTIAL DRIVERS OF BEHAVIOR CHANGE

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PURPOSE: The authors' 2020 study confirmed the definitions for ''10 Experiential Drivers'' of behavior change that motivate the behaviors of teaching kitchen (TK) participants. The purpose of this study is to test the relevance of the 10 experiential drivers among participants who reported healthy behavior shifts after participating in the Teen Battle Chef (TBC) TK program.
METHODS: This study is a secondary analysis of qualitative data obtained in a previously-conducted study where 30 TBC alumni were interviewed about whether/how TBC influenced their behaviors and lifestyle. Participants were asked to describe the most influential program elements and what motivated successful behavior changes. Each interview transcript was reviewed and coded to identify every instance a quote corresponded to one of the experiential drivers. Each mention was tallied, and descriptive statistics were calculated to identify frequency of driver mentions. No new data were collected for this study.
RESULTS: Of the 30 interviews, 100% commented about experiences that motivated behavior changes that directly corresponded to the five drivers: success, challenge, skill-building, skill-reinforcement, and home-environment. Four additional drivers were attributed in behavior motivation comments by 90% or more of youth: recipe concept (n = 27, 90% of participants); palate development (n = 29, 96% of participants); collaboration (n = 28, 93% of participants); and peer support (n = 29, 96% of participants). Only the driver related to experiences around celebration was rarely mentioned within the transcripts (n = 17, 57% of participants).
CONCLUSION: TBC alumni interviews included some significant and long-sustained behavior changes. Youths reported motivations were consistent with authors' 10 Experiential Drivers. Some of the more important behavior changes attributed to the 10 Drivers are weight loss, substantial positive shifts in eating habits and level of physical activity, as well as having had a positive influence on their families and friends. More research on how the drivers motivate behavioral outcomes in TK is warranted.

P45 ADDRESSING FOOD INSECURITY THROUGH AN INTEGRATED FARM TO FORK LEARNING COMMUNITY AT COWELL COFFEE SHOP

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PURPOSE: Cowell Coffee Shop is a non-transactional cafe dedicated to promoting food sovereignty by serving the University of California, Santa Cruz with free, nutritional, sustainable, and culturally relevant food approximately 40 hours every week of the school year.
METHODS: Cowell Coffee Shop builds on the other food and farming initiatives in the Center for Agro-ecology and Sustainable Food Systems. Each section is led by a university faculty who employs a team of kitchen, farm, or garden coordinators. Student volunteers and interns have the opportunity to work at different locations, in which they would see how the food they planted gets processed, cleaned, cooked, then served, or specialize in one facet of the integrated food system. As a pedagogical kitchen, the Cowell Coffee Shop instills the fundamental kitchen skills that allows the students the ability to participate in the complex and creative meals that the cafe provides for specific cultural events.
RESULTS: Since opening, Cowell Coffee Shop has become an integral part of the campus. Many of the people seeking food at the coffee shop have taken the opportunity to join the learning community in the kitchen, where the lessons imparted upon them offer a new layer of food independence. One of the resources Cowell Coffee shop offers is a meal kit distribution program, which has included various selections for example, mushroom or pork dumplings or pine nut mole. In this way, Cowell Coffee Shop promotes a cycle of teaching, as volunteers and interns become teachers themselves by distributing the ingredients and recipe required for these meal kits and sharing the tips they learned.
CONCLUSION: Going forward, Cowell Coffee Shop will continue to utilize its teaching kitchen and outreach programs to strengthen the community built around it and ensure that vulnerable communities maintain access to Basic Needs resources.

P46 EVALUATING ASSOCIATIONS BETWEEN RACE, FOOD ACCESS, AND OBESITY TRENDS IN CHICAGO

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PURPOSE: Multiple barriers limit access to nutrient dense foods for communities of color and individuals living in socioeconomically disadvantaged neighborhoods. Neighborhoods with limited or no access to nutritious foods rely primarily on energy dense foods which are significant indicators of high obesity rates. The Cooking up Health (CUH) culinary medicine elective includes a module on obesity that engages future health professionals in the kitchen and classroom to empower children in food insecure communities. To illustrate the relationships between food access and obesity rates across Chicago neighborhoods, a layering map was created for participants.
METHODS: The maps were created using the Chicago health atlas. The data was interpreted and transferred to Google MyMaps, a Geographic Information System. Multiple layers were added regarding food access, obesity rates, and race and ethnicity to visually represent the relationships between geography and the parameters above.
RESULTS: Maps are indicative of higher obesity rates in areas of low food access. The map illustrates that neighborhoods with increased food inequity are predominantly located on Chicago's south and west sides. These neighborhoods are home to a higher percentage of African American and Hispanic/Latino communities.

CONCLUSION: Despite data collection linking food insecurity and demographics in Chicago, few have created visual overlapping comparison maps that expose inequities. This map is an educational tool used by CUH health professionals to engage with communities affected by food inequality. Neighborhoods with higher rates of obesity and low food access have been documented to have lower lifespans, increased rates of chronic disease, fewer green spaces, and COVID mortality and cases. Policy changes, urban farms, and teaching kitchens are some ways of improving food inequity. Future development of mapping activities as educational tools can help health professionals more deeply understand the complex cultural and social conditions that impact health status in these neighborhoods.

P47 A BRIEF CULINARY NUTRITION PROGRAM INCREASED MINDFUL EATING BEHAVIORS AMONG HEALTH SCIENCES FACULTY

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PURPOSE: To assess the impact of culinary nutrition training that incorporates mindful eating on diet quality and eating behaviors among health sciences faculty.
METHODS: Fourteen faculty at the UC Irvine College of Health Sciences participated in a culinary nutrition training program in Spring 2022. The program entailed two in-person teaching kitchen classes focused on the Mediterranean diet and the Anti-inflammatory diet. Each class involved preparation of 3 dishes under the guidance of a certified chef, a nutrition presentation with a registered dietitian, and a guided mindful eating practice and discussion with a health coach. Participants were asked to complete a single 24-hour dietary recall and the Mindful Eating Questionnaire (MEQ) at pre- and post-course. Nutrition data were analyzed to compute the Healthy Eating Index (HEI)-2015 and the Adapted Dietary Inflammatory Index (ADII). Changes in mean HEI-2015, ADII, and MEQ total and subscale scores were analyzed by paired samples t-test.
RESULTS: Ten faculty completed all surveys. Baseline diet quality indices indicated a moderate quality diet with pro-inflammatory potential (mean ± SD HEI-2015: 61.56 ± 22.25; ADII: 0.23 ± 3.33). Both indices showed a non-statistically significant improvement by the end of the program, such that the average HEI-2015 increased to 65.40 ± 19.54 ($t = -0.87$, $p = 0.40$), and the ADII score decreased to -0.44 ± 3.54 ($t = 0.62$, $p = 0.55$). The MEQ external eating subscale showed a significant increase (2.61 ± 0.50 vs 3.03 ± 0.61, $t = -3.70$, $p = 0.01$), while the MEQ total score increased slightly from pre- to post-program (2.86 ± 0.33 vs 2.99 ± 0.32, $t = -1.88$, $p = 0.09$).
CONCLUSION: A brief culinary nutrition intervention incorporating mindful eating for health sciences faculty has potential to improve personal diet quality and eating behaviors. Participants reported reduced tendency to eat under the influence of external cues upon completing the program.

P48 FROM THE PRECISION COOKING TO NUTRIGENOMICS: FOR A HAPPY AND HEALTHY LIFE

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PURPOSE: Precision cooking is the missing link between nutraceutics (a neologism between nutrition and pharmaceutics) and precision nutrition, a useful discipline for the design of tailored nutritional recommendations able to ameliorate or prevent disorders as non-communicable diseases, including cardiovascular diseases and diabetes. Precision cooking aims to guarantee the technological transfer of the scientific research results to ordinary citizens, to avoid bioactive compounds from functional foods available on the market, could be destroyed by the normal conservation and home food preparation practices (cold storage, cutting, cooking, etc.).
METHODS: A trans-disciplinary approach must be considered to support the advance of precision cooking. This approach helps to overcome the current fragmentation of knowledge thanks to the integration between different scientific disciplines having the same subjects as food technologies, food chemistry, pharmaceutical chemistry, nutrigenetics, and nutrigenomics. The latter plays a key role in modulating multiple physio-pathologic conditions in humans by studying how dietary components modulate gene expression at different levels. Nutrigenomics is mainly built on several high-throughput omics techniques: Nutritranscriptomics, Nutriepigenomics, Nutriproteomics, and Nutrimetabolomics representing a large-scale study of global mRNAs, epigenetic modulations, proteins, and metabolites expression levels under a nutritional stimulus. Conversely, nutrigenetics aims to identify gene variants associated with differential responses to nutrients, improved or damaged by gastronomic practices, and relate these variations to disease states.
RESULTS: The integration of these omics disciplines could allow for the generation of a holistic view providing a better understanding of the interplay between genome and dietary components. Moreover, nutrigenomics and nutrigenetics will provide valuable information that could assist clinicians in identifying the optimal diet for a given individual.
CONCLUSION: An integrated view of precision nutrition, possible only if foods are cooked following scientific knowledge (i.e., precision cooking), can adequately anticipate individual responses to nutritional intakes, helping to design tailored dietary advice.

O49 IMPLEMENTATION OF A WOMEN'S HEALTHY TEACHING KITCHEN PROGRAM ACROSS THE VETERANS HEALTH ADMINISTRATION

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PURPOSE: This project explored implementation and outcomes of a women's specific Healthy Teaching Kitchen (HTK) program at multiple sites across the Veterans Health Administration (VHA). Three key areas were explored: implementation, women Veteran access to HTK, and impact measured by self-reported quantitative and qualitative feedback from participants.
METHODS: Funding from VHA Women Veterans Health Care, in partnership with VHA Nutrition and Food Services, offered 170 VHA facilities an opportunity to start or expand a Veteran HTK class for women. Funding was awarded to 58 sites to use between May 2021-September 2021. HTK leadership provided implementation support with monthly calls, curricula, virtual HTK training, and data collection guidance.

RESULTS: The majority (97%) of funded sites successfully implemented a virtual women's specific HTK series of classes. The classes were offered in a group setting, primarily as a virtual cook-along series of 6 classes. Of data collected on 314 participants, 303 (96%) reported making changes during this program that support their health and wellness and 304 (96%) reported confidence to continue the changes. Central themes from the qualitative data indicate the most helpful aspects of the program were: nutrition education, trying new foods and recipes, the booklet of recipes and handouts, culinary education, the live virtual class, and cooking together. Most participants (57%) report no changes are needed to the program. Recommended changes include offering more classes, in-person classes, audio or visual improvements, different recipes, and muting participants during class.
CONCLUSION: Strong leadership support, guidance, curriculum, and monthly calls contributed to successful implementation. The number of sites who applied and launched this program speaks to the value of this intervention in addressing a need in women Veterans healthcare. Feedback from participants was resoundingly positive in both making changes and increasing confidence, suggesting potential for this type of programing to effect sustained behavior change.

P50 DEVELOPMENT OF A CULINARY MEDICINE TOOLKIT TO IMPROVE IMPLEMENTATION OF VIRTUAL COOKING CLASSES FOR LOW-INCOME ADULTS WITH DIABETES

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PURPOSE: Nourishing the Community Through Culinary Medicine (NCCM) is a pilot study implementing virtual culinary medicine intervention for 125 low-income, ethnically diverse diabetic adults in Texas. The five biweekly, 90-minute, interactive virtual cooking sessions are held via WebEx completely in English or Spanish and provide the opportunity to develop cooking skills and healthy eating behaviors from affordable, simple-to-prepare ingredients. The purpose of this abstract is to describe the virtual culinary medicine toolkit (VCMT), which is part of the NCCM study.
METHODS: The NCCM curriculum was adapted from existing UTHealth's A Prescription for Healthy Living curricula to include the VCMT, which was designed to help improve participant interaction, engagement, and retention. The VCMT offers easily accessible educational materials for providers and participants. The provider VCMT offers level-setting education to help reduce mixed nutrition messaging and includes handouts discussing topics such as inclusive nutrition and mindful eating. Each handout has a QR code and link to access an adjoining animated video that provides further explanation in an engaging medium. In addition, the participant VCMT offers a range of fundamental cooking skills videos and infographics, including knife skills and preparing whole grains and healthy beverages. Participant handouts and animated videos, which are played during the virtual cooking class, provide a space for participants to learn more about relevant diabetes management and food literacy topics such as reading a nutrition label. The animated videos replace a traditional slide-based lecture allowing space for patient-centered facilitated discussions during virtual cooking sessions.
RESULTS: Participants' feedback will provide an understanding of how to improve and enhance access to information beyond each virtual education session.
CONCLUSION: The VCMT could potentially guide the development of virtual culinary medicine intervention programs to shift learning from lecture-based to patient-centered facilitated discussions via a visual and inclusive medium.

O51 FEASIBILITY ANALYSIS OF THE METHODOLOGY USED IN THE NUTRITIONAL AND CULINARY HABITS TO EMPOWER FAMILIES (N-CHEF) PROJECT

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PURPOSE: The general objective was to analyze the feasibility of implementing a culinary-nutritional intervention in families of the Nutritional and Culinary Habits to Empower Families (n-CHEF) project. The specific objective was to increase the adherence to a Mediterranean dietary pattern in families, and more specifically, the consumption of plant-based foods.
METHODS: The n-CHEF (NCT04986449) is a feasibility study in which 15 families with a child aged 10-14 years attended 4 culinary-nutritional workshops (2 face-to-face, 2 online) led by a chef and a dietitian. The elaboration of recipes, focused on vegetables, was combined with nutritional advice and experiments. The adherence to the Mediterranean diet of parents and children was collected at baseline and at the end of the intervention. Moreover, after each workshop, a satisfaction questionnaire was sent to the families and the research team carried out an exhaustive control of attendance, schedule, and economic cost of the workshops.
RESULTS: The adherence to the Mediterranean diet after the intervention increased significantly within parents (8.1 (SD 1,6) vs 10.2 (SD 2.0); p 0.005) and children (8.1 (SD 2.6) vs 10.9 (SD 2.5); p 0.001). In the satisfaction questionnaire, the overall assessment of all the workshops received positive ratings, although, the online workshops scored lower than the face-to-face workshops. All families except one attended the 4 workshops with a duration of 3 hours, close to the time established in the methodology. The cost was 12,Ç/workshop/family.
CONCLUSION: The adherence of the families to the Mediterranean diet improved significantly as a result of the intervention. The feasibility analysis of the culinary-nutritional intervention proposed in the n-CHEF project indicates a high degree of acceptance of the methodology applied by the families. The time and cost of each workshop was as expected.

P52 EXAMINING THE ROLE OF LANGUAGE IN TEACHING KITCHENS: DEVELOPMENT OF A NARRATIVE TASK FOR USE IN THE NNEDPRO MOBILE TEACHING KITCHEN IN KOLKATA, INDIA

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PURPOSE: The Mobile Teaching Kitchen (MTK) initiative was established in Kolkata, India in 2018 by NNEdPro, using a ''See One, Do One, Teach One'' (SODOTO) model. Since then, MTKs have been set up in multiple locations in India and internationally. 6 women from the pilot became MTK ''Champions,'' and now sell nutritionally balanced, sustainable meals to the public, and support new participants, all from a teaching van and base kitchen. This research seeks to gain preliminary insight about the long-term impact of the MTK on the Champions' skills.
METHODS: In 2018, participants completed a self-reported Knowledge, Attitudes, and Practices (KAP) questionnaire pre- and post-SODOTO, measuring knowledge and the initiative's impact. In a 2022 focus group, six supervisors discussed each Champion's performance in the presence of moderators and quantified this using a 1 (very poor) to 10 (very strong) scoring system, covering the fundamental areas of confidence, communication, and confidence. These scores, along with verbal feedback, reflect the strengths of the Champions, as well as the areas that may require further development/support.
RESULTS: Longitudinal data was available for 5 Champions. Mean post-intervention scores were 64.8%, 72.8%, and 38.5% for Knowledge, Attitudes, and Practices, respectively. The mean composite KAP score was 59.13%. Mean group scores for confidence, competence, and communication were 71.50%, 74.33%, and 68.33%, with a mean composite score of 71.39%.
CONCLUSION: Considering the 2022 feedback and 2018 KAP scores together indicates that the knowledge gained in 2018 has been maintained and improved. The Champions' competence was the strongest domain at the group level, and communication the weakest. Moving forward, the Champions will complete another KAP assessment for comparative purposes. Further, an ongoing study exploring the role of oral language in the MTK may advance insights into improving the transfer of knowledge from the programme whilst navigating literacy barriers.

P55 IMPROVING THE ENGAGEMENT OF INNER CITY YOUTH IN SCIENCE AND FOOD: RESULTS FROM A PILOT STUDY FOR PRE-K-12 STUDENTS

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PURPOSE: With the transition to remote learning during the 2020 COVID-19 pandemic, there was concern about pre-K-12 students falling behind during summer break. The aim of this project is to assess the feasibility of a 4-week virtual science and cooking enrichment program, designed to increase interest in STEM through food, in a large, urban school district.
METHODS: Building on the existing curriculum delivered to food-insecure UCLA students, the curriculum was developed by an interdisciplinary team of faculty, medical students, residents, chefs, and educators from the school district. Educators from more than 40 classrooms incorporated the materials into customized lesson plans. Students were recruited from across the school district. Live-virtual cooking sessions were offered weekly, led by a professional chef and scientist. Prior to each session, students learned the science behind each recipe and received the recipe for preparation.
RESULTS: 1700 students pre-K-12 enrolled in the course. Informal feedback from teachers was positive, with instructors reporting, ''They were building all these connections as they learned about photosynthesis and chlorophyll - they were fascinated'' and describing parents saying, '''Now my daughter cooks and creates her own recipes.' This wasn't staring vapidly at a computer - They were sharing and learning.'' Despite no homework, students dove into the material, drawing pictures from lessons and developing recipe books. The remote platform allowed for easier accessibility and utilization of experts from across the country. Teachers identified the live cooking lessons as the most engaging part of the course for students and recommended the inclusion of more sessions for future enrichment classes.
CONCLUSION: This pilot course demonstrates the acceptability and promise of the virtual course to increase engagement in science and nutrition among school-age children. Future iterations have the capacity to make students excited to learn and apply science in their everyday lives.

P56 IMPROVING HEALTHY BEHAVIORS AMONG WISEWOMAN PARTICIPANTS: A NOVEL APPROACH TO CULINARY MEDICINE

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PURPOSE: The purpose of this research was to evaluate effectiveness of a culinary medicine intervention among WISEWOMAN participants to improve healthy behaviors.
METHODS: A six-week in-person course utilizing a modified version of the 2016 Goldring Center for Culinary Medicine's Health meets Food curriculum was conducted among women who were low-income, uninsured/underinsured, enrolled in the National Breast and Cervical Cancer Early Detection Program, and noted to have risk factors for heart disease. The course consisted of didactics with a registered dietician and a participatory teaching kitchen component. Participants were given pre- and post-course questionnaires regarding their health as well as knowledge, attitudes, and beliefs around health behaviors. Pre- and post-questionnaires were compared using frequency data. Knowledge and belief questions utilized a Likert scale.
RESULTS: There were 64 participants with a median age of 53 years (35-74); 53 participants had pre- and post-program data. 49% of participants were obese/severely obese; 21% were morbidly obese/super obese. 25% were diabetic, 53% had high cholesterol, and 75% had hypertension. 100% of participants reported at least one positive change in health behavior post-program. Participants had an increase in knowledge of diets and their health effects. Despite no exercise intervention, 39% of participants increased weekly exercise post-program. The belief that eating healthier helps prevent or improve symptoms for disease increased post-program.
CONCLUSION: Culinary medicine is an effective intervention to increase healthy behaviors in WISEWOMAN participants. Despite no exercise intervention, over 1/3 of participants increased

weekly exercise post-program. Future research is needed to determine whether these results would translate to other populations and into biochemical/biometric changes.

P58 THE EFFECT OF MINDFUL EATING PRACTICE ON CHILDREN: A SCOPING REVIEW

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PURPOSE: Choosing healthy foods is not enough for a child to eat healthily; they also need to consume the right quantity of the food as well. Mindful eating is based on the fundamental philosophy of mindfulness. Evidence shows that the practice of mindful eating can help parents minimize mealtime emotional distress with children, but the effect of mindful eating on children is unclear. Thus, the study aims to investigate evidence of the mindful eating practice in children's eating behaviours.
METHODS: Based on Arksey and O'Malley's five-step scoping review approach, the author searched in PUBMED and CINAHL by using the search terms ''mindfulness,'' OR ''mindful eating'' until May 2022. Eligible publications are in full-text in the English language in the last 20 years.
RESULTS: The scoping review includes 10 articles from interventions to observations. The findings show two main benefits of mindful eating practice in children, including enhancing a healthy relationship with food and reducing the risk of eating disorders although the effects on the growth vary. Children also became more attentive to the cross-interactions of all senses, which improve their ability to recognise hunger and satiate feelings. To nurture the value of mindful eating at early ages, four key messages have been uncovered: (1) having a meal while sitting at a table without distractors (2) encouraging children to engage in food-related activities such as buying food together, playing with foods, reading about foods or food labels, and gardening a tiny vegetable, and (3) teaching good meal manners, and (4) encouraging children to serve themselves and wake up all senses while eating.
CONCLUSION: The scoping review has suggested that the mindful eating practice has positive effects on children's eating behaviours. Further interventions, particularly on the effects on the growth, in a large-scale paediatric population are necessary.

O62 FROM THE KITCHEN TO THE ELECTRONIC MEDICAL RECORD: CULINARY MEDICINE E-CONSULT EMPOWERS NUTRITION INTEGRATION IN CLINICAL CARE

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PURPOSE: Health and wellness outcomes improve when patients have a multi-disciplinary care team with expertise integrating evidence-based, practical nutrition and culinary knowledge into clinical care. Although interprofessional collaboration, access to dietitians, and nutrition training options for physicians have improved in recent years, many barriers still exist to this optimized care model. Over the past years, electronic consultations (eConsults) emerged as a tool for ''asynchronous, consultative, provider-to-provider'' access to sub-specialty care. As one strategy to bridge these barriers, a culinary medicine physician-dietitian team launched a first of its kind pilot program to blend these two concepts into one innovation - the Culinary Medicine e-consult.
METHODS: 1) Engage institutional internal billing team, administrative and physician leaders to establish Culinary Medicine eConsult pathway within the electronic medical record (EMR) system; 2) Identify small pilot group of physicians and present the service details; 3) Culinary Medicine team receives consults via EMR; 4) Create a five-part response: patient context, brief condition summary, key dietary recommendations, culinary strategies and recipes tailored to patient, and recommendations for local resources to address any food access issues; 5) Respond to requesting physician via EMR, including permanent record of consult note in chart and billing.
RESULTS: During this pilot, the eConsult team received and completed twenty unique patient consults from five physicians. All consults were billed with the established eConsult code for non-face-to-face consultation (99451), with 100% reimbursement from all payors (including CMS and private insurances). The eConsult team received positive feedback on three themes: 1) Satisfaction of patient; 2) Ease of use; and 3) Time-saving innovation.
CONCLUSION: This pilot innovation successfully integrated nutrition education for both requesting clinicians and their patients via the eConsult model using a low resource, scalable process. This approach offers new modalities for sustainable integration of teaching kitchen concepts into traditional clinical care.

P63 PRELIMINARY EVALUATION OF VIRTUAL FRESH & SAVORY SHARED MEDICAL APPOINTMENT PROGRAM ON SELF-REPORTED PATIENT OUTCOMES AND FOOD BEHAVIORS

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PURPOSE: Poor quality diets and over-reliance on processed and foods prepared away from home are known contributors to many negative health outcomes. The Fresh and Savory program at MedStar Health aims to address these gaps by teaching patients in a hands-on and supportive environment the knowledge and skills needed to cook simple, healthy, and delicious foods at home. While the in-person program has been described and evaluated previously, the present study aims to analyze the impact of participation in the virtual program format.
METHODS: Each cohort experienced programming including culinary demonstrations, nutrition education, and hands-on cooking exercises in a shared medical appointment. Participants completed electronic surveys to assess anthropometrics; current cooking, dietary, and exercise behaviors; and confidence and motivation both prior to participation and 2 weeks after completion. A per-protocol analysis was used to assess changes in self-reported anthropometrics, dietary behaviors, and other related lifestyle factors following participation. Paired t-tests were used to compare continuous, parametric variables and Wilcoxon signed rank tests were used to compare nonparametric variables.
RESULTS: Data from 30 participants who completed the 8-week program in fall 2021 and spring 2022 were analyzed. Though none of the results involving BMI, dietary behaviors, or other lifestyle factors was statistically significant, many suggested improvements. Qualitative responses about changes in dietary intake, confidence preparing plant-based meals, and other lifestyle behaviors also indicated primarily positive changes.

CONCLUSION: While previous participant feedback indicated acceptance of and learning from the Fresh and Savory program, present results further suggest that many participants reported positive changes. Unfortunately, none reached statistical significance. Pending additional IRB review, future research will also evaluate benefits on health outcomes. Because more than 50% of patients were obese even after program participation, further research with larger sample sizes and/or program modification is needed to best empower patients to take preventive action to maintain good health.

P64 DOSE-RESPONSE WITH PLANT-BASED MEALS AND HBA1c REDUCTION IN THE BT-001 PIVOTAL TRIAL AT 90 DAYS

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PURPOSE: Successful adoption and maintenance of comprehensive behavioral changes to attenuate sequelae of Type 2 diabetes (T2DM) remains a challenge. BT-001 is a digital therapeutic designed as a scalable, engaging, and interactive mobile application that provides personalized, nutritional cognitive behavioral therapy (nCBT) that recommends increasing the number of plant-based meals consumed to improve glycemic control. Initial evaluation of BT-001 showed hemoglobin A1c (HbA1c) fell 0.4% ($p < 0.001$) vs the control app at 90 days. Patients self-reported the number of plant-based meals consumed while using the digital therapeutic. Hypothesis: Patients reporting more plant-based meals consumed will have greater HbA1c reductions.
METHODS: Adults with HbA1c >7% were randomized (1:1) to receive access to BT-001 or a control app. The primary efficacy endpoint was mean HbA1c change from baseline and the primary safety outcome is adverse events. Outcomes being reported here are the HbA1c % reduction by tertiles of plant-based meals consumed.
RESULTS: Improvements in HbA1c increased in line with the number of plant-based meals reported over the 90-day study period. Patients in the highest tertile for plant-based meals (≥ 12 a week) had a reduction in HbA1c of -0.44%, which was significantly larger ($p = 0.04$) than the improvement in patients in the lowest tertile. Changes in HbA1c for patients in the middle and low tertiles were -0.28 (6–11 meals a week) and -0.16 (≤ 6 meals per week), respectively.
CONCLUSION: The 90-day results of this pivotal trial indicate that patients consuming more plant-based meals have larger improvements in glycemic control as evidenced by the reduction in HbA1c.

P65 IMPACT OF THE CULINARY MEDICINE ELECTIVE ON THE EDUCATIONAL QUALITY AND HEALTHY LIFESTYLE BEHAVIORS IN FOURTH-YEAR MEDICAL STUDENTS

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PURPOSE: Medical School is designed to train students to provide high-quality patient care. A 2019 Lancet systematic review concluded that nutrition is insufficiently incorporated into medical education regardless of country, setting, or year of education. Therefore, an interprofessional Culinary Medicine (CM) elective was developed, with a focus on integrative health promotion.
METHODS: School of Medicine exit survey data from 2018-2022 ($n = 345$) compared students ($n = 48$) who completed CM during medical school with students ($n = 297$) who did not. Questions were included on a larger annual exit survey. In Spring 2020, qualitative feedback was also gathered through a student focus group. Methodologically, survey questions addressed students' ability to perform various tasks related to course learning objectives, in a five-point Likert scale. The survey also included health behavior questions. Survey questions were analyzed using descriptive statistics and the Mann-Whitney two-sample rank-sum test as appropriate.
RESULTS: Students who completed CM were more likely to respond 'strongly agree' or 'agree' than non-course-taking students to questions about preventing illness and counseling patients about physical activity, sleep, health behavior change, and championing a healthy lifestyle and wellbeing for a community. Specifically, students who completed CM were significantly more likely to agree that they could counsel patients about nutrition ($p < .05$) and counsel patients about physical activity ($p < .05$). Students who took the elective during preclinical years were more likely to agree that they could counsel patients about activity ($p < .05$) and champion a healthy lifestyle for themselves ($p < .01$). Students who participated in the focus group reported that the elective built confidence in interacting with patients, and provided a holistic understanding of medicine and health.
CONCLUSION: Our findings suggest that the CM elective provided a training opportunity with lasting effects on student abilities to provide high-quality patient care related to nutrition and health.

P67 INTERDISCIPLINARY APPROACHES TO ADOLESCENT NUTRITION, ENVIRONMENTAL LITERACY AND BEHAVIOURS: DEVELOPMENT OF A NUTRITION EDUCATION PROGRAM

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PURPOSE: Adolescence is a critical period to establish healthy sustainable eating behaviours and diets that will track into adulthood. Youth are increasingly aware of the harmful effects of climate change yet perceptibly disconnected from their natural environment in urban settings. There is limited evidence on optimal strategies to improve accessibility, acceptability, and attractiveness of healthy sustainable diets among youth. We aimed to design a nutrition education program that engages youth as stewards of their local food systems to improve culinary skills, nutrition literacy and dietary behaviours in the Greater Toronto Area.
METHODS: A literature review of existing interventions was conducted to identify most effective program design elements including theoretical models, outcome measures and evaluation tools. Specific priorities of the program will be set based on a local needs assessment of social, epidemiological, ecological, and political factors through stakeholder consultation.

RESULTS: The study protocol was reported according to SPIRIT and structured according to the PRECEDE-PROCEED Model with integration of the Health Belief and Experiential Learning models. The program design is grounded in the Theory of Reasoned Action/Planned Behaviour, Social Cognitive Theory, and Self-Determination Theory. The behaviour change objectives are concurrent with the underlying pillars of a healthy sustainable diet (i.e. healthful, environmentally sustainable, affordable, culturally appropriate and accessible). These include adherence to high quality, nutrient dense plant-based dietary patterns, reduction of household food waste, increased motivation, knowledge, and skills surrounding affordable food preparation and cooking, and enhanced awareness of connectedness to the natural environment and food systems. The evaluation plan includes a pre- and post-test measurement instrument developed through an iterative process based on previously validated tools.
CONCLUSION: This procedure may inform future researchers, program planners, and educators to translate sustainable nutrition research into practice and engage youth as key agents of change in the Great Transition towards sustainable food systems.

P68 JOURNEY TO HEALTH: AN EXPERIENTIAL NUTRITION PILOT PROGRAM FOR UTAHNS LIVING IN UNDERSERVED COMMUNITIES

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PURPOSE: Journey to Health (J2H) is a free five-month nutrition education pilot program designed to reduce health disparities in underserved communities. J2H is a collaboration amongst the University of Utah Center for Community Nutrition, the University of Utah Wellness Bus, and the Utah Food Bank.
METHODS: J2H is offered in areas with high incidences of chronic diseases, low socioeconomic status, and diverse populations, including the cities of West Valley, South Salt Lake, and Kearns, as well as Salt Lake City's Glendale neighborhood. The curriculum emphasizes low-cost strategies to improve health and wellness, and is offered in English and Spanish. Participants attend nine activities within five months, including biometric screenings, nutrition classes, dietitian-led health coaching sessions, and a community meal. Unique elements include incorporation of incentives and cooking demonstrations focusing on affordable and culturally relevant recipes, utilizing ingredients from the traditional Latin American diet.
RESULTS: Within the first year, 143 participants attended the program. Fifty-six percent attended at least fifty percent of activities, and forty-five percent reported Spanish as their preferred language. J2H participants' skin carotenoid levels, a proxy measurement of fruit and vegetable intake, at baseline averaged 31,993^{cm-1}, and 33,455^{cm-1} at month 5, a 4.56% increase, while the national average is 20,000^{cm-1}. Participants' self-reported behavior changes and suggested areas for program improvement were collected during the community meal at the end of the program. Reported behavior changes included reading nutrition facts labels, eating subjectively reported healthier foods, preparing more meals at home, and using alternatives to salt and sugar. Suggested program improvements included more cooking classes, greater emphasis on physical activity, focusing on prevention and management of specific chronic diseases, and involving children.
CONCLUSION: Future work will include the incorporation of participant and community partner input, curriculum modifications, and expansion to additional underserved communities.

P69 COOKING SKILLS, NUTRITION KNOWLEDGE AND EATING BEHAVIORS AMONG ITALIAN ADOLESCENTS DURING COVID-19 PANDEMIC: THE ONLINE SURVEY COALESCENT

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PURPOSE: Recent studies suggest that home cooking and meal sharing play a key role in promoting healthy development in adolescents. Lockdown restrictions during the COVID-19 pandemic affected lifestyle worldwide. This study aimed to investigate change in eating habits, including cooking skills, in a sample of Italian adolescents during the pandemic, compared to the previous period.
METHODS: An online survey was submitted to students attending high schools in a province of North Italy. According to changes in food consumption, we assigned an eating habit index (EHI) score ranging from -31 to 38, reflecting respectively a worsening or an improvement in diet quality, compared to the period before the pandemic. We divided respondents into three groups considering cooking ability and number of meals able to prepare: high, medium and low cooking skills.
RESULTS: We recruited 1686 participants, of whom 50% were female, aged 16 ± 1.5 y.o. The median EHI score was 3 (from -20 to 33). Overall, 58% declared to slightly improve their cooking skills, and 22% improved them a lot. EHI mean score was statistically higher among adolescents who highly improved their cooking ability during the pandemic compared to those reporting no or slightly improvement (5.2 vs. 3.1, $p = 0.0001$). According to a multivariate logistic analysis, high cooking skills were associated with female gender (OR 1.40, $p = 0.007$), an EHI score >9 (75th percentile value) (OR 1.42 $p = 0.01$), better nutrition knowledge (OR 1.47 $p = 0.003$) and lower ultra-processed foods consumption (OR 1.44 $p = 0.01$).
CONCLUSION: Overall, our results suggest that COVID-19 pandemic positively influenced cooking skills among adolescents. Good cooking abilities were associated with better nutrition knowledge and healthier eating habits, including a lower consumption of ultra-processed foods. Projects aimed to improve culinary skills in adolescents could be of value in promoting a healthier lifestyle.

O70 COMPARING EFFECTIVENESS OF VIRTUAL TO IN-PERSON CULINARY MEDICINE COURSES AMONG CANCER SURVIVORS AND THEIR CAREGIVERS: IMPACT OF COVID-19 PANDEMIC

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PURPOSE: The purpose of this research was to compare the effectiveness of a virtual culinary medicine course to a pre-pandemic, in-person culinary medicine course among cancer survivors and their caregivers.
METHODS: A 6 week in-person culinary medicine course utilizing the Goldring Center for Culinary Medicine's Health meets Food curriculum was conducted among cancer survivors who had been treated at Mitchell Cancer Institute in Mobile, Alabama and their caregivers. An identical model/participant population was utilized for a 3-week course conducted via Zoom during COVID-19. Both courses utilized didactics and participatory kitchen experiences. Participants received pre- and post-course questionnaires regarding health behaviors, knowledge, attitudes, and beliefs. Comparison of pre- and post-course questionnaires utilized frequency data. Knowledge and belief questions utilized a Likert scale.
RESULTS: The in-person course consisted of 19 cancer survivors and 4 caregivers compared to the virtual course consisting of 6 and 2, respectively. Taken together, the median age was 60 (25-74). >50% had an overweight/obese BMI, 48% had hypertension, 45% had high cholesterol, and 42% had diabetes. 17 of 23 completed the in-person post-course questionnaire and 4 of 8 completed the virtual post-course questionnaire. 100% of participants had an increase in at least one healthy behavior such as meal planning, preparing home-cooked meals, improved fruit and vegetable intake, and use of the nutrition labels. Decreases in fast-food, unhealthy food/drink, and alcohol intake were observed. Nutrition, diet, and health behavior knowledge and beliefs improved as well as rating of personal health habits. Despite no exercise intervention, frequency of exercise increased 29% and 50% among in-person and virtual participants, respectively.
CONCLUSION: Research findings reveal that a virtual culinary medicine course is an effective strategy for increasing healthy behaviors among cancer survivors and their caregivers. Future research should utilize virtual opportunities to expand to an increasing population of cancer survivors.

P71 DEFINING TERMS IN CULINARY NUTRITION

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PURPOSE: Terms such as culinary nutrition, culinary medicine, and culinary competency are used in practice and throughout the literature. Examination of how these terms is used by practitioners, academics and researchers, and creation of consensus definitions will promote consistent use of these terms across work areas and disciplines.
METHODS: Leading practitioners, academics and researchers working in the field of food and nutrition were selected to participate. Initially, thirty potential participants from Australia, North America, Europe, and Asia were approached via email to submit definitions to key terms including culinary nutrition, culinary nutrition science, culinary medicine, culinary nutrition professional, culinary nutrition intervention, culinary nutrition activity and culinary nutrition competency via a Qualtrics survey link. Consent was implicit and participants were asked if they were willing to contribute to further discussion once initial analysis was completed and to forward the research information and survey link to others. Initial emails were sent in October/November 2021 with email reminders sent between November and March 2022. Content analysis of the text answers for each of the terms will provide initial definitions for these terms in July-August 2022. Contributing participants, and other primary and secondary sources will be invited to further examine these initial definitions and build consensus. This research was approved by the Human Research Ethics Committee (2020-3E).
RESULTS: Thirty-seven participants commenced the survey by entering their details, and twenty-three included one or more definitions for terms. Preliminary examination of the text answers suggests that, for example, culinary nutrition relates to the integration of culinary arts or cooking skills with nutrition science, focused on developing and delivering nutritious foods and meals.
CONCLUSION: Consensus for definitions will be achieved through a two-stage approach; content analysis of text definitions and focused discussions of these preliminary terms with practitioners, academics and researchers in the field.

P72 IMPLEMENTATION OF A PHYSICIAN-TAUGHT CULINARY MEDICINE COURSE: BENEFITS OF PIVOTING TO VIRTUAL CLASSES

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PURPOSE: Increases in obesity and its comorbidities is a current public health crisis that has been exacerbated by the Covid-19 pandemic. Healthy eating habits are critical in preventing, treating, and reversing these diseases. Culinary medicine is a unique approach that has been shown to improve participants' nutrition knowledge, healthy cooking confidence, and eating behaviors. The purpose of this project was to develop and implement virtual cooking classes for patients at high risk of diseases caused by obesity.
METHODS: Culinary medicine classes began as in-person classes for patients ages 6-17 years with a cap of 12 patients/class. With Covid-19, we pivoted to virtual classes and expanded the class to 50 patients ages 4-17 as well as started adult classes. Recipes were sent by e-mail one week ahead so patients could gather ingredients. We started the class with a 10-15-minute nutrition lesson then had live, interactive cooking. We taught 2-3 recipes per class and rotated themes monthly. Recipes were plant-based and seasonal. Each class was offered 1x/month in the early evening and taught by 2 physicians.

RESULTS: When we initially ran our in-person classes, we had 6-10 patients/class attend. Now, with our virtual classes, we have 8-20 patients/class (average 13). In kids' classes, 90% of patients cook along with us; whereas in adult classes, 40% of the patients cook along. We adjusted our classes according to patient feedback. We changed our themes to include more international food and added a 3rd class focusing on South Asian recipes.
CONCLUSION: With the pivot to virtual classes, we served almost double the number of patients compared to in-person classes. It increased access to classes by increasing the cap, allowing us to increase referral base to anyone interested regardless of health status, adding additional classes, as well as reduced commute time for instructors and patients.

P74 PILOT OF AN INTERPROFESSIONAL FUNCTIONAL NUTRITION AND LIFESTYLE MEDICINE ELECTIVE WITH COMMUNITY COOKING CLASSES DURING COVID-19 PANDEMIC

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PURPOSE: Diet and nutrition are recognized factors in chronic disease, including the inflammation driven chronic 'pre-existing' conditions that place patients at a higher risk for poor outcomes following Covid-19 infection. Reports, however, continue to highlight a paucity of clinically effective nutritional training in medical school curriculum. The Covid-19 pandemic response offered a unique opportunity to pilot an interdisciplinary culinary medicine curriculum while promoting community and wellness through an anti-inflammatory Mediterranean diet via a virtual teaching kitchen.
METHODS: Health Professional students from Touro University California (TUC) were invited to participate in an interprofessional (IPE) Functional Nutrition and Lifestyle Medicine elective. A 6-week course was designed to offer synchronous remote education via Zoom base on the Health Meets Food courseware. A TUC website advertised a series of cooking sessions, recipes, and registration to the greater community. Enrolled TUC students underwent a 4-hour training with course faculty. Students led real-time cooking sessions and facilitated practical nutrition discussions with participants. A 10-minute closing discussion compared calories, macronutrients and costs of the home prepared meal compared to fast foods. The final session included an invited guest speaker.
RESULTS: Twenty self-selected TUC students in the osteopathic medicine (10), pharmacy (6) and physicians' assistant (4) programs enrolled in the nutrition elective. Community participants included local healthcare professionals, TUC staff, family, and friends. Utilization of Zoom proved adequate for a remote teaching kitchen and participation from multiple colleges within the university. The final session was an in-person guest lecture.
CONCLUSION: We have successfully launched an IPE elective that serves the TUC healthcare student population as well as the community at-large. This elective is the cornerstone in building clinical competence in nutrition and integrating a robust nutrition curriculum across all TUC colleges.

P75 THINK OF THE PLANET, COOK IN THE GARDEN: OPEN AIR CULINARY CLASSES AS A WAY TO PROMOTE THE HEALTH OF THE POPULATION AND THE PLANET!

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PURPOSE: Culinary practices can be a strategist to improve the health of the population and the planet. With teaching culinary classes, it is also possible to promote autonomy in food choices, to encourage sustainable preparations and to bring food to the centers of discussions, sharing knowledge about culinary techniques, nutritional value and food culture.
METHODS: Monthly culinary practices are developed within the USP Sustainability Project, which is an interdisciplinary initiative of the University of São Paulo (USP) to develop and promote ecological actions in the form of open and experimental laboratories. The practices are themed around typical foods from Brazilian culture, such as: Non-conventional foods, Honey from native stingless bees and Cassava. Each practice counts on the participation of specialists in the subject and is divided into two stages: (1) conversation circle, in which the exchange of experiences and knowledge between specialists and participants takes place. (2) demonstration of recipes. The recipes demonstrated are later shared on the social networks linked to the Project so people who were not present can also increase their repertoire in the kitchen.
RESULTS: The practices are of great interest to the public, always reaching the maximum number of participants (between 15 and 18 participants), who are students and employees of the University, as well as lay audience. Participants were enthusiastic about the exchange of knowledge and experiences with cooking, reporting an increase in their repertoire of techniques and recipes to use at home, in addition to later acting as knowledge multipliers, sharing the experience with others.
CONCLUSION: Through teaching cooking classes it is possible to bring up important discussions about food and nutrition, such as cultural identity, sustainability, and healthy habits, promoting the health of people and the planet.

P77 BUILDING A COMMUNITY OF HEALTHY FAMILIES: TEACHING THROUGH ACTIVE ENGAGEMENT IN A FOOD APARTHEID

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PURPOSE: The National Children's Center (NCC) Early Learning and Early Intervention Center and Georgetown University partnership on the Health and Nutrition Initiative focuses on delivering nutritional competency to families of children with and without special needs. Sessions aim to reflect age and culture-specific content based on different body systems and are complemented with cooking demonstrations that can be replicated at home. The program's purpose is to demonstrate that providing

applicable teaching sessions leads to healthier habits by empowering families through nutritional knowledge, practical tools, collective discovery and ethnic dishes to navigate health decision making.
METHODS: Two monthly Zoom sessions utilize interactive presentations involving students, physicians and practical cooking videos. The first session covers nutrition within the context of basic anatomy and physiology. The second session builds on nutritional lifestyle recommendations through a cultural lens and food preparation skills and demonstration from a professional chef. Parents are encouraged to ask questions throughout and provide suggestions to other parents on best practices.
RESULTS: Following each session, a Likert scale survey is presented to parent participants. Results consistently revealed an increase in knowledge and satisfaction with the multi-directional learning and teaching discussions and demonstrations presented. The Health and Nutrition Initiative also completed an evaluative study to assess outcomes from all participant categories: families/parents, Georgetown students and physicians, and NCC staff and clinicians. All study participants reported a positive change, with parents specifically noting their appreciation for meaningful and personal dialogue, cultural representation, and an inclusive learning approach.
CONCLUSION: The open dialogue between families, students, and medical professionals has proved to be valuable for improving knowledge around nutrition in the home environment for this underserved population. Continuation of small-group settings will support an environment for information sharing and community building around health and nutrition.

P80 VIRTUAL TEACHING KITCHEN BENEFITS: COMPARISON OF IN-PERSON AND VIRTUAL TEACHING KITCHENS FOR GRADUATE STUDENTS BEFORE AND DURING THE COVID-19 PANDEMIC

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PURPOSE: The UCLA Teaching Kitchen plays an integral role in Nutrition coursework for graduate Nursing students. Skills learned from the teaching kitchen experience can improve health behaviors among students and provide lifestyle recommendations for future patients.
METHODS: The COVID-19 pandemic offered a naturalistic setting for comparison of survey responses collected for an in-person delivery of the UCLA Teaching Kitchen in early 2020 to virtual online delivery in early 2021. Surveys, administered to students before they experienced the kitchen and afterwards, were the same for both years and measured 'Knowledge, Attitudes and Practices', a self-evaluation of health behaviors, and a cooking skills assessment. A total of 67 students replied to our pre and post kitchen surveys in 2020 and 56 replied in 2021. Each student attended the teaching kitchen in small groups of at least ten students for one time during the quarter, with kitchen groups focusing on different candidate diseases. The virtual teaching kitchens were delivered using Zoom software with students cooking in their home kitchens, while in-person teaching kitchens were delivered on site at the UCLA Teaching Kitchen.
RESULTS: The knowledge and skills from the Teaching Kitchen training showed improvement for both types of delivery, however not the same factors improved. Food knowledge and cooking skills showed significant improvement in the virtual teaching training, while lifestyle behaviors such as exercise and sleep patterns were significantly improved among students who received in-person training.
CONCLUSION: Improvement in nutrition knowledge, lifestyle behaviors and cooking skills from both in-person and virtual teaching kitchens occurred among graduate Nursing students. However, the improvements we observed differed depending on which type of training was given. Because virtual delivery of the teaching kitchen lessons required students to cook in their own kitchens, this may have helped to establish connections between cooking skills and nutrition knowledge.

P81 THERAPEUTIC CULINARY ELECTIVE: A STRATEGIC ALLIANCE BETWEEN CULINARY ARTS, MEDICINE, PHYTOCHEMISTRY AND ETHNOBOTANY FOR CHEFS IN TRAINING

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PURPOSE: Chronic diseases have a huge impact in population health and require multidimensional culturally sensitive intervention strategies, involving different professionals, patients, communities, and institutions. Cooks have critical roles in the creation of healthy and culturally sensitive culinary options for people; however, they report limited knowledge in the topic. The Therapeutic Culinary elective was designed and implemented for culinary arts students at Universidad de Antioquia, Colombia intended to improve nutrition knowledge, promote use of approved medicinal plants, and increase awareness about opportunities to participate in strategic alliances to promote healthy eating behaviors.
METHODS: This hybrid course was designed and offered by a physician with experience in culinary medicine and a phytochemistry and ethnobotany expert. The 7 modules curriculum presents introduction to phytotherapy and culinary medicine, therapeutical activities of plants; secondary metabolites, extraction techniques, criteria to select therapeutic recipes and practical experiences to create therapeutic recipes. Students are evaluated through short quizzes, oral presentations and a capstone project entitled: ''My therapeutic plate'' where they select a medicinal plant as main ingredient of their creation. Students conduct research about phytochemical, nutritional, cultural, and historical aspects of the selected plan and present their creations in the teaching kitchen with invitation to the academic community.
RESULTS: In the first edition of the elective course, 13 students were enrolled. This elective has demonstrated feasibility, acceptability, and preliminary accomplishment of learning objectives. We administered pre and post survey to participants to examine students' satisfaction with the course and obtain feedback.
CONCLUSION: This elective is an innovation that can be easily implemented in other settings. The curriculum can be adjusted for different populations and needs.

P82 EVALUATING THE IMPACT OF MEDICAL STUDENT NUTRITION PREVENTION AND CHRONIC ILLNESS MANAGEMENT TEACHING ON THEIR KNOWLEDGE, ATTITUDES AND HEALTH HABITS

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PURPOSE: Nutrition education and counseling are critical to patient wellness and health. Primary care physicians are uniquely positioned to provide this counseling as frontline managers of illness prevention and chronic disease management. A lack of medical school nutrition education, however, does not prepare medical students with nutrition knowledge, skills, and confidence. This study describes and evaluates the knowledge and self-efficacy of Keck School of Medicine (KSOM) of University of Southern California (USC) Primary Care Program (PCP) medical students after leading community-based nutrition classes both immediately and 1-4 years post-teaching.
METHODS: First year PCP KSOM students completed a survey after teaching nutrition classes (Spring 2017 - Spring 2020) and 1-4 years after teaching (August 2021) to assess the impact of teaching. Initial open-ended responses were coded for themes. Follow-up descriptive data was collected and analyzed in Qualtrics.
RESULTS: Immediately post teaching, students (n = 45) reported learning about macronutrients (n = 13, 29%), portion sizes (n = 7, 16%), glycemic index (n = 6, 15%), and metabolic syndrome (n = 5, 12%). 49% of students (n = 28/57) noted they had knowledge to now counsel patients about nutrition. 1-4 years post teaching, 88% (n = 53) of students reported a sustained increase in nutrition knowledge and 85% (n = 51) felt their confidence educating patients about nutrition was increased from their baseline. Students also reported making healthy personal dietary changes due to teaching.
CONCLUSION: It is important for physicians-in-training to gain nutrition knowledge and education early in their career. This training can benefit student knowledge, behavior change, and patient counseling confidence for students and their future patients.

P83 THE COMFORTS OF HOME: HOW TEACHING KITCHEN VIDEOS CAN HELP OLDER ALBERTANS REDUCE THEIR RISK OF MALNUTRITION

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PURPOSE: Up to fifty percent of Canadian adults are malnourished upon hospital admission. Malnourished patients require greater care, incur longer hospital stays, and experience increased clinical complications. A variety of medical, social, financial, and system factors put older adults at high risk of malnutrition. Addressing malnutrition prior to acute events can improve health outcomes, prevent hospitalizations, and support older adults to continue living independently. An upstream, population-wide, intervention is needed to address the pervasive prevalence of malnutrition among older adults.
METHODS: In September 2022, a series of six short videos will be filmed in the Alberta Health Services (AHS) South Health Campus (SHC) Wellness Kitchen. Clinical dietitians (RDs) will instruct viewers to prepare nourishing high-protein and high-calorie recipes using accessible ingredients and home kitchen equipment. Plain language scripts and recipes were drafted collaboratively by clinical, culinary, and provincial teams. The videos will be recorded and edited by Digital Media Services using broadcast quality equipment. The videos will be hosted on the Alberta Health Services' webpage and available free of charge to the public and providers.
RESULTS: At the time of submission this project is still in progress, however, hosting the videos on a provincial platform makes them publicly available to more than 4 million Albertans. The platform is directly linked with the provincial patient portal and electronic medical record allowing clinicians to recommend the videos to patients and document the intervention. The videos will be promoted provincially through an AHS media campaign with communications to staff, the Universities of Calgary and Alberta, and the public. They will also be highlighted nationally through the Canadian Malnutrition Task Force.
CONCLUSION: High quality videos facilitate province-wide access to culinary medicine interventions and teaching kitchen programs, optimizing clinician time and enhancing the scalability and reach of this innovative clinical approach.

O84 TEACHING KITCHENS IN K-12 SCHOOLS: INNOVATIVE EDUCATION MEETS HEALTH AND WELLNESS TRAINING MEETS ENGAGING ENTREPRENEURSHIP

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PURPOSE: To test the effectiveness of a teaching kitchen in a K-12 environment to determine level of student interest, range of community support, and overall learning assessments.
METHODS: We followed a three-stage implementation: stage one - research the ideal teaching kitchen layout and design for K-12 educational use and build the kitchen on the back of our existing 4,000 sq. ft greenhouse; stage two - design a semester elective course for 9-12 students along with an entrepreneurial option and design a series of grade-appropriate classes for K-8 grade students; stage three - advertise the opportunities to students to gauge interest and acquire sign-ups for the program.
RESULTS: We experienced massive success and overwhelming response for the program. Stage one came together thanks to several donors who saw the vision and came on-board to support so that our fully licensed kitchen was built for $265,000. The plan for a semester elective, entrepreneurial option, and lower elementary classes came together just as planned with great feedback from the students. As for stage three, once students came to understand the plan for the K-12 kitchen, they signed up in record numbers propelling this elective to the most popular in the school's history and forcing us to create a waiting list for the program. Additionally, the school community became increasingly excited which has led to a large fundraising campaign.
CONCLUSION: K-12 students love to cook and when this passion is directed toward healthy, responsibility sourced food, the results are profound. Our teaching kitchen has been hailed as a massive success and we will be creating a second teaching kitchen in one of our neighboring campuses this coming school year. This will enable us to determine if our model can function as a prototype so that other K-12 schools can implement similar programming.

O85 EXAMINATION OF AN ONLINE COOKING EDUCATION PROGRAM TO IMPROVE SHOPPING SKILLS, ATTITUDES TOWARD COOKING AND COOKING CONFIDENCE IN WIC PARTICIPANTS

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PURPOSE: WIC serves low-income pregnant and breastfeeding women and their children <5 years, who are at increased risk for health disparities reduced access to healthy foods to support them during critical periods of growth and development. The purpose of this study is to test if a pre-recorded online cooking education program resulted in improved shopping skills, attitudes towards cooking, and confidence in cooking habits.
METHODS: A mixed-method correlational study, conducted from March 2021 to January 2022, with adult English- and Spanish speaking Ventura County WIC clients (n = 257) participating in the Family Kitchen online cooking education program. Self-administered online surveys were conducted before and after watching a pre-recorded online cooking education video. Survey reliability was tested using exploratory factor analysis to compare online versus in-person survey delivery. Descriptive statistics and repeated measures ANOVA (GLM) assessed the association between demographic variables (age, education, race/ethnicity, income, food security status) and improvements in the three outcomes of interest.
RESULTS: Factor analysis revealed three core factors, identical in the pre-and post-survey, including cooking confidence (Cronbach's alpha .80), shopping skills (Cronbach's alpha .70), attitudes towards cooking (Cronbach's alpha .70). Shopping skills decreased from baseline to post-intervention ($F = 5.91$; $p = <.05$) and was consistent across age groups ($F = 3.20$; $p = <.05$), and food security status ($F = 7.48$; $p < .01$). Positive attitudes toward cooking increased with income ($F = 2.85$; $p = <.05$), specifically among those with incomes <$20,000 and between $30-39,000. Cooking confidence increased from baseline to post-intervention ($F = 27.2$, $p < 0.01$) with an interaction between the intervention program and food security status ($F = 7.45$; $p = <.01$) demonstrating a larger increase for the FI compared to the FS.
CONCLUSION: Benefits of online cooking education for WIC participants included reduced food insecurity levels and greater ability to meet nutritional needs while shopping on a budget. Future research should assess barriers for WIC participants to access virtual services.

P86 COOKING WITH CONFIDENCE: COMMUNITY-BASED COOKING EXPERIENCE CLASSES WITH YOUNG ADULTS WITH AUTISM SPECTRUM DISORDER

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PURPOSE: Cooking with Confidence (CWC) is a community-based, educational program that supports young adults on the autism spectrum in learning basic cooking skills through hands-on classes that offer project-based learning experiences. Existing research reports higher rates of obesity, eating disorders and lack of social support among individuals with developmental disabilities. Using an interdisciplinary team, a program evaluation of CWC was conducted to determine effectiveness and plan for further program revision.
METHODS: Students from the School District of Philadelphia were recruited through the Philadelphia Autism Project in March, 2022. The Philadelphia Autism Project is housed at the Policy and Analytics Center, at the A.J. Drexel Autism Institute. Students aged from 15-21 took part in two different series of hands-on weekly cooking, a recurring 4-week series (n = 9) or a 1-week one-time class (n = 31). Each series was led by an instructor and took place within the Culinary Literacy Center kitchen. Students prepared dishes from recipes used in prior CWC classes, received education on nutrition labels, and participated in instructor-led discussions on food texture, and preferences. Each class contained a cooking instructor, co-facilitator, and a notetaker for observing support or adaptation needed by students, tasting of new foods, and student participation and interaction as a group.
RESULTS: Pre- and post-measures for the evaluation include cooking self-efficacy, barriers to cooking, recipe and kitchen safety knowledge, social engagement through family meals and likelihood to participate in future programs, and sociological questions related to development and interest in cooking in their daily lives.
CONCLUSION: Results from the complete program evaluation will be analyzed based on the type of series, and pre and post-survey results. The proposed medium- and long-term results detailed in the CWC program evaluation logic model will be evaluated for use in future studies.

O87 FROM LIABILITY TO ASSET: NORTHWELL HEALTH'S PRAGMATIC APPROACH TO TRANSFORMING HOSPITAL FOOD

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PURPOSE: Valuing food as the foundation of health and well-being, Northwell Health, New York's largest healthcare system, has transformed its hospital food to become an asset and market differentiator.
METHODS: Northwell prepares and serves nearly ten-million meals per year. In 2016, a comprehensive analysis on the state of hospital food was performed. Findings sparked senior leadership support and an interdisciplinary group created a strategic plan. Michael Dowling, President and CEO, championed this effort, signing a vision-forward Commitment to reimagine food in healthcare. Chef Bruno Tison, with extensive experience in the culinary industry within Europe and United States, was recruited as the change agent to lead this transformation. Prioritizing high-performing teams, a targeted effort around staffing and professional development was launched. The Food & Nutrition Council created quality standards around purchasing, preparation and delivery. Hospitals order food/ingredients that are fresh, healthy, and nutritious - eliminating frozen, processed, and pre-packaged items. Other notable accomplishments: conversion to In-Room dining, hospital gardens fostering farm-to-bedside approach, teaching kitchens for staff, patients and families, food

''farmacies,'' proactive patient rounding by Executive Chefs, partnership with local businesses/organizations and unwavering support during the pandemic.
RESULTS: In Q3 2016, Northwell's ''Quality of Food'' patient experience measure ranked at the 9th percentile, when compared nationally to peers. June 2022 YTD, that measure ranks at the 81st percentile, an increase of 72 rank points with minimal impact on budgetary cost. Additionally, 67% of Northwell's adult hospitals rank in the top quartile, with eight hospitals (53%) achieving a rank of 90th percentile or higher.
CONCLUSION: Northwell has transformed the way it buys, cooks, and serves food to support the healing and wellbeing of patients, team members and the community. Food is our most basic way to maintain good health, prevent sickness and maximize clinical benefit, and so Northwell sees food as medicine.

P88 FOOD MATTERS: AN INTERPROFESSIONAL EXPERIENTIAL COURSE, INTEGRATING CULINARY SKILLS, FOOD JUSTICE AND FOOD SYSTEMS FOR HEALTH SCIENCES STUDENTS

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PURPOSE: The food system - the interconnectedness of food to humans, communities, and the environment - plays a crucial role in population and individual health. Leading health and environmental organizations call for urgent action to address climate-health crises worldwide. Subsidized and industrially produced foods are linked to higher rates of diet-related diseases. Health sciences curricula fail to translate these relationships into meaningful training. ''Food Matters'' teaches these system-level issues and empowers health sciences students to apply these concepts in self and patient care.
METHODS: ''Food Matters for Health Professionals'' is a 1-credit graduate level interprofessional health sciences elective course. It utilizes hands-on culinary practice to explore evidence-based content on the intersection of health and nutrition, sustainable food systems, traditional foodways and social determinants of health. We assessed changes in wellbeing, confidence, skills, and knowledge around nutrition and culinary skills through a validated survey. Paired t tests were conducted to compare pre- and post-survey responses. Qualitative data came from students' post-class reflections on application of course content.
RESULTS: Participants ($n = 89$) showed statistically significant ($p < 0.05$) changes pre- to post-survey in personal wellbeing, and ability to apply knowledge and assist patients with nutritional quality of food choices, macronutrient identification in food, budgeting time for balanced meals, stocking a kitchen, and integrating dietary patterns and recipe adaptations. Qualitative data themes from post-course reflections demonstrated increased knowledge of food systems, social determinants of health, interprofessional collaboration and personal wellbeing.
CONCLUSION: Interprofessional, experiential education covering culinary skills, applied nutrition science, sustainable food systems, traditional food ways and social determinants of health provides meaningful and relevant tools to equip health sciences students to better understand the complex systems impacting human and environmental health. Expansion of such educational interventions could have a meaningful impact on health professionals' wellbeing, chronic disease epidemics and environmental health.

P89 WEAVING FOOD SYSTEMS, BASIC CULINARY SKILLS AND APPLIED NUTRITION THROUGH A PRE-CLERKSHIP MEDICAL SCHOOL CURRICULUM GROWS CONFIDENCE FOR PATIENT CARE

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PURPOSE: Undergraduate medical education suffers from a chronic deficiency in translating basic nutrition concepts to patient care given the magnitude of diet-related chronic diseases. Recent research points to the effectiveness of ''weaving'' nutrition content into existing curriculum. In an effort to address this deficiency, the University of Minnesota Medical School Duluth (UMMS-D) implemented a <10-hour longitudinal pilot curriculum taught by a Chef/MPH and MD to weave food systems, basic culinary skills and clinically applied nutrition through existing first and second year courses.
METHODS: Three classes of outgoing second-year medical students (MS2's) at UMMS-D were surveyed about personal health, knowledge of nutrition, and confidence in its application to patient care. The intervention group ($n = 29$) consisted of outgoing MS2's from the 2020-2021 academic year who received the new pilot curriculum. Data from 2021-2022 MS2's is currently being analyzed. The control group ($n = 28$) consisted of outgoing second-year medical students during the 2019-2020 academic year prior to the pilot nutrition curriculum.
RESULTS: Over 90% of the intervention group, versus 54% of control, reported being able to discuss and recommend healthy dietary modifications to a patient with a chronic disease. Intervention MS2's showed statistically significant increases of confidence when talking with patients about dietary patterns and plant-rich diets, and when working inter-professionally around food and nutrition. Survey findings did not yield statistically significant differences in control versus intervention group regarding students' perceived personal health or knowledge of nutritional concepts.
CONCLUSIONS: Results demonstrate a strong correlation between this woven pilot curriculum and an increase in MS2's confidence in applying concepts of nutrition to chronic disease management and patient care. This model may apply to other medical schools seeking to weave applied nutrition through existing curriculum and meet the urgent need to equip future physicians for basic nutritional interventions in chronic disease management.

P90 CULINARY & DIETARY HABITS OF TEACHING KITCHEN PARTICIPANTS BY SOCIOECONOMIC STATUS

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PURPOSE: Socioeconomic status (SES) is a known determinant of health; home cooking is also linked to greater diet quality. However, the relationship between SES and cooking is not well-established. We aimed to quantify associations of SES with cooking confidence, cooking frequency and dietary quality to find trends across SES groups using teaching kitchen participant data.
METHODS: A short survey was created by the Teaching Kitchen Collaborative (TKC) Research Group to gather data on demographics and lifestyle habits on TK participants. The survey was

piloted at 9 classes in spring of 2022 to determine its feasibility and accessibility. In this study, we used the pilot data to investigate SES, cooking and diet. We created a SES Index score using survey data for income, education, employment, and food security status. To quantify cooking confidence and dietary quality, we created continuous scores using confidence ratings for cooking skills and frequency of fruit, vegetable, whole grain, and sugar-sweetened beverage consumption, respectively. We ran chi-square, one-way ANOVA, and scatterplots to assess distribution of the outcome (cooking frequency/confidence and diet) across SES groups both as categorical and continuous variables.
RESULTS: The survey was distributed among 9 classes; 27 participants completed survey responses in full. The difference in cooking confidence between low and high SES were nonsignificant ($p = 0.28$), as was the difference in diet quality ($p = 0.60$). Scatterplots showed no linear association between these variables and SES score. There were no significant differences found in continuous SES score nor categorical SES between cooking frequency groups ($p = 0.61$ and $p = 0.43$, respectively).
CONCLUSION: No significant associations were found between SES and cooking in this study. However, the total sample size was very small due to setbacks in survey distribution. Analysis will be updated in summer of 2022 with more study participants which will yield a more robust effect estimate.

P91 HANDS-ON NUTRITION TRAINING FOR PEDIATRIC PRIMARY HEALTH CARE PRACTITIONERS: THE EXPERIENCE OF 5-DAY FACE-TO-FACE TRAINING PROGRAM IN ATHENS

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PURPOSE: Dr. PED-Chef is an innovative Erasmus+ KA2 project which aims to develop training for pediatric primary health care practitioners on childhood nutrition-related issues through hands-on nutrition science education combined with culinary medicine education. The aim of this presentation is to describe the face-to-face learning workshops for pediatric practitioners.
METHODS: Dr. PED-Chef project began in 2020 with 6 partners from Norway (coordinator), Greece, Italy, Turkey and Spain. The following steps were completed before the organization of the event with pediatric practitioners: 1) Conceptual framework for training pediatric primary health care practitioners on childhood nutrition; 2) Methodology for the design of the training curriculum; 3) Development of the training curriculum package and an e-learning platform. The face-to-face 5-day event with pediatric primary health care practitioners was conducted in Athens.
RESULTS: A total of 14 trainers, 28 trainees and a chef participated in a face-to-face 5-day event from June 30 until July 3 of 2023. During first 3 days, trainers gave theoretical and practical sessions on: 1) the fundamentals of nutrition for pediatric practitioners, 2) useful resources and effective tools for promoting healthy eating to family, 3) introduction to culinary medicine, and 4) health communication and counselling on promoting healthy eating. On the fourth day, the students attended a mixed session in which a show cooking by a chef and an in-depth study of culinary medicine contents were carried out. On the last day, the students took a test and participated in a master chef session in groups. All trainees valued very positively the contents taught at the event for their clinical practice.
CONCLUSION: The participation of pediatric primary health care practitioners in training programs on culinary medicine can be an effective tool to improve their nutritional education in a way that can benefit the children and their families.

P93 THE EFFECT OF MENU REORDERING ON THE CARBON FOOTPRINT OF DIETARY CHOICES IN UNIVERSITY DINING

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PURPOSE: This study aimed to increase climate friendlier choices by reordering some customizable menu items according to their carbon footprint (CO2 eq).
METHODS: It was conducted at The Study at Hedrick, a UCLA grab-and-go eatery, where students order their meals onsite with an iPad. The order of ingredients was modified twice. For the first 5 weeks, customizable menu options, add-ons, and beverages were listed from the highest to lowest carbon footprint and then for the next 5 weeks, the order was reversed. In both periods, all sales data were collected and exported to Excel.
RESULTS: A total of 389,302 and 400,409 items were selected respectively during the first and the second data collection periods. The different menu options were combined according to food type (animal- or vegetable-based) and food category (e.g., beef, pork, etc.). Comparing sales between the first and second data collection, the distribution was significantly different between the two periods for each food category and for the two food types. Overall, results show that students were more likely to choose plant-based and low-carbon options when these were placed at the top of the menu. Among animal-based foods, sales decreased for pork, poultry, and cheese options, whereas sales increased for beef, milk, eggs, and fish. The fish used at The Study is sustainable and the eggs served were ≤4 oz. thus both items had a low carbon footprint. With the exception of beverages, sales of all plant-based options increased during the second data collection.
CONCLUSION: Current strategies at UCLA to increase students' food literacy include posters/infographics in dining halls at point of service and teaching kitchen programs, which offer cooking skills and information about animal versus plant foods. In this regard, the Teaching Kitchen can play a crucial role as an interactive educational program that can support behavior change.

P94 LONG COVID SHARED MEDICAL APPOINTMENTS: LIFESTYLE AND MIND-BODY MEDICINE WITH PEER SUPPORT

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PURPOSE: Long COVID is a rising health concern where patients have multiple distressing symptoms with no clear treatment guidelines. Early evidence indicates the role of cytokines and chronic inflammatory processes in developing long COVID. Anti-inflammatory diet is known to reduce chronic systemic inflammation.

METHOD: We developed a shared medical appointment (SMA) program to provide lifestyle education and mindfulness exercises for patients with long COVID symptoms. Our objective was to provide patients education and support to recuperate from Long COVID symptoms. Patients virtually attended two-hour weekly visits for six weeks. The SMAs are co-led by a medical provider and a holistic psychotherapist. Connection between nutrition and inflammation are discussed, participants are given assignments to replace pro-inflammatory food with nutrient dense food in their diet. Specific recipes and botanical teas are recommended to reduce inflammation and support mental health. Additional resources to Culinary Medicine shared with patients throughout the duration of SMA. For quantitative outcomes, we assessed pre-and post-intervention change in symptoms using Medical Questionnaire Symptom Score (MSQ). We used a two-tailed paired t-test.
RESULTS: Since May 2021, nine SMA cohorts have been conducted. Patients made positive dietary changes during program participation. Most common dietary changes made by patients were removing sugar and processed foods. Additionally, patients increased their vegetable and spices intake. Patients that tried herbal teas found them beneficial. We have analyzed 48 MSQ's to date, which shows significant improvement in symptoms. Patients felt educated, connected, and supported (''I am not alone, I am not crazy,'' ''This class gives me tools to help myself.'').
CONCLUSION: Shared Medical Appointments can be an effective way to educate and support patients with Long COVID Syndrome with nutrition information. Group support in medical group visits can be a powerful tool for patients struggling with uncertain illnesses and trying to engage in dietary modifications.

P96 PARTNERING HEALTHCARE SYSTEMS AND COMMUNITY-BASED ORGANIZATIONS TO IMPROVE COOKING SKILLS

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PURPOSE: Classes are designed to help participants gain confidence in basic culinary skills transforming produce into easy, affordable meals. Preparing meals at home leads to increased fruit and vegetable consumption, improving health outcomes, and less money spent eating out. Another purpose is to familiarize participants with purchasing, picking up, and utilizing locally sourced produce from FoodShare boxes, available with an EBT card and from multiple sites across the state.
METHODS: This project was created through hospital system and community-based collaboration. Participants are recruited through medical practices, employee, or community groups using on-site registration, email, flyers, social media, and word of mouth. The curriculum was developed by the Spartanburg Food System Coalition (PAL Spartanburg, American Heart Association Upstate, Ruth's Gleanings, Foodshare Spartanburg, and Spartanburg Regional Healthcare System) and is tailored to the needs of unique groups participating. Classes are held every other week for 7 weeks, to correspond with FoodShare box delivery dates and to develop new healthy habits over time.
RESULTS: Participants are asked to complete a pre, post, and 6-month post-survey. Initial data is showing participants self-reporting weight loss, lower total cholesterol, and 1 person reported a decrease in insulin. Participants are still utilizing culinary skills learned in class 6 months later. While they may not continue using FoodShare boxes for various reasons they are now aware of this nontraditional way to access affordable food.
CONCLUSION: Participants in Cooking Up Confidence enjoy camaraderie with other participants despite cooking virtually. Families participating emphasized improved skills and knowledge. Health outcomes vary according to individuals, especially considering medical conditions of targeted groups. Participants continue to use learned skills, benefit from the 7-week timeframe and repetition, enjoy the break in-between classes, try new produce dishes, and are more knowledgeable about community programs, therefore impacting quality of life positively.

P97 NUTRITION KITCHEN: FREE, ONLINE, NUTRITIONAL COOKING VIDEOS BASED ON MEAL MODIFICATION AND LIFESTYLE MEDICINE IN THE MILITARY HEALTH SYSTEM

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PURPOSE: To develop and launch a virtual pilot program for free, online, nutritional cooking videos through the United States Air Force Medical Service for active duty service members, spouses and families.
METHODS: Primary surveys were distributed to adults at San Antonio Military Medical Center and Wilford Hall Medical Center in fall 2018, requesting current and desired use of various nutrition resources. Secondary surveys were distributed to active duty service members and their spouses in summer 2019, requesting preferences for meal prep and cook time, weekly grocery budget, meal size, batch cooking preference, available kitchen equipment, most common meals eaten, and desired features in an online nutritional cooking class. A large multidisciplinary group of healthcare providers, patients, and Air Force personnel collaborated to generate Nutrition Kitchen video series recipes and content.
RESULTS: 446 primary surveys were collected, including 122 from active duty service members. Almost all active duty service members (79%) desired an online nutritional cooking class. 141 secondary surveys were collected from active duty service members and spouses. Survey results directly guided the development of Nutrition Kitchen. In addition to specific preferences, some key requested features of the program included an on-screen chef and registered dietitian, various options to modify each commonly eaten meal, on-screen evidence-based references, on-screen professional animations for food processing and nutrition concepts, and on-screen nutritional label reviews. Six episodes were launched in summer 2022 which included active duty service members and featured foods commonly found at military commissaries. Additional data collection will evaluate the effectiveness of the pilot program as it pertains to behavior change after viewing the videos.
CONCLUSION: Nutrition Kitchen is an Air Force Medical Service pilot program for the most desired nutrition resource by surveyed active duty service members. To the authors' knowledge, a similar virtual teaching kitchen product does not exist.

P98 A MIXED STAKEHOLDER APPROACH TO REALIZE NEW PERMANENT CAMPUS-LINKED TEACHING KITCHEN FACILITY

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PURPOSE: One of the biggest obstacles to successful and widespread installation of teaching kitchens at universities are the high costs of construction and installation. The subsequent follow-up costs for maintenance, operation and permanent staff represent a further hurdle. On the other hand, a culture of understanding the value of teaching kitchens must be promoted. This is done most purposefully by offering courses (e.g., in ''Culinary Medicine'') for medical students, physicians, health care and nutrition professionals. Other students can participate in ''Planetary Health Diet'' classes.
METHODS: At the University of Göttingen, a teaching kitchen only existed as part of the obesity outpatient clinic. Therefore, this kitchen is available for educational purposes within a narrow time frame. Due to this situation, the non-profit association Culinary Medicine Germany and the Institute for Nutrition and Psychology, have agreed a joint venture to set up a new state-of-the-art Teaching Kitchen, also equipped for broadcasting virtual cooking classes or live events. Financing, operating, and maintenance are pre-financed by the non-profit association. A philanthropic Foundation provided funding for initial investment in construction and furnishings. Europe's largest kitchen furniture manufacturer could be won for the kitchen equipment. The institute uses study quality funds to rent the teaching kitchen for student cooking classes and thus contributes to pay for operational costs. Likewise, jointly raised third-party funds or paid continuing education courses. Further expansion will be secured through donations and call-up of government grants.
RESULTS: Fully equipped state of the art TK for up to 24 participants will be launched by October 10th, 2022, within 12 months from planning. Least cost financing is secured at utilization of about 100 yearly classes.
CONCLUSION: A mixed stakeholder approach is a feasible option to overcome the lack of financing for TKs.

O99 MULTICENTER EVALUATION OF A CULINARY MEDICINE ELECTIVE FOR MEDICAL STUDENTS IN GERMANY DELIVERED VIRTUALLY

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PURPOSE: The elective Culinary Medicine at the medical schools of the universities Göttingen, Giessen and Brandenburg is a teaching kitchen based elective aimed to train medical students how to better counsel patients on nutrition and lifestyle medicine topics. We assessed changes in counselling competencies, attitude towards nutrition counselling in medical practice, nutrition knowledge, eating- and cooking behaviour, and subjective well-being among students who participated in the elective 'Culinary Medicine'. The curriculum was developed and delivered by the Institute for Nutrition and Psychology and Culinary Medicine Germany.
METHODS: The curriculum included seven weekly modules in the teaching kitchen for 3 hours each, consisting of a short introduction and a hands-on cooking part. As the elective was conducted virtually using a zoom-platform, the associated recipes were distributed before the modules. Five questionnaires assessed counselling-competencies, knowledge, eating- and cooking habits, and mental well-being. We used comparative statistics and t-tests to assess changes from baseline.
RESULTS: In all areas, counselling competencies on nutrition and lifestyle medicine topics increased significantly ($n = 70$, $p \leq 0.001$). Statistically significant changes also occurred in knowledge. Here, an increase in students' correct answers was shown in almost all of the areas asked. Of these, 9 out of 16 changes were significant. ($p < 0.001$). No significant changes were shown in either cooking or eating behaviour. Subjective well-being after the course significantly improved compared to before the course ($p = 0.001$).
CONCLUSION: The elective Culinary Medicine is an effective way to improve students counselling competencies and knowledge even if administered virtually. Further studies should investigate whether a face-to-face course produces better teaching success and whether participants in the elective will counsel patients better in the future.

P100 A NOVEL INVERTED CLASSROOM CONCEPT FOR PLANETARY HEALTH DIET COOKING CLASSES IN A UNIVERSITY SETTING

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PURPOSE: The average diet of the global population has negative impacts on the environment and increases the risk of many diet-related diseases. Therefore, a social transformation toward a healthier and more sustainable diet is urgently needed. With the Planetary Health Diet, the EAT-Lancet Commission has made a concrete recommendation for a diet that promotes human health and preserves natural resources. Through their role as potential future experts and leaders, university students incorporate an important multiplier function in society. Therefore, the aim of this study is to design and evaluate an inverted classroom concept for Planetary Health Diet cooking classes to improve eating and cooking behavior in university students and increase their counseling competencies toward sustainable and healthy nutrition.
METHODS: The intervention of this controlled intervention trial will consist of seven three-hour classes based on SCT, offered as an elective to students of all degree programs at the University of Goettingen. The control group will consist of students that have not participated in the course. At the beginning of each session, student presentations will provide basic information about different topics in the context of design and implementation of a more sustainable diet in everyday life, meeting the requirements of an inverted classroom concept, in which essential learning content is developed by the students themselves. In the following cooking class conducted in a teaching kitchen, the students prepare, consume, and discuss sustainable, healthy, and tasty dishes that even fit a limited budget and restricted timetable. The primary outcome measures will be (1) eating behavior, (2) cooking skills, (3) corresponding attitudes, and (4) counseling competencies toward sustainable and healthy nutrition.

CONCLUSION: The study may provide important results about the potential of a university-based elective with integrated teaching kitchen training aiming to contribute to a social transformation toward healthier and more sustainable diets.

P101 HYBRID DELIVERY, ACCESS AND SCALABILITY: A VIRTUAL TOUR OF THE BROADCAST-MEDIA EQUIPPED ALBERTA HEALTH SERVICES SOUTH HEALTH CAMPUS WELLNESS KITCHEN

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PURPOSE: In a climate of competing resources and fiscal restraint, teaching kitchens (TKs) can optimize access, reach, and scalability of programming, and enhance standard delivery models, through innovations in the use of broadcast technology. While many TKs depend on minimal audio, visual, and broadcasting equipment, the Alberta Health Services (AHS) South Health Campus Wellness Kitchen (SHCWK) has leveraged existing equipment and internal technical staff to deliver high-quality, broadcast-media standard, virtual programming.
METHODS: During the Covid-19 pandemic the SHCWK leveraged existing capital and personnel to develop and deliver high-quality, live, virtual Culinary Medicine programming for patients, medical trainees, dietetic interns, and practitioners.
RESULTS: Through optimized use of existing infrastructure and staff resources, patient intervention sessions can now be broadcast to participants across the province, increasing the potential target patient reach of the SHCWK to more than 4 million Albertans, and to health care providers and trainees nationally and internationally. Based on the success of live delivery, additional internal departments (including Digital Media Services and Provincial Nutrition Services) have partnered with the SHCWK to scrip, produce, and disseminate high-quality recorded videos. Not only will recordings optimize clinician time to deliver the sessions, but they will also support flexible, tailored, access for patients and referring providers.
CONCLUSION: The SHCWK utilizes a novel technological approach to deliver high-quality virtual health interventions and virtual training sessions. Success with live virtual delivery drew key partners to the table to support the production of high-quality recorded content. When the SHCWK returns to in-person programming, hybrid delivery will allow for simultaneous in-person and virtual participation. As many TKs seek to scale their interventions, the SHCWK approach may serve as a model for virtual delivery from a built-in, hospital-based, teaching kitchen.

P102 ENGAGING CANADIAN LEADERS ON "NUTRITION IN MEDICAL EDUCATION: A CULINARY MEDICINE APPROACH" AT THE 2022 CANADIAN CONFERENCE ON MEDICAL EDUCATION

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PURPOSE: Across the United States, Culinary Medicine (CM) is offered in medical programs to meet nutrition education competencies, and equip future practitioners with dietary counselling, interdisciplinary collaboration, and self-care skills. In Canada, the field of CM is still emerging, and a lack of awareness amongst stakeholders presents a barrier to widespread adoption of this innovative approach to providing nutrition in medical education. To address this awareness gap, our pan-Canadian team facilitated a meeting for Canadian stakeholders at the 2022 Canadian Conference on Medical Education titled ''Nutrition in Medical Education: A culinary medicine approach''
METHODS: The meeting was offered as in a hybrid virtual and in-person format. National and international physician leaders in CM delivered presentations, followed by facilitated small group discussions. Attendees were encouraged to explore current barriers to nutrition in medical education in Canada and propose solutions to improve nutrition competency among physicians through interprofessional collaboration with dietitians and culinary medicine initiatives. Following the meeting, a survey was distributed to attendees to explore if the meeting met their needs and the stated meeting objectives.
RESULTS: Over forty-five leaders attended the meeting, with representation from across Canada, Europe, and the United States. One third responded to the post-meeting survey. Of those, the majority felt the meeting objectives were met, that it addressed their learning needs, and that they gained new knowledge, skills, and/or attitudes from the meeting. Eight survey respondents (from eight distinct institutions) self-identified as champions, indicating an interest in future meetings and communications.
CONCLUSION: This meeting was a useful strategy to raise awareness, identify champions, explore barriers, and engage stakeholders at a national level on nutrition in medical education and culinary medicine. Expanding the activities of current teaching kitchen collaborative members, meetings like this can extend the knowledge of existing leaders and raise awareness to new audiences.