

Evidence for a Community Wellness Kitchen

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Abstract

This study proposes an original ideal to implement Wellness Kitchens throughout communities across the United States. Nutrition plays an important role in maintaining normal weight and preventing obesity-related illnesses such as heart disease, diabetes, stroke and some cancers. Due to a number of contributing factors that will be evaluated throughout this paper, many Americans do not understand how poor diet negatively affects their health. These unsuspecting individuals rely on the medical system as a whole to care for their nutrition needs; some of which may be alleviated through a holistic approach to understanding nutrition. I conducted online research using PubMed, Google and Google Scholar. Two Wellness Kitchen sessions were recorded and one online questionnaire was conducted (n=77) where participants answered 21 questions about nutrition and whether or not they would utilize a Wellness Kitchen in their community. Sixty-nine percent of the study participants would find it beneficial to have a community Wellness Kitchen. This original idea focuses on implementing a Wellness Kitchen in communities across America with a hands-on approach to teaching nutrition to reduce chronic health-related conditions.

Keywords: Wellness Kitchen, community kitchen, nutrition, adult-onset diabetes, prevention, wellness, disease, prevention

Evidence for a Community Wellness Kitchen

Currently in the United States, 78.6 million people, accounting for more than one-third of adults and 17% of youth, are obese (Ogden, Carroll, Kit, & Flegal, 2014). Ogden, Carroll, Kit, & Flegal's study report no significant changes in childhood obesity from 2003-2004 through 2011-2012, however the obesity prevalence remains high requiring continued surveillance (2014). Obesity contributes to costly medical conditions including heart disease, diabetes, stroke and some cancers (*Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report* – NHLBI, NIH, 1998). Healthcare practitioners are taxed as their resources are shifting to care for what is now considered one of the leading causes of preventable death in the United States (*Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report* – NHLBI, NIH, 1998). In 2008 the cost of treating obesity-related medical conditions was \$147 billion; costing obese individuals an additional \$1,429 annually in medical bills compared to normal weight persons. These increasing medical costs are somewhat absorbed by healthy individuals who minimally use the medical system, however this is not a long-term realistic solution.

This project proposes the adoption of an original idea; a Wellness Kitchen, a state-of-the-art teaching facility focusing hands-on nutritional demonstrations tailored to meet the participant's specific medical need. An emphasis is placed on restoring health while teaching accountability for the participant's medical condition. Two theories that prompted this research project and will be further discussed in this paper: (1) the removal of Home Economics education from the public school system, and (2) a decline in home cooked meals. Five target groups exist where Wellness Kitchens may provide the greatest impact in a community and will

be further discussed in this paper: (1) Individual Participants, (2) Prime Individuals, (3) Communities, (4) Employers and Insurance Companies, and (5) Primary Care Physicians.

The purpose of this capstone project is to present current literature supporting the benefits communities can experience through the implementation of a Wellness Kitchen and to present new research material supporting the need for wellness education for all ages. Wellness Kitchens present the opportunity for food to be used as medicine and for the prevention of weight-related diseases caused by nutrient-deficient foods to be explored in a hands-on learning environment specifically tailored to meet the individual need of each participant.

Methods and Materials

A series of video recordings were created based on participant needs. The participants presented their objectives based on their desired outcome.

Study Participant Profiles

Study Participant #1:

- 18 year old, white, non-Hispanic, female
- 5'5", 150 pounds - participant recently lost 35-lb over the previous nine months
- History of skipping meals and consuming meals low in nutritional value
- Light smoker; attempting to stop
- Eating Habits: unhealthy, irregular meals including fast food and high fat/high carb meals
- Medical Diagnosis: (1) type-1 diabetes – age two, (2) seizure disorder – age three, and (3) eosinophilic esophagitis (EE), caused by food sensitivities that severely damage the gastrointestinal (GI) tract and cause esophageal problems

- Goals: (1) achieve a better understanding of nutrition, (2) Learn how to shop for and prepare easy meals at home, and (3) reasonable cost and time frame

Study Participant #2:

- 38 year old, white, non-Hispanic, female
- 5'5", 152 pounds
- Healthy eating habits – participant followed a strict vegan diet for approximately 7 months (1/2014-8/2015) experienced a 25 lbs. weight loss. Vegan diet stopped due to severe skin reactions which she attributed to diet, leading to an overgrowth of *Candida*. Experienced weight gain after re-introducing meat and dairy back into diet
- Medical Diagnosis: (1) Autoimmune Hashimoto's thyroiditis
- Goals: (1) better manager weight

Online Questionnaire

I conducted an online questionnaire of 77 participants (n=77) who answered 21 questions about nutrition and the likeliness of utilizing a community Wellness Kitchen. Questions are detailed in the Discussion and graphs are located in Appendix A and will be further discussed in detail in the results section of this paper.

Research Design

The research I conducted in this experiment included: (1) two participants' profiles used for video recordings. Participants were interviewed and provided with a detailed report that included a meal plan and hands-on instruction, and (2) questionnaire designed to gain an understanding of how a random group of individuals from varying backgrounds viewed the importance of nutrition and how it relates to overall wellness.

The online questionnaire participants responded to questions regarding their social and economic status, age and gender. In addition, participants answered questions focused on the number and age of people living in the home, weekly grocery budget, location of closest organic grocery, types of organic food items purchased, the percentage of meals eaten at home vs. fast food restaurants and non-fast-food restaurants and their prior experience and/or education in cooking from scratch, if applicable.

Bias of Online Questionnaire

The online questionnaire was sent by open invitation to the Facebook community and shared by numerous individuals directly linked to my friends. I also posted the questionnaire on two wellness pages I manage on Facebook. The possibility exists that the target audience is not as randomized as the primary participants may have similar interests related to health and wellness as many people who view my pages do so for wellness topics of interest.

Results

During an online search for the keywords “wellness kitchen” and “holistic kitchen” no scholarly articles populated. “Community kitchen” provided four results: (1) “Aboriginal Community Kitchen Garden Project” in Canada, (2) “A Qualitative Study of Community Kitchens as a Response to Income-Related Food Insecurity”, (3) “Tecno-economic assessment of an off-grid PV-powered community kitchen for developing regions”, and (4) “The role of a community kitchen for participants in a socio-economically disadvantaged neighbourhood”.

Video Recordings

Participant #1 – a video recording showing the steps in creating guacamole for under \$3 was prepared for participant #1. The video showed step-by-step instructions for easy duplication at

home. Guacamole was chosen for participant #1 due to her previous medical conditions and desire to stay within a small budget and create a filling snack within a few minutes. Participant #1 is a type-1 diabetic with a relevant history of EE, requiring a meal without artificial colors, GMOs or preservatives. Because EE can be controlled and prevented with proper diet, a diet rich in organic and non-GMO foods is critical as reducing unnecessary exposure to chemicals, especially those found in food.

Participant #2 – a video recording showing how to can fresh tomatoes was created as the participant sought information on self-reliance and utilizing the vegetables grown in her garden. Participant #2 was chosen to show the variety of skills or opportunities that a Wellness Kitchen can provide to participants.

Online Questionnaire

The online questionnaire was viewed by 113 random people and 77 participants answered all 21 questions; 5 questions were removed due to the fill-in-the-blank answers (Appendix A). The respondents answered: 69% would use a community Wellness Kitchen; 70% would watch YouTube videos; 90% were taught how to cook from scratch; 71% enjoy cooking at home; 81% have time to cook meals at home; 62% have children under the age of 18 living in the home; 45% feel confident teaching their children how to cook from scratch; 49% budget more than \$100 at the grocery each week; 43% would send their children to a Wellness Kitchen to learn about nutrition and how to cook from scratch; 66% eat less than 5 meals weekly at fast-food restaurants; 70% eat less than 5 meals weekly at non-fast-food restaurants; 35% earn more than \$100k annually; 42% would be willing to pay between \$10-\$25 for a custom-designed nutrition session; 88% have a grocery within 10 miles of their home that sells organic food; when grocery shopping, the following foods are ranked in order of preference of purchasing organically: 25%

fruit, 27% vegetables, 6% canned goods, 13% meat, 3% boxed snacks, 3% breads and bakery, 10% everything possible, 10% do not purchase organic foods and 3% other; of the respondents 81% female, 19% male.

Discussion

Plants are used not only as a source of fuel, but to treat medical conditions and to heal the body. First recorded in Ancient Egypt, one of the earliest documented use of plants for the treatment of disease and management of health is garlic, which was fed to working class pyramid builders to maintain and increase their strength, enabling them to work harder thus increasing productivity (Rivlin, 2001, p. 951S). Garlic contains effective anti-cancer and antitumor properties and is antimicrobial, antithrombotic, hypolipidemic, antiarthritic and hypoglycemic (Thomson & Ali, 2003, p. 67). Turmeric, a common spice from the root *Curcuma longa*, is part of the ginger family. Turmeric is a medicinal herb with anti-inflammatory effects due to the presence of curcumin. Multiple molecules within the plant are involved in the anti-inflammatory process and include, collagenase, cyclooxygenase 2, elastase, hyaluronidase, interferon-inducible protein, interleukin-12 (IL-12), leukotrienes, lipooxygenase, monocyte chemoattractant protein-1 (MCP-1), nitric oxide, phospholipase, prostaglandins, thromboxane, tumor necrosis factor (TNF). (Chainani-Wu, 2004). Although traditionally known for its medicinal properties, current day use of turmeric is for flavor and spice in Mediterranean dishes.

Between 1912 and 2012, as the Western world embraced pharmaco-therapy as a cure-all, the decline of herbal remedies and natural medicines declined (Bastyr University, 2012). However, by the end of the 20th century, people questioned the over-use of pharmaceuticals, giving birth to the rise of natural medicines in America once again (Bastyr University, 2012). In

the last decade, the use of alternative medicines have increased dramatically. In 2001, Americans spent \$4.2 billion on herbs and other botanical remedies (Kelly et al., 2005, p. 281-286). Despite the increased use of natural medicines and herbal products in the United States, alluding to the point that Americans have a greater interest in their health, they lack food and nutrition education, which was previously taught to school-aged children. During the American Revolution the study of home economics begin in the United States for the sake of preparing girls for life on the farm helping with their families (Home Economics, 2015). However, over the years, these critical skills led women to seek positions in hospitals, restaurants, hotels and government offices (Importance of Home Economics in Schools, 2013). With the higher demands being placed on mathematics, economics, history, literature and the sciences, home economics courses were slowly replaced in the public school system (Importance of Home Economics in Schools, 2013). Currently, if a student wishes to learn about cooking, nutrition or other life skills, such as personal finance, they must obtain that skill through lifestyle learning; for example, replicating what they are seeing at home. Perhaps one of the greatest challenges growing children face is the reality that many of their parents both work and are not preparing meals at home. Cooking classes can provide community members with the opportunity to learn a life skill while team building (Blum Center for Health, 2015) and were readily available in nearly every school in American during the 1980s and 90s. With the alarming rise of childhood obesity, health experts may reconsider the negative impact that removing home economic courses from school has had on communities across the United States.

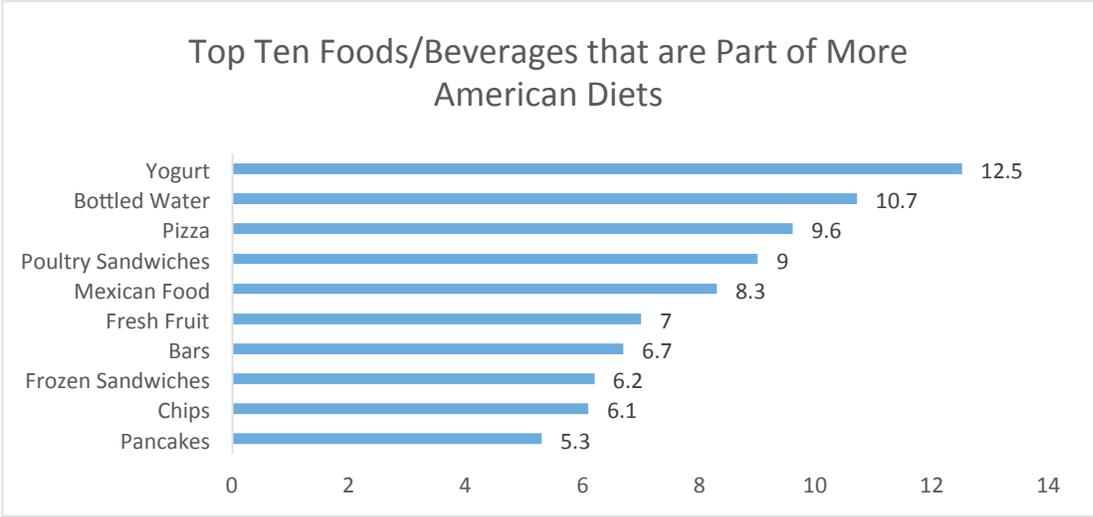
Leading nutrition experts agree for the majority of American families, homemade meals are slowly becoming a thing of the past (Gustafson, n.d.). The reasons are not surprising and include: (1) the convenience of eating at fast food restaurants, (2) too little time at home to

prepare a healthy meal, (3) too challenging to prepare meals if adequate instruction was not passed from one generation to the next, and, (4) the cost of a home cooked meal can be more expensive than value meals available at fast food restaurants (Gustafson, n.d.). Many families are unable or unwilling to sacrifice one income, requiring both parents to work full time jobs, pushing families away from the dining room table and into restaurants. For these reasons, as well as a push for female equality in the job market, traditional roots that at one time encouraged the mother or wife to prepare meals at home is no longer a reality for most Americans.

During the 1960s and 1970s, Kentucky Fried Chicken advertised a billboard showing a giant bucket of chicken under a two-word slogan, ‘Women’s Liberation’ (Poole, 2013). Again in 1970 they ran another advertisement stating ‘Introducing Mom’s Night Off Feast’ which encouraged families to eat at KFC so mom could let someone else do the hard kitchen work for her (Asiago, 2013). Ironically this representation of women and equality in the work force meant that home cooked meals would be set aside for the hope of a career equal to that of a man (Poole, 2013). Smith, Ng, & Popkin (2013) reported a decline in home cooked meals between 1965 and 2008, in a well-documented, cross-sectional analysis of data from 6 nationally representative US dietary surveys and 6 US time-use studies in a report showing trends in US home food preparation and consumption between 1965 and 2008. The largest declines occurred between 1965 and 1992 where foods prepared at home accounted for 65-72% of total daily energy and 54 to 57% reported cooking activities (Smith, Ng, & Popkin, 2013).

In a 2010 article published in The New York Times, Kim Severson writes about a two-decade decline of vegetables despite public health initiatives, stricter government guidelines and record growth reported by farmers’ markets. With only 26% of the nation’s adults eating vegetables (excluding french fries but including lettuce on a hamburger) three or more times a

day, something is wrong. In fact, since 1989, salads ordered as a main course at either lunch or dinner at restaurants in the US have dropped by half to only five percent (Severson, 2010). The NPD Group, a research group who collects receipts from more than 500,000 consumers using the NPD mobile phone app and conducts 12 million consumer interviews each year released their 29th Annual Eating Patterns in America Report on November 10, 2014 showing that although more Americans are eating at home since 1993, they are not cooking at home. Figure 1 shows the point change in percent of American food consumption of items eaten at least once in a two-week period; the top 10 food/beverages consumed are listed (The NPD Group, 2014). With yogurt and pizza listed as the top two food choices for reporting Americans, the data in the NDP Group report clearly shows unhealthy foods of convenience. Although food is being brought into the home, the consumer is not preparing it (The NDP Group, 2014).



According to the University of Minnesota’s Center for Spirituality & Healing, people really don’t need much nutrition advice because they already know what to do; eat a variety of foods, minimize sugar and other empty calories, watch the amount of food consumed and exercise each day (University of Minnesota, 2013). Following these simple recommendations really are the staple of leading a healthy life and should be encouraged from a young age;

however most people choose not to follow these recommendations. The philosophy of the Wellness Kitchen understands that although people *know* what they should be eating, they *aren't* doing so. By introducing a teachable method, tailored to a person's health status, in an easily duplicable method, better compliance and success is anticipated. Evidence presented in this capstone supports the concept of the Wellness Kitchen as an effective means to positively influence communities across the United States.

Although Wellness Kitchens are focused on teaching nutrition and demonstrating meal preparations, they should not be confused with community kitchens, which are public spaces where groups of people cook for their community on a regular basis. Community kitchens are designed to encourage socialization and reduce meal costs by cooking collectively (Food Share, n.d.) and exist in many states across the nation. Wellness Kitchens, on the other hand, introduce a new concept designed to educate clients on nutrition, however multiple benefits are provided. Clients will; (1) increase nutritional awareness by learning how their food choices affect their health, wellness and finances, (2) learn about whole, organic foods, gardening and creating healthy recipes, and (3) decrease their medical footprint and minimize out-of-pocket expenses for prescriptions, medical bills and insurance costs. Out-of-pocket expenses currently spent on doctor's visits, medications, hospital and lab bills dramatically decrease while the client's nutritional intelligence increases, furthermore increasing longevity.

The importance of healthy eating is not limited to a home cooked meal. As a growing population of students are concerned about the food they are eating and look to source healthier alternatives in their current food selection, in 2015, Auburn University answered the call and introduced a state-of-the-art Wellness Kitchen on their main campus in Georgia.

Students can opt-in to participate in healthier meal plans during their academic years (Auburn University, 2015). Although Auburn University doesn't teach the students how to prepare their own meals, the Wellness Kitchen provides students with the option to eat a high quality diet balanced with nutrition and an outstanding dining experience (Auburn University, 2014). The University's Wellness Kitchen has a dedicated gluten/allergen free prep area providing students with allergies the option of allergy free food cooked daily from scratch (Auburn University, 2014). The Wellness Kitchen offers a meal plan where 60 meals (breakfast and lunch are considered one meal and dinner is considered two meals) cost the student \$995, however a remaining balance of \$45 is available to be used at any on-campus dining facility. This amount is figured at a discounted rate for students of \$8.40 versus the retail pricing of \$8.99 for breakfast, \$9.99 for lunch and \$17.99 for dinner, excluding taxes (Auburn University, 2014).

Wellness Kitchens will focus on the (1) individual and (2) prime individuals, and target groups (3) communities, (4) employers and insurance companies, and (5) primary care physicians (PCP).

1. Individual Participants

Target participants are individuals already looking to lead a healthier lifestyle. They may have a medical condition where nutrition would play a leading role in their overall wellness. Individual participants expect to pay a premium for the services provided. These participants are expected to make up the majority of a Wellness Kitchen business and are targets for referrals.

2. Prime Individuals

Prime individuals have been diagnosed with a medical condition where nutrition could alleviate or reduce some of the symptoms and/or eliminate the disease altogether; an example would be type-2 diabetes. Clinical research has shown that type-2 diabetes can be reduced or eliminated

with proper nutrition. Diabetics should focus on lifestyle strategies such as nutrition and exercise in order to improve metabolic outcomes. (Franz et al., 2003, p. 30). To achieve these outcomes, these patients “need nutritional recommendations that are supported by scientific evidence and that can be easily understood and translated into everyday life” (Franz et al., 2003, p. 30). In a type-2 diabetes cost-of-illness analysis appearing in the August 2015 edition of *Frontliners in Pharmacology*, \$51.1 million could be saved annually in non-trivial healthcare costs by increasing the fiber in a type-2 diabetic’s diet to 38 g for men and 25 g for women. Simply sharing this message with a population of people who are uninformed about small things they can do to make a difference in their health can be lifesaving while reducing overall healthcare costs. A Wellness Kitchen is a perfect environment for this message to be delivered. Prime individuals may require the direction of their PCP in order to secure a Wellness Kitchen appointment as health is not a major focus for them.

3. Target Group: Communities

Health conscious communities and communities where a moderate percentage of the population suffers from medical conditions where nutrition can play a key role in decreasing medical cost and the reliance on an already taxed medical system are excellent target communities. Growing communities looking to recruit new homeownership design community centers around the needs of their community members. Many communities have wellness programs already but lack an educational kitchen. Working with recreational centers to build a Wellness Kitchen has many benefits and should be explored. A focus idea may incorporate attending Town Hall meetings to propose a community Wellness Kitchen and gain community support. Conducting neighbourhood questionnaires is another way to gain an understanding of the needs of the target community.

4. Target Group: Employers and Insurance Companies

Employers could be incentivized by their insurance provider to work with them in order to decrease company insurance. Any out-of-pocket expenses an employee incurs to attend Wellness Kitchen sessions may be reimbursed as part of a wellness initiative. Research has shown that nutrient-conscious employees decrease their dependency on expensive medications and therapies, therefore decreasing the business' overall medical costs (Kaspin, Gorman, & Miller, 2013). Employers may encourage employees attend wellness programs and some employers may even incentivize employee participation. A literature review conducted by Kaspin, Gorman, & Miller (2013) identified health-related and economic outcomes of employer-sponsored wellness programs. Twenty references were accepted and the interventions were classified into health assessment, lifestyle management and behavioral health (Kaspin, Gorman, & Miller, 2013). Improved economic outcomes were reported, such as “health care costs, return on investment, absenteeism, productivity, workers’ compensation and utilization” and they were able to determine a decrease of health risks (Kaspin, Gorman, & Miller, 2013). From their research, Kaspin, Gorman and Miller were able to summarize the relationship between corporate encouragements of a wellness program to improved employees’ lives, not only for cost reduction. In this example, the employees were provided with community support by health organizations which provided support, education and treatment with an improvement in health-related and economic outcomes (Kaspin, Gorman, & Miller, 2013).

5. Target Group: Primary Care Physicians

In a 1995 study, Kushner recognized nutrition and dietary counseling to be a key component of preventative services provided by primary care physicians (PCP). However, even after the Healthy People 2010 and the U.S. Preventative Task Force identified the need for 75% of PCPs

to address nutrition with their patients, the objectives were not achieved, in fact, during a midcourse review, those numbers had actually declined from 42% to 40% (Kolasa & Rickett, 2010, p. 502). Physician's offices are identified as a target group to partner with a Wellness Kitchen in order to provide patients with the nutritional education they require.

Potential for harm

The information presented is to be used for educational purposes only and does not take the place of a consultation with your trusted healthcare provider. If a participant has been diagnosed with a medical condition that requires pharmaceutical intervention, please check with a trusted healthcare provider prior to adjusting the diet or supplement therapy.

Conclusion

With strikingly high numbers of preventable illnesses costing Americans millions of dollars annually, it is time we stop and consider what has happened over the past few decades to contribute to this problem of epidemic proportion. Wellness Kitchens provide a viable solution to individuals and communities who are concerned about their health, medical expenses and their footprint that may leave the next generation in shambles. Through the research provided, it is clear that the education provided to clients can be life-changing. Individual clients, school-aged children, community members and major corporations will benefit from understanding how food affects their health, wellness and impact on their community. Wellness Kitchens are an ingenious way to add a fun and creative approach to revitalizing how families choose to spend their mealtime; are they going to prepare healthy meals at home with this new knowledge they've learned, or will they continue to eat out at fast-food restaurants or purchase pre-made foods from the grocery? The concept of the Wellness Kitchen explores at a minimum the

opportunity to begin to impact these daily decisions that community members are making. Evidence has been provided supporting the implementation of Wellness Kitchens, or at a minimum the concept thereof, in communities across America to fight the obesity epidemic and positively impact families around the nation. Food has been used as medicine since the beginning of time and the challenge now is to put thousands of years of evidence to use in kitchens across America. Instead of suppressing nutrition as a means to heal the body, the American people deserve to understand how food heals. As American communities are challenged with the task of providing outreach programs to their community members; the Wellness Kitchen provides the answer to that call.

Recommendations

Wellness Kitchens provide an opportunity for participants to learn about nutrition in a holistic environment where special attention can be paid to the medical condition of the participant. Clinical research should be considered after Wellness Kitchens are up and running across the United States to further support implementation across the country. Controlled and randomized trials should be considered. PCP should consider referring patients to Wellness Kitchens as a means to educate patients about nutrition. This option will allow the physician to focus on the medical need and hand the nutrition over to an expert in the field who will best be able to address the patient's concerns in a detailed manner, which the physician may not feel comfortable doing due to a lack of nutrition knowledge. Finally, employers and insurance companies should work together to create a wellness plan, including incentives and reimbursement packages, to assist employees who participate in wellness programs.

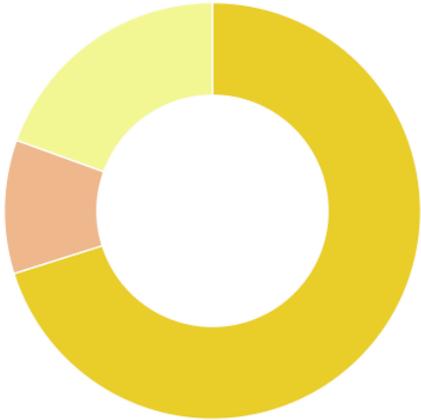
Appendix A

Would you find it beneficial if your community had a Wellness Kitchen, where you could learn about nutrition, how to prepare realistic me...



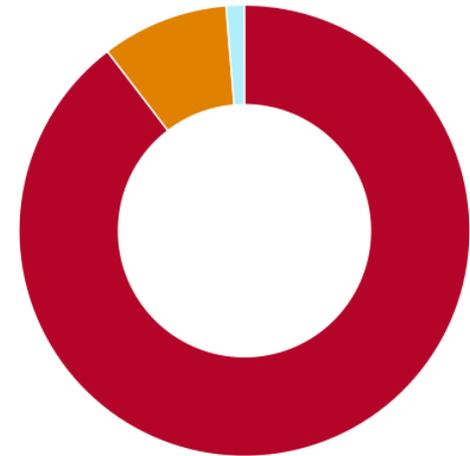
69% YES 1% NO 30% MAYBE

Would you watch YouTube videos of recorded sessions from the Wellness Kitchen? Sessions may include topics on food choices for diabetics...



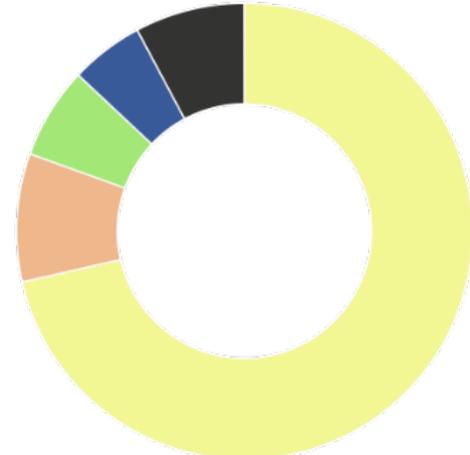
70% YES 10% NO 19% MAYBE

Have you or has anyone in your family been taught how to cook from scratch (non-boxed or already prepared foods)?



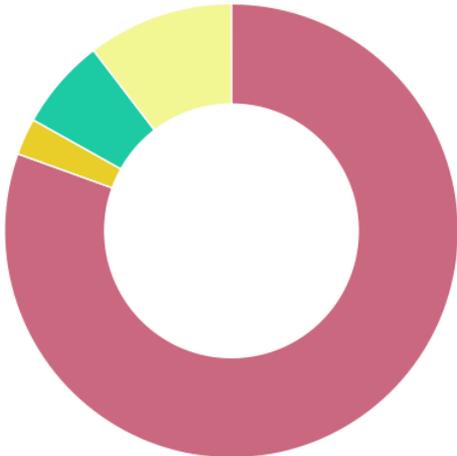
90% YES 9% NO 1% I DON'T KNOW

Do you enjoy cooking at home?



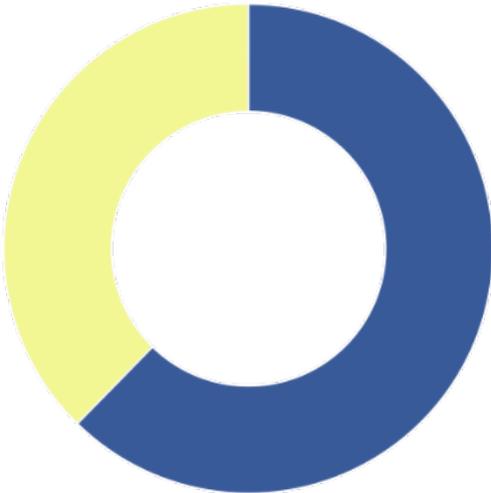
71% YES 9% NO 6% IF I KNEW HOW TO COOK, I WOULD ENJOY IT 5% I PREFER FOR SOMEONE ELSE TO ALLOW ME TO COOK 8% Other

Do you, an adult, or older teenager have time to prepare home cooked meals for you or your family?



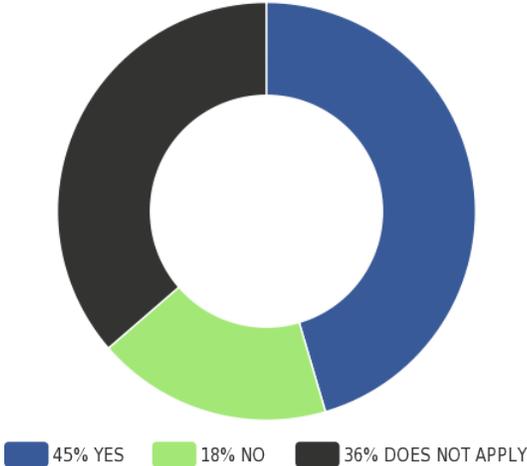
81% YES 3% NO 6% ON WEEKENDS ONLY 10% Other

Are there children under the age of 18 living in your home?

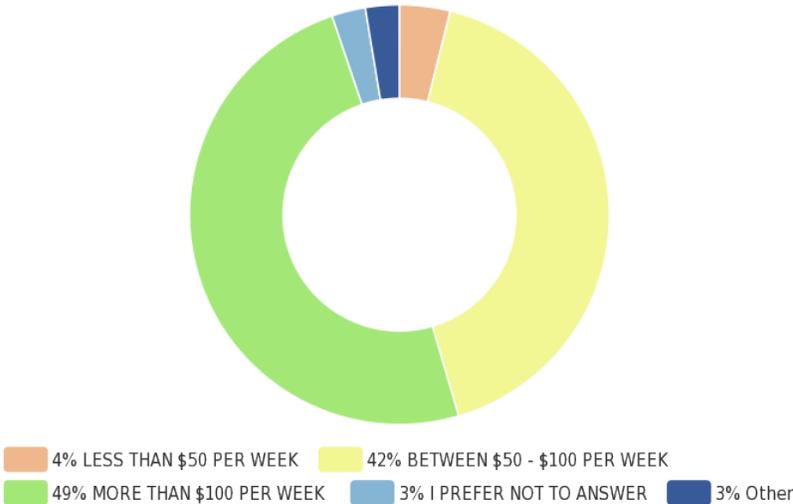


62% YES 38% NO

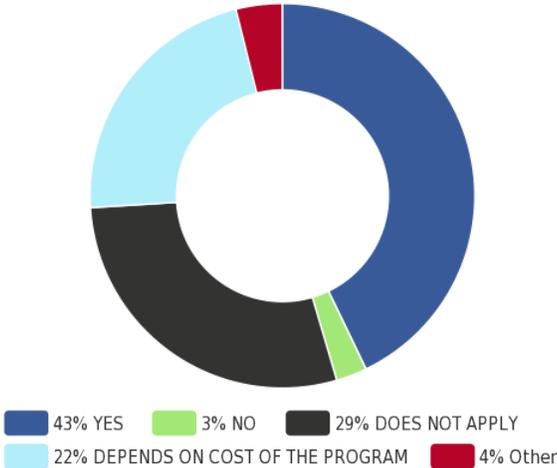
If you are their parent / guardian, do you feel prepared to teach your children under the age of 18 how to cook FROM SCRATCH at home?



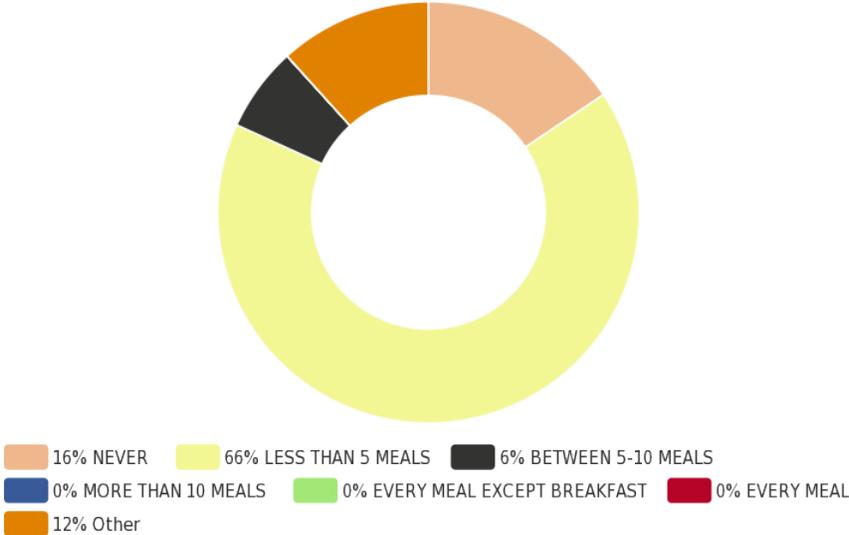
What is your average weekly budget for food items purchased at the grocery?



If a program existed where the Wellness Kitchen could help to teach children how to prepare a meal from scratch, would you be interested ...



How many times per week do you eat at FAST-FOOD restaurants?

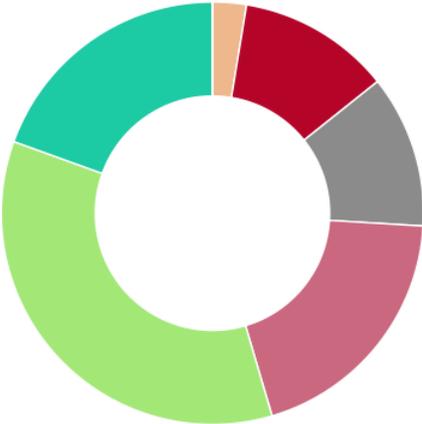


How many times per week do you eat at a NON FAST-FOOD restaurant? This would include restaurants like Applebee's, PF Chang's, Steakhouse...



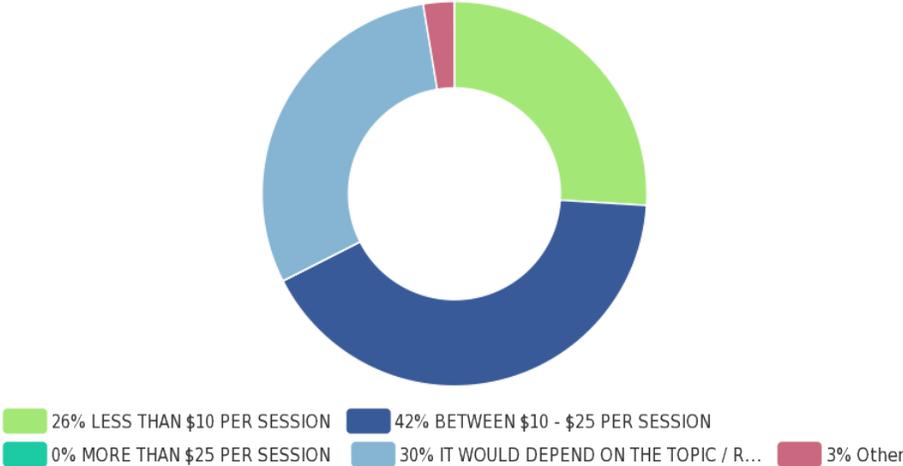
13% NEVER 70% LESS THAN 5 MEALS 5% BETWEEN 5-10 MEALS
4% MORE THAN 10 MEALS 0% EVERY MEAL EXCEPT BREAKFAST 0% EVERY MEAL
8% Other

What is your family's annual income?

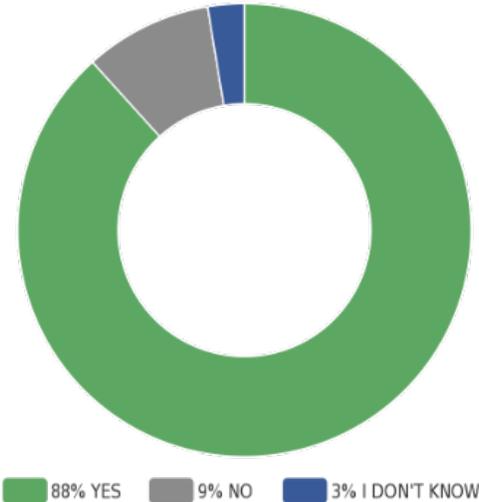


3% LESS THAN \$25,000 12% \$25,000 - \$50,000 12% 50,000 - \$75,000
19% \$75,000 - \$100,000 35% MORE THAN \$100,000 19% I PREFER NOT TO ANSWER
0% Other

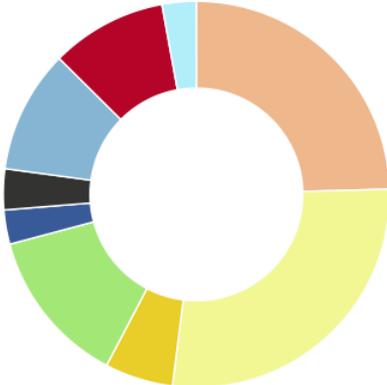
How much would you be willing to pay per 60 minute session to learn how to prepare healthy meals that are custom designed to aid your hea...



Do you have a store that sells organic food within 10 miles of your home?

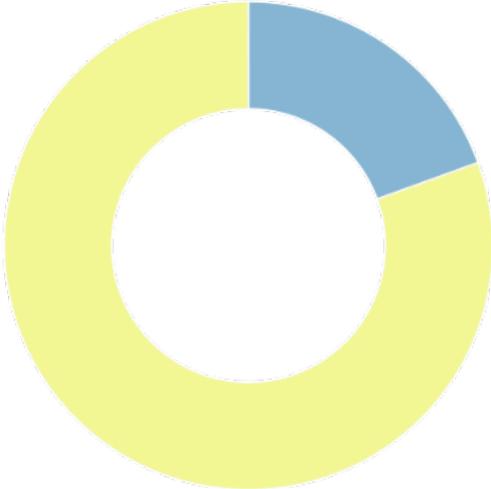


When grocery shopping, which of the following do you try to purchase as organically?



25% FRUIT 27% VEGETABLES 6% CANNED GOODS 13% MEAT
3% BOXED SNACKS 3% BREADS AND BAKERY 10% EVERYTHING I POSSIBLY CAN
10% I DO NOT PURCHASE ORGANIC FOODS 3% Other

What is your gender?



19% MALE 81% FEMALE

References:

- Abdullah, M. M., Gyles, C. L., Marinangeli, C. P., Carlberg, J. G., & Jones, P. J. (2015). Cost-of-illness analysis reveals potential healthcare savings with reductions in type 2 diabetes and cardiovascular disease following recommended intakes of dietary fiber in Canada. *Frontliners in Pharmacology*, *11*(6), 167. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/26321953>
- Asiago. (2013, October 19). 1970's KFC ads depicting women's liberation. | The Challenge Diet. Retrieved from <http://asiago.me/challengediet/1970s-kfc-ads-depicting-womens-liberation/>
- Auburn University. (2014). Wellness Kitchen | Tiger Dining | Auburn University. Retrieved from http://www.auburn.edu/administration/auxiliary_services/dining/WellnessKitchen.php
- Auburn University. (2015). AuburnTigers.com - Official Athletics Site of the Auburn Tigers - Facilities. Retrieved from http://www.auburntigers.com/facilities/wellness_kitchen.html
- Dufo-Lopez, R., Zubi, G., & Fracastoro, G. V. (2011, October 21). Tecno-economic assessment of an off-grid PV-powered community kitchen for developing regions. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0306261911006301>
- Blum Center for Health. (2015). Team Building and Wellness Cooking Class | Blum Center for Health. Retrieved from <http://blumcenterforhealth.com/corporate-wellness-and-partner-programs/corporate-wellness-program/team-building-and-wellness-cooking-class/>
- Bastyr Univeristy. (2012, April 24). Scholar examines decline and rise of herbal medicine. Retrieved from <http://www.bastyr.edu/news/general-news-home-page/2012/04/visiting-scholar-examines-decline-and-rise-herbal-medicine>

Chainani-Wu, N. (2004). Safety and anti-inflammatory activity of curcumin: a component of tumeric (*Curcuma longa*). *Journal of Alternative and Complementary Medicine*, 9(1).

Retrieved from <http://online.liebertpub.com/doi/abs/10.1089/107555303321223035>

Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity

in Adults: The Evidence Report - NHLBI, NIH (98-4083). (1998). Retrieved from

National Institutes of Health website: [http://www.nhlbi.nih.gov/health-](http://www.nhlbi.nih.gov/health-pro/guidelines/archive/clinical-guidelines-obesity-adults-evidence-report)

[pro/guidelines/archive/clinical-guidelines-obesity-adults-evidence-report](http://www.nhlbi.nih.gov/health-pro/guidelines/archive/clinical-guidelines-obesity-adults-evidence-report)

Food Share. (n.d.). Community Kitchens - FoodShare Toronto. Retrieved from

<http://www.foodshare.net/community-kitchens>

Franz, M. J., Warshaw, H., Daly, A. E., Green-Pastors, J., Arnold, M. S., & Bantle, J. (2003).

Evolution of diabetes medical nutrition therapy. *Postgraduate Medical Journal*, 79(927),

30-35. Retrieved from <http://pmj.bmj.com/content/79/927/30.short>

Furber, S., Quine, S., Jackson, J., Laws, R., & Kirkwood, D. (2010). The role of a community

kitchen for participants in a socio-economically disadvantaged neighbourhood. *Health*

Promotion Journal of Australia, 21(2), 143-145. Retrieved from

<http://www.publish.csiro.au/?paper=HE10143>

Gustafson, T. (n.d.). Too Busy, Too Lazy, Too Tired to Cook - Food and Health with Timi

Gustafson R.D. Retrieved from [http://www.timigustafson.com/2011/too-busy-too-lazy-](http://www.timigustafson.com/2011/too-busy-too-lazy-too-tired-to-cook/)

[too-tired-to-cook/](http://www.timigustafson.com/2011/too-busy-too-lazy-too-tired-to-cook/)

home economics. (2015). In *Compton's by Britannica*. Retrieved from

<http://kids.britannica.com/comptons/article-202129/home-economics>

- Kaspin, L. C., Gorman, K. M., & Miller, R. M. (2013). Systematic review of employer-sponsored wellness strategies and their economic and health-related outcomes. *Population Health Magazine*, 16(1). Retrieved from <http://online.liebertpub.com/doi/abs/10.1089/pop.2012.0006>
- Kelly, J. P., Kaufman, D. W., Kelley, K., Rosenberg, L., Anderson, T. E., & Mitchell, A. A. (2005). Recent trends in use of herbal and other natural products. *JAMA Internal Medicine*, 165(3), 281-286. Retrieved from <http://archinte.jamanetwork.com/article.aspx?articleid=486402>
- Kolasa, K. M., & Rickett, K. (2010). Barriers to providing nutrition counseling by physicians: a survey of primary care practitioners. *Nutrition in Clinical Practice*, 25(5), 502-509. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20962310>
- Rivlin, R. (2001). Historical perspective on the use of garlic. *Journal of Nutrition*, 145(7), 951S. Retrieved from <http://jn.nutrition.org/content/131/3/951S.short>
- Thomson, M., & Ali, M. (2003). Garlic [*Allium sativum*]: a review of its potential use as an anti-cancer agent. *Current Cancer Drug Targets*, 3(1), 67-81. Retrieved from <http://www.ingentaconnect.com/content/ben/ccdt/2003/00000003/00000001/art00006>
- University of Minnesota. (2013, July 3). Food As Medicine | Taking Charge of Your Health & Wellbeing. Retrieved from <http://www.takingcharge.csh.umn.edu/explore-healing-practices/food-medicine>
- Mundel, E., & Chapman, G. (2010). A decolonizing approach to health promotion in Canada: the case of the Urban Aboriginal Community Kitchen Garden Project. Retrieved from <http://heapro.oxfordjournals.org/content/25/2/166.short>

- Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *Journal of the American Medical Association*, *311*(8). Retrieved from <http://jama.jamanetwork.com/article.aspx?articleid=1832542>
- Poole, G. (2013, June 9). The good men project. Retrieved from <http://goodmenproject.com/featured-content/international-mens-movement-from-fast-food-feminism-to-home-baked-equality/>
- Smith, L. P., Ng, S. W., & Popkin, B. M. (2013). Trends in US home food preparation and consumption: analysis of national nutrition surveys and time use studies from 1965-1966 and 2007-2008. *Nutrition Journal*, *12*(45). Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3639863/>
- Severson, K. (2010, September 25). Told to Eat Its Vegetables, America Orders Fries - The New York Times. Retrieved from http://www.nytimes.com/2010/09/25/health/policy/25vegetables.html?_r=0
- Tarasuk, V., & Reynolds, R. (n.d.). A Qualitative Study of Community Kitchens as a Response to Income-Related Food Insecurity. - Abstract - Europe PubMed Central. Retrieved from <http://europepmc.org/abstract/med/11844401>
- The NPD Group. (2014, November 10). Americans are Going Out Less - npd.com. Retrieved from <https://www.npd.com/wps/portal/npd/us/news/press-releases/the-economy-of-eating-in-america-americans-are-going-out-less-and-getting-more-meals-from-home/>

United States Department of Agriculture. (n.d.). *Basic report: 09037, avocados, raw, all commercial varieties* (09037). Retrieved from The National Agricultural Library website:

ndb.nal.usda.gov/ndb/foods/show/2205?fg=&man=&lfacet=&count=&max=35&sort=&qlookup=Avocados%2C+raw%2C+all+commercial+varieties&offset=&format=Abridged&new=&measureby=

Williamson, K. (2014). Plant-Based Recipes. Retrieved from <http://www.plantbasedkitchen-recipes.com/>