Seeds of Change: UCR’s Healthy and Sustainable Food Initiative

May 7, 2015
The Science of Food & Health
Spring 2015 Science Lecture Series
What is Sustainability

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Food Choices are important to the planet

- 40% of all arable land
- 40% of water use
- 42% of global exports
- 30% of greenhouse gases
Percent of land used for growing crops

1700  1800  1900  2000

percent of land used for growing crops

0%  20%  40%  60%  80%  100%
Percent of land used for growing crops
Percent of land used for growing crops
Percent of land used for growing crops
Percent of land used for growing crops
Percent of land used for growing crops
Percent of land used for growing crops
The Impact of our Food Choices

Food and Menu Choices are the most important ones we make for our health and the health of the planet.

Nutrition and environmental imperatives are converging.

Menu and recipe choices are more significant than farm choices.
Guiding Principles

• UC Global Food Initiative
• UC Office of the President 2020 Food Sustainability Goals
• University of California, Riverside Sustainability Goals
• Menus of Change
• UCR Dining Service Restaurant Programs
Seeds of Change Vision

- Nutritious and Healthy
- Socially Responsible and Ethical
- Environmentally Sustainable
- Delicious Culinary and Cultural Appeal

OUR VISION
Dining’s Big Initiative - Ongoing

To leverage the position of universities to advance healthier, more sustainable life-long food choices among students-who will soon be parents and adult decision makers-by connecting a diversity of insights from academic programs and dining services.
24 Principles of Healthy Sustainable Menus
Menu Concepts and General Operations

1. Be Transparent. Let customers know how your food was produced, including information on labor, animal welfare, and environmental practices. Inform your customers about calories and nutrition.

2. Fresh and Seasonal, both Local and Global. Source fresh, peak-of-season foods from farms that use more sustainable growing practices, including local producers and those in more distant regions.
Menu Concepts and General Operations

3. Reward Better Agricultural Practices. Shift purchases to farms and ranches that protect and restore natural systems and reduce greenhouse gas emissions through effective management practices.

4. Globally Inspired, Largely Plant-Based Cooking. Increase the ratio of plant-centric foods and preparations to those from animal food cultures around the world to support menu innovation.
5. **Focus on Whole, Minimally Processed Foods.** Emphasize slow metabolizing calories, and leave room for healthy processed foods—from frozen vegetables to low-sodium tomato paste and canned beans.

6. **Grow Everyday Options, While Honoring Special Occasion Traditions.** Expand everyday food and menu choices that embrace current nutrition and environmental science.
Menu Concepts and General Operations


8. Right Size Portions. Reduce portion sizes without undercutting profits by changing the value proposition for customers from an emphasis on quantity to a focus on flavor, culinary adventure, new menu formats, and the overall dining experience.
Menu Concepts and General Operations

9. Celebrate Cultural Diversity. Savor our culinary heritage while reimagining those elements of culturally-based food traditions that may be less healthy by limiting portion size, rebalancing ingredient proportions, or offering these foods less often.

So what have we accomplished?
Your coffee purchase is building infrastructure for fresh water

MAKE EVERY DROP COUNT.

Water is coffee is 97% water, but a lot more water goes into making each cup possible. Water is needed to grow coffee trees and process coffee cherries into green coffee beans. Without water, there is no coffee.

Coffee producers in Santa Rosa, Guatemala struggle with long dry seasons and droughts. Water is scarce and most families rely on containers into which they are only a few hours each week. They travel many miles to collect water to heat, bath, cook, and clean.

When you choose ecoGrounds® blend coffee, your purchase supports access to clean water. UCR Dining Services is partnering with ecoGrounds® Coffee, The Human Rights Network, Foundation, and the municipal government of Santa Rosa Rock, to fund a project to provide materials and education for small coffee farmers to harvest water at home.

Who knew buying a cup of coffee could be life changing?
UCR Swipes for the Homeless

Donate up to three unused Meal Swipes and UCR Dining will donate the food value of the meals to FEEDING AMERICA (formerly Second Harvest), which provides food assistance in Riverside and San Bernardino Counties. We're proud to partner with the UCR chapter of Swipes for the Homeless, a national non-profit dedicated to raising awareness and feeding America's hungry. Look for sign-up tables in the lobby of AU and Loshland March 8-11.
Inland Harvest Donations
Community Supported Agriculture (FarmShare)

Open to the Public!
UCR FarmShare

Thursdays 12pm-2pm and 4pm-6pm
Visit bitly.com/UCRFarmShare to learn more
Foods and Ingredients

1. Think Produce First. Focus on fruits and vegetables first—with great diversity across all meals and snacks.

2. Make Whole, “Intact” Grains the New Norm. Choose 100 percent whole-grain bread, brown rice, and whole grain and/or higher protein pasta.
3. Potatoes: New Directions for Sides. Limit your use of potatoes as a “plate filler” by combining smaller portions of them with other, non-starchy vegetables, featuring them less often, and offering healthier vegetables instead.

4. Move Nuts and Legumes to the Center of the Plate. Nuts and legumes are an excellent source of protein. They also add flavor and increase satiety.
Foods and Ingredients

5. Choose Healthier Oils. Fats high in unsaturated fats, such as canola, soy, peanut, and olive oils, as well as fish, nuts, seeds, avocados, and whole grains, are heart healthy. Avoid trans fats.

6. End the Low-fat Myth. Use beneficial fats, associated with optimal nutrition and healthy weight, to increase the appeal of other healthy ingredients such as vegetables and whole grains.
Foods and Ingredients

7. Serve More Kinds of Seafood More Often. Introduce diners to a wider variety of seafood sourced from responsibly managed fisheries.

8. Milk, Cheese, and Yogurt in a Supporting Role. Limit servings of dairy to one to two per day, leverage the flavor of cheese in smaller amounts, minimize the use of butter, and highlight yogurt (with no added sugar) as a choice in professional kitchens.
Foods and Ingredients

9. Poultry and Eggs in Moderation. Both are good choices of healthier protein with a far lower environmental footprint than red meat.

10. Red Meat: Smaller Portions, Less Frequently. Feature red meat in a supporting role to healthier plant-based choices, and also experiment with red meat as a condiment.
Foods and Ingredients

11. Reduce Added Sugar. Turn to ingredients like fruits, whole grains, dark chocolate, nuts, and healthy oils as alternatives in desserts, and substantially reduce sugar across the menu.

12. Cut the Salt. Stop relying on salt to deliver flavor. Instead use high-flavor produce, spices, herbs, citrus and other aromatics, healthy sauces, and seasonings.
Foods and Ingredients

13. Reduce Sugary Beverages and Innovate. Offer smaller servings, discourage frequent consumption, and promote the products of emerging and established brands that are developing solutions in this challenging area.

14. Drink Healthy. Serve water (plain, with fruit, herbs and aromatics, or other natural flavors), plain coffee and tea, and wines, beers, and spirits (in moderation and with caveats).
What we have accomplished

Home-Grown Citrus. Oranges from our world-renown Citrus Varietal Collection are used to produce fresh-squeezed orange juice every day.
R’Garden Support and Purchasing

UCR Dining buys produce from the R’Garden, and uses it in meals served on campus, putting money directly back into UCR.
Nutrition, Health, and Delicious Culinary Appeal
by
Dr. Neal Malik
Seeds of Change Vision

Our Vision

Nutritious and Healthy

Socially Responsible and Ethical

Delicious Culinary and Cultural Appeal

Environmentally Sustainable
RD’s Roles & Available Department Resources

• Nutrition resource for the campus
  – 1:1 consultations for faculty, staff, and students
  – Special dietary needs
  – Nutritional and allergen information
  – General nutrition education

• Assistance with campus wellness programs

• Campus and community programs
<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>(V) Seasoned Wedge Fries</td>
<td>5 OZ</td>
</tr>
<tr>
<td>(V) Steamed Broccoli</td>
<td>4 OZ</td>
</tr>
<tr>
<td>(V) Tangy Brazilian Black Beans</td>
<td>5 OZ</td>
</tr>
<tr>
<td>Brioche Dinner Roll</td>
<td>1 each</td>
</tr>
<tr>
<td>Homestyle Fried Chicken with Pan Gravy</td>
<td>1 srvng</td>
</tr>
<tr>
<td>Oven Roasted Jersey Sweet Yams</td>
<td>4 oz</td>
</tr>
<tr>
<td>Yucatan Style Salmon</td>
<td>4 oz</td>
</tr>
<tr>
<td><strong>-- Meals To Go --</strong></td>
<td></td>
</tr>
<tr>
<td>Ancho Barbecue Chicken with Mashed Potatoes &amp; Biscuit</td>
<td>1 srvng</td>
</tr>
<tr>
<td>Barbecue Pork Ribs w/ Mac &amp; Cheese &amp; Biscuit</td>
<td>1 srvng</td>
</tr>
<tr>
<td>Barbecue Pork Ribs w/ Mashed Potato &amp; Biscuit</td>
<td>1 srvng</td>
</tr>
<tr>
<td>Big Baked Potato w/ Beef Chili &amp; Cheese</td>
<td>1 srvng</td>
</tr>
<tr>
<td>Big Baked Potato w/ Broccoli &amp; Cheese Sauce</td>
<td>1 srvng</td>
</tr>
<tr>
<td>Big Texas Baked Potato w/ Beef Chili, Bbq Pork &amp; Cheese</td>
<td>1 srvng</td>
</tr>
<tr>
<td>Big Texas Baked Potato w/ Chicken Alfredo &amp; Bacon</td>
<td>1 srvng</td>
</tr>
<tr>
<td>Herb Rotisserie Chicken with Mac &amp; Cheese &amp; Biscuit</td>
<td>1 srvng</td>
</tr>
<tr>
<td>Homestyle Breaded Chicken Strips</td>
<td></td>
</tr>
<tr>
<td>Homestyle Chicken Strip w/ Potato Wedges</td>
<td>10 oz</td>
</tr>
<tr>
<td>Homestyle Chicken Strip w/ Potato Wedges</td>
<td>1 srvng</td>
</tr>
</tbody>
</table>
# UCR Dining Website

## Chinese Apple Salad with Grilled Salmon

### Nutrition Facts

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount/Serving</th>
<th>%DV*</th>
<th>Amount/Serving</th>
<th>%DV*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fat</td>
<td>35.7g</td>
<td>55%</td>
<td>Tot. Carb.</td>
<td>22.7g</td>
</tr>
<tr>
<td>Sat. Fat</td>
<td>5.2g</td>
<td>26%</td>
<td>Dietary Fiber</td>
<td>5.3g</td>
</tr>
<tr>
<td>Trans Fat</td>
<td>-</td>
<td>-</td>
<td>Sugars</td>
<td>8.5g</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>40.3mg</td>
<td>13%</td>
<td>Protein</td>
<td>20.8g</td>
</tr>
<tr>
<td>Sodium</td>
<td>700.7mg</td>
<td>29%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Calories 482
- Calories from Fat 322
- *Percent Daily Values (DV) are based on a 2,000 calorie diet.

**ALLERGENS:** Fish, Tree Nuts

*Note: Nutritional Values that are not available for a recipe are represented by dashes.*

Nutrition information is approximate, based on current product and recipe data.
## UCR Dining Website

### Friday, May 01, 2015 - Today's Menu

**Nutrient Group: LABEL 2**

<table>
<thead>
<tr>
<th>Recipe Description</th>
<th>Portion</th>
<th>Qty</th>
<th>Cals</th>
<th>Fat-T</th>
<th>Carb</th>
<th>Sugar</th>
<th>Fiber</th>
<th>Calc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homestyle Chicken Noodle Soup</td>
<td>6 ozl</td>
<td>1</td>
<td>71.772</td>
<td>1.795</td>
<td>8.612</td>
<td>0.718</td>
<td>0.718</td>
<td>14</td>
</tr>
<tr>
<td>Chinese Apple Salad with Grilled Salmon</td>
<td>1 each</td>
<td>1</td>
<td>481.929</td>
<td>35.743</td>
<td>22.698</td>
<td>8.485</td>
<td>5.271</td>
<td>116</td>
</tr>
</tbody>
</table>

*** TOTALS FOR MEAL ***

<table>
<thead>
<tr>
<th>Cals</th>
<th>Fat-T</th>
<th>Carb</th>
<th>Sugar</th>
<th>Fiber</th>
<th>Calc</th>
</tr>
</thead>
<tbody>
<tr>
<td>553.701</td>
<td>37.538</td>
<td>31.31</td>
<td>9.203</td>
<td>5.989</td>
<td>130</td>
</tr>
</tbody>
</table>

Nutrition information is approximate, based on current product and recipe data.
Food Allergies

• Food allergy & dietary restriction icons
Food Allergies

• Gluten-free kitchen at A-I
  – Only available to those with Celiac disease

• Culinary team is trained using the Food Allergy & Anaphylaxis Network guidelines (FAAN)

• Management is certified
Health is About Conscious Design
Which Items Sell the Fastest?
The Trend – Customizable Meals
Menu Positioning – Education Meets Customization

- Allow the freedom of choice, without forcing the health issue
- Making the healthy choice the easy choice
  - Whole grain options throughout campus
  - 21-topping salad bar in our residential restaurants
  - La Fiamma (HUB)
    - Salads with the option of adding a protein
  - The Barn
    - Lighten Up! Menu
    - Meets the CA Dept. of Public Health’s Healthy Entrée Guidelines for calories and fat
Nutritional Guardrails for Entrées

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Min/Max per serving</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories (kcal)</td>
<td>700 Max</td>
<td>1 meal = 1/3 of 2,200 kcal per day (2,000-2,400 kcals/d)</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>7-8 g Max</td>
<td>Provides 10% of kcal in a 700 kcal meal</td>
</tr>
<tr>
<td>Trans Fat</td>
<td>0 g Max</td>
<td>Need as little as possible/d</td>
</tr>
<tr>
<td>Sodium (Salt)</td>
<td>1,000 mg Max</td>
<td>1/3 of the 2,300 mg/d guideline = 770 mg; Round up to 1,000 mg</td>
</tr>
<tr>
<td>Fiber</td>
<td>8 g Min</td>
<td>1/3 of the 25 g/d guideline</td>
</tr>
</tbody>
</table>

- Each entrée to feature at least 1 serving of dark green, orange, or red vegetable and 1 whole grain (ex. First ingredient is “whole grain” or “whole wheat”) and 1-2 servings of a lean protein – *Whole, intact grains & Think Produce First*
- Emphasize use of herbs, onion, garlic, etc. to flavor foods as opposed to salt – *Cut the salt*
Education Meets Customization

ChooseMyPlate.gov
Why MyPlate?

• According to the Harvard School of Public Health (2014), a diet reasonable in portions and full of fruits, vegetables, and whole grains may prevent many chronic diseases

• Researchers are discovering that many consumers have difficulty with portion control
  – Become more conscious of what and how much goes on our plate or in our cup or bowl

• University campuses
  – First time away from home, on their own & responsible for their own health
½ the plate should contain fruits & veggies - *Think Produce First*

A little more than ¼ the plate should contain grains, preferably whole, intact grains

A little less than ¼ of the plate should contain lean proteins – *Eat less red meat*

1 cup (1 serving) of low-fat dairy *in a supporting role*
How Big is the Plate?

9” inch plate
Benefits of Using MyPlate

- Smaller plates in our residential restaurants + Trayless dining since 2008
- Decreased food waste by 50% & reduced water usage by 1 million gallons to date!
Customizing MyPlate for UCR

<table>
<thead>
<tr>
<th>ID</th>
<th>Dish Description</th>
<th>Override Category</th>
<th>Menu Category</th>
<th>Platform / Service Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>716789</td>
<td>Chicken &amp; Poblano Pepper Soup</td>
<td>G P V F D</td>
<td>Soup</td>
<td>VILLAGE GARD</td>
</tr>
<tr>
<td>716782</td>
<td>(V) Hearty Vegetable Soup</td>
<td>G P V F D</td>
<td>Soup</td>
<td>VILLAGE GARD</td>
</tr>
<tr>
<td>711587</td>
<td>Deli Bar &quot;Featuring Seasonal &amp;&quot;</td>
<td>G P V F D</td>
<td>Soup</td>
<td>VILLAGE GARD</td>
</tr>
<tr>
<td>710334</td>
<td>Artisan Bread Bar</td>
<td>G P V F D</td>
<td>Soup</td>
<td>VILLAGE GARD</td>
</tr>
<tr>
<td>715299</td>
<td>(V) 21 Toppings Salad Bar</td>
<td>G P V F D</td>
<td>Salad</td>
<td>VILLAGE GARD</td>
</tr>
<tr>
<td>710109</td>
<td>Seasonal Fruits &amp; Vegetables</td>
<td>G P V F D</td>
<td>Salad</td>
<td>VILLAGE GARD</td>
</tr>
<tr>
<td>715107</td>
<td>(V) French Bread Margherita Pi</td>
<td>G P V F D</td>
<td>Spinellis Pizza</td>
<td>SPINELLI'S</td>
</tr>
<tr>
<td>800118</td>
<td>Cavatappi Carbonara</td>
<td>G P V F D</td>
<td>Global Sizzle</td>
<td>GLOBAL SIZZL</td>
</tr>
<tr>
<td>400992</td>
<td>(V) Penne Pomodora with Whole</td>
<td>G P V F D</td>
<td>Global Sizzle</td>
<td>GLOBAL SIZZL</td>
</tr>
<tr>
<td>75040</td>
<td>Italian Meatballs</td>
<td>G P V F D</td>
<td>Global Sizzle</td>
<td>GLOBAL SIZZL</td>
</tr>
<tr>
<td>710671</td>
<td>(V) Focaccia</td>
<td>G P V F D</td>
<td>Global Sizzle</td>
<td>COMFORT T&amp;L</td>
</tr>
<tr>
<td>710138</td>
<td>Tandoori Rotisserie Chicken</td>
<td>G P V F D</td>
<td>Urban Kitchen</td>
<td>URBAN KITCHET</td>
</tr>
</tbody>
</table>
Today’s Plate

April 24, 2015 – Lunch

Wild Rice – Vegetarian Bar
Mixed Greens Salad – 21-topping Salad Bar
Grilled Salmon – The Grill
Strawberry yogurt – World’s Fare
Fruit Salad – 21-topping Salad Bar
R’Talk Screens – Residential Restaurants
Implementation

• Goal is to implement in A-I and Lothian as soon as possible
  – Pilot

• Consider incorporating into retail locations in the future
  – Currently providing education at retail platforms
Continue Providing Education

**Grains**
- 1 serving of rice or pasta = ½ cup
  - That’s the size of a light bulb

**Protein**
- 1 serving of burger or chicken patty = a 3-oz. burger or patty
  - (duh!)

**Vegetables**
- 1 serving of salad = 1 cup
  - About the size of two hands cupped together
- 1 serving of dressing = 1 tbsp
  - Roughly the size of a poker chip

**Protein**
- 1 serving of meat = 3 oz.
  - About the size of a deck of cards
- 1 serving of deli meat = three 1-oz. slices
  - Each slice is about the size of a CD

**Fruits**
- 1 serving = 1 piece of fruit
  - Roughly the size of a baseball

**Vegetables**
- 1 serving of soup = 1 cup (8 oz.)
  - About the size of a small coffee cup
Continue Providing Education

Color Your Health

- Make half your plate fruits and vegetables.
- Eat at least FIVE SERVINGS of fruits & vegetables daily.
- Eat a variety of fresh, frozen or canned vegetables, especially dark-green, red and orange veggies.
- Add fruit to meals and snacks.
Continue Providing Education

WHOLE WHEAT PASTA provides you with more nutrients, and is higher in fiber than regular pasta.

WE EAT FROM A FOOD PLATE, NOT A FOOD PYRAMID
Continue Providing Education

Choose HEALTHY FOODS for your body and mind.

Eat a HEALTHY DIET based on a variety of nutritious foods.

WE EAT FROM A FOOD PLATE, NOT A FOOD PYRAMID

dining.ucr.edu  UCR Housing, Dining & Residential Services  wellness.ucr.edu
Culinary & Cultural Appeal

- Food choices reflect the diversity of our campus and our community
  - 12th in the nation (U.S. News & World Report, 2014)
- Chefs won Gold (2014) & Silver (2015) awards at the National Association of College & University Food Services (NACUFS) Regional Culinary Challenge
  - Comments regarding quality of food served is always very positive
### Culinary & Cultural Appeal

#### Menus for Friday, April 24, 2015

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Nutrition Information</th>
<th>Lunch</th>
<th>Nutrition Information</th>
<th>Dinner</th>
<th>Nutrition Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fresh Baked Pastries</strong>&lt;br&gt; Assorted Bagels&lt;br&gt; Assorted Fresh Baked Donuts&lt;br&gt; <strong>Breakfast Offerings</strong>&lt;br&gt; (V,GF) Breakfast Parfait&lt;br&gt; (V) Cream of Wheat&lt;br&gt; <strong>Chefs Special</strong>&lt;br&gt; Fresh Blended Smoothie Bar</td>
<td></td>
<td><strong>Fresh Baked Pastries</strong>&lt;br&gt; Assorted Bagels&lt;br&gt; Assorted Fresh Baked Donuts&lt;br&gt; <strong>Breakfast Offerings</strong>&lt;br&gt; (V,GF) Fire-Roasted Vegetable Soup&lt;br&gt; <strong>Vegetarian Bar</strong>&lt;br&gt; Artisan Ciabatta Bread Bar&lt;br&gt; New England Clam Chowder&lt;br&gt; <strong>Worlds Fare Station</strong>&lt;br&gt; Tikka Masala Chicken&lt;br&gt; Tikka Masala Shrimp&lt;br&gt; Turkey Sausage Patty</td>
<td></td>
<td><strong>Soups &amp; Deli Bar</strong>&lt;br&gt; (V,GF) Fire-Roasted Vegetable Soup&lt;br&gt; Artisan Ciabatta Bread Bar&lt;br&gt; New England Clam Chowder&lt;br&gt; <strong>My Gourmet</strong>&lt;br&gt; Bacon&lt;br&gt; Meat Fries&lt;br&gt; Pumpkin Pancakes&lt;br&gt; Pancake Syrup &amp; Toppings Bar&lt;br&gt; (V,G,F) Scrambled Eggs&lt;br&gt; House Made Corned Beef Hash</td>
<td></td>
</tr>
</tbody>
</table>
Campus Collaborations

• Faculty/Staff Wellness Programs
  – Mission: Possible
    • 192 faculty/staff completed the 12-wk program
  – Mission: Possible 2
    • 370 faculty/staff completed the 10-wk program
  – Bounce Into Wellness
    • 125 HDRS employees participated in the 12-wk program
Final Remarks

- A key strength of our programs is that they leverage all of the wonderful resources UCR and the UC system have to offer.
  - Programs complement each other and work together seamlessly

- We hope that the Seeds of Change initiative will transform the way we all think about food.
Thank You!

Please be our guest and taste our Seeds of Change concepts brought to life!