The Blended Burger Project
In Collaboration With
UCR Dining, UCR and UCOP Procurement Services, and the Supplier Community

Presented by Matthew Burke and Gustavo Plascencia
Barriers are encountered in any new application and The Protein Flip has not been immune to obstacles and hurdles.

**Labor**
- Introducing more procedures in production requires more labor
- Of that new labor they need to be of a higher skill level
- Who will train the new employees? How will they be trained? Need to ensure there are enough workers to do the work
- Increased labor maintaining menu management systems

**Cost**
- Food costs (ie: specialty ingredients)
- Additional costs for labor

**Sourcing**
- Sourcing local, fresh ingredients all year
- Consistent supply
- Finding suppliers who have the capabilities to make The Blend
- High quality ingredients

**Misconceptions**
- Selling healthy and sustainable food choices when the misconception is they are flavorless
- Relating the value of a dish without large amounts of protein included; the misconception is it’s less valuable

**Serving Less**
- Serving less red meat and in smaller quantities
- There could be a threat in moving meat from center of the plate to just “on” the plate
- Battling century old behavior of seeing meat as center plate and in large portions

**OPPORTUNITIES**
- Creating menu items that fit each venue
- Creating menu items that are on-trends and feature flavors that fit with each venue
- Reduce the amount of animal proteins in the dining halls for sustainability and health
- Connecting the chefs, product and guest in a flavor first approach
Seeds of Change Initiatives

**Glen Mor (Savor):** “Connecting the Dots” Seeds of Change Principles, Awareness, and Education.

**The Barn:** Vegan Menu Awareness and Education

**C Stores:** Reduced Sugar Beverage Campaign

**Blended Burger Project:** Acceptance, Awareness, and Education
Earth n’ Turf Burger by THE GLEN MOR MARKET, UC RIVERSIDE:
Wild mushrooms are blended with grass-fed ground beef and topped with a roma tomato and ginger chutney, arugula, tomato slices, grilled red onions and mayo.

THE FLIP:
The Blend

(i.e: blending mushrooms or vegetables with meat)

- Earth n’ Turf Burger at UC Riverside consists of a blend of roasted wild mushrooms, garlic and grass-fed beef
- Menage Trois Burger at The Lab Gastropub at USC
- Chicken and Waffle Burger at McKays at USC
- Stanford University is blending 100% of their burgers, meatballs, meatloaf, Kafta and lamb burgers
- Blended beef-mushroom meatloaf at Texas A&M University
- 50/50 mushroom blended sausage at Texas A&M University
- Blended crabcakes at UMASS
- Mushroom-Potato-Chorizo Tacos at UMASS
- Crimini and Pork Meatballs at UMASS
The Challenge: Mass Production For Residential Dining

- Replicate The Mushroom Burger at the Market
- Fresh Mushrooms
- Fresh Beef
- Consistent Quality
- Labor Cost
- Hamburger Flavor with little or no Mushroom taste (70/30 mix)
912120 RR MUSHROOM FOR BLENDED BURGER

Source: 160
Portion: 1 oz
Revised: 21 Dec 16, lanetted

Nutrition Facts
Serving Size 1 oz.

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>Calories</th>
<th>Calories from Fat</th>
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<tbody>
<tr>
<td></td>
<td>20 g</td>
<td></td>
</tr>
<tr>
<td>Total Fat 1.6 g</td>
<td>% Daily Value</td>
<td>2%</td>
</tr>
<tr>
<td>Saturated Fat 0.1 g</td>
<td></td>
<td>1%</td>
</tr>
<tr>
<td>Trans Fat 0 g</td>
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<td>0%</td>
</tr>
<tr>
<td>Cholesterol 0 mg</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Sodium 39 mg</td>
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<td>2%</td>
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<tr>
<td>Total Carbohydrate 2.1 g</td>
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</tr>
<tr>
<td>Dietary Fiber 1.3 g</td>
<td></td>
<td>3%</td>
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<tr>
<td>Sugars 0 g</td>
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<td>0%</td>
</tr>
<tr>
<td>Protein 1.3 g</td>
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<td>2%</td>
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*Percent Daily Values are based on a 2,000 calorie diet

INGREDIENTS: Mushrooms, Olive Oil. Optional ingredients: Serrano Chili, Black Pepper, Spices, Ginger, Shallots

Method of Preparation

TO PREPARE MUSHROOMS:
1. FILL SINK WITH COLDS WATER, VASE.
2. ADD MUSHROOMS TO SINK AND USE YOUR HANDS TO AGITATE THE MUSHROOMS TO LOOSEN DIRT IN THE WATER.
3. DRAIN WATER COMPLETELY FROM MUSHROOMS AND RINSE WITH COLD WATER AGAIN TO REMOVE ALL DIRT.
4. PLACE MUSHROOMS IN A LARGE BOWL AND TOSSED LIGHTLY WITH OLIVE OIL AND SEASON WITH SALT AND PEPPERS.
5. THEN PLACE MUSHROOMS ON A SHEET PAN AND PLACED IN 475 DEGREE OVEN, UNTIL CARAMELIZED. ABOUT 15-20 MIN.
6. LET MUSHROOMS CARAMELIZE SLIGHTLY AS THEY COOK DOWN AND NO MOISTURE IS LEFT ON THE SHEET PANS.
7. PLACE MUSHROOMS ON LADDER RACK AND PLACE IN WALL IN COOL, COVERED LABERG AND DATED.
8. WHEN MUSHROOMS ARE COOKED PLACE IN BUDDHA B Wedge and MAKE WILL UNTIL ALMOST A PASTE.
9. AT THIS POINT MUSHROOMS MAY BE FROZEN UNTIL READY TO BLEND WITH BEEF FOR BURGERS.

Cost (03, A-I)

<table>
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<tr>
<th>Item</th>
<th>Name</th>
<th>Cost</th>
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<tbody>
<tr>
<td>0046</td>
<td>WCP MUSHROOMS MEDIUM WHITE 1</td>
<td>0.285</td>
</tr>
<tr>
<td>6265</td>
<td>SALT KOSHER 1/2 lb</td>
<td>0.008</td>
</tr>
<tr>
<td>8523</td>
<td>SP PEPPER BLACK TABLE GRIND 5</td>
<td>0.008</td>
</tr>
<tr>
<td>2690</td>
<td>OIL OLIVE BLEND 8250 QL</td>
<td>0.002</td>
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Portion Cost: 0.375

CCP- Wash hands during food preparation when changing tasks.
CCP- Cook ground meat to 160 F (66 C) or above for 15 seconds.
Cook vegetables for hot holding to 140 F (60 C).

07/26/16 07:00 Lanette Dickerson
CCP- Label and date foods with today's date.
The Solution: UC Collaboration

David Henry- Sr. Director
Duane Gornicki- Res. Director
Chef Lanette Dickerson
Chef Burke Reeves
Karen Fiorenza- Dietician
Gustavo Plascencia- Sustainability

Eric Pollack- Food Commodity Manager

Matthew Burke- Procurement Analyst
Supplier Community

High-end Food Catering Company (used for airlines and high-end events)
Meat Packing Company
Food Distributor
Product is Shipped in a 10 lb Case 4x1 = 40 Patties

“Always Fresh, Never Frozen”
Blended Burger Project

- The Blended Burger Project was implemented at the University of California, Riverside in Residential Restaurants in response to UCR Dining, Hospitality & Retail Services’ commitment to sustainability.

- The Blended Burger is comprised of 70% beef and 30% mushroom which is nutritionally a healthier option for students providing:

  - 9% Fewer Calories
  - 12% Less Total Fat
  - 22% Less Saturated Fat
  - 27% Less Trans Fat
  - 24% Less Cholesterol
  - 88% More Fiber

Than a traditional 100% beef burger.
Blended Burger Project

Survey

(450 student participants)
Blended Burger Taste

- 88% of students enjoy the taste of the Blended Burger
65% of students were UNAWARE that the Blended Burger was 30% MUSHROOM.
Blended Burger Planetary Impact

- 95% of students were **UNAWARE** of the impact one Blended Burger has on the planet which is equivalent of **saving enough water to fill a bathtub** as well as a greenhouse gas emissions reduction equivalent to **taking a car off a road for 2 miles**.

- Of the students surveyed, the majority were **pleasently and happily surprised** that the burger they currently were consuming had such a powerful environmental impact.
Potential Impact of Serving only the Blended Burger at the Residental Restaurants Over a Year’s Time

• In 2016, **88,360** burgers were served in the residential restaurants.

• Potential Water Savings/ GHG Emissions Reductions

  Over 2.5 million gallons per year

  Approximately the water need to fill 4 Olympic Size Swimming Pools

• Over **80.4 metric tons of GHG Emissions avoided**

  Equivalent to 11 Cars removed from the roads

  Equivalent to saving 127 megawatt hours of electricity

  Equivalent to emissions from powering 12 homes for a year
Are you up for the Challenge?