Development of an interactive nutrition, cooking, and food skills program for adolescents

Mara Alexanian-Farr RD, Rebecca Noseworthy RD, Barkha Patel PhD, Jill Hamilton MD
OUTLINE

• Food Literacy and Health

• About Our Initiative

• Teen2Chef
  • Objectives
  • Development
  • Pilot & Evaluation
  • Next Steps
FOOD LITERACY AND HEALTH

Lower Food Literacy Correlations:
• ↑ convenience foods
• ↑ risk of health problems

Cullen et al. 2015
MEANT 2 PREVENT

a type 2 diabetes prevention initiative in children and youth
TEEN 2 CHEF
an interactive nutrition, cooking, and food skills program
for adolescents
OBJECTIVES

1. To design, develop and refine a 10 week, evidence-based, interactive food skills program for teenagers aged 13-18 years

2. To evaluate the usability and content of the program for facilitators

3. To evaluate the effect of the program on participant knowledge and behaviour change from baseline to 10 weeks
Focus Groups
Program Review
Pilot & Evaluation
Creation & Editing
Editing
Review
DEVELOPMENT
PROGRAM OBSERVATIONS

- Varied Program Length
- Inconsistency of Lifestyle & Obesity Management Programs
- Credentials of Facilitator
- Focus of Education
- General Population
- Facilitator Access to Programming

OUR PROGRAM

• Population: Adolescent specific (13-18yo)

• Facilitator: Dietitian led
  • Nutrition education focus

• Collaborative & Shared: Available for free
  • Translated
<table>
<thead>
<tr>
<th>WEEK</th>
<th>EDUCATION</th>
<th>RECIPES</th>
<th>SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>Energy Bites</td>
<td>Kitchen Safety</td>
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<tr>
<td></td>
<td>Eating 101</td>
<td>Wraps and Veggies with Dip</td>
<td>Knife skills (video)</td>
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<tr>
<td>2</td>
<td>Hydration</td>
<td>Smoothie Bowls</td>
<td>Reading a recipe (handout)</td>
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<td></td>
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<td>Fruit Infused Water</td>
<td>Kitchen Tools</td>
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<tr>
<td>3</td>
<td>Portions/Plate</td>
<td>Zucchini Pasta</td>
<td>Food safety (handout)</td>
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<tr>
<td></td>
<td>Method</td>
<td>Bolognese Sauce OR Meatballs</td>
<td></td>
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<tr>
<td>4</td>
<td>Label Reading</td>
<td>Cauliflower and Carrot Soup</td>
<td>Kitchen Terms</td>
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<td></td>
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<td>Granola bars (oven required)</td>
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<tr>
<td>5</td>
<td>Macronutrients</td>
<td>Burrito Bowl</td>
<td>Buying in Season</td>
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<td>6</td>
<td>Grocery Store</td>
<td>Hummus</td>
<td>Comparing Products</td>
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<td></td>
<td>Scavenger Hunt</td>
<td>Lentil and Couscous Salad</td>
<td>Navigating a Grocery Store</td>
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<tr>
<td>7</td>
<td>Eating Out</td>
<td>Tortilla Pizzas</td>
<td>Navigating Fast Food Environments</td>
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<td></td>
<td></td>
<td>Caesar Salad</td>
<td></td>
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<tr>
<td>8</td>
<td>Adapting Recipes</td>
<td>Pumpkin Zucchini Muffins</td>
<td>Baking and measuring</td>
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<td></td>
<td>and Salt</td>
<td>Burgers with hidden veggies</td>
<td>Adapting a recipe</td>
</tr>
<tr>
<td>9</td>
<td>Meal and Snack</td>
<td>Chicken Stew</td>
<td>Batch cooking</td>
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<td>Mapping</td>
<td></td>
<td>Grocery Game (handout)</td>
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<tr>
<td>10</td>
<td>Wrap Up</td>
<td>Master Chef challenge</td>
<td>Improvising</td>
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<tr>
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<td>Banana N-Ice Cream (demo)</td>
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</table>
COOKING SESSIONS

At the start of each cooking session, ensure all materials are clean and ready to use. Dish washing station should be set up, as should recipe stations with cutting boards, knives, and ingredients. Split the group into teams to work on different parts of the recipe or meal. Remind each team to read through the recipe before starting! Education on how to read a recipe will take place in Week 2 (handout provided).

Equipment
- Cutting boards
- Knives
- Wooden spoons
- Scissors
- Sieve/colander
- Spatulas
- Pots and frying pans
- Mixing bowls
- Can opener / peeler

Cleaning
- Non-latex gloves
- Sponge/scrubber
- Dish soap
- Paper towels/cloths
- Cleaning spray

Meal Time
- Plates/bowls
- Knives/forks/spoons
- Cups
- Serving utensils
- Serving plates/dishes
- Water pitcher

Cleaning:
Cleaning should take place throughout the cooking session. Participants should be reminded in advance that they are expected to clean everything up prior to leaving the session. Assigning participants to certain tasks at the beginning of each session can be helpful in making sure everyone knows their job.

Table 2: Kitchen Equipment

<table>
<thead>
<tr>
<th>Appliances/Large</th>
<th>Equipment</th>
<th>Cleaning</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Processor</td>
<td>Muffin tin (12 cup)</td>
<td>Sponges/scrubbers</td>
<td>Knife set</td>
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<tr>
<td>Blender</td>
<td>Baking sheets</td>
<td>Paper towels</td>
<td>Cutlery</td>
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<tr>
<td>Stove Off hot Plate</td>
<td>Can opener</td>
<td>Non-latex gloves</td>
<td>Plates</td>
</tr>
<tr>
<td>Oven Off toaster oven</td>
<td>Wooden Spoons</td>
<td>Cleaning spray</td>
<td>Bowls</td>
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<tr>
<td>Microwave</td>
<td>Baking Spatula</td>
<td></td>
<td></td>
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<tr>
<td>Frying pan (large)</td>
<td>Flipper/spatula</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pot (large)</td>
<td>Cutting boards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pot (medium)</td>
<td>Set of mixing bowls</td>
<td></td>
<td></td>
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<tr>
<td>Spiralizer (optional)</td>
<td>Bowls (for ingredients)</td>
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<tr>
<td></td>
<td>Measuring spoons &amp; cups</td>
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<tr>
<td></td>
<td>Vegetable peeler</td>
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<td></td>
<td>Cheese grater</td>
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**Week 1: Introduction & Eating 101**

### Materials
- Pencils/Pens
- PowerPoints (Intro and Eating 101)

### Handouts
- Week 1 Activity
- Recipes: Energy Bites & Greek Chicken Pitas
- Pre-Questionnaire
- Session evaluation

### Specialized Cooking
- Ingredients
- Food Processor

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**PowerPoint Presentations (30-40 minutes):**
1. Introduction to 12-week group
2. Eating 101

**Activity (10 minutes):**
- Have the group complete the activity and take up questions

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**Hunger vs. Appetite**

**Key Points:**
- The reasons we eat can be described by HUNGER or APPETITE
- HUNGER is your body physically needing food
- APPETITE can be described by your brain wanting food

**QUESTIONS:**
1. How full do you need to fill your stomach when you eat?
2. Do you think you need to eat enough food so your stomach is COMPLETELY full?

*many people think that their stomach needs to be completely full – however feeling satisfied is not caused by your stomach being full – our stomach sends signals when it senses food in it. Even drinking a glass of water can temporarily make you feel fuller.*
CAULIFLOWER CARROT SOUP

Makes: 6-8 servings
Prep Time: 10 minutes
Cook Time: 30 minutes

WHAT YOU NEED:
1 large onion chopped
3 medium carrots (diced or grated)
1 teaspoon ground cumin
1/4 teaspoon ground turmeric (optional)
1-2 cloves garlic or vegetable stockbroth
2 yellow skinned potatoes, peeled and chopped
1 large head cauliflower (chopped)
juice of half a lemon (or to taste)
1 teaspoon salt (or to taste)

Equipment Needed:
- stove or crockpot
- large pot
- blender or food processor

HOW TO MAKE:
1. In a large pot over medium heat, sauté onions and carrots in about 1 tablespoon of olive oil until the colors are softened.
2. Mix in the spices.
3. Add the stock, potatoes, and cauliflower. The liquid should be almost covering the vegetables.
4. Bring to a boil and simmer for 20-30 minutes or until potatoes and cauliflower are tender.
5. Puree soup using a blender or food processor. Adjust salt to taste, and add lemon juice.
6. Serve soup with cooked chicken breast and spinach.

EATING 101

QUESTION 1

WRITE DOWN WHETHER THE FOLLOWING SCENARIOS ARE HUNGER OR APPETITE:

1. I want a delicious pizza: ________________
2. I have not eaten in 4 hours and my stomach is rumbling: __________________
3. It is lunch time: _________________________
4. I am watching a movie and eat popcorn: _____________________

QUESTION 2

USING THE HUNGER SCALE ABOVE, WHEN SHOULD YOU STOP EATING? (Use the numbers 0-10 to answer)

START: ________ STOP: ________
PILOT AND EVALUATION

- Participant & Facilitator Feedback
  - Post Curriculum
  - Usability of Content
  - Improvements

- Pre/Post Questionnaire
  - Current Practices
  - Cooking Confidence
  - Food Skills
  - Self-Efficacy
  - Nutrition Knowledge
  - Barriers to Change
NEXT STEPS

• Post Pilot
  • Evaluate Outcomes
  • Changes Implemented

• Launch
  • Early 2019

• Translation
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CONTACT

mara.alexanian-farr@sickkids.ca