



The Magic of Mushrooms

Steve Solomon
Culinary Strategy
The Mushroom Council



The Mushroom Council



Represent growers and the entire industry

Build demand for mushrooms

Education, research and promotion

No sales, on-farm, lobbying, sourcing

All About Mushrooms



Ancient Egyptians believed mushrooms were the plant of immortality, according to the hieroglyphics of 4,600 years ago.



Mushrooms are grown indoors, so they are always in season



White button mushrooms are the most popular variety, representing 90% of mushrooms consumed in the United States.¹



Mushrooms are a \$1.1 billion industry. This year, more than 900 million pounds of mushrooms were grown in the U.S.¹



Kennett Square, PA is considered the mushroom capital of the world.

Naturally low in calories and fat-free, one serving of mushrooms provides 3 grams of protein, 1 gram of fiber and adds important nutrients to the plate.³



Health Areas Where Mushrooms May Play A Role



Weight Management



Bone Health



Immunity



Diet Quality

Anti-Tumor

Low calorie, low sodium, fat free and cholesterol free

"Eating a healthy serving of fresh fungi daily can help protect you from breast cancer, according to the *International Journal of Cancer*." *Eat This, Not That*, *New York Times*

Cancer Prevention

One of the few foods with naturally-occurring Vitamin D for bone health and immune system protection.

Anti-Bacterial

The oldest single cell protein and nutrient dense and rich in antioxidants



Anti-Viral

Protect cells from damage leading to heart disease/high blood pressure.

Antioxidant

Excellent source of B Vitamins, Selenium and Potassium which help break down fats and carbohydrates

Anti-Inflammatory

Immune Boosting

How Mushrooms Are Grown

RAW MATERIALS

The substrate provides a nutritional balance of organic material to serve as a growth medium for mushrooms.



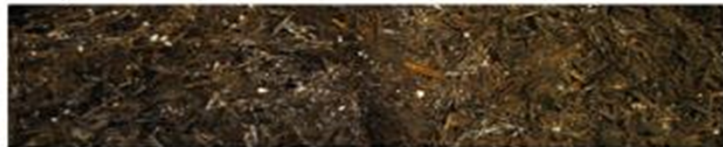
SPAWNING

Mushroom spawn, purchased from commercial labs, is mixed with the substrate.



BEDDING

The mushroom spawn mixture is transferred to several hundred beds or trays.



CASING AND PINNING

Casing, made of peat moss, is spread over the mushroom bed serving as a reservoir to hold in moisture. During the pinning stage, "pins" of mushrooms push up through the casing.



HARVESTING

Mushrooms are harvested by hand throughout a 16-35 day cycle.

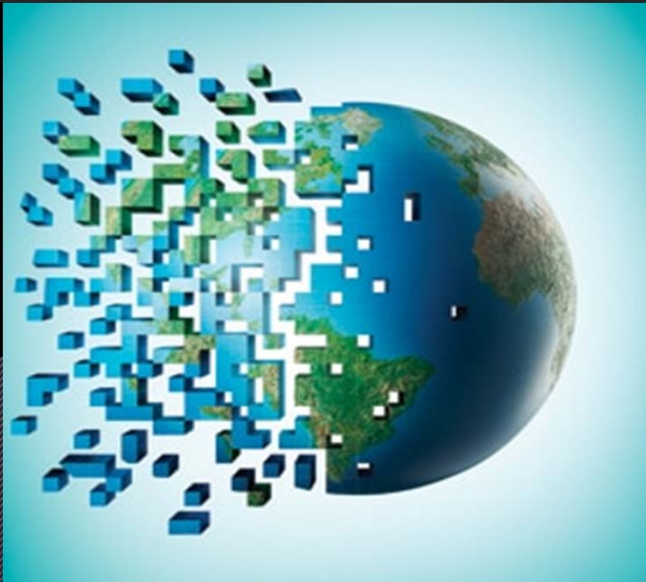




<http://www.mushroominfo.com/growing-mushrooms/>



The World Is Changing



The New Realities



Holistic health,
knowledgeable,
proactive

Obesity, burdens to HC system, societal costs



How will we feed 9B people in 2050. How will we feed them today.



Government
MD

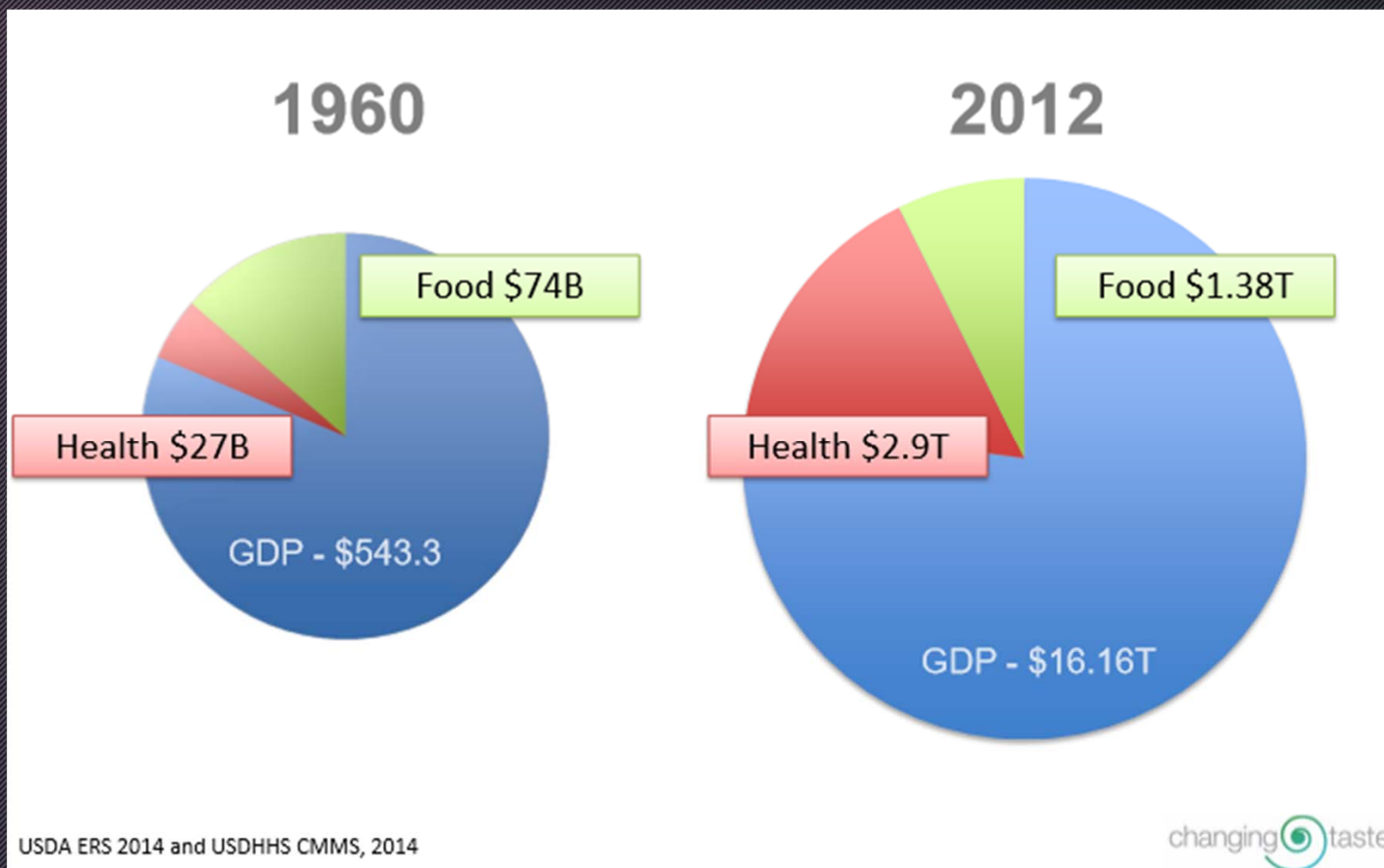


"...making it our moral duty to respect rather than ravage the garden that is our home"

--Pope Francis Encyclical

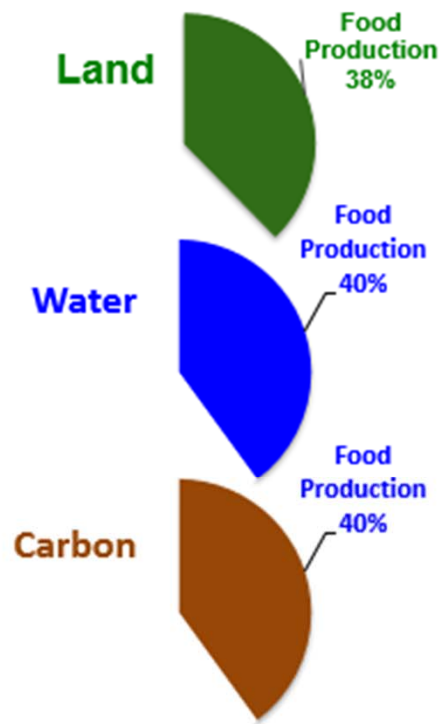


Food Choices Matter To Our Economy



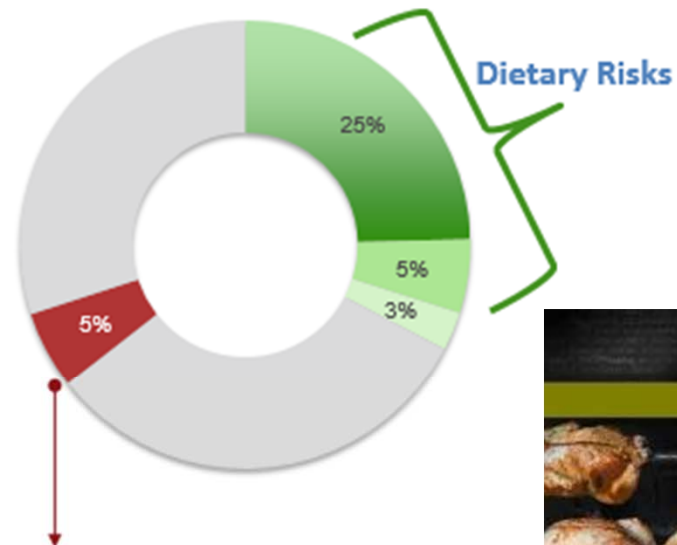
"Menu Choices Are More Important Than Farm Choices"

Share of World's Resources



All Causes of Mortality (U.S.)

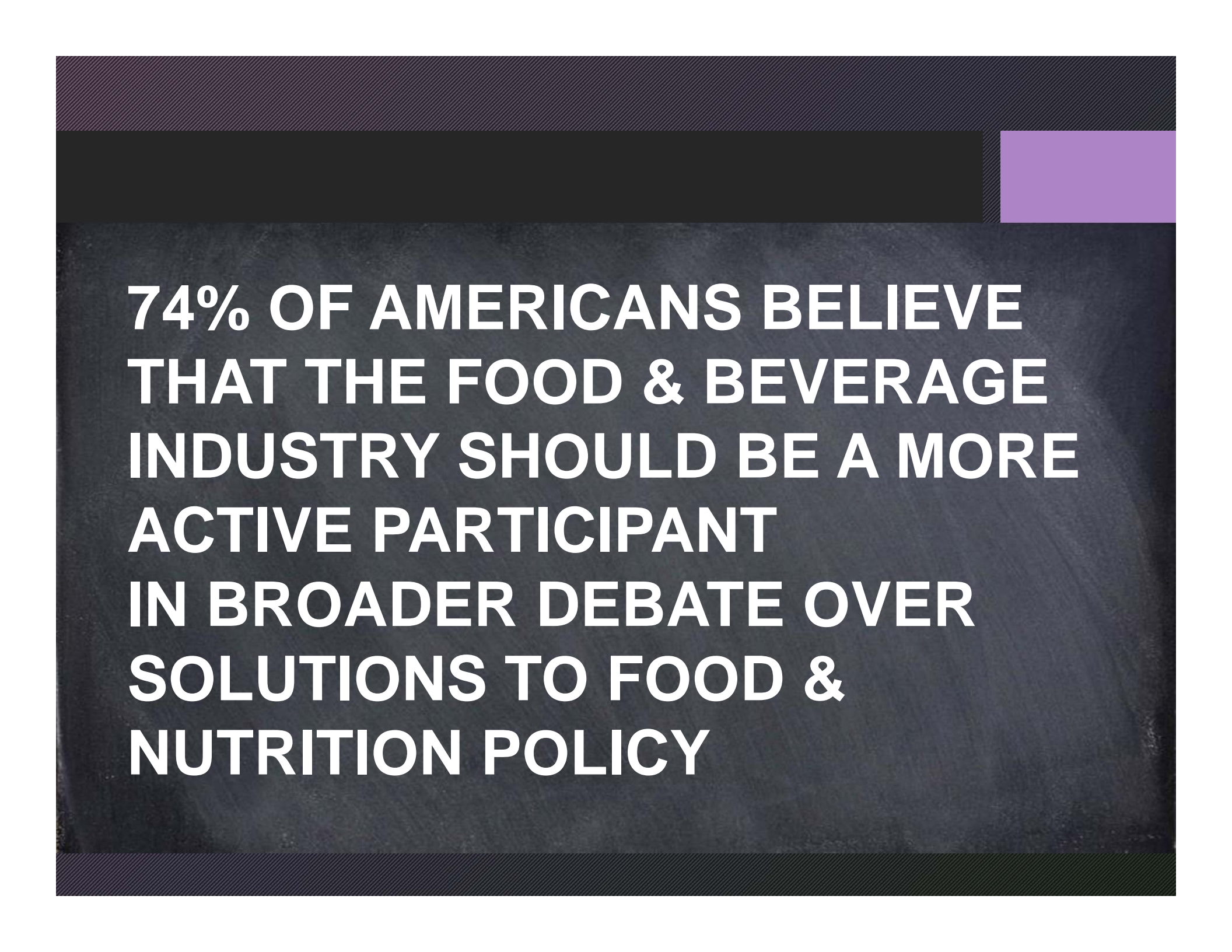
■ Cardiovascular Disease ■ Stroke
■ Diabetes ■ Other
■ Lung Cancer



Food choices are now a more important contributor to our health, healthcare costs, and causes of death than smoking.

changing  tastes





**74% OF AMERICANS BELIEVE
THAT THE FOOD & BEVERAGE
INDUSTRY SHOULD BE A MORE
ACTIVE PARTICIPANT
IN BROADER DEBATE OVER
SOLUTIONS TO FOOD &
NUTRITION POLICY**



INNOVATION

"Helping diners link what they eat with how they feel and how they perform in their daily lives can be tools and support needed to drive lasting change in behaviors and attitudes about healthy foods."



Blended. And Better.



fresh
MUSHROOMS

America Loves Burgers



“Regular”



“Unleaded”

Can we create a burger that can mitigate nutritional and environmental concerns and still deliver a fabulous taste experience ?

HMC: Where Meat Met Mushrooms

Burgers--one
of the first
initiatives
explored by
Healthy
Menus
Collaborative





OPERATOR MEMBERS



Why Is This An Issue?



THE PROTEIN FLIP



Much attention is given to the increasing rates of meat consumption in the developing world – but Americans can be a big part of the solution:

AMERICANS EAT **3X AS MUCH MEAT** (RED MEAT AND POULTRY) AS THE GLOBAL AVERAGE. **OVER HALF IS RED MEAT.**



MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
	✓			✓		✓

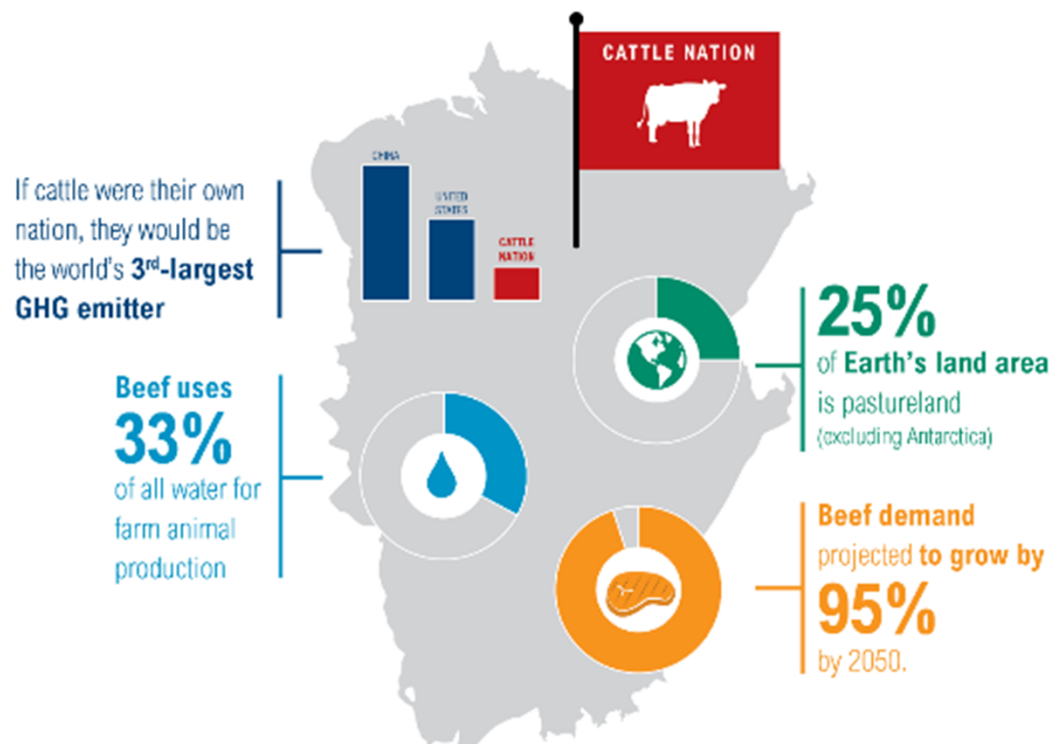
AMERICANS EAT AN AVERAGE OF 3 BURGERS A WEEK.*
THAT'S 50 BILLION BURGERS PER YEAR—JUST BY ONE COUNTRY.

WHAT IF WE ALL ATE ONE LESS BURGER PER WEEK? OR A DIFFERENT KIND OF BURGER?

What if we did even more: reducing our consumption of red meat to a few ounces per week and **switching to other animal and plant proteins** with a smaller **environmental footprint**?

Why Is This An Issue?

Beef Creates a Huge Environmental Footprint



wri.org/shiftingdiets

WORLD RESOURCES INSTITUTE

WORLD RESOURCES INSTITUTE

PROTEIN SCORECARD

What you put on your plate has a large impact on the environment. Research by WRI and its partners shows that meat and dairy are generally more resource-intensive to produce than plant-based foods. Increasing pressure on land, water and the climate. Small dietary shifts—such as switching from beef to pork, or poultry to beans—can significantly reduce agricultural resource use and greenhouse gas (GHG) emissions. Use this scorecard to lower your diet's impacts in a way that works for you.

Read more at wri.org/shiftingdiets

Join the conversation [#ShiftingDiets](https://twitter.com/ShiftingDiets)

	FOOD	IMPACT (GHG emissions per gram of protein)	COST (Retail price per gram of protein)
LOW	Wheat		\$
	Corn		\$
	Beans, chickpeas, lentils		\$
	Rice		\$
	Fish		\$\$\$
	Eggs		\$
	Nuts		\$\$\$
MEDIUM	Poultry		\$
	Pork		\$
	Dairy (milk, cheese)		\$
HIGH	Beef		\$\$\$
	Lamb & goat		\$\$\$

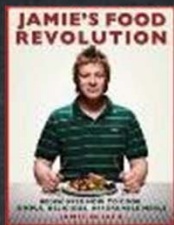
How Much Protein Do You Need?

The average daily adult protein requirement is 50g for a man and 45g for a woman but many people consume much more than they need.

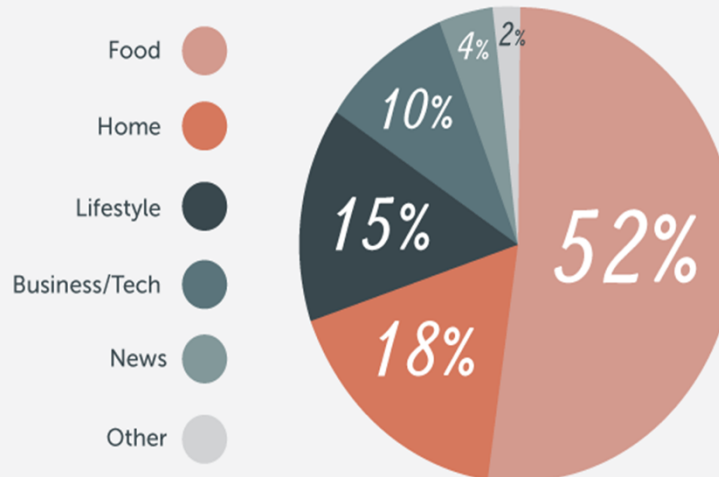


Sources: GlobalAgri-Web model, developed by CIAT, Princeton University, IFPRI, and WRI (GHG data); USDA and FAO (costs) (US retail price data). <https://www.wri.org/protein-scorecard>

Big Appetite for Food Culture



TOPICS COVERED IN Highly-Shared Headlines



buffer | CoSchedule





A collage of various food-related images. It includes a large burger with a sesame seed bun, a plate of fried food, a woman wearing a red mushroom hat, a bowl of salad, a taco, and a kitchen scene with three people. The text 'CAN WE DO BETTER?' is overlaid in large white letters.

CAN WE DO BETTER?

and out! (hint: yes)

Introducing The Blend



Finely
chopped
mushrooms
look, act,
taste and
perform like
ground
meat

THE STORY BEHIND THE BLEND



Birth of a Concept: The Blend

For the past several years, chefs have faced increasing pressure and scrutiny to serve healthier meals that reduce calories and sodium, are better for the land and the world we live in and still taste delicious. The challenge to achieve that intersection between nutrition-sustainability-flavor is at the core of innovation within America's food system.

The idea of a beef-mushroom blended burger—“The Blend”—broadly offered an American menu item conceived of and incubated by The Healthy Menu R&D Collaborative (HMC), an educational initiative of high-volume culinary leaders developed by The Culinary Institute of America in partnership with its founding member, Mushroom Council. The Blend concept reflects the opportunity to apply innovative, strategic culinary insights to the substantial health and environmental imperatives facing our foodservice industry.

[Read more about “The Blend” and “The Protein Flip” here.](#)



MUSHROOMS: A CASE STUDY IN INNOVATION FROM THE CIA

The CIA's Healthy Menu R&D Collaborative (HMC) is a working group of volume foodservice culinary and nutrition leaders and suppliers who collectively feed 100 million Americans a day; small changes in their menus have a big impact on public health. In collaboration with its founding corporate member, Mushroom Council, the CIA asked this group to test if burgers might be ripe for “the flip” concept. Could umami-rich mushrooms replace a third or more of the meat and satisfy customers? The answer was a resounding yes, and a new generation of blended meat-mushroom burgers—“The Blend”—is sprouting up on menus coast to coast. The innovation is spreading, with new blend concepts using other vegetables and plant-based ingredients.

Better Nutrition

	ALL BEEF PATTY	BEEF AND MUSHROOM PATTY	
CALORIES	307	149.4	51%
TOTAL FAT	20.2	8.8	56%
SAT FAT	7.6	3.2	58%
CHOLESTEROL	103	84.7	18%
SODIUM	85	52.3	39%



Nutrition	Savings
Calories	26%
Fat	33%
Cholesterol	22%
Sodium	46%



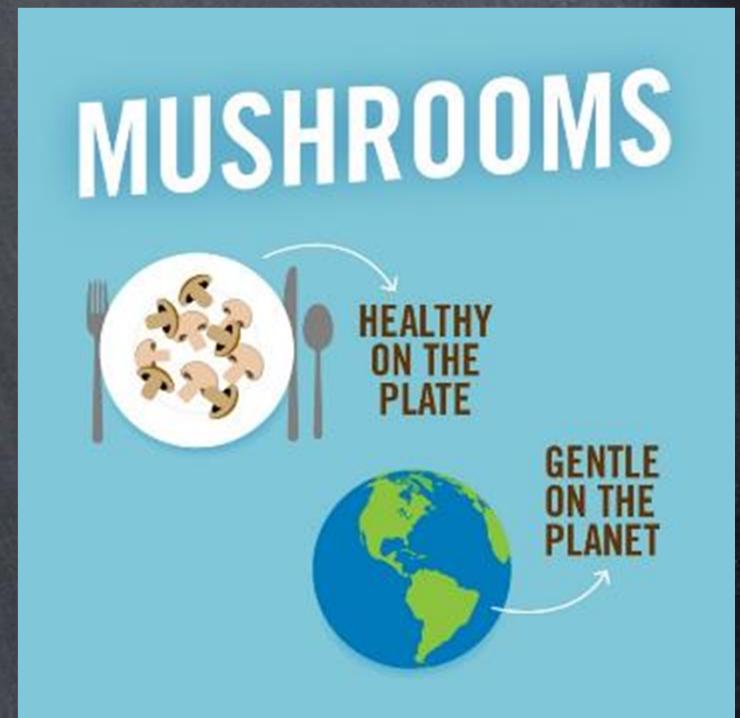
If we blended 1/3
mushrooms into every
burger served in
foodservice...

4.5 trillion calories
saved

Better for the Planet

Mushrooms are one of the most sustainable foods produced in the United States

They are also the biggest recycler of agricultural waste

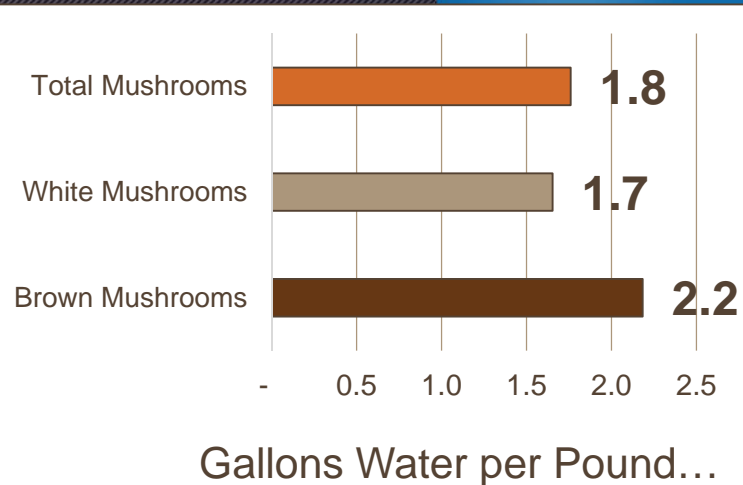


Water Usage

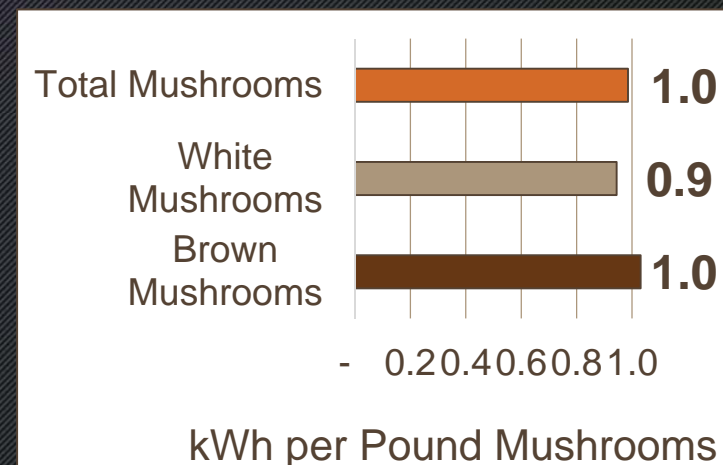
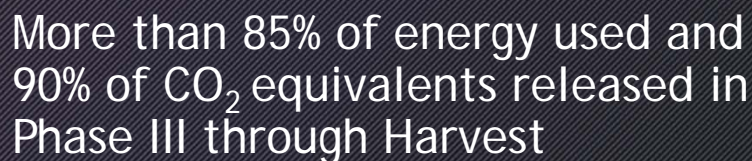
Culinary
Institute of
America and
Harvard,
Menus of
Change,
2015;
SureHarvest,
2017

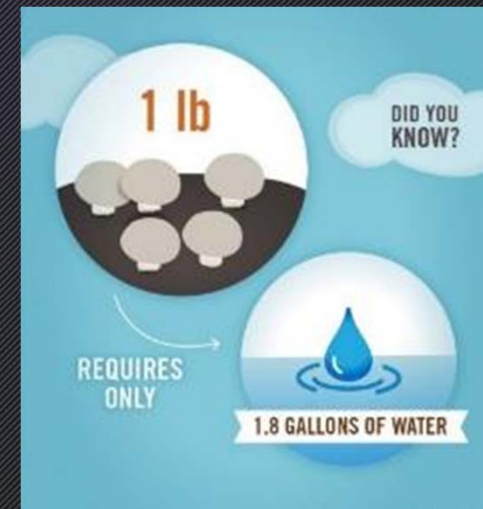
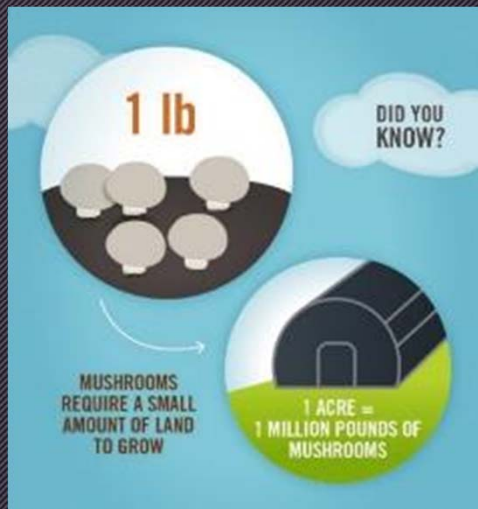
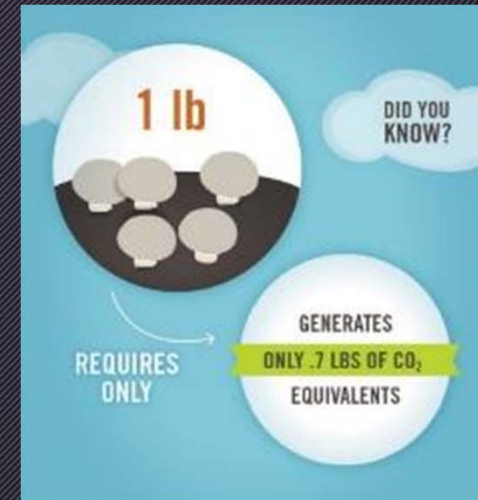
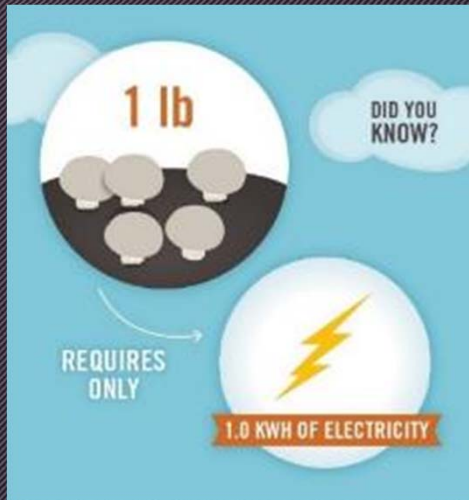
GALLONS OF WATER USED IN FOOD PRODUCTION PER POUND

INDUSTRIALLY
RAISED LIVESTOCK

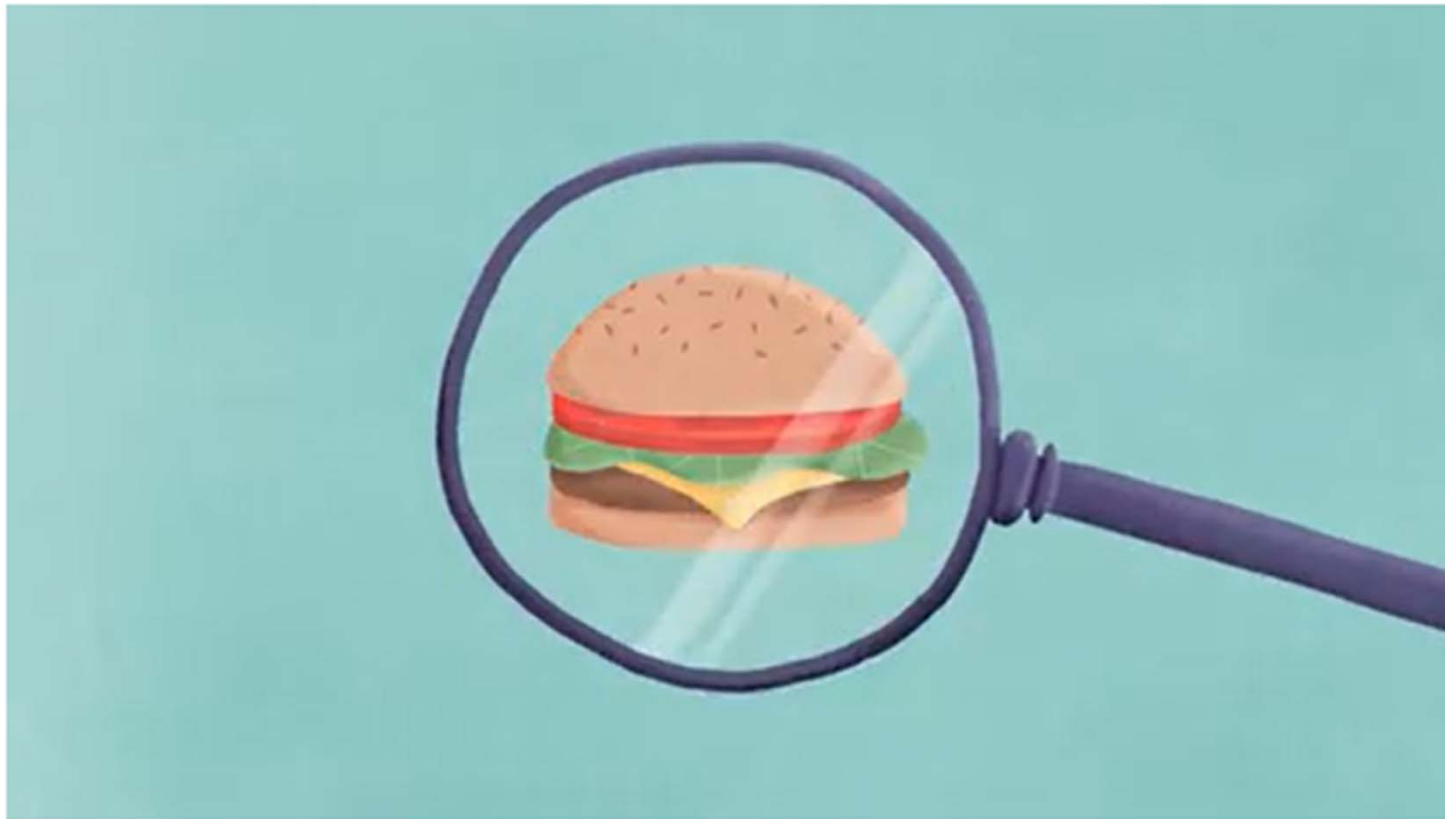


Gallons Water per Pound...





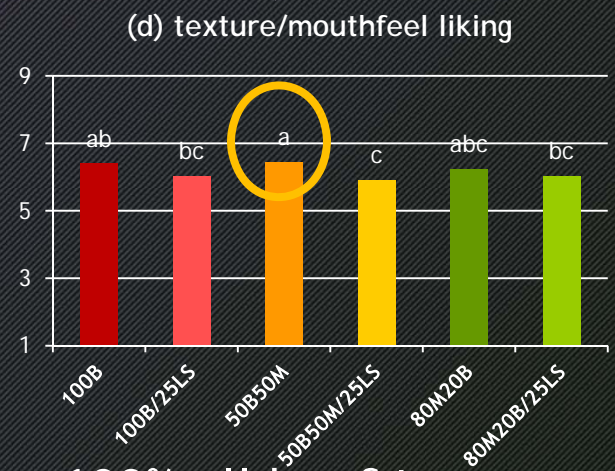
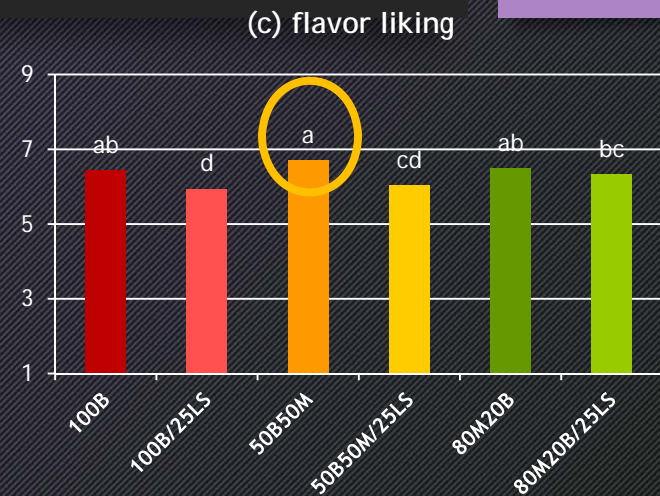
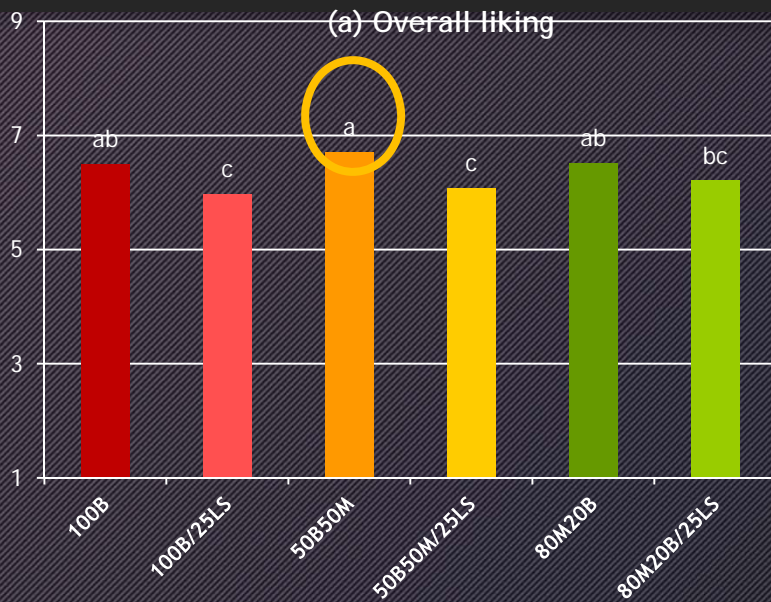
<http://video.epicurious.com/watch/how-the-blended-burger-can-help-solve-our-emissions-crisis>



HOW-TO | RECIPES

How the Blended Burger Can Help Solve Our Emissions Crisis

Better Flavor



Consumers preferred flavor of The Blend vs. 100% all beef taco



FLAVORFUL
Sustainable
healthier
BLENDED

PEOPLE

Doing better for health.
Change the way future generations eat.

PLANET

Doing better for sustainability.
Blending just 1 meal a week can make
a world of difference.

PALATE

Doing better for flavor.
The country's top chefs are making
better burgers with The Blend.

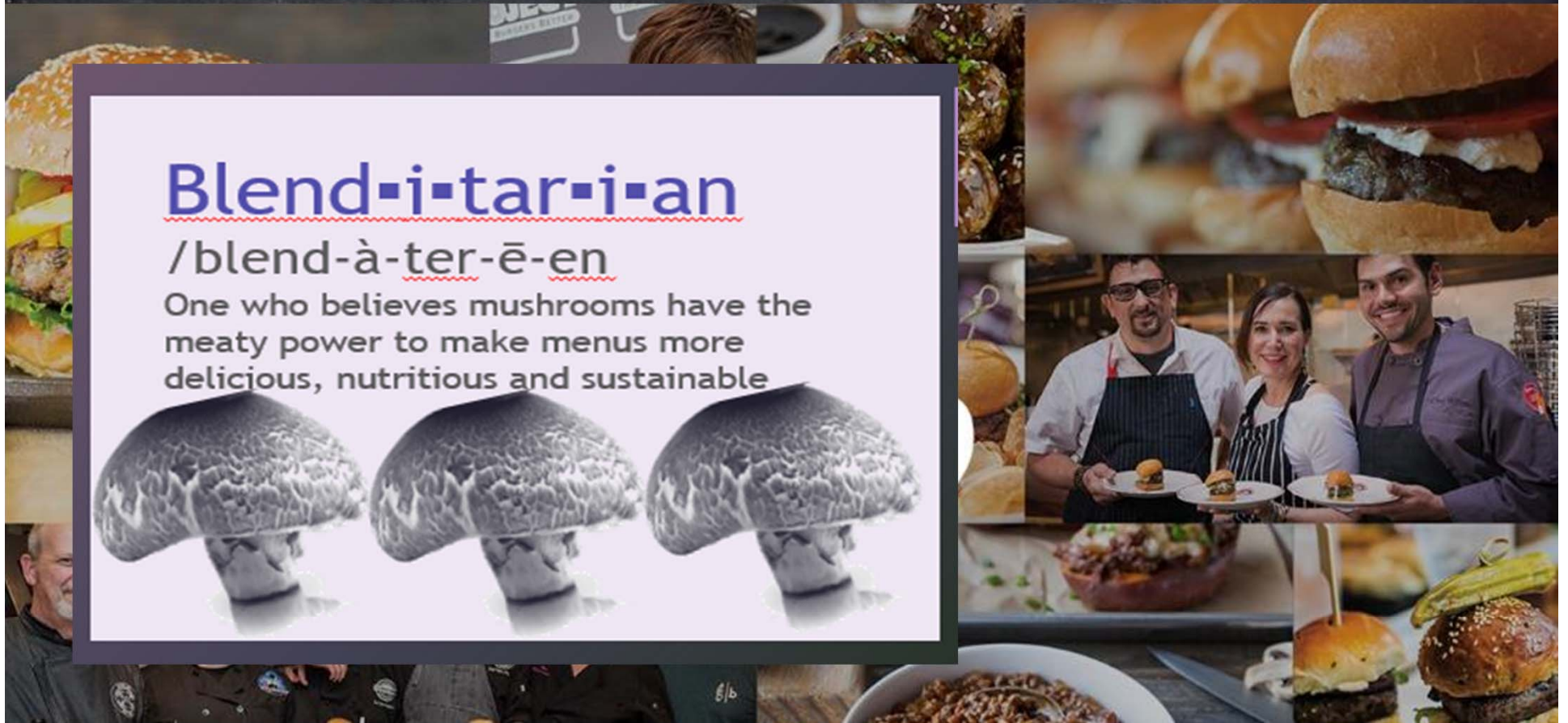


MUSHROOMS
IT'S WHAT THE PLANET
WOULD ORDER.

Blend-i-tar-i-an

/blend-à-ter-ē-en

One who believes mushrooms have the
meaty power to make menus more
delicious, nutritious and sustainable



Colleges Were The First Blenditarians



Gastropub Style Better Burger

Yale
UNIVERSITY



THE OHIO STATE UNIVERSITY
OFFICE OF STUDENT LIFE





Sodexo Switches to Blended Burgers

Leading foodservice provider Sodexo is taking tremendous strides in the national movement to increase fruits and veggies in school lunches by transitioning from all-beef burgers to blended burgers in all 250 school districts it serves. The switch to blended burgers could mean 250 million calories, 38 million grams of fat, 15 million grams of saturated [...]

250M Calories
38M Fat
Grams
15M Sat Fat
Grams



REAL WORLD IMPACT



- In 2013 Pizza Hut “silently” rolled out an improved hand-tossed crust with 35% less sodium.
- In November 2015 Pizza Hut will successfully complete another “stealth” sodium reduction, rolling out Thin ‘N Crispy crust with 38% less sodium and cheese with 30% less sodium.
- In 2015 Pizza Hut developed a new meatball with mushrooms that is nutritionally superior to its traditional beef topping—38% fewer calories, 53% less sodium, and 60% less saturated fat!



REAL WORLD IMPACT



Compass Group North America

"We are testing our first commercial meat & mushroom blended burger product, which will reduce calories, saturated fat and sodium all by about 20%."



The average American eats
three hamburgers every
week.
(The NPD Group)

Hamburgers and
cheeseburgers account for
71% of all beef served
commercially in the U.S.
(USDA ERS)



REAL WORLD IMPACT



Sodexo Beef + Mushroom Blended Burger

- Contains 30 fewer calories, 2 fewer grams of saturated fat, and 40 fewer milligrams of sodium compared to the standard burger for schools.
- When tested with students before the nationwide roll-out, 85% of students preferred them over the previous non-mushroom burger



Issue Date: Vol. 56, No. 3, March 2016, Posted On: 2/15/2016

Sodexo Switches To Beef-Mushroom Blend Burgers In K-12 Schools

Emily Jed
Emily@vendingtimes.net

TAGS: Sodexo, Blend burger, school meals, Lisa Feldman, food service, Mushroom Council, Chris Studtmann

GAITHERSBURG, MD -- [Sodexo](#) said it will be switching the all-beef burgers it sells to its K-12 school accounts to the meat-and-mushroom Blend burger. The change is said to support better nutrition for students in more than 250 school districts.

Recent studies suggest kids are taking more fresh fruits and vegetable at school meals, but not necessarily eating them, according to Sodexo culinary director Lisa Feldman. "In addition to our work incorporating behavioral economics principles into our school nutrition programs to encourage students to both take and consume more fruits and vegetables, Sodexo is also looking at ways to add produce to other things we serve like adding natural and nutrient-packed mushrooms to burgers," Feldman said.

According to Sodexo, the mushrooms blend seamlessly with the meat and most students are either happy with the change or don't even notice it.

The Blend burger contains fewer calories, fewer grams of saturated fat and fewer milligrams of sodium compared to the standard burger for schools. Given the 7 million monthly estimated purchases at Sodexo cafeterias, the company estimates this move will result in a savings of more than 250 million calories, 38 million grams of fat, 15 million grams of saturated fat and 304 million milligrams of sodium from student meals each month.



Can Mushroom-Enhanced Burgers Get Kids to Eat More Produce?

LATEST

Plant-Based Food Makes
Get a Lobbyist

World Food Prices Hit 10-
Year Low, But You Won't
Save a Dime

Is This the Best Place to Live in
America?

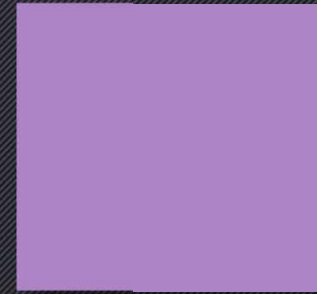
Meet the Scavenger, a Shaggy
Flakous Hybrid

What It's Like to Go
Undercover at Publix

Put the Green Phone Away

FOOD & WINE





*Sodexo PB&J Burger (Portobello, Beef and Jalapeno)
535 calories, 12 g fat, 595 mg of sodium*

*Seasons*₅₂
FRESH | GRILL



*Seasons 52 Signature Burger (featuring the Blend)
435 calories, 12 g fat, 595 mg of sodium*



Firebirds Oven Roasted Portobello, Cherry Tomato, Red Onion and Port Jus Burger
580 calories, 16g fat, 485 mg of sodium



*DMK Burger
(featuring the Blend)*

Other Chain Blenditarians



The Cheesecake Factory



BUZZ



Hard To Miss



HELPFUL FOR FAMILIES
Cutting Down on the Meat, but Not the Taste



**RESTAURANT
BUSINESS.**

Blended burgers will be the slider of 2016

If you doubt it, get to one of the many college campuses that are mixing proteins with mushrooms, grains, veggies and other highly textured components to deliver a burger that's more moist, more flavorful, more healthful and kinder to the environment.

The Culinary Institute of America is teaching tomorrow's chefs to eat them regularly—a blended burger is featured every day in the school's new student-feeding operation—as well as how to form and cook them. And the beef-plus burgers already are proving successful for chains.



n p r



STARCHIEFS



THE HUFFINGTON POST

The 5 Biggest Healthy Eating Trends for 2017

1/20/2016 10:55 PM ET



Burgers taste better by blending beef with mushrooms

The new year is just around the corner, so it's time to usher in the latest food trends that will soon hit restaurants and grocery store shelves. With more of us paying attention to the environment and our health, food manufacturers are responding by offering more innovative, plant-forward foods that are better for people and the planet. Get ready for seaweed, algae, fungi and other plant-based edibles that will delight your taste buds in 2017.

Here's a sneak peek at the healthy trendsetters:

Earth-Friendly Burgers

Who doesn't love a good burger? Clearly, most Americans do because we eat an estimated 50 billion of them a year. That's a lot of beef, which just happens to have one of the largest environmental footprints of all animal-based foods we eat. To help, chefs are reinventing burgers to be healthier and more sustainable, without compromising the taste.

The James Beard Foundation's Blended Burger Project calls for chefs across the country to blend at least 25 percent fresh chopped mushrooms into a burger patty. Blended burgers combine finely chopped mushrooms with meat, creating a burger that's tastier, healthier, and more sustainable than all-meat burgers. So far, the blended burger has been adopted by some of nation's most creative and adventurous chefs and the food service industry, according to Kristopher Moon, vice president of the James Beard Foundation. In addition to restaurants, many leading universities and public schools offer blended burgers on their menus too.

FOOD AND FITNESS

Thursday, December 15, 2016

Food Trends to Watch in 2017

By Katherine Brookings, MS, RD



There are tons of trendy new foods hitting store shelves this year - from seaweed snacks to animal-free "meat" and "dairy" products to fungi edibles. Most of these buzzy bites are focused on one central theme: plant-based everything. That's because more and more people are seeking out foods that are kinder, greener and healthier.

Here are five healthy eating trends to sink your teeth into in the new year.

A great burger is always on trend, but with more emphasis on healthier, sustainable eating, top chefs are reinventing the burger to be more eco-friendly ... and delicious!

The James Beard Foundation's Blended Burger Project calls for chefs across the country to blend at least 25% fresh chopped mushrooms into a burger patty. Blended burgers combine finely chopped mushrooms with meat, creating a burger that's tastier, healthier, and more sustainable than all-meat burgers. So far, the blended burger has been adopted by some of nation's most creative and adventurous chefs and the food service industry, according to Kristopher Moon, vice president of the James Beard Foundation. In addition to restaurants, many leading universities and public schools offer blended burgers on their menus too.

Make your own savory burger with this [Mushroom Mince](#) recipe.



Thanks ladies! I had the best time! @hede-korb @todayshow @todayfood just call me I will make lunch any time #chilllife #workingdreams @themushroomchannel #blenditarian

WebMD

Mushrooms Have a Moment

They're helped by the "blended burger" movement, which combines them with meat

By RALPH GARDNER JR.

April 4, 2016 8:35 p.m. ET

Mushrooms are the new black. Or the next ramps. Or something like that.

I know because my daughters recently started talking about cultivating them on a log. I believe it was. And also because I attended a "blended burger" event at the esteemed James Beard Foundation on the evening of March 28.

WSJ





And Easier To Source



hvmc





James Beard Foundation's Blended Burger Project





THE JBF IMPACT PROGRAMS

The JBF Impact Programs are committed to establishing a more sustainable food system through education, advocacy, and thought leadership.

Explore JBF's Impact Programs by clicking on the buttons below. You can also get updates about Impact Programs by signing up for the JBF Impact newsletter.

LEADERSHIP AWARDS

FOOD CONFERENCE

CHEFS BOOT CAMP

CULINARY LABS

ISSUE SUMMITS

BLENDED BURGER

**JAMES
BEARD
FOUNDATION**

Celebrating, nurturing, and honoring chefs and other leaders making America's food culture more delicious, diverse, and sustainable for all."

The James Beard Foundation's

BLENDED BURGER PROJECT™

BACK FOR ITS THIRD YEAR!

You can make a difference by reimagining the iconic burger. When you make a patty blend of meat and at least 25-percent finely chopped mushrooms, you can create an even better burger—better flavor, better nutrition, and better for the planet.

Through our consumer-driven contest, the chefs whose "blended burger" receives the most online votes will cook at the historic James Beard House in January 2018.

Runs Memorial Day-July 31, 2017. Sign up now.



JamesBeard.org
BlendedBurgerProject
#BlendedBurgerProject

"As a proponent of sustainable, healthy foods, I'm thrilled to join the Blended Burger Project™. The meaty, umami qualities of mushrooms make them the perfect ingredient to boost a burger's flavor - and their nutritional and environmental qualities make a great burger even better."

Hugh Acheson

James Beard Foundation
Award-winning chef, author and Top Chef judge





The Blended Burger Project™ is a movement that strives to make burgers better by blending ground meat with chopped mushrooms, creating an incredibly delicious patty that's healthier for your guests and more sustainable for the planet.



Menu THE BLEND

Combining ground meat with finely chopped or diced mushrooms helps you create a burger that is more delicious, nutritious and sustainable. It has been written about by major food and consumer publications. It's the way guests want to eat. It's the way you can make an impact. **Burgers. Made Better.**



Photo credit: Thorsbyr Brewing Co., San Francisco, CA
Recipe credit: Chef Robert McCarthy, Thorsbyr Brewing Co., San Francisco, CA. Photography credit: Eric Williams

Make A DIFFERENCE

The James Beard Foundation believes every chef can make a difference. That's why they are encouraging chefs like you to participate in the 3rd annual Blended Burger Project™ by menuing burgers that blend ground meat with at least 25% mushrooms. This national movement is led by chefs who are adding their own creative take on the Blend, boosting flavor and improving nutrition and sustainability. Serve the burger your customers crave. Win the opportunity to cook at the historic James Beard House.

Memorial Day through July 31, 2017

REGISTER TODAY:

Visit www.jamesbeard.org/blendedburgerproject



**JAMES
BEARD
FOUNDATION**

