METEORIC RISE IN FLEXITARIAN EATING AND HOW HPP CAN PLAY A ROLE

BARB STUCKEY
President & Chief Innovation Officer, Mattson
What You Need to Know About the Meteoric Rise in Flexitarian Eating
1. About Me
2. What We Do & Why We’re Interested In This Topic
3. What does Flexitarian Mean?
4. Proprietary Consumer Research
5. How HPP Can Tap Into This Trend
6. Q&A
President & Chief Innovation Officer
MATTSON

Author
TASTE: Surprising Stories & Science About Why Food Tastes Good

Instructor
The Fundamentals of Taste at San Francisco Cooking School

Forbes Contributor
I write about the business of food
MATTSON: WHO WE ARE
OUR APPROACH IS CULINARY & TECHNICAL

WE ARE LOCATED AT THE EPICENTER OF FOOD TRENDS

CALIFORNIA WINE COUNTRY’S ASPIRATION FOOD AND BEVERAGE

SAN FRANCISCO’S VIBRANT CULINARY SCENE

SILICON VALLEY’S SPIRIT OF INNOVATION

BERKELEY’S WORLD-CHANGING FOOD ACTIVISM
WE TRANSFORM
HOLISTIC THINKING
& CONSUMER INSIGHTS
& FOOD TRENDS
INTO Viable BUSINESS OPPORTUNITIES
A GREAT PRODUCT IS YOUR ULTIMATE COMPETITIVE ADVANTAGE
PRODUCT DESIGN & DEVELOPMENT

10,000 SQUARE FEET OF DEVELOPMENT SPACE

30 MEMBERS OF CULINARY, R&D, SCALE-UP TEAM

PILOT PLANT

REGULATORY INPUTS, COPACK SEARCH & COMMERCIALIZATION
Bakery Concepts—Purchase Intent and Key Measures

- **Morning Bakes, Snack Crisps, and Toasted Duets** were the top three performing concepts. These concepts exceeded all Mattson purchase intent norms and had the highest expected purchase frequency compared to Daybreak Bakes.

- **Daybreak Bakes** was the least favored concept and scored below two of the three purchase intent norms.

### BAKERY CONCEPTS

<table>
<thead>
<tr>
<th></th>
<th>Mattson Norms</th>
<th>Morning Bakes</th>
<th>Snack Crisps</th>
<th>Toasted Duets</th>
<th>Daybreak Bakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Intent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definitely buy</td>
<td>20%</td>
<td>42%</td>
<td>42%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>Probably buy</td>
<td>35%</td>
<td>31%</td>
<td>38%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Top 2 box</td>
<td>60%</td>
<td>22%</td>
<td>72%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>Might or might not buy</td>
<td>13%</td>
<td>15%</td>
<td>23%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Probably not buy</td>
<td>7%</td>
<td>10%</td>
<td>4%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Definitely not buy</td>
<td>3%</td>
<td>1%</td>
<td>1%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Weighted Purchase Intent*</td>
<td>70</td>
<td>92</td>
<td>92</td>
<td>57</td>
<td>61</td>
</tr>
<tr>
<td>Uniqueness (% Top 2 Box)</td>
<td>69%</td>
<td>52%</td>
<td>42%</td>
<td>65%</td>
<td></td>
</tr>
<tr>
<td>Ranking</td>
<td>Ranked 2nd</td>
<td>Ranked 1st</td>
<td>Ranked 3rd</td>
<td>Ranked 4th</td>
<td></td>
</tr>
</tbody>
</table>

*See Appendix for WPI Calculation

### Daybreak Bakes — Frequency of Use by Variety

Q. How often would you expect to buy each of the following varieties of Daybreak Bakes? (% very/somewhat often)

- Fruits & Nuts: Blueberry and Almond: 51%
- Fruits & Nuts: Cranberry and Walnut: 42%
- Steelcut Oats with Maple Brown Sugar Raisins: 33%
- Fruits & Nuts: Apricot, Pistachio and Raisins: 30%
- Ancient Grains: Quinoa, Amaranth and Millet: 19%
- SuperSeed: Sunflower, Pumpkin and Chia: 16%
- Sprouted: Whole Wheat, Sunray and Millet: 15%
HOW WE GOT INTERESTED IN PLANT-BASED FOOD
HPP EXPERIENCE
YEARS OF EXPERIENCE EXPLORING HPP ACROSS CATEGORIES

- Juices
- Coffee Beverages
- Plant-Based Beverages
- Deli Meats + Cheese
- Salad Dressing
- Salsa
- Potatoes
- Pasta Sauces
- Baby Food
- Sausage
- And others
WHAT IS FLEXITARIAN?
Flexible

+ 

Vegetarian

= 

Flexitarian
Originally a cookbook and diet.

Publication Date: Oct 2008!!
Omnivore: I Eat A Wide Variety of Foods

I Eat A Wide Variety of Foods But Trying To Eat LESS Meat, Dairy, Pork, Chicken, etc.

I Eat Mostly Vegetarian, but Occasionally Eat Meat, Dairy, Pork, Chicken, etc.

I am a Vegetarian: No Meat, Pork, Chicken, etc.

Vegan: I eat No Animal Products

And you?
BUT A DIET REQUIRES COMMITMENT

Omnivore: I Eat A Wide Variety of Foods

I Eat A Wide Variety of Foods But Trying To Eat LESS Meat, Dairy, Pork, Chicken, etc.

I Eat Mostly Vegetarian, but Occasionally Eat Meat, Dairy, Pork, Chicken, etc.

I am a Vegetarian: No Meat, Pork, Chicken, etc.

Vegan: I eat No Animal Products

Single  Dating  Exclusive  Engaged  Married
I Eat A Wide Variety of Foods But Trying To Eat LESS Meat, Dairy, Pork, etc. + I Eat Mostly Vegetarian, but Occasionally Eat Meat, Dairy, Pork, etc.

Just a desire to eat LESS ________________.
It lets you dabble, play the field, try things on for size. be “flex-curious”
The ability to FLEX in and out is why the behavior is growing!!
FLEXITARIAN RESEARCH RESULTS
METHODOLOGY

• Mattson proprietary study on eating trends, behaviors, and beliefs to understand consumers' opinions on plant-based food.

• Online survey fielded June 4-23, 2017
  • Sent to 1,000s of gen pop consumers in Mattson’s database
  • Survey link was posted on social media sites

• n=1163 consumers completed survey
Q. WHICH BEST DESCRIBES THE WAY YOU EAT?

- Wide variety of foods including meat, dairy, pork, and poultry: 65%
- Wide variety of foods, LESS meat, dairy, pork, etc.: 20%
- Mostly vegetarian - occasionally meat, dairy, poultry, etc.: 9%
- Vegetarian - no meat: 4%
- Vegan - no animal products: 2%

At 6% of pop, vegetarians + vegans aren’t big enough to target.
Q. WHICH BEST DESCRIBES THE WAY YOU EAT?

29%: About 1/3 of the population are FLEXITARIANS

- 65% Wide variety of foods including meat, dairy, pork, and poultry
- 20% Wide variety of foods, LESS meat, dairy, pork, etc.
- 9% Mostly vegetarian - occasionally meat, dairy, poultry, etc.
- 4% Vegetarian - no meat
- 2% Vegan - no animal products
Q. IN THE YEAR AHEAD, HOW OFTEN DO YOU EXPECT TO EAT PLANT-BASED FOODS?

Almost HALF of population says they plan to eat MORE plant-based foods.

And the behavior will continue to grow!
Improve Your infrastructure? + Hell, Yes! - Not in My Backyard

Raise Your Taxes
48% of population says they plan to eat MORE plant-based foods.

29% of population admits to trying to eat LESS of what they LOVE!

HALF!
Eating Vegan at Panera

Dining out vegan can be tricky, but at Panera, we think it should be easy for you to eat the way you want.

At Panera, items designated as vegan have no animal sources: no meat, fish, shellfish, milk, egg or honey products, and no enzymes and rennet from animal sources.
A lot of baggage on this end of the continuum.
Positivity matters when it comes to what people eat!
Q. WHAT COMES TO MIND FOR EACH STATEMENT…

<table>
<thead>
<tr>
<th></th>
<th>100% Plant-based</th>
<th>Vegan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going to taste better</td>
<td>73%</td>
<td>27%</td>
</tr>
<tr>
<td>Healthier</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>More of a dietary choice</td>
<td>76%</td>
<td>24%</td>
</tr>
<tr>
<td>More for me</td>
<td>79%</td>
<td>21%</td>
</tr>
<tr>
<td>The future</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>More of a lifestyle than a diet</td>
<td>59%</td>
<td>61%</td>
</tr>
<tr>
<td>Somewhat unclear</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Old school</td>
<td>26%</td>
<td>74%</td>
</tr>
</tbody>
</table>

Consumers were forced to pick 1:
Q. WHAT COMES TO MIND FOR EACH STATEMENT…

<table>
<thead>
<tr>
<th>Statement</th>
<th>100% Plant-based</th>
<th>Vegan</th>
</tr>
</thead>
<tbody>
<tr>
<td>More of a dietary choice</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>More of a lifestyle than a diet</td>
<td>39%</td>
<td>61%</td>
</tr>
</tbody>
</table>
Q. WHAT COMES TO MIND FOR EACH STATEMENT…

100% Plant-based

Means making choices at the table

<table>
<thead>
<tr>
<th>Statement</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>More of a dietary choice</td>
<td>59%</td>
</tr>
<tr>
<td>More of a lifestyle than a diet</td>
<td>39%</td>
</tr>
</tbody>
</table>

Bold=Higher score
Q. WHAT COMES TO MIND FOR EACH STATEMENT…

Vegan

Means making ethical choices…
which are hard, and sometimes naked

- More of a dietary choice
  - 41%

- More of a lifestyle than a diet
  - 61%

Bold=Higher score
WOULD YOU RATHER BE POSITIVE OR NEGATIVE?

+ Plant Based = Celebration

- Vegan = Deprivation
Q. WHAT COMES TO MIND FOR EACH STATEMENT...

<table>
<thead>
<tr>
<th>Statement</th>
<th>100% Plant-based</th>
<th>Vegan</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB needs clarification for some people</td>
<td>Somewhat unclear</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>Old school</td>
<td>26%</td>
</tr>
<tr>
<td>Vegan carries some baggage</td>
<td></td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>74%</td>
</tr>
</tbody>
</table>

Bold=Higher score
The V Word
100% Plant Based
Q. TOP 3 REASONS FOR CHOOSING TO EAT PLANT-BASED FOODS MORE OFTEN?

1. General health benefits: 76%
2. Lose weight: 44%
3. Feel better when eat plant-based foods: 44%
4. Better for environment: 31%
5. Help manage health condition: 28%
6. Don't like eating animals treated with hormones: 23%
7. Animal welfare: 23%
8. Food intolerances/sensitivities: 13%
9. Persuaded by friends/family: 7%
10. My kids eat plant-based: 3%
11. Doctor/test confirmed food allergies: 2%

#1 reason by 34% points!

“It’s better for me”
Q. TOP 3 REASONS FOR CHOOSING TO EAT PLANT-BASED FOODS MORE OFTEN?

**Top 3 Responses:**
- **health & well-being**
- **Ethical reasons come in at #4 & #7**

- General health benefits: 76%
- Lose weight: 44%
- Feel better when eat plant-based foods: 44%
- Better for environment: 31%
- Help manage health condition: 28%
- Don't like eating animals treated with hormonones: 23%
- Animal welfare: 23%
- Food intolerances/sensitivities: 13%
- Persuaded by friends/family: 7%
- My kids eat plant-based: 3%
- Doctor/test confirmed food allergies: 2%
Q. TOP 3 THINGS YOU'LL DO TO INCREASE CONSUMPTION OF PLANT-BASED FOODS AT HOME?

- Eat more vegetables: 64%
- Eat more salads: 43%
- Eat more fruit: 38%
- Eat less meat: 29%
- Eat more legumes/beans: 22%
- Eat more nuts/seeds: 22%
- Eat more grains: 17%
- Eat more plant-based meat products: 16%
- Eat more plant-based non-dairy products: 15%
- Seek out plant-based meals at restaurants: 11%
- Eat more plant-based protein powders/shakes: 7%
- Eat more plant-based chicken substitutes: 5%
- Eat less dairy: 4%
- Seek out plant-based meals from delivery service: 4%

The takeaway:
Focus on the positives!
<table>
<thead>
<tr>
<th>Generation</th>
<th>Health benefits</th>
<th>Animal welfare</th>
<th>Lose weight</th>
<th>Feel better when eat PB</th>
<th>Manage health condition</th>
<th>Better for environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen Z</td>
<td>33%</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millennial</td>
<td>27%</td>
<td>12%</td>
<td>17%</td>
<td>15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gen X</td>
<td>25%</td>
<td>12%</td>
<td>15%</td>
<td>15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baby Boomer</td>
<td>27%</td>
<td>12%</td>
<td>21%</td>
<td>14%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Greatest Gen</td>
<td>31%</td>
<td></td>
<td>21%</td>
<td>14%</td>
<td>13%</td>
<td>11%</td>
</tr>
</tbody>
</table>
Q. WHERE ARE YOU MOST LIKELY TO TRY A PLANT-BASED DISH?

1/3 of consumers MOST LIKELY to try PB dishes AFH!

- 54% At home
- 33% Away from home (restaurant, café, etc.)
- 10% Home of friends/family
- 3% Other

% of Respondents
<table>
<thead>
<tr>
<th>Menu Item</th>
<th>% of Consumers Who Want to Try</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applewood Smoked Port’house with chard and garlic, polenta, and V1 steak sauce</td>
<td>52%</td>
</tr>
<tr>
<td>Restaurant: Plant</td>
<td></td>
</tr>
<tr>
<td>Hot “Chicken” Fried Steak with avocado puree, sliced heirloom tomatoes</td>
<td>49%</td>
</tr>
<tr>
<td>Restaurant: Plum Bistro</td>
<td></td>
</tr>
<tr>
<td>“Crab” Cakes: hearts of palm, granny smith apples, with horseradish aioli.</td>
<td>46%</td>
</tr>
<tr>
<td>Restaurant: Crossroads Kitchen</td>
<td></td>
</tr>
<tr>
<td>Tomato “Tuna” with pickled ginger pears, avocado mousse, pomegranate crème fraiche</td>
<td>37%</td>
</tr>
<tr>
<td>Restaurant: Elizabeth’s Gone Raw</td>
<td></td>
</tr>
<tr>
<td>Wood-Roasted Carrot, kimchee “Reuben,” pumpernickel, sauerkraut puree</td>
<td>33%</td>
</tr>
<tr>
<td>Restaurant: Vedge</td>
<td></td>
</tr>
</tbody>
</table>

Source: Datassential Modern Meatless
THE CLOSER TO FAMILIAR, THE BETTER

Use meaty terms!! And anything

Steak Sauce
Chicken Fried
“Crab” Cakes

“In Quotes”
Q. HOW LIKELY TO ORDER PLANT-BASED ____ FROM YOUR TRUSTED RESTAURANT?

<table>
<thead>
<tr>
<th>Dish</th>
<th>% Definitely/Probably Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant-based Entrée Salad</td>
<td>86%</td>
</tr>
<tr>
<td>Plant-based Side Dish</td>
<td>84%</td>
</tr>
<tr>
<td>Plant-based Appetizer</td>
<td>78%</td>
</tr>
<tr>
<td>Plant-based Pasta Entrée</td>
<td>72%</td>
</tr>
<tr>
<td>Plant-based Main Dish</td>
<td>70%</td>
</tr>
<tr>
<td>Plant-based Sandwich</td>
<td>65%</td>
</tr>
<tr>
<td>Plant-based Burger</td>
<td>65%</td>
</tr>
<tr>
<td>Plant-based Pizza</td>
<td>56%</td>
</tr>
</tbody>
</table>

Dishes that usually contain veg

Dishes driven by meat or cheese!
Q. OF THE PLANT-BASED FOODS YOU’VE TRIED IN THE PAST, HOW SATISFIED WERE YOU?

- Plant-based Entrée Salad: 73% Satisfied, 9% Not Satisfied, 18% Never Tried
- Plant-based Side Dish: 69% Satisfied, 12% Not Satisfied, 20% Never Tried
- Plant-based Burger: 62% Satisfied, 22% Not Satisfied, 16% Never Tried
- Plant-based Appetizer: 61% Satisfied, 13% Not Satisfied, 26% Never Tried
- Plant-based Main Dish: 58% Satisfied, 15% Not Satisfied, 27% Never Tried
- Plant-based Pasta Entrée: 56% Satisfied, 16% Not Satisfied, 28% Never Tried
- Plant-based Sandwich: 54% Satisfied, 17% Not Satisfied, 30% Never Tried
- Plant-based Pizza: 45% Satisfied, 21% Not Satisfied, 34% Never Tried

Dishes that usually contain veg
Dishes driven by meat or cheese!
Let’s see what we can learn from testing 2 different versions of the same concept.

Note: concepts rotated to avoid order bias…
Black Bean Burger Concept Test
The Black Bean Burger
A delicious burger that starts with a custom crafted black bean patty made with black beans and roasted vegetables and a blend of spices, tender on the inside and slightly crusted on the outside by grilling. Served on a toasted multigrain bun.

The Black Bean Burger comes with your choice of toppings: non-dairy cheddar, pepper jack, or mozzarella cheese, non-dairy Parmesan ranch or mayo, pickles, lettuce, tomato, onion, ketchup, or mustard.
Q. HOW LIKELY WOULD YOU BE TO BUY THE BLACK BEAN BURGER?

<table>
<thead>
<tr>
<th></th>
<th>TOTAL SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=1,148</td>
</tr>
<tr>
<td>Definitely buy</td>
<td>31%</td>
</tr>
<tr>
<td>Probably buy</td>
<td>26%</td>
</tr>
<tr>
<td><strong>TOP 2 BOX (60%)</strong></td>
<td>57%</td>
</tr>
<tr>
<td>Might/might not buy</td>
<td>20%</td>
</tr>
<tr>
<td>Probably not buy</td>
<td>14%</td>
</tr>
<tr>
<td>Definitely not buy</td>
<td>9%</td>
</tr>
<tr>
<td>Weighted purchase intent</td>
<td>55</td>
</tr>
</tbody>
</table>

Did not meet our norms…

But what if we put this on the menu JUST for Flexitarians and Vegetarians?
Q. PURCHASE INTEREST IN **BLACK BEAN BURGER** BY SELF-DESCRIBED DIET

Top 2 Box: Def + Prob Would Buy

- **Vegan**
- **Vegetarian**
- **Mostly Vegetarian**
- **Eat a Variety - trying to eat LESS meat, etc.**
- **Eat a Variety - incl meat, dairy, etc.**

Exceeds norm for **ALL categories except**

- **Omnivores (Non–Flex)**
Q. HOW SHOULD WE DESCRIBE THIS BURGER ON MENU OF YOUR TRUSTED RESTAURANT?

- Black Bean Burger: 46%
- Veggie Burger: 11%
- Plant-Based Protein Burger: 9%
- Vegetable and Grain Burger: 8%
- Vegan Burger: 5%
- Vegetarian Burger: 5%
- Plant-Based Burger: 4%
- Meat Free Burger: 3%
- Made Entirely out of Plants: 2%
- Animal Meat Free Burger: 2%

Negativity!!
Negativity!!
Q. IF TOPPINGS INCLUDED DAIRY, CHEESES, MAYO, AND SAUCES WOULD YOU BE . . .

~ 1/2 of consumers want dairy on their plant-based burger!

46% More likely to buy it

44% Unaffected by those options

10% Less likely to buy it
Remember, 1/3 of consumers are Flexitarian… they’re not committed!
Q. WHAT, IF ANYTHING, COULD WE DO TO IMPROVE THIS BURGER FOR YOU?

<table>
<thead>
<tr>
<th>Top Improvements—The Black Bean Burger</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTHING! It looks good!</td>
</tr>
<tr>
<td>Use real (dairy) cheese /good cheese</td>
</tr>
<tr>
<td>Make sure it's not dry</td>
</tr>
<tr>
<td>Do not like black beans: would prefer “non-bean” burger</td>
</tr>
</tbody>
</table>

Remember, 1/3 of our sample is Flexitarian… they’re not committed!
Incredible Burger
Concept Results
The Incredible Burger
It’s here. A delicious burger made entirely out of plants for people who love the taste of juicy, meaty burgers. For even more authentic real burger flavor, we grill it and serve it on a toasted multigrain bun.

The Incredible Burger comes with your choice of toppings: non-dairy cheddar, pepper jack, or mozzarella cheese, non-dairy Parmesan ranch or mayo, pickles, lettuce, tomato, onion, ketchup, or mustard.
Q. HOW LIKELY WOULD YOU BE TO BUY THE INCREDIBLE BURGER?

<table>
<thead>
<tr>
<th></th>
<th>TOTAL SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=1,148</td>
</tr>
<tr>
<td>Definitely buy</td>
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</tr>
<tr>
<td><strong>TOP 2 BOX (60%)</strong></td>
<td>54%</td>
</tr>
<tr>
<td>Might/might not buy</td>
<td>24%</td>
</tr>
<tr>
<td>Probably not buy</td>
<td>14%</td>
</tr>
<tr>
<td>Definitely not buy</td>
<td>9%</td>
</tr>
<tr>
<td>Weighted purchase intent</td>
<td>50</td>
</tr>
</tbody>
</table>

Did not meet our norms…

But what if we put this on the menu JUST for Flexitarians and Vegetarians?
Q. HOW LIKELY WOULD YOU BE TO BUY THE INCREDIBLE BURGER?

Top 2 Box: Def + Prob Would Buy

- Eat a Variety - incl meat, dairy, etc.
- Eat a Variety - trying to eat LESS meat, etc.
- Mostly Vegetarian
- Vegetarian
- Vegan

Met norms only for vegans, vegetarians, and mostly vegetarian
Q. BEST WAY TO DESCRIBE THIS INCREDIBLE BURGER (FROM RESTAURANT)?

- For people who love the taste of meat: 27%
- Veggie Burger: 17%
- Plant-based Protein Burger: 12%
- Vegetarian Burger: 9%
- Meat-Free Burger: 7%
- Meat-Free Burger: 6%
- Plant-based Burger: 6%
- Vegan Burger: 5%
- Made entirely out of plants: 3%
- Animal Meat-Free Burger: 2%

Positivity wins again!
Q. WHAT ARE YOUR EXPECTATIONS FOR THIS BURGER?

<table>
<thead>
<tr>
<th>Top 6 Expectations</th>
<th>The Black Bean Burger</th>
<th>The Incredible Burger</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=1,163</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better for me</td>
<td>Better for me</td>
<td></td>
</tr>
<tr>
<td>High in protein</td>
<td></td>
<td>High in protein</td>
</tr>
<tr>
<td>Will taste delicious</td>
<td></td>
<td>Will taste delicious</td>
</tr>
<tr>
<td>Low in fat</td>
<td>Easier on my digestive system</td>
<td>Low in fat</td>
</tr>
<tr>
<td>Low in calories</td>
<td></td>
<td>Feel lighter after eating</td>
</tr>
<tr>
<td>Easier on my digestive system</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q. WHAT, IF ANYTHING, COULD WE DO TO IMPROVE THIS BURGER FOR YOU?

<table>
<thead>
<tr>
<th>Top Improvements—The Incredible Burger</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTHING!</td>
</tr>
<tr>
<td>Make it look less like meat</td>
</tr>
<tr>
<td>Add real (dairy) cheese</td>
</tr>
<tr>
<td>Explain exactly what is in the burger</td>
</tr>
<tr>
<td>Add more toppings (avocados, veggies, sauces, etc.)</td>
</tr>
</tbody>
</table>

Issue here is explaining what’s in it.
Q. IF TOPPINGS FOR INCREDIBLE BURGER INCLUDED DAIRY, CHEESES, MAYO, AND SAUCES…

Almost identical to Black Bean Burger!
Q. WHICH BURGER DO YOU PREFER?

Very close!!

- Prefer Black Bean Burger: 47%
- Prefer Incredible Burger: 42%
- I would not buy either burger: 11%
Q. WHICH BURGER DO YOU PREFER?

<table>
<thead>
<tr>
<th>Self-described diet...</th>
<th>Vegan</th>
<th>Vegetarian</th>
<th>Mostly Veg... Occasional meat, poultry, etc.</th>
<th>Trying to eat LESS meat, dairy, fish, poultry</th>
<th>Eat a Variety - including meat, dairy, fish, poultry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Black Bean Burger</strong></td>
<td>42%</td>
<td>48%</td>
<td>59%</td>
<td>50%</td>
<td>45%</td>
</tr>
<tr>
<td><strong>Incredible Burger</strong></td>
<td>58%</td>
<td>44%</td>
<td>38%</td>
<td>42%</td>
<td>42%</td>
</tr>
</tbody>
</table>

N=27, N=31, N=116, N=146, N=805

Whaaaaaaa?

Of course... as vegans they’ve made lifestyle decision to eat beans every day!!
**Q. WHY DO YOU PREFER EACH BURGER?**

<table>
<thead>
<tr>
<th>Reasons for Preferring The Black Bean Burger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Love black beans / good source of protein</td>
</tr>
<tr>
<td>Familiar, real ingredients “black beans and roasted veggies”. Know what to expect.</td>
</tr>
<tr>
<td>Seems more natural. Nothing mysterious. Don’t like burgers made to taste like meat.</td>
</tr>
<tr>
<td>Looks and sounds more appetizing</td>
</tr>
</tbody>
</table>
IF I HAVEN’T SOLD YOU ON THIS OPPORTUNITY YET...
Plant based food sales in US exceeded $5 Billion in 2016

PB +8.1% over last 12 months VS. +0.2% for all food

90% = dairy + meat alternatives
IMPLICATIONS FOR HPP TECHNOLOGY
METHODOLOGY

• Mattson 2nd study on eating trends

• Online survey fielded August, 2017

• n=390 consumers completed survey
Most plant-based meat alternatives sold **FROZEN**

Consumers generally want **FRESH**

Let’s find out if it’s true here.
Plant-based burgers made from vegetables, beans, peas, grains, etc. Sold **fully-cooked** from the **freezer section**. Simply reheat on the grill, in a skillet, or microwave.

Plant-based burgers made from vegetables, beans, peas, grains, etc. Sold **raw** from the **refrigerated meat** or **refrigerated produce section**. Handle like fresh meat. Cook thoroughly on the grill, or in a skillet.
Q. WHICH FORM OF BURGER DO YOU PREFER?

Total Sample, n=390

- Raw from the refrigerated meat or refrigerated produce section: 56%
- Fully-cooked from the freezer section: 44%
Q. WHICH FORM OF BURGER DO YOU PREFER?

By Generational Group

- Raw from the refrigerated meat or refrigerated produce section:
  - Age 23-32: 57%
  - Age 33-52: 54%
  - Age 53-71: 56%
  - Age 71+: 50%

- Fully-cooked from the freezer section:
  - Age 23-32: 43%
  - Age 33-52: 46%
  - Age 53-71: 44%
  - Age 71+: 50%

n=390
Q. WHERE IN STORE WOULD YOU PREFER TO BUY RAW PLANT-BASED BURGERS?

- Refrigerated MEAT section: 75% of Respondents
- Refrigerated PRODUCE section: 25% of Respondents

n=390
HERE ARE 2 DIFFERENT FORMS OF PLANT-BASED “GROUND”

Plant-based “ground” made from vegetables, beans, peas, grains, etc. Sold **fully-cooked** from the **freezer section**. Simply heat in a skillet or microwave, or add directly to soup or chili.

Plant-based “ground” made from vegetables, beans, peas, grains, etc. Sold **raw** from the **refrigerated meat** or **refrigerated produce section**. Simply cook in a skillet or microwave, or add directly to soup or chili.
Q. WHAT FORM OF GROUND DO YOU PREFER?

- 65% of Respondents prefer Raw from the refrigerated meat or refrigerated produce section.
- 35% of Respondents prefer Fully-cooked from the freezer section.

n=390
Q. WHERE IN STORE WOULD YOU PREFER TO BUY RAW PLANT-BASED “GROUND”?

- Refrigerated MEAT section: 68%
- Refrigerated PRODUCE section: 32%

n=390
PLANT-BASED CHICK’N STRIPS

Plant-based chick’n strips

n=390
Q. WHICH FORM OF CHICK’N STRIPS DO YOU PREFER?

- 52% of respondents prefer raw from the refrigerated chicken or refrigerated produce section.
- 48% of respondents prefer fully-cooked from the freezer section.

n=390
Q. WHERE IN STORE WOULD YOU PREFER TO BUY “CHICK’N STRIPS”?

- Refrigerated MEAT section: 68%
- Refrigerated PRODUCE section: 32%

n = 390
All plant-based meats +6% versus YAG.

Refrigerated PB meats +23% versus YAG.

Plant-based meat = 2.1% of meat sales.

Plant-based milk = 9.3% of milk sales.
THE OPPORTUNITIES ARE EVERYWHERE!

Frozen and Center Store
Q. ONE OF THE WAYS TO MAKE PLANT-BASED REFRIGERATED MEAT ALTERNATIVES SAFE IS TO USE HIGH WATER PRESSURE INSTEAD OF TRADITIONAL HIGH HEAT PASTEURIZATION TO KILL BACTERIA AND TOXINS.

WHAT’S THE BEST WAY TO TALK ABOUT THIS TYPE OF PROCESS?
CHOOSE ONE
Q. WHAT'S THE BEST WAY TO TALK ABOUT THIS TYPE OF PROCESS?

- High pressure pasteurized: 38%
- No-heat pasteurized: 11%
- Water pasteurized: 10%
- Cold water pasteurized: 9%
- Cold water pressed: 8%
- Cold pressed: 8%
- Cold pasteurized: 6%
- Water pressed: 5%
- Other: 4%
- Cold pressured: 3%
Q. WHAT'S THE BEST WAY TO TALK ABOUT THIS TYPE OF PROCESS?

By Generational Group

- **Millennial**
  - High pressure pasteurized: 39%
  - No-heat pasteurized: 13%
  - Water pasteurized: 11%
  - Cold water pasteurized: 5%
  - Cold water pressed: 10%
  - Cold pressed: 10%
  - Cold pasteurized: 2%
  - Water pressed: 5%
  - Cold Pressured: 2%

- **Gen X**
  - High pressure pasteurized: 36%
  - No-heat pasteurized: 11%
  - Water pasteurized: 11%
  - Cold water pasteurized: 9%
  - Cold water pressed: 6%
  - Cold pressed: 10%
  - Cold pasteurized: 9%
  - Water pressed: 4%
  - Cold Pressured: 3%

- **Boomers**
  - High pressure pasteurized: 39%
  - No-heat pasteurized: 10%
  - Water pasteurized: 9%
  - Cold water pasteurized: 11%
  - Cold water pressed: 10%
  - Cold pressed: 4%
  - Cold pasteurized: 3%
  - Water pressed: 5%
  - Cold Pressured: 3%

- **Silent**
  - High pressure pasteurized: 30%
  - No-heat pasteurized: 10%
  - Water pasteurized: 10%
  - Cold water pasteurized: 10%
  - Cold water pressed: 30%
  - Cold pressed: 10%
  - Cold pasteurized: 10%
  - Water pressed: 10%
  - Cold Pressured: 10%

n=390
Q. WHY DID YOU SELECT **HIGH PRESSURE PASTEURIZED**?

<table>
<thead>
<tr>
<th>Top Reasons for Selecting High Pressure Pasteurized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self explanatory / easy to understand / most straightforward</td>
</tr>
<tr>
<td>Most descriptive without being confusing</td>
</tr>
<tr>
<td>Most logical of the processes listed</td>
</tr>
<tr>
<td>High pressure = clean, sanitary, safe, healthy</td>
</tr>
<tr>
<td>Best fit for the products shown</td>
</tr>
</tbody>
</table>
“HPP sounds like a process that would really kill bacteria.”

"Cold doesn't seem sanitary”

"Water seems like it dilutes flavor”

“High pressure pasteurized sounds scientific and sanitary.”

“I get the impression of a more thorough process.”

“Everyone is familiar with pasteurization. 'High Pressure' sounds modern and new.”

“I think of high pressure as a high pressure washer. I know the item will be clean and safe.”
IN SUMMARY

1/3 of population Flexitarian

½ will eat more plant-based foods next year

Consumers want fresh plant-based “meat”

And they want you to tell them exactly what the process is

We can help!
THANK YOU!

WANT TO TALK INNOVATION?

BARB@MATTSONCO.COM