Real Food First: Nutrition Follows

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Session Goals and Objectives

* Identify the downfalls of the “nutritionism” paradigm
* Understand why food is more than the nutrients found on the nutrition facts label
* Learn about a community-cooking program that focuses on whole-food ingredients, to lead to improved nutrition and F&V consumption.
* Identify low-cost foods that may help prevent chronic disease and walk away with a few tasty recipes
The Big Question: What is nutrition and what are we supposed to eat??

* Nutrition is “the process of providing or obtaining the food necessary for health and growth”. (1)

* Food is defined as “material consisting essentially of protein, carbohydrate, and fat used in the body of an organism to sustain growth, repair, and vital processes and to furnish energy.” (2)
Nutritionism (i.e.- the commercialization of nutrition)

- Started with discovery of the first vitamin

- The idea that a food’s nutritional value, benefits, or harmful effects is the sum of its individual nutrients, vitamins, minerals and other known components. (3)

- “Nutrition” is found in nutrients, not food

- “Good or bad” nutrients = “good or bad” foods
Consumer Confusion

* Belief that a ‘magic ratio’ of fats, carbs, and protein are key to a healthy diet

* Displaces ourselves as the authority of our own health

* This can lead to:
  * Restrictive behaviors
  * Unhealthy diets
  * Reliance on manufacturer labels to define what is healthy
  * Fear and/or confusion around food or food groups

* Examples?
This or That?

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>Calories 140</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Daily Value*</td>
<td></td>
</tr>
<tr>
<td>Total Fat 4g</td>
<td>5%</td>
</tr>
<tr>
<td>Saturated Fat 0g</td>
<td>0%</td>
</tr>
<tr>
<td>Trans Fat 0g</td>
<td></td>
</tr>
<tr>
<td>Cholesterol 0mg</td>
<td>0%</td>
</tr>
<tr>
<td>Sodium 180mg</td>
<td>8%</td>
</tr>
<tr>
<td>Total Carbohydrate 29g</td>
<td>11%</td>
</tr>
<tr>
<td>Dietary Fiber 4g</td>
<td>14%</td>
</tr>
<tr>
<td>Total Sugars 15g</td>
<td></td>
</tr>
<tr>
<td>Includes 0g Added Sugars</td>
<td>0%</td>
</tr>
<tr>
<td>Protein 2g</td>
<td>4%</td>
</tr>
</tbody>
</table>

Vitamin D 1.4mcg 8%
Calcium 312mg 25%
Iron 1.08mg 6%
Potassium 0mg 0%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.
This or That?

### Nutrition Facts

**This Ingredient**

- **Calories:** 264
- **From Fat:** 150
  - **% Daily Value:**
    - Total Fat: 18g (28%)
    - Saturated Fat: 1.4g (7%)
    - Trans Fat: 0g
    - Cholesterol: 0mg (0%)
    - Sodium: 2mg (0%)
    - Total Carbohydrates: 23g (8%)
      - Dietary Fiber: 5g (21%)
      - Sugars: 13g
    - Protein: 8g (16%)
  - Vitamin A: 0% • Vitamin C: 1%
  - Calcium: 11% • Iron: 9%

*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.*

### Nutrition Facts

**That Ingredient**

- **Calories:** 140
- **Calories from Fat:** 50
  - **% Daily Value:**
    - Total Fat: 6g (9%)
    - Saturated Fat: 4g (19%)
    - Trans Fat: 0g
    - Cholesterol: 5mg (2%)
    - Sodium: 140mg (6%)
    - Total Carbohydrate: 17g (6%)
      - Dietary Fiber: 5g (20%)
      - Sugars: 8g
    - Protein: 6g (10%)
  - Calcium: 2% • Iron: 4%

*Not a significant source of vitamin A and vitamin C.*
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.*

### Comparison

- **Calories:**
  - This: 264
  - That: 140
- **Total Fat:**
  - This: 18g
  - That: 6g
- **Saturated Fat:**
  - This: 1.4g
  - That: 4g
- **Dietary Fiber:**
  - This: 5g
  - That: 5g
- **Calories from Fat:**
  - This: 150
  - That: 50
Nature Knows Best

* Food synergy concept:
  * The interaction of nutrients and other bioactive compounds work in concert to prevent chronic disease (4)
  * Fowke et al. found that brassica vegetable intake reduced oxidative stress (5)
  * No effect from micronutrient + fiber supplementation
  * Research from Chen et al. observed that vitamin E increased the antioxidant effect of almond skin flavonoids on LDL oxidation (6)
All Paths Lead to the Same Light

- The following diets have all been associated with lowering heart disease risk, reducing obesity rates, lowering blood pressure, blood triglycerides, inflammatory markers, and overall mortality: (7-10)

  - Vegan
  - Vegetarian
  - Mediterranean
  - DASH

- What is the common denominator?

  - Minimize refined carbohydrates, sweets, limit red meats,
  - Increased consumption of F & V, legumes, whole grains, lean meats
Eat a variety of healthy foods each day

- Have plenty of vegetables and fruits
- Eat protein foods
- Make water your drink of choice
- Choose whole grain foods

Leafy greens, cruciferous vegetables, stems, bulbs, mushrooms

Meat, eggs, dairy, poultry, fish and shellfish (FAT)

Nuts & seeds (FAT)

Fruits, cereals, pulses (Legumes), Starchy vegetables (CHO)

Animal foods

Plant foods
Increased access does not always mean increased consumption. Barriers could include:

- Unfamiliarity
- Taste preferences
- Lack of knowledge and/or skill
- Lack of cookware (pots, pans, knives, utensils)
A visit to the food pantry can often feel like a Chopped television challenge...This is part of your day’s bounty.

Create 3 meals, assume you have some spices, oil and basic cookware.

- 2 zucchinis (somewhat wilted)
- 2 lb of sweet potatoes
- 2 lbs of goat chunks
- small bag of onions (half are sprouted)
- 2 8oz cans of salmon
- 2 cans of chickpeas and 1 can of spinach
- Carton of eggs
- 2 lb bag of white rice
(Cooking) Real Food First: Nutrition Follows

* Home cooking = increased intake of F & V, whole grains, and reduced BMI \(^{(11)}\)

* Community-cooking classes + education:
  * Improved dietary habits
  * Increased nutrition knowledge
  * Beneficial health outcomes \(^{(12)}\)
Community Cooking Classes in Action

- Slice of the Month Cooking Experience
- Project SHARE Farmstand
- Frequently available ingredients:
  - Monthly distributions
  - Weekly Farmstand distribution
  - Farmers market
Making Food Fun Again

- Hands on group activity + education
- Whole-food based recipes
- 45 minutes or less
- Discuss health benefits while cooking
Once monthly, two hours each session

Meal included with class

Family friendly

Open discussion

Flexible curriculum

Client centered
“You can put almost anything on a taco!

“Everybody gets a chance to learn new things and help each other.”
Promoting Behavior Change at Home

- Featured ingredients
- Spices
- Knives, cookware
Teamwork Makes the Dream Work

Opportunities for collaboration

* Sadler Health clinic
  * Blood pressure screenings
  * Mental health
  * Diabetes education

Sadler Health Center
Health and Education for Everyone
100% of participants surveyed self-reported:

- That they would be more willing to pick up F & V available at the food pantry
- An increased confidence in cooking abilities
- Increased confidence in preparing a healthy meal from scratch using product from the food pantry
- They acquired valuable knowledge they did not know before such as knife skills or nutrition knowledge
“Never had beets this way. It was delicious!”

“Foods I wouldn’t typically eat together are now on my menus.”

“Most people learn better by doing.”

“I learned how to mince with a knife!”
Keys to Success

- Build relationships & trust
  - Meet clients where they are
  - Food samples
  - Call/email list
  - Verbiage
Redefining “Superfoods”
“Superfoods” on a Budget

- Brassica veggies—Cabbage, collards, kale, chard, spinach
  - Available all year
  - Affordable
  - Versatile
    - Sautéed, raw salads, soup additions, stir fries, the list goes on…
  - Nutrient dense, low in calories
    - Potassium, copper, manganese, iron, calcium
    - Vitamin A, B, C, E, K,
    - Antioxidant phytochemicals
      - Over 20 identified flavonoids in cabbage alone
“Superfoods” on a Budget

- Sweet potatoes
  - Affordable
  - Versatile & easy to cook
  - Roasted (savory or sweet), mashed, soups and stews, frittatas, and anywhere else a white potato would be used
- Nutrient powerhouse
  - Fiber
  - Antioxidants—Vitamin A and other carotenes
  - Rich in minerals (copper, manganese, potassium) and vitamins (Vitamin B and C)
“Superfoods” on a Budget

* Onions and garlic
* Flavor!
* Availability and cost
* Antioxidants—Sulfur compounds, phenolics, flavonoids and anthocyanins (13)
Lentils

* High in protein
* Prebiotic fiber—good for your gut
* Over 40 identified polyphenol antioxidants (14)
* Rich in vitamins and minerals; low in vitamin K
Keep Nutrition Simple: Cook Real Food
1. Oxford Dictionary
2. Merriam Webster Dictionary