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## **OUR OBJECTIVE**

The Mushroom Council plays a very important role in the national promotion of fresh mushrooms through consumer public relations, foodservice communications and retail communications. Many different venues are used to promote fresh mushrooms to consumers, such as working with professional chefs in developing and promoting new recipes, working with produce department managers to maintain the highest quality mushroom product for customers and sending out thousands of brochures each year to consumers hungry for new mushroom ideas.







FLETCHER STREET
OSTROM MUSHROOM FARMS

As 2013 Chair of the Mushroom Council, I leave the board energized with optimism for the Mushroom Industry. The years of investment in research, in the refinement and focus of the Council's marketing program, have culminated in a perfect storm of opportunity for the industry. Beginning with the investment in a social media marketing program and ending with the promotion of the 'Trend is to Blend' concept I believe the Mushroom Industry is posed to move mushrooms from an 'impulse purchase' to a 'staple item' for consumers.

The Council's nutrition research has started to show promise, and looks to be gaining momentum. As a significant offshoot of that research, Blendability is becoming one of our strongest, and most consumer-accessible marketing tools we have ever experienced as an industry. The beauty of the concept is its applicability to retail, foodservice, schools and healthcare consumers, from gourmet to weight-loss, to food costs. Blendibility is just one aspect of that investment that we expect to bear fruit in the future.

That is not to say that we do not have our challenges as an industry for the future. The mushroom category is constantly challenged at retail with diminishing space and consolidation of foodservice and retail operators may pose real difficulties for grower's ROI. However, the positioning that mushrooms has as a delicious, healthy, versatile and sustainable 'veggie' has never been more perfect and I hope you will join with me in continuing to support the efforts of the Mushroom Council.

Yours very truly,

Fletcher Street

# STATEOF THE INDUSTRY: RETROSPECTIVE AND FORECAST

#### Shipments/Disappearance

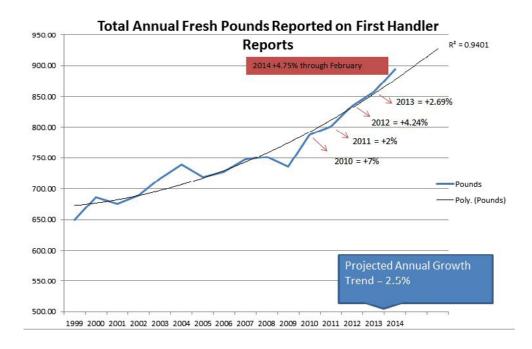
#### Fresh:

After a pause, from 2004 through 2009, demand for fresh mushrooms appears to have heated back up, reaching a new record level of per capita consumption, according to NASS in 2011/2012 (most recent data available). Indeed if we examine a graph of fresh shipments compiled from Mushroom Council first handler reports we can see that growth rates four years running have continued to exceed population growth (less than 1% per annum). Please note the 2.5% projected growth rate is claimed with 94% confidence and indeed 2014 began the year in excess of this forecast.

Where is the growth? According to IRI retail scan data. 2013 retail sales volume increased 3.9% in 2013. **Assuming** foodservice sales are 50% of total shipments, that would mean that foodservice sales increased nearly 1.5%  $(\frac{1}{2} \text{ of } 3.9 + \frac{1}{2} \text{ of } 1.48 = 2.69\% \text{ total pounds})$ growth in 2013). Looking ahead, based on an examination of recent retail sales performance 2014 is tracking yet again, above the prior year through March, albeit at a smaller 52 week rate of 2.9% With total pounds shipped up 4.75% ytd, this would suggest an improvement in the foodservice growth rate thus far in 2014. All in all, the outlook for 2014/15 looks strong.

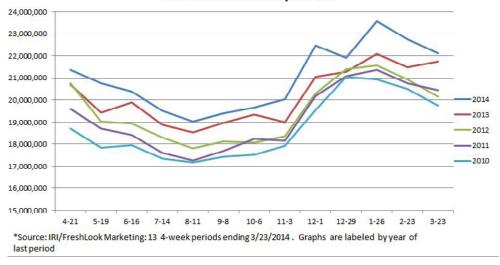
#### Processed:

The Mushroom Council does not collect assessments on or track processed mushroom shipments. However, according to the Economic Research Service (ERS) of USDA, processed mushroom per capita consumption in the most recent year reported (2012/13) was at an all-time low.



According IRI retail scan data, retail sales volume increased 3.9% in 2013

Total U.S. Mushroom Category Sales - Pounds 4-week Periods: 13 per Year\*



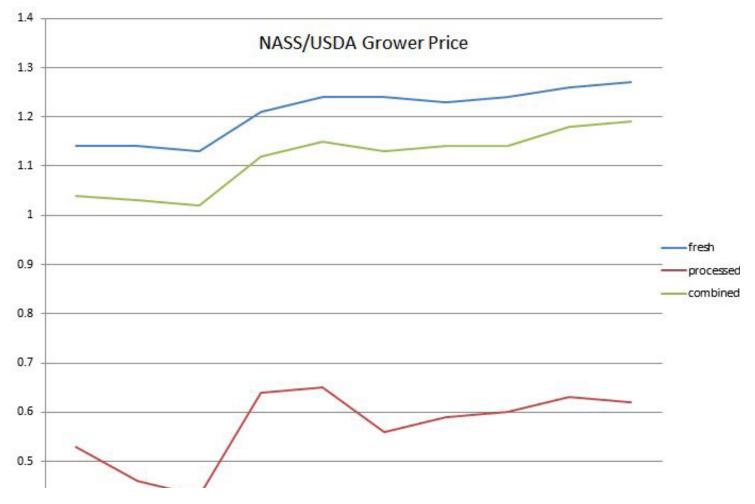
#### **Production and Imports**

According to the most recent NASS/USDA report (August 2013) yields appear consistent over the last 3 years and projected area of planting in 2013/14 is stated to be up 1%. Anecdotally, after some farm closings and rumored production increases by others, a net increase of 1% as suggested by NASS in 2014 appears to be a reasonable expectation (our forecast is for domestic production growth of 1.75%). Imports account for over 10% of annual fresh shipments and have increased on average nearly 5% over the last 4 years and were up over 6% to kick off 2014. 10% of 5% would add .5% to estimated supply growth.

#### Pricing

All we can say about pricing is that we are 94% confident fresh shipments or disappearance in 2014 will again out-pace population growth, at 2.5%. Expected production and import growth is to just keep pace. If demand remains strong, expect prices to at least remain the same if not increase. All indications are that demand is and will remain strong for fresh mushrooms, and with interest in the Blend Trend spilling into the processed market, we would expect a strengthening in that channel as well.

Of course, any real price forecast is beyond the scope or expertise of this summary, this year. However, the Mushroom Council is in the process of working with an experienced and highly-regarded agricultural economist in order to gain a better grasp of the supply and demand forces at work in an industry as unique as mushrooms. In next year's annual report we hope to have a more robust review of the market for mushrooms.





#### 2013 Summary

2013 was a year of development and implementation of the culinary technique "blendability." This concept of blending mushrooms with meat proteins was presented across all channels including, school nutrition, commercial and non-commercial foodservice, consumer social channels and media outlets.

- Nutrition: Expanded influencer reach via Registered Dietitians and media outlets with key messaging focused on mushroom nutrient profiles and mushrooms as new and ongoing food trends. Created new connections with nutrition influencers and organizations, such as Partnership for a Healthier America (PHA), with whom the Council shares mushroom news, research, applications and resources.
- Consumer Media: The Council continued to collaborate with spokespeople to increase mushroom awareness among consumers using an integrated and holistic approach. Through extensive media coverage, the blendability cooking application inspired a new perception of mushrooms, not only as a meat replacement but also as a meat extender and flavor enhancer. The numerous benefits of blendability have created a surround sound across media channels throughout the year.
- Retail: The Council's Topline Report was upgraded with the inclusion of a more robust data set which included the addition of data from retail organizations such as Walmart, Target, B.J's and DECA. The Blue Print for Profit report was updated, and now uses a fresh and modern approach to merchandising mushrooms. An interactive "Sales per Square Foot" calculator that is useful to determine specific sales figures based on real world displays in actual retail locations.
- Foodservice: The Council conducted promotions and demos with commercial and non-commercial foodservice establishments to help drive home the health benefits of

- mushrooms. Collaboration with influential menu developers and participation in culinary trade-shows and conferences educated chefs and key decision makers on mushroom blendability.
- School Nutrition: The Council worked closely with school foodservice directors to create pilot programs to test the acceptance of mushroom and meat blended products among students. In an effort to educate directors, the Council has created resources and hosted training webinars about the benefits of mushroom blendability. Directors have been informed how they can purchase IQF Mushrooms from USDA food, and how mushrooms fit as a kid-friendly solution to new meal pattern requirements.

#### Overall Strategies

- Leverage mushrooms as part of the solution to eating healthier to manage weight (Swapability, MyPlate message, Mushroom Mondays, cuisine/day part versatility, calorie and sodium reduction)
- Emphasize mushrooms' vitamin D content, and other nutritional benefits
- Demonstrate mushrooms' culinary versatility to target audiences
- Build deeper online community relationships to foster education leading to advocacy by demonstrating, engaging and driving conversations
- Connect with consumers emotionally (health, cause, sustainability) to drive mushroom engagement (purchases)
- Leverage superfood status and nutrition research to continue action towards becoming a recommended vegetable as part of 2015 Dietary Guidelines

# 13 MUSHROOM MEMORABLE MOMENTS IN 2013

## ENLISTED "TOP CHEF" RICHARD BLAIS

Enlisted "Top Chef" Richard Blais to create and menu a Blendability recipe – the Earth & Turf Burger – featuring 50 percent mushrooms and 50 percent beef for his restaurant and to share with consumers.

#### TREND TO BLEND

Media declared the "Trend to Blend," accelerated by NPR in a banner story featuring RD and chef spokespeople.

NPR "The Salt" Blog Online November 2013



"Chefs and school cafeteria directors say burgers that blend mushrooms and meat are a hit."

#### Make Room For Mushrooms: Fungi Compete With Meat In Burgers

by AMY GUTTMAN

November 05, 2013 3,49 Pt

Chefs and school cafeteria directors say burgers that blend mushrooms and meat are a hil. Mushroommed burgers are, on average, 24 percent lower in fat and 27 percent cheaper than regular, all-beef burgers, according to the Mushroom Council.





## MUSHROOMS AND HEALTH SUMMIT

Gathered top mushroom influencers for Mushrooms and Health Summit to shape the direction of mushroom research. Used new mushroom science to drive media coverage on Blendability, weight management, immunity, vitamin D, Swapability, superfoods, flavor and versatility.



#### COMMITMENT TO PHA

Committed to bring more vegetables to American plates through PHA and the Blendability technique.



Blendability, the process of replacing a portion of meat with finely diced mushrooms, took off in 2013, Take a look at our highlights demonstrating why 2013 was all about The Trend to Blend http://mushro.ms/iikNvKa







7 2.069

## SOCIAL MEDIA FNGAGEMENT

Facebook fans.

Blendability content drove unprecedented community engagement among 135,000

## SWAP IT OF TOP IT CONTEST

Debuted Swap It or Top It recipe contest and received 119 new Blendability, Swapability and MyPlate mushroom recipes.

# 13 MUSHROOM MEMORABLE MOMENTS IN 2013

#### **INFOGRAPHICS**

7

Generated new customized content that told the complete mushroom story through a comprehensive infographic.



USDA IQF Mushrooms now available to be diverted for processing Material Code #110421

## MUSHROOMS ARE A USDA FOOD

8

For the first time ever mushrooms became available through USDA Foods available to schools across the Nation to use in the National School Lunch Program. USDA Foods have to be 100% US Origin. Material Code – 110421

#### KIT-APPROVED

9

The Council has worked with five school systems to increase "kid-approved" mushroom-based meal items within the USDA school meal guidelines. Averaging over 80% acceptance in all pilots, mushroom blended entrees continue to be accepted by students

#### BLENDING IS TRENDING ON CAMPUS

10

Yale, Harvard, Stanford, University of California at Riverside and the University of Massachusetts all introduced new blendable items to their menus and continue to explore opportunities.

## a natural combination



## MUSHROOM BLENDED FAVORITES

Compass Group North America developed a new initiative, Mushroom Blended Favorites, to create familiar dishes that now have an enhanced nutritional profile and a better sustainability message for its varied audiences.

## HEALTHIER MEAT/MUSHROOM PRODUCTS

12

The Council created a new category of healthier meat/mushroom products available for school and/or commercial foodservice. Six new meat/mushroom blend products already at market are lower in calories and fat per serving as compared to similar all-meat options





## NEW COOKING VIDEOS

13

An exciting new series of 16 cooking videos was developed in partnership with the CIA; the Council's first foray into online video

# YEAR-OVER-YEAR CONSUMER MEDIA COMPARISON

2013 was a monumental year for media with impressions surpassing 1.3 billion – the most media ever generated for the Council in one year.

Overall, 2013 followed a similar cadence as previous years with a few areas to note:

- Spikes coincided with Council promotions while monthly baseline impressions hovered in the 45-75 million range, compared to 40-70 million range in 2012.
- Taste of Home media, radio and online efforts around the spring cooking schools generated the most impressions of any previous partnership years to date, thereby amplifying results in the March–June timeframe to average more than 100 million per month. Also during this time, mushroom research presented as abstracts at Experimental Biology drove breaking coverage in the news cycle.
- Working with Chef Richard Blais surrounding his Blendability burger recipe and summer grilling contributed to media impressions being higher in the summer months compared to 2012.
- The Mushrooms and Health Summit and Mushroom Month activities fueled spikes in September.
- At the year's end, there was a surge in media reporting on the "Trend to Blend" as well as extended coverage showcasing mushroom nutrition research.
- For reference, Q1 and Q2 spikes in 2012 followed TOH media in the spring and a USA Weekend article in May.

Consumer/Nutrition Media Impressions: 2012 vs. 2013



#### Comparison by Media Type:

Consumer/Nutrition Media Impressions (by Media): 2012 vs. 2013



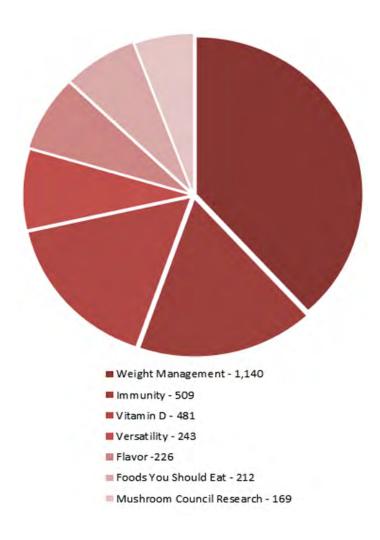
## Consumer/Nutrition Topics (by frequency of appearances in articles) The pie graph offers a snapshot of the most commonly discussed topics in conjunction with mushrooms, measured by number of articles.

The pie graph offers a snapshot of the most commonly discussed topics in conjunction with mushrooms, measured by number of articles that topics where mentioned. Some articles contain more than one topic and may therefore be counted in multiple areas, as relevant. For example, an article about spring foods for weight loss might contain messaging about mushrooms being low-calorie, nutrient-dense and a great meat replacement citing Council-funded research for credibility.

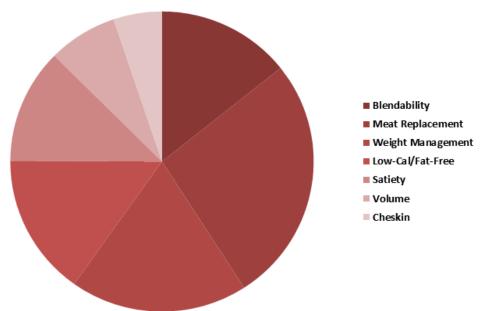
In 2013, the Council began tracking media that referenced mushrooms for their unique flavor. As people are encouraged to look for ways to fill half their plates with fruits and vegetables, media representation of mushrooms has shifted from spotlighting them as "nutrient-dense" to a more holistic view of mushrooms as a food that should be eaten for taste and nutrition. Although mushroom versatility is often highlighted, 2013 was a year where media wove mushrooms' culinary story together with their nutrition benefits, and Blendability was the common thread tying the two together.

For comparison, the top categories in 2012 were: weight management, immunity, vitamin D, versatility, foods you should eat/superfood and nutrient-rich/dense. This similarity year over year can indicate message retention and resonation while the rising topic areas showcase the Council's dedicated communications outreach focusing on weight management supported by Blendability, meat replacement and Council research platforms.

The "weight management" category includes articles that talked about Blendability, meat replacement, low-calorie, satiety, volume and Cheskin research as they laddered up to headlines about managing weight. Nearly 170 media placements talked about Blendability (60 percent more than 2012) for more than 450 million impressions (40 percent of total consumer media impressions).



2013 Weight Management Specific Topics (by frequency of appearances in articles)



# YEAR-OVER-YEAR FOODSERVICE TRADE MEDIA COMPARISON



Foodservice Media Impressions totaled 1,507,377 impressions.

Mushroom Blendability, Foodservice Promotions, School Nutrition Progress and chef created recipes inspired headlines in 2013 in the Foodservice Trade Media.

Publications such as Foodservice Director and Food Management highlighted the success of mushroom blendability both in College Dining and the National School Lunch Program. A feature on Jessica Shelley, the foodservice director for Cincinnati Public Schools shared the success of USDA mushrooms and mushroom blendability as improving the health and participation at lunch.

Meatless Mushroom Recipes remained popular including Udon Noodles with mushrooms; mushroom Burger Recipes and Mushroom Stroganoff were highlighted in Food Management and School Nutrition Magazine. Nation's Restaurant News promoted the many mushroom LTO's including Wendy's Portabella Melt. Foodservice Media daily e-blasts repurposed many of the popular consumer articles highlighting Mushroom blendability as a solution to changing consumer behavior.

Varied foodservice promotions and additional blended and meatless recipes remained on trend and foodservice media worthy as evident in the continued strong headline impressions in 2013.



#### Mushrooms Make Headlines in Retail Trade Media

**Trade Media totaled** 

2,569,925

in 2013 up 187% from 893,933 impressions in 2012.

Mushrooms made consistent headlines in retail media coverage, with a number of placements in The Packer, Produce News, Produce Business and Produce Retailer due to the many exciting promotions and industry events.

Blendability, Foodservice promotions and nutrition initiatives continued to drive retail coverage. Mushrooms and Health Research and Events including the Mushroom and Healthy Summit research presented at the Experimental Biology Conference inspired features in Produce Business, The Packer and The Produce News. Blendability and the rise of mushrooms in foodservice stimulated features in everything from Produce Business to Progressive Grocer. The continued growth of industry retail sales and volume as well as special sections highlighting the entire industry's progress received consistent media coverage throughout the year. The industry experienced another year of tremendous growth and excitement resulting in tremendous trade media opportunities



#### Category Development Program

2013 witnessed several advances in the Retail Category Development program.

The Council's Topline Report was upgraded with the inclusion of a more robust data set which included the addition of data from retail organizations such as Walmart, Target, B.J's and DECA. The inclusion of this additional data provided a more precise view of the mushroom category and added greater detail to the reporting. The Topline Report was further enhanced through expanded analytics that accompany the report, providing greater insight into retail sales, volume and price trends and variations.

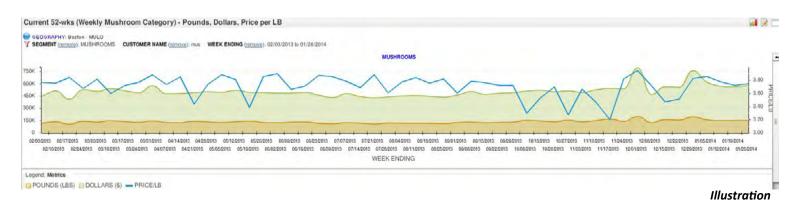
Retail reporting was fortified with the Mushroom <u>Quarterly Trends Reports.</u>

These reports provide a quarter-byquarter view of the retail trends of top and bottom performing markets. With the reports covering a time span of six months, readers can identify trends by segment and market. This report is a solid tool for use by executive, marketing and sales staff. The report further makes an excellent point of comparison, allowing shipper/handlers to measure and contrast their internal salesby-market against the results of the general marketplace. Sellers of mushrooms can uncover sales opportunities, weaknesses and gaps, market growth trends by variety, and variations in mix and price.

Mushroom Council's online data tool MarketInsights, is a large repository of retail sales data that is constantly refreshed.

Once logged onto the site, the Council's entire retail landscape is available. The site includes a dashboard providing an overview of the category utilizing sales, volume and pricing data. The dashboards are laid out in a graphical manner with easy-to-read charts, tables and definitions. The site also has pre-built sales reports for numerous retail measures. Moreover, you can easily select any timeframe you desire and the reports will instantly be refreshed with the requested information. The final area of the site allows you to customize and save your own set of reports. Once the data is refreshed, the reports are updated too.

As a member of the Council, access to the tool is available just by requesting a unique log-on and password.



#### Retail Best Practices

The Blue Print for Profit report has a fresh and modern approach. Twenty or more years ago, many super markets in the U.S. had a similar approach to retailing and merchandising. Since then the world of retail has been revolutionized. Today there is no "one size fits all" approach to retailing or merchandising. Walmart, Trader Joe's, Whole Foods and Target – each retailer has a different approach, a different target audience and an entirely different display set. Moreover, each region of the country has a unique sales profile. Example: little to no Bulk is sold in the Northeast. Based on this multitude of variations, a limited or simplified display concept cannot accurately reflect the category or planogram needed for every retailer in the nation. The new Blue Print for Profit report helps overcome many of these issues of size and scope by providing information that can be scaled upward or downward based on the display set in each retail situation. Further, the report is complemented by an interactive "Sales per Square Foot" calculator that is useful to determine specific sales figures based on real world displays in actual retail locations.

The Blue Print for Profit report and the accompanying calculator is available for download.

# Activate the purchase (off the shelf and into the cart) by meeting or exceeding the shopper's key purchase criteria: Stock the right selection of varieties and forms desired by local shoppers (this Blueprint for Profit is loaded with information, tips and trends to support your retailer's assortment decisions) Keep shelves well-stocked with fresh, high-quality product Build clean, neat, organized and visually appealing displays Ensure prices are clearly marked and offer good value

#### **Retail Webinars**

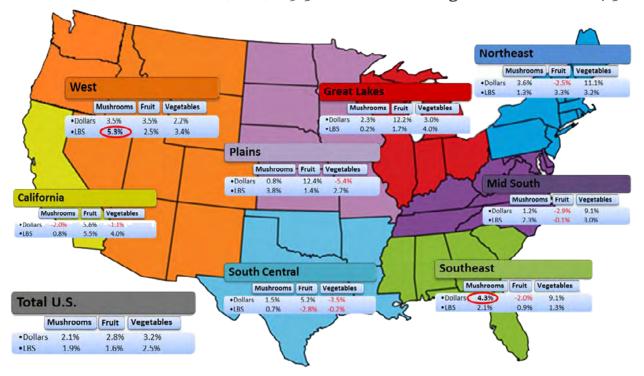
The Council sponsored several foodservice and retail webinars in 2013. The retail portions of the webinar provided both strategic and tactical information. From the pricing and availability of produce generated by the global produce market to changes in U.S. store format and size, the topics generated questions and discussions surrounding mushroom sales at retail.

#### Other Reports, Information and Support

The Council also provides other retail focused reports throughout the year including the Holiday and Events report and numerous ad hoc reports. Further, the Council provides members with other retail information and data-related support and services upon request.

## 2012 Retail Growth by Region

• West Grows Volume (LBS) +5.3% / Southeast grows Sales (\$) +4.3%





## **NUTRITION RESEARCH PROGRAM 2013**

#### Mushrooms and Health Global Initiative

The Mushrooms and Health Global Initiative (Initiative), launched in 2007, is an international collaborative project to increase worldwide consumption of mushrooms by providing the scientific basis for the dissemination of mushroom and health information to those in public relations, marketing, media and to health professionals who then relay the message to consumers. A global group of

industry professionals with expertise in marketing, public relations, communications, food/nutrition and mushroom science collectively functions as the Mushrooms and Health Global Initiative Team.

The primary assets of the Initiative include the *Bulletin*, a quarterly newsletter; the *Mushrooms and Health Report*, a compilation

of recent mushroom research updated every 2 years; and the Mushrooms and Health website (www.mushroomsandhealth.com) which archives the Bulletin and the most current Mushrooms and Health Report. A total of 24 issues of the Bulletin have been e-distributed (and posted on the website) since 2008 to individuals, organizations and businesses involved/interested in mushrooms. In 2013 alone, the Bulletin abstracted 31 studies on Agaricus mushroom nutrition and health research. The use of the Internet and social media enables greater global discussion and participation in the Initiative to identify and communicate compelling scientific reasons for consumers to eat more mushrooms. To facilitate this exchange, the Bulletin features a listing of websites, blogs, Twitter, Facebook, Pinterest and YouTube links for Australia, Canada, Italy, Netherlands, South Africa, United Kingdom, Ireland and the United States

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## MUSHROOMS AND HEALTH GLOBAL INITIATIVE BULLETIN



An ISMS Global Initiative to increase the worldwide consumption of mushrooms through the collection, evaluation and dissemination of scientifically validated information.





Research presented and/or published (For more information, contact the Mushroom Council)

#### Mushrooms&Health SUMMIT

Many of the funded researchers presented their findings at the Mushrooms and Health Summit, September 9-10, Washington, D.C.

**Lorraine Brennan, Michael Gibney, and Anne Nugent, University College, Dublin, Ireland** published "Effect of supplementation with vitamin-D2 enhanced mushrooms on vitamin D status in healthy adults" in the *Journal of Nutritional Science*, 2013, vol 2, e29.

Margherita Cantorna, Penn State University, State College, PA published "White button mushrooms increase microbial diversity and accelerate the resolution of *Citrobacter rodentium* infection in mice" in the *Journal of Nutrition* April 1, 2013; vol 143: #4, pp. 526-532; and presented "White button mushrooms alter the microbiome to protect against gastrointestinal injury" at the Mushrooms and Health Summit.

Shiuan Chen, City of Hope Duarte, CA presented an abstract on the Phase II trial in 12 men with rising PSA as only symptom following curative therapy for prostate cancer abstract at the January American Society of Clinical Oncology Genitourinary Conference.

Lawrence Cheskin, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD published "Positive effect of white button mushrooms when substituted for meat on body weight and composition changes during weight loss and weight maintenance – A 1-year randomized clinical trial" in *Appetite*, December 1, 2013: vol 71: pp. 379-389; and presented "Mushrooms: For weight control and health" at the Mushrooms and Health Summit.

**Michael Holick, Boston University Medical Center, Boston, MA** published "Photobiology of vitamin D in mushrooms and its bioavailability in humans" in *DermatoEndocrinology* Jan-March

2013; 5:1,1011; presented 3 poster abstracts at Experimental Biology: "Mushrooms not only produce vitamin D2 but can also produce vitamin D3 and vitamin D4" FASEB J. 27, 794.6; "Isolation and identification of vitamin D2 and photobyproducts" *FASEB J.* 27, 794.5; and "Evaluation of the bioavailability of vitamin D2 in mushrooms in healthy adults" *FASEB J.* 27, 794.4.

Amy Mydral Miller, Culinary Institute of America St. Helena and the UC Davis Robert Mondavi Institute Sensory and Food Innovation Lab, Davis, CA presented "Using mushrooms to improve the nutrition properties and consumer appeal of popular meat-based dishes" at the Mushrooms and Health Summit, and with Jean Xavier Guinard prepared manuscript on "Flavor-enhancing properties of mushrooms in meat-based dishes in which sodium has been reduced and meat has been partially substituted with mushrooms" for submission.



Theresa Nicklas, Children's Nutrition Research Center, Baylor College, Department of Pediatrics, Houston, TX, Carol O'Neil, Louisiana State University, Baton Rouge, LA and Victor Fulgoni, Nutrition Impact, Battle Creek, MI published "Mushroom intake is associated with better nutrient intake and diet quality: 2001-2010 National Health and Nutrition Examination Survey" in the Journal of Nutrition and Food Sciences, September 16, 2013; presented poster abstract at Experimental Biology "Mushroom consumption is associated with increased nutrient intakes and better diet quality in adult participants of the National Health and Nutrition Examination Survey (2001-2010) FASEB J. 27, Ib350; and "Mushroom consumption is associated with better diet quality and better nutrient intakes in adult participants of the National Health and Nutrition Examination Survey (2001-2010)" at the Academy of Nutrition and Dietetics Food and Nutrition Conference, October, Houston. Fulgoni presented "Mushroom intake is association with increased nutrient intakes, better diet quality, and reduced risk of some cardiovascular risk factors in adult participants of the National Nutrition and Health Examination Survey (2001-2010)" during the Mushrooms and Health Summit.

Susan Percival, University of Florida, Gainesville, FL presented 3 poster abstracts at Experimental Biology: "Consumption of Lentinula edodes modulates human immune function by altering cytokine secretion of PBMC ex vivo. FASEB J. 27, 643.15; "Lentinula edodes consumption: Proliferation, activation and modification of memory and naive innate immune cell populations," FASEB J. 27, 643.17; "Consumer knowledge, attitudes and behaviors about foods that have immune benefits: focus on mushrooms," FASEB J. 27, 643.14; presented "Immunity improves after consuming shiitake mushrooms daily" at the Mushrooms and Health Summit; and has prepared a draft manuscript.

**Ryan Simon, Cantox Health Sciences International, Mississauga ON, Canada** published "Safety assessment of the post-harvest treatment of button mushrooms (*Agaricus bisporus*) using ultraviolet light" in the *Journal of Food Chemical Toxicology* 2013; (56) 278-289.

Jaime Uribarri, Mount Sinai School of Medicine New York City, NY presented abstract "Bioavailability and biological effects of vitamin D2 in mushrooms: Safety and efficacy of 2 different doses compared to D3 supplement" at the June Vitamin D Workshop in San Francisco; prepared for submission manuscript entitled "Vitamin D2 from UVB-exposed white button mushroom consumption: Contributions to serum 25 hydroxyvitamin D in a randomized controlled trial of older adults at risk for type 2 diabetes"; and anticipates presenting additional abstracts in 2014.

Dayong Wu, Nutritional Immunology Laboratory at the USDA Human Nutrition Research Center on Aging, Tufts University, Boston, MA presented oral abstract at Experimental Biology on "Dietary supplementation with white button mushroom augments the protective immune response to Salmonella vaccine in mice" FASEBJ. 27, 123.2; the study was published online in November in the Journal of Nutrition; and presented "Mushrooms, immune function, and host resistance to microbial infection" at the Mushrooms and Health Summit.





Research to be completed/presented or published in 2014

**Shiuan Chen, City of Hope, Duarte, CA** "Identification and characterization of white button mushroom strains with high antiaromatase activity."

**Peter Horvath, State University of New York at Buffalo NY** "Effects of vitamin D rich mushrooms on functional performance and quality of life in older men and women" completed with 3 abstracts to be presented at Experimental Biology in 2014.

Claire Kruger and Nancy Booth, Spherix Consulting, Rockville, MD "Preparation of GRAS dossier to obtain GRAS status for mushrooms treated post-harvest with UV-irradiation."

Barbara Shukitt-Hale, USDA Agriculture Research Service, Tufts University, Human Nutrition Research Center on Aging, Boston, MA "Effects of mushroom supplementation on age-related deficits in cognition and motor function" completed and manuscript drafted.

## **CONSUMER NUTRITION PROGRAM 2013**

#### Mushroom Council Announced Three-Year Commitment to the Partnership for a Healthier America

The Council led the produce department as the first commodity to make a commitment with the Partnership for a Healthier America (PHA) to bring more vegetables to American plates in an effort to help end childhood obesity. Created in 2010 in conjunction with – but independent from – First Lady, Michelle Obama's Let's Move! effort, PHA is a nonpartisan, nonprofit organization, devoted to working with the private sector to ensure the health of the nation's youth by solving the childhood obesity crisis.

At the PHA "Building a Healthier Future Summit" on March 8, 2013, Council Chair and mushroom grower Fletcher Street introduced the Council's commitment to showcase how healthier, delicious meals are

possible with mushrooms – in any cuisine at breakfast, lunch and dinner. Other speakers to take the same stage for the closing session included keynote speaker, Michelle Obama as well as Eli Manning, NFL quarterback for the New York Giants; Cory Booker, mayor of Newark, New Jersey; and Lawrence Soler, PHA CEO.

Council representatives also engaged with opinion leaders and delegates from corporations, advocacy groups, and foundations to introduce them to how mushrooms are a unique solution, and identify ways to collaborate to combat childhood obesity. This partnership with PHA affords the Council access to the nation's foremost children's health influencers and

organizations, creates a high-profile platform to communicate the benefits of Blendability and puts mushrooms into consideration for new partnerships and opportunities.

As part of the commitment, the Council will dedicate at least \$6 million over three years to product innovation and a fully integrated marketing program that will inform and engage key stakeholders, including school nutrition directors, moms, chain restaurants and more.

Specifics of the Council commitment and progress to date is highlighted below and reported in detail through the programspecific areas of this annual report.

- Created in 2010 in conjunction with but independent from First Lady, Michelle Obama's Let's Move! effort, PHA is a nonpartisan, nonprofit organization, devoted to working with the private
- sector to ensure the health of the nation's youth by solving the childhood obesity crisis.



Larry Soler, PHA CEO, and Fletcher Street, Council Chair



#### Mushroom Council Commitment with the Partnership for a Healthier America

#### **New Product Innovations Blending Mushrooms and Meat**

In partnership with major meat processors, the Council has created a new category of healthier meat/mushroom products available for school and/or commercial foodservice. Seven new meat/mushroom blend products already at market and are lower in calories and fat per serving as compared to similar all-meat options. JTM launched a line of mushroom blended products, including three burgers, a meatball, taco blend, pasta marinara and pasta with mushrooms. DeVault Foods has launched both mushroom blended meatballs and mushroom blended burgers to the market.

#### **Marketing Mushrooms to Millions of Consumers**

- The main focus of Council communications efforts is to educate consumers on why and how to eat mushrooms both as center of plate and by encouraging them to blend mushrooms and meat to increase flavor while cutting down on fat and calories, thereby creating healthier meals with added vegetables. In 2013, the Council doubled the goal of 550 million impressions, netting a banner 1.3 billion total impressions. Combined with social amplification, the Council's efforts yielded more media placements and higher reach than any previous year.
- The Council's inaugural Swap it or Top it Facebook recipe contest ran from June 1st through launched on July 31st and encourage consumers to submit their own recipes within Blendability, Swapability or MyPlate categories. The contest received 119 entries and served as a discussion point among other consumer-facing audiences including retailers, culinary experts and health professionals.

#### **Educate Restaurant Chains, Colleges & Food Service**

The Council is leading the way with education and demonstration opportunities to build relationships with 10 restaurant chains and colleges to develop new mushroom menu items.

- World of Healthy Flavors: The Council provided a culinary session where R&D directors from 20 top national chain restaurants were shown the power of blending meat and mushrooms, followed by an educational session to discuss marketing the blend concept to consumers.
- Healthy Menus Collaborative: The Council offered mushroom blendability demonstrations to R&D directors at 35 of the top 50 restaurant chains. Participants developed specific menu ideas for kids, sandwiches, breakfast and entrees using blendability.
- International Corporate Chefs Association: Distributed material on blendability, served mushroom blend crabcakes and meatballs and met 30 chefs from the Top 100 chains.
- Latin Flavors: The Council participated in a panel discussion on successes with Healthy Mexican food. Two top 100 directors (one from a Mexican chain and one from a steakhouse) talked about their success with mushrooms and meatless options.
- Healthy Menus, Healthy Kids: The Culinary Institute of America (CIA) held a session on the sensory research from UC Davis on the mushroom blend. In a culinary session, major Directors from Ohio, California, Colorado, Tennessee, Illinois and other states had the opportunity to cook blendable products to serve to the rest of the conference.
- Flavor Quality and the American Menu: The Council took to the stage
  to present blendability and the momentum of mushrooms on the
  menu. 5 of the top independent colleges in the U.S., 20 restaurant
  chains and all major food service manufacturers were in attendance.

#### **Piloting and Executing National School Food Programs**

- Pilots The Council has worked with five school systems to increase "kid-approved" mushroom-based meal items within the USDA school meal guidelines. Averaging over 80% acceptance in all pilots, mushroom blended entrees continue to be positively received by students.
- Demos The Council has demoed mushroom blendability at the School Nutrition Association's Annual Conference 2013, School Nutrition Industry Conference 2014, various School Nutrition State Conferences and the School Food Focus National Gathering 2014.
- Recipes 26 school recipes have been added to mushroomsinschools.com that serve as a resource for any food service director interested in adding mushrooms to school menus.
- Reaching Parents via Nutrition Educator Engagement The Council engaged key educators of parents and children including school foodservice professionals and registered dietitians and health/nutrition experts at the School Nutrition Association (SNA) and the Academy of Nutrition and Dietetics (Academy) national conferences. The Council's presence at these events educated attendees about the nutrition benefits of blending mushrooms and meat and provided ample outreach opportunities throughout the year including: pre and post conference communications, specific updates on Council news and activities (such as USDA commodity buy and Mushrooms and Health Summit), bi-annual newsletters and one-on-one conversations.

### School Nutrition Association (SNA) Annual National Conference, July 14-17, Kansas City, Missouri

 The Council educated school nutrition stakeholders about the value and appeal mushrooms can bring to menus and provide them valuable resources to implement mushrooms and mushroom blendability into their meal cycle.

## Academy of Nutrition and Dietetics' Annual Food & Nutrition Conference & Expo, October 19-22, Houston, Texas

 Educate health influencers about the nutritional benefits of mushrooms, establish the Council as a credible resource and authority on mushrooms and build relationships with Academy members and health influencers.

Through new and existing programs, the Council is bringing mushroom applications, including Blendability and Swapability, to the forefront of all programs across consumer, media, schools and foodservice initiatives and will continue to build on this momentum through 2015 and beyond to help build a healthier future for America's kids.

The Council is taking advantage of opportunities revealed from the Summit to inspire action by the science community and propel momentum through 2014 and beyond via initiatives that will increase awareness and education, drive news, reach more people and increase frequency of key Council message delivery.



## SPOTLIGHT: RESEARCH PROMOTION

The New York Times praised mushrooms for their simplicity and versatility, noting "Omnivore, vegetarian and vegan diners all prize them."
Similar mentions appeared on the "Rachael Ray Show," in the Huffington Post and Real Simple and Shape magazines.

#### Mushroom Science Fuels Media Coverage

The core tenet of the Mushroom Council's news bureau is to generate articles and headlines in the media publications that key/target consumers and influencers turn to for food and health information. In addition to the roster of partners, spokespeople or recipes used to create news, the industry's global research pipeline provides excellent fodder for coverage. For mushrooms – a food that is available yearround – new research can serve as the "Why Now" moment to spur consideration for new articles.

There are a variety of ways the Council promotes new research to media. Breaking science with a direct impact on mainstream health outcomes can generate headlines across food and health media. In April, the Council promotes new studies announced that month at the Experimental Biology conference. Similar efforts last year drove more than six million media impressions about vitamin D and weight management research. When studies break, they can be shared with media right away, but coverage and "newsiness" comes down to context. For example, from December through February when most of the country was in the thick of cold (weather and flu) season, the Council leveraged vitamin D and immunity (and of course weight management for the New Year) studies to affect dialogue, leading to a slew of articles in the early months of the year.

For other studies that confirm the existing canon of mushroom research, findings can be woven together and married with cultural dialogue and food and health trends to generate ink. In these instances, science can provide the reason to believe in mushrooms.

Mushrooms' nutrient profile, as supported by the industry's expansive body of science presented at the Mushrooms and Health Summit, provides the foundation for media outreach efforts. From technical science beats to general consumer interest publications, research has been a proven driver of a robust news bureau, and will continue to do so as 2014 unfolds.

#### Nutrition is the Backbone of Mushroom Coverage in Media Trends

The Council's ability to highlight mushrooms' nutrient profile has been instrumental in securing media coverage and inserting mushrooms into new and ongoing food trends. Based on usage and attitude studies, the Council has found that the more consumers know about mushrooms' health benefits, the more likely they are to purchase. Through media outreach efforts, the Council utilizes the global mushroom nutrition network to develop messaging and promote breaking research to drive awareness of mushrooms in media.

Research supported by the Mushroom Council and presented at Experimental Biology in April as abstracts were amplified through Council media outreach efforts. Following a press release, and targeted media outreach, stories garnered six million media impressions in outlets such as Forbes, New York Daily News, Everyday Health, Women's Health, Fitbie and Yahoo!Shine. Headlines proclaimed mushrooms as a "Secret Ingredient for Weight Loss," "Slimming Meat Substitute," and "Surprising Source of Vitamin D."

Through nutrition messaging rooted in research, mushrooms continue to gain traction as an everyday, every way food that consumers should eat. Practicality is key for consumers looking to create good-for-you meals. On the spectrum of superfoods, mushrooms are an accessible kitchen staple that offer a simple way to add nutrients to the plate. The New York Times praised mushrooms for their simplicity and versatility, noting "Omnivore, vegetarian and vegan diners all prize them." Similar mentions appeared on the "Rachael Ray Show," in the Huffington Post and Real Simple and Shape magazines.

The Mushrooms and Health Summit enabled the Council to summarize and share the collective body of science in one comprehensive package to spark media interest and coverage. The Council's commitment to driving forward research will be integral in shaping mushroom key messages to continue to move the needle on awareness.

## Partnerships and Influencer Relationships Firmly Root Mushrooms in Health and Nutrition Arenas

Over time, the Council has cultivated meaningful relationships wih leading nutrition influencers and organizations with whom the Council shares mushroom news, research, applications and resources.

Partnerships with the Academy of Nutrition and Dietetics subgroups in 2013 allowed the Council to generate new excitement around mushrooms and welcome a fresh set of mushroom ambassadors. The program encouraged nutrition experts and leaders to educate their own communities about healthy cooking and eating behaviors, featuring mushrooms. Additionally, this network expansion has created new spokesperson collaborations; and fostered extensions with Academy of Nutrition and Dietetics member groups and thereby reaching a larger influencer audience.

When the Council fielded the annual nutrition influencer survey among Today's Dietitian subscribers to measure this audience's attitudes towards mushrooms, nearly 70 percent of nutrition influencers recommend mushrooms to their clients – a 32 percentage point increase since the survey began in 2008 and a growth of almost 85 percent over the past five years. These nutrition influencers also praised mushrooms as a vegetable option to meet dietary guidelines; recognized mushrooms' role for weight management; and touted their flavor and versatility - echoing the Council's key messages about Blendability and MyPlate. Results from the Council's annual survey of health professionals speak to the impact of the Council's marketing efforts.

The Council continues to engage with and grow its network of mushroom advocates by regularly sharing new updates about mushrooms' health benefits and emerging research. This club of educated dietitians continues to call on the mushroom story, bringing it to life across their nutrition platforms. In 2013, the Council's nutrition network generated high-caliber media placements for more than 77 million impressions.

- NBC nutrition expert Joy Bauer highlighted mushrooms as a "skinny food for a skinny you" in a segment on "TODAY"
- "Guy-atitian" Dave Grotto promoted mushrooms as one of the best foods to eat in 2013 (Chicago Daily Herald, Fresno Bee).

- The "Nutrition Twins" cited mushroom research in their round-up of flu-fighting foods.
- In a Lowdown on Vitamin D, "The Doctors" identify mushrooms as a food source of the nutrient.
- In Today's Dietitian, Mondays Campaign president Peggy Neu praised the Council as a leader in its efforts to inform and share meal solutions for consumers who want to go meatless.
- ABC's "The Chew," SELF and Martha Stewart Living magazines, have also heralded mushrooms for their role on a meatless plate.

Flash

WHISTNEW HOW

Jan
14

EVERTHALANT BETWELL AT PUT AM

#Meatless Monday: Mushrooms Make a Tasty

Alternative

EMAL

FIRST

STORE 6

STORE 17

Shroom Tacos: Make a hearty feast with these. The recipe is as easy as it is

bit of choose.

deficious. Saute a pound of assorted mushrooms and a chopped onion in a bit of olive oil over medium heat. Once softened, add in a few cloves of minced garlic and

season with chili powder, cumin, salt and pepper. Squeeze in the juice of a lime for an extra flavor punch! Serve in taco shells topped with lettuce, tomatices, citantro and a

Mushroom Frittata: Who says bacon is the only thing that pairs well with eggs? This savory wild mushroom frittata combines high-protein egg whites, meally mushrooms and herbs into a fabulous meatless weeknight dinner that's sure to please! The best part is that you can dustomize it to your liking and add any veggie combination you

prefer, from sweet potatoes and onions to broccoli and cheddar.

Nearly

**70**%

of nutrition influencers recommend mushrooms to their clients – a

32%

point increase since the survey began in 2008 and a growth of almost 85 percent over the past five years.





#### The Trend to Blend is Made Bigger in Texas at Annual Nutrition Conference

The impact of the Council's presence at the Academy of Nutrition and Dietetics' annual conference is evidenced by the awareness the Council has built, and how it continues to blossom into new opportunities. Attending the Academy's Food and Nutrition Conference and Expo (FNCE) serves to keep the Mushroom Council top-of-mind as an accessible resource for health professionals.

In 2013, in Houston, Texas, the Council kept "the blend" trending. The Council once again showcased the Blendability concept to dietitians and health professionals and worked hand-in-hand with JTM Food Group to raise the profile of mushroom blended meat products in schools.

Attendees had an opportunity to sample two different Blendability recipes: a fromscratch mushroom and turkey slider at the Council's booth and a pre-made mushroom and beef burger at the JTM booth. Among the other themes touched upon at the conference. including sustainability, innovation, partnerships, and weight management, Blendability stood out as a trend for making meals more flavorful, healthy and kid-friendly.

The Council booth drew crowds from every corner of the expo hall serving more than 1,500 Blendability Mushroom Turkey Burger Bites. Finely chopped and roasted mushrooms blended seamlessly with the ground turkey in this 50/50 burger; adding

vegetables, nutrients, moisture and flavor, while cutting calories and fat. Attendees commented on how juicy and tasty the burgers were, recognizing the culinary, flavor and nutrition benefits of Blendability.

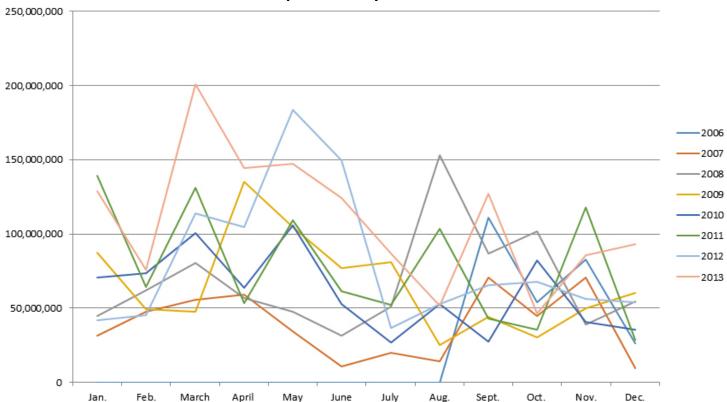
In addition to the booth presence, the Council also hosted several one-on-one meetings at FNCE, which range in scope from informational meetings with practicing/media RDs to collaboration sessions with thought leaders across a wide range of nutrition/health organizations. FNCE provides a central location for the Council to host conversations with partners across PHA, CNPP and CIA initiatives and fosters opportunities for direct collaboration and tactical planning for the year ahead.





We were serving up one of our favorite mushroom blendability recipes, Mushroom Turkey Burger Bites.

#### Total 2006 – 2013 Media Impressions by Month



became the centerpiece of the Mushroom Council's marketing efforts as a new way for consumers to use and enjoy mushrooms. Capitalizing on this momentum, the "Trend to Blend" truly came to life in 2013 through the Council's integrated and holistic approach to increase mushroom awareness, which is reaching more consumers than ever before. Recent highlights include:

In 2012, the mushroom Blendability concept

In March 2013 there was

## 200 MILLION MEDIA IMPRESSIONS

#### **Extensive Media Coverage**

The Blendability cooking application has inspired a new perception of mushrooms, not only as a meat replacement but also as a meat extender, complement and flavor enhancer. Since introducing the mushroom and meat blend concept, the Council has seen a flurry of recipes and tips popping up in the media – all showcasing how easy it is use mushrooms to enhance the flavor of favorite meals while cutting calories and adding extra veggies to the plate.

The numerous benefits of Blendability have created a surround sound across media channels throughout the year:

"Mushrooms are especially good in meat dishes. The texture and taste works perfectly." – Hungry Girl

"The high-fiber mushroom mixture works well for any meat-based dish like tacos, meat sauce, hamburgers and more." – *Doctor Oz* 

"Chop mushrooms and sauté, then mix with ground beef to lighten up burgers, casseroles or meatloaf." – Ladies' Home Journal "Using grated mushrooms...adds moisture to lean ground beef, chicken or turkey." – All You

"Low-cal 'shrooms up the heartiness factor of these patties, for burgers that are backyard barbecue-worthy."— SELF

"Replacing red meat with white-button mushrooms can help you lose weight and keep it off." – Women's Health

## The New Hork Times

Cutting Down on the Meat, but Not the Taste



The Mushroom Council's presence at the Culinary Institute of America (CIA) Worlds of Healthy Flavors meeting inspired a New York Times "Recipes for Health" column in March that discussed innovative ways foodservice companies and chefs are increasing vegetables/decreasing meat intake while amping up flavor. The article featured mushroom Blendability in a weeklong recipe series, including a mushroom-based recipe from Chef Scott Samuel of the CIA.

The Council garnered nearly 170 media placements about Blendability (60 percent more than 2012) for more than 450 Million Impressions (40 percent of total consumer media impressions). Outlets featuring stories about Blendability included:

- Consumer lifestyle magazines and online outlets: Men's Health, Women's Health, SELF, Ladies' Home Journal, Family Circle, fitness, All You, Men's Fitness, Every Day with Rachael Ray, Hungry Girl e-newsletters
- National News: AP (associated press), New York Times, NPR, Washington Post, TIME, CNN, Huffington Post
- National TV shows: The Doctor Oz Show, ABC's The View, Access Hollywood

#### **Contests and Cooking Schools - Getting Consumers Blending**

- · Taste of Home Cooking Schools: At the Spring Taste of Home Cooking Schools in more than 100 locations nationwide. 65,000 attendees watched as chefs demonstrated how easy it is to blend mushrooms and meat in a turkey burger to not only reduce calorie and fat intake, but to also increase flavor and moisture. Following the demonstrations, nearly 50 percent of attendees said that they had either already made or were planning to make the Mushroom Turkey Burger recipe.
- Swap It or Top It Contest: During the summer, the Council encouraged even more consumers to try their hand at making-over meals with mushrooms through the Swap It or Top It online recipe contest hosted on the Council's Facebook page. From June through the end of July, the contest received 119 entries featuring mushrooms in summer grilling recipes – from traditional burger toppings, to Blendability recipes and meatless meals. The Council's Facebook fans voted on the top six recipes, selecting a Blendability Blueport Salmon Burger with Peach Salsa as the grand prize winner.

## SPOTLIGHT: **NPR**



Chefs and school cafeteria directors say burgers that blend mushrooms and meat are a hit. Mushroom-meat burgers are, on average, 24 percent lower in fat and 27 percent cheaper than regular, all beef burgers, according to the Mushroom Council.



Make Room For Mushrooms: Fungi Compete With Meat In

Chefs and school cafeteria directors say burgers that blend mushroon

#### Make Room For Mushrooms

From research and recipe development to outreach and education among consumers and health influencers, Blendability has evolved and developed over the past two years. In November, NPR's food blog, The Salt (known for covering emerging food trends) made a case to Make Room For Mushrooms: Fungi Compete With Meat In Burgers.

Through links and stories of how experts across the country are using/appreciating mushrooms, this piece demonstrated how the "Trend to Blend" is taking off - and making meals, kids and families healthier along the way. Among a litany of core Blendability and health messages, the article also gave a nod to the Mushrooms and Health Summit, cited mushroom research, included commentary examples from a collection of mushroom ambassadors and spokesperson Richard Blais' Earth & Turf Burger was the spotlight image. Lastly, the article links back to a series of other Council and public assets on mushrooms, showing again how content (and placements) live beyond the original story.



PHA @PHAnews

Make room for mushrooms! @MushroomChannel packs in the nutrients w/ their yummy mushroom & meat blends via @NPRFood n.pr/1cGvvlH

☐ View summary

♠ Reply 13 Retweeted ★ Favorite ••• More

7 Nov

#### Blais Brings Blendability to Life

This year, the Council bolstered Blendability efforts through a celebrity chef partnership. During the summer months, the Council worked with Chef Richard Blais (Top Chef All-Stars winner) to create a 50 percent mushrooms and 50 percent beef burger recipe, place it on the menu of his popular Atlanta restaurant, Flip Burger Boutique, and conduct media promotion in support of the partnership.

Chef Blais touted the numerous health and culinary benefits of Blendability, namely promoting the Earth & Turf Burger as the poster example of delicious and nutritious foods. Blais appeared on ABC's daytime talk show "The View" in a segment about summer cookouts where he served his Earth & Turf Burger to the hosts as a betterfor-you grilling option. Blais shared his favorite grilling tips in fitness spotlighting Blendability, and an article on CNN about Blais' 60-pound weight loss had him talking about the Earth & Turf Burger as an example of how to create flavorful food that is healthy and delicious. Additionally, a series of placements stemmed from an interview with Men's Health magazine where Blais offered Blendability as his first tip for enjoying healthy food without sacrificing taste. The

#### **Earth & Turf Burgers**

"Roast and grind mushrooms and swap for half of the beef. It's an obvious calorie and fat intake reduction, while adding more umami - the flavor of savory are what literally makes your mouth water - and this therefore increases flavor impact. It's a win-win."

- "It's less than half the amount of beef you'd have in a normal burger."
   "The mushrooms actually keep the burger juicier."
- Host Billy Bush takes a bite: "This is phenomenal."
- On calorie savings, registered dietitian Keri Glassman chimes in: "You're gonna save about 50 percent of the calories... and it's just as hearty which is the great thing about mushrooms."
- Blais finishes the segment saying, "Most importantly, it's delicious."

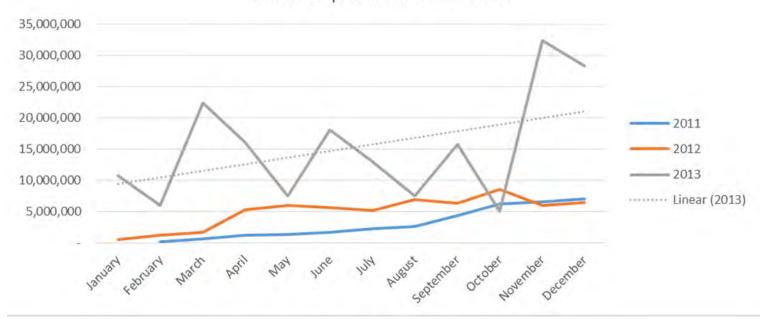
Social and traditional media surrounding the Council's partnership with Chef Blais contributed to the 222 million impressions the Council netted during the critical summer time period. When the burger originally launched, it was supposed to be menued at one FLIP Burger Boutique location for the month of July. However, due to popular demand, the Earth and Turf burger became a mainstay on the menu at all four FLIP locations, indefinitely. Currently, the Earth & Turf Burger is the sixth most popular menu item with 25 burgers sold daily, even at a higher price point.

With Blais, Blendability was given a new platform to reach audiences with a burger recipe and expert tips from a marquee chef. Consumers not only learned how to make a better burger (in terms of taste and nutrition) but had the opportunity to taste and see for themselves how a seemingly gourmet trend can be practical and easy to execute for a delicious and nutritious option in their own kitchens.





#### Social Impressions 2011-2013



## **182 MILLION SOCIAL IMPRESSIONS**



# 35 NEW RECIPES

through blogger ambassadors partnerships in 2013

#### The Power of a Social Recipe

In 2013, The Mushroom Council's social presence reached new audiences, with recipes at the core of engagement. The Council's plan to amplify and share key messages through recipes and visual content generated 182 million social impressions in 2013, in comparison to 62 million social impressions in 2012. Through the evolution of our social channels, the development of new relationships online and offline, and blogger and partner recipes contributed in 2013, the Council continues to inspire new mushroom enthusiasts.

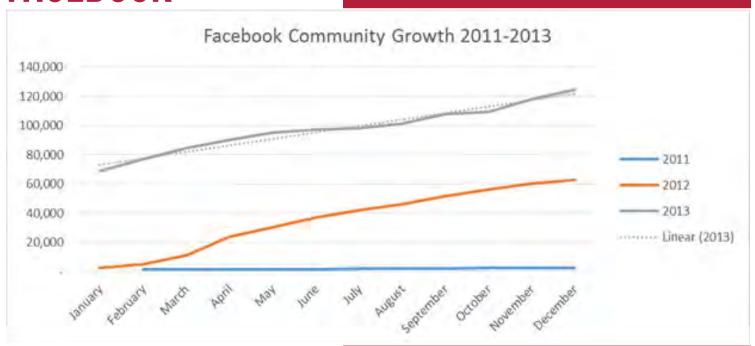
Starting with blogger ambassador partnerships, the Council received 35 new recipes in 2013 which served as blog content and additions to the recipe database. A robust collection of recipes throughout the year allows the Council to connect recipes with key moments in time, while creating a deep recipe database based on the Council's message platform. These recipes serve as the base for social channels by expanding content opportunities across every platform. On Twitter, the Council builds relationships that create opportunities with key influencers and everyday mushroom lovers. Through online Twitter parties and offline conferences, the recipe database enables engagement through the power of a recipe suggestion. Whether it's focused on Meatless Monday, family- friendly recipes or Blendability, recipes allow the Council to strengthen existing social relationships and create new ones.

It's interesting to note that the recipes driving users back to mushroominfo.com are not always recent. Social sharing has expanded the life span of many recipes in the database. Curating Pinterest boards based on timely and seasonal events allows the Council to showcase multiple recipes at once across other social platforms. As users pin their favorite recipes to their own Pinterest boards, the Council refreshes old and new recipes across the platform.

Facebook remains the Council's largest social community, reaching 125,000 followers in 2013. Serving up beautiful imagery, targeted messaging and shared content, the Council places recipes so that they appear naturally in a user's newsfeed, alongside updates from friends and family, without creating a forced presence. This has attracted new followers and sustained engagement over the past two years. Starting with 2,500 followers in January 2012 to 125,000 followers in 2013, Council content has received consistent engagement in an otherwise cluttered Newsfeed. In addition to updates, the recipes rotate as the cover photo every month and provide content for featured Facebook tabs that house consumer recipes and Mushroom Monday newsletters.

Each social channel worked together in 2013 to inspire their unique communities to tell a comprehensively delicious mushroom story online and offline.

# SPOTLIGHT: FACEBOOK





In December 2013 the Council posted 32 pieces of original content that the community shared

**6,400 TIMES** 

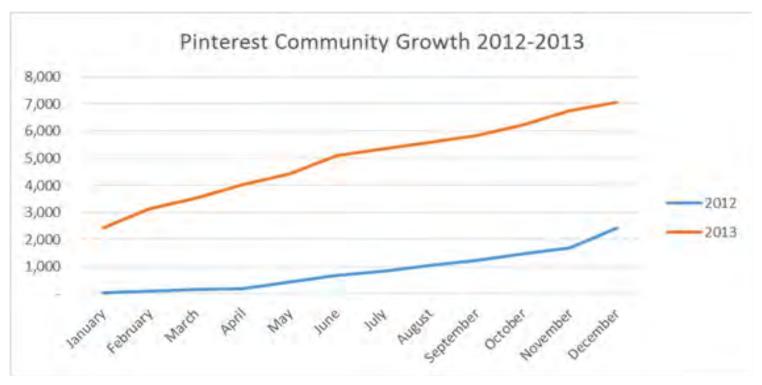
with an all-time high of 1,972 shares for one post.

#### Facebook Surpasses 100,000 Fans

In the summer of 2013, the Council reached a new landmark of more than 100,000 Likes on Facebook. Providing a mixture of content that focuses on every day recipes, seasonal themes, food service highlights and healthy tips, the Council engages current fans, while simultaneously targeting new fans.

The Council continued to generate strong engagement within the Facebook community, with fans going beyond a simple "like" to sharing content across their own Newsfeed, extending the reach of Council messages. A share demonstrates richer interaction than a one-time like, and serves as a personal endorsement as fans showcase the post within their own Facebook network. In December 2013 alone, the Council posted 32 pieces of original content that the community shared 6,400 times, with an all-time high of 1,972 shares for one post. Shares demonstrate that messaging and content is resonating with the Council's fan base, and expand the lifespan of messaging because sharers are more likely to return to a post on their own page vs. initially viewing it once in the newsfeed.

Partnering with food bloggers who provided high quality photography for every recipe and sharing foodservice promotions created a wealth of fresh, original content for Facebook. In addition, creating collages of old recipes based on timely themes or key messaging refreshed archived recipes and brought them into a new light.





Spicy Mushroom Ramen - I have some mushroom stock coming my way soon and this is good inspiration

the Council gained
4,600
New followers

#### The Pinterest Equation

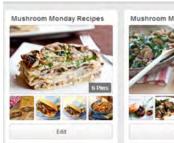
Pinterest serves as a centralized hub for mushroom recipes from all over the web, with an inherently social foundation. Pinterest is different than Facebook and Twitter, in that it's not focused on real-time updates. The platform itself serves as a resource for inspiration and discovery, through a completely visual lens. The strength of the Pinterest platform is that half of the Council's success stems from the foundation the Council put in place to create a rich, diverse database of recipes from partners, bloggers and more.

The compelling visuals that accompany all of the Council's recipes are the backbone of success on this platform, resulting in a new way for consumers to discover mushroom recipes, driving traffic back to mushroominfo.com. The ability for Pinterest users to pin their favorite recipes as they find them on the Council's site, or as they search on Pinterest, brings recipes from the past into the spotlight all over again, extending their reach and inspiring new audiences.

For example, a 2011 recipe for Spicy Mushroom Miso Ramen received so many pins from the Council's community that it became one of the Council's most popular pins of all time. In 2012 the blog post featuring the Miso Ramen recipe received 5,535 page views, however, due to increased promotion on Pinterest, the page views skyrocketed to 17,517 page views in 2013. Users are not just pinning recipes; they are providing visual inspiration for new fans to click through a pin and discover Mushroom Channel resources. In 2013, 36,000 MushroomInfo.com visits were referrals from Pinterest, accounting for five percent of total traffic.

To further demonstrate the power of relevant content to reach new audiences, in 2013, the Council Pinterest page picked up more than 4,600 new followers; however our content received 34,000 repins, creating a reach seven times greater than the follower base.

The Council's Pinterest account features a total of 47 boards focused on everything from daypart inspiration to holiday occasions, and even a deeper look into how mushrooms grow. The Council uses Pinterest as a new way to tell a compelling story of mushroom versatility – through real-life cooking applications – that can easily be shared across social platforms to inspire mushroom consumption.









#### Minced Chicken Mushrooms with Lettuce Cups

24/06/2013 BY DENISE WOODWARD 6 COMMENTS

I kind of have a thing for fungi. Lucky for us, as mushrooms are readily available in our neighborhood markets. One of the things that I adore about mushrooms is how versatile an ingredient they are. They can be used in recipes from breakfast to dessert. Loften tos sin meaty mushrooms to replace a portion of meat in recipes as well: they add great flavor and depth to a dish. This recipe for minced chicken mushroom lettuce cups is no exception either. It is a keeper!





#### Eat Write Retreat

A 2013 sponsorship at the niche food blogger conference, Eat, Write, Retreat in Philadelphia, provided the Council important face time among key mushroom-loving food bloggers and simultaneously introduced the start of the Swap It or Top It recipe contest. Local Council members were on hand to educate bloggers about the growing process, with live mushroom beds that inspired a paparazzi-like flurry of photography that cascaded across the bloggers' social channels.

The partnership went beyond the three-day conference, as the Council worked with the Kitchen Play network that sponsors the event to host a blog tour and Twitter party in June that was focused on the "Trend to Blend" and showcased Blendability through a

variety of recipes. Between May 1 – June 25, 205 tweets referenced the event's hashtag (#EWR13) and mushrooms, generating nearly 89,000 Twitter impressions from 60 unique participants. Beyond Twitter, the conference drew attention to the Council's owned social channels. In total 16 blog posts referenced the mushroom growing session and others were inspired to share mushroom recipes.

The hashtag (#EWR13) and mushrooms, generated nearly

89,000 TWITTER IMPRESSIONS



#### BLUEPORT SALMON BURGER WITH PEACH SALSA



#### Swap It or Top It Recipe Contest

The inaugural Swap It or Top It contest lived on a personalized Facebook tab, incentivizing home cooks to enter their recipes for a chance to win \$5,000. The Council launched a call to action across social channels for mushroom lovers to share their favorite summer recipe utilizing the concept of Swapability/ Blendability. The visual-heavy social strategy allowed messaging to easily translate from Facebook to the blog, Pinterest and beyond. Promotional efforts across social assisted in driving 119 total entries, 10,000 total voting tab views, and more than 2,500 votes. The Council's Facebook fans voted on the top six recipes, selecting a Blendability Blueport Salmon Burger with Peach Salsa as the grand prize winner.

The second place winner, the voice behind the blog "Busy in Brooklyn," received media coverage for her Portobello Burger with Sundried Tomato Aioli with a segment her local news station in Brooklyn, NY.

A comprehensive online and offline communication strategy ensured that each social platform utilized their unique strengths to promote the contest with a variety of mushroom loving audiences.

Over

## 1 MILLION

**Facebook Ad Impressions** 



## FOODSERVICE AND TRADE PROGRAM 2013

2013 was the year of "the trend is to blend" with many restaurant and foodservice operators taking advantage of mushroom versatility. As a result of the trend is to blend, the Mushroom Council made a presentation at the Midwest Research Chefs Association (RCA) showcasing how a product starts at the idea stage and then is commercialized. The Council presented to approximately 30 menu developers at the event and showcased meatballs, crab cakes and sliders made with mushroom-meat blends. Because of the success of that presentation, the Council also spoke at the Prepared Foods Magazine R&D midyear conference, where an Applications Lab was held for 40 menu developers. A presentation was given titled "Mushrooms to the Rescue: The New Earth and Turf." It demonstrated the evolution and the benefits of mushroom blendability.

Some of the top successes around blendability came from high profile chefs. Richard Blais, of Top Chef and Flip Burger (Atlanta), created a 50% mushroom and 50% beef burger for his menu. Chef Blais was inspired after hearing about the concept from the Council and from his weight loss success story, seen here on CNN. The story produced a series of other articles with numerous media outlets talking about the Earth & Turf Burger as an example of how to create flavorful food that

is healthy and delicious. The story of the Earth and Turf Burger was seen across large and small media outlets including; Fitness Magazine; Men's Health; The Washington Post; The Wall Street Journal; SmartBrief nutrition/ foodservice newsletters; as well as mentioned by reputable bloggers. Blais was also called to make appearances on ABC's daytime talk show The View, as well as, Access Hollywood with Keri Glassman, Nutrition Expert, to demonstrate mushroom blendability. The Council supported the partnership on social media by promoting Richard's posts on Facebook, Twitter and Instagram channels.



"If you want the flavor of fat without the calories, go for mushrooms," he says. To make the patty for the Earth + Turf burger at Flip Burger Boutique, Blais mixes mushrooms in with the beef.





Chef Jehangir Mehta, from Iron Chef America and The Next Iron Chef.

The second well-known chef to menu a mushroom-blended burger was Chef Jehangir Mehta, from Iron Chef America and The Next Iron Chef. At the restaurant Graffiti, he offers a beef and mushroom blended burger and had already received rave reviews on his burger which used portabellas and beef along with Indianinspired seasonings. Chef Jehangir Mehta was invited to cook at the 30th Anniversary of the Culinary Trust event. Chef Mehta picked "The Re-Imagining of the American Burger" as his theme and used every variety of mushroom to showcase his "food of the future." The burger consisted of an Angus beef blended with portabellas on a brioche bun with mushroom butter, topped with chilipickled oyster mushrooms, black trumpet mayo and a king mushroom cheddar chip. Alongside were enoki mushroom fries with shiitake and maitake ketchup. The Council was honoured to participate in the event

and showcased Chef Mehta in a blog post, "A Feast to Celebrate the Future of Food," and also featured the photo of Jehangir with Thomas Keller, who promoted the event.

Aside from the Earth & Turf Burger, the New York Times discussed innovative ways foodservice companies and chefs are increasing vegetables and decreasing meat intake while amping up flavor. The article which was based on the Council's participation at CIA's Worlds of Healthy Flavors, featured blendability in a weeklong recipe series, highlighting multiple applications of the mushroom-meat cooking technique including mushroombase recipes from Chef Scott Samuel of the Culinary Institute of America (CIA). Recipes included: Mushroom and Turkey Burgers, Mushroom, Bulgur, Spinach and Turkey Fritters with Yogurt Sauce, Mushroom and Beef Meatballs, and Rainbow Beef.

## 81% OF ALL RESTAURANT'S MENU MUSHROOMS.

#### Mushrooms on the Menu

The Council worked hard to support as many chains as possible to promote and incorporate mushrooms on their menu.

Maggiano's promoted popular mushroom dishes for Mushroom Month including, Ravioli al Forno, Rigatoni "D" and Tuscan Herb Medallions. They also promoted Chicken and Mushroom Stuffed Shell entrées, which was a successful LTO.

The Mushroom Council worked with a popular Chicago burger chain, Epic Burger, on their first promotion, "Mushroom Monday". Guests received 20% off their Portabella Burger, every Monday. During the promotion Epic Burger hosted a flash sale where followers and fans could say the word "fungtastic" before noon or mention the Mushroom Council's blog posts to receive a free Portabello Burger.

The Council's support included merchandising, a competition where guests could win a Portabello Burger every Monday for a year, as well as social media and server incentives.

Wendy's re-introduced their Bacon Portabella Melt on a Brioche Bun and promoted it throughout the year over the TV-airways.

Denny's launched a new Build Your Own Omelette promotion with graphics and a TV spot that depicted mushrooms. They continue to run TV and now are focused on "Ome lart."

Au Bon Pain introduced an LTO Egg White Mushroom Breakfast Sandwich as well as a Chicken Mushroom Sandwich.







RESTAURANT	MUSHROOM DISH
Red Lobster	<b>Chicken with Portobello Wine Sauce:</b> Wood-Grilled chicken breasts cooked to perfection and topped with Portobello wine sauce. Served with mashed potatoes and choice of accompaniment.
Bertucci's	<b>Roasted Mushroom and Asiago Flatbread</b> : A white style pizza on our multigrain crust with roasted Portobello and white mushrooms, Asiago cheese, fresh sage.
Cosi	<b>Stuffed Portabella bowl:</b> Hearth-roasted veggies, fresh mozzarella, basil, tomato sauce, balsamic vinaigrette, and grains.
Noodles and Company	Springtime Flatbread: A crispy flatbread appetizer with mushrooms, fresh asparagus, Parmesan and bacon.
	<b>Garden Pesto Sauté:</b> Asparagus, mushrooms, red bell peppers, onions, spinach, pecans, pecorino and feta over gluten free fusilli noodles and topped with Genovese pesto.
	<b>Truffle Mac:</b> Signature Mac & Cheese sauce spiked with white truffle oil, sautéed baby portabella mushrooms and topped with parmesan cheese and house-made toasted breadcrumbs.
	Thai Hot Pot: Pulled pork and shiitake mushrooms in a curry broth.
	Alfredo Mont Amore: Parmesan chicken and roasted mushrooms.
McCormick and Schmick's	Grilled Salmon and Vegetable Ragout with mushrooms.
Darden's Bahama Breeze	<b>Vegetarian Asian Tofu:</b> Sautéed tofu, Shiitake mushrooms, bok choy, bell peppers and edamame in a sweet chili and ginger sauce; served over basmati rice and topped with peanuts. <i>(LTO)</i>
	<b>Asian Chicken Vegetable:</b> Sautéed chicken, Shiitake mushrooms, bok choy, bell peppers and edamame in a sweet chili and ginger sauce; served over basmati rice and topped with peanuts. <i>(LTO)</i>
Corner Bakery	Garden Gate Scrambler: Chicken-apple sausage, spinach, peppers, Cheddar, and mushrooms.
Perkins	<b>Spinach and Baby Bella Scramble:</b> Slow roasted tomatoes, grilled onions, fresh spinach and, of course, baby portabella mushrooms.
Panera Bread	<b>Spinach Power salad</b> : Baby spinach, roasted mushrooms and onion blend, egg, bacon, frizzled onions and Vidalia onion.
El Pollo Loco	<b>Chicken-Mushroom Quesadilla</b> : Twice grilled flour tortilla stuffed with jack cheese, chopped citrus-marinated fire-grilled chicken, sautéed mushroom and onion, poblano cream sauce and cilantro.
Denny's	Build Your Own Omelette
California Pizza Kitchen	Shaved Mushroom Flatbread: Cremini mushrooms, sautéed spinach, romano and parmesan cheeses.
Epic Burger	Portabella Mushroom Sandwich: Portabella mushrooms cooked with olive oil, sea salt and black pepper.
Applebee's	Napa Chicken and Portabellas: A grilled chicken breast topped with portobello mushrooms and onions smothered in a rich red wine sauce and our Parmesan cheese blend. Served over sautéed zucchini, mushrooms, roasted red peppers, red onions and crispy red potatoes.
Au Bon Pain	Egg White Mushroom Breakfast Sandwich <i>(LTO)</i> Chicken Mushroom Sandwich <i>(LTO)</i>
	ALL NEW
On the Border	<b>Spinach and Mushrom Quasadillas:</b> Spinach & mushrooms, roasted corn & jalapeños and melted Jack cheese. Served with sour cream, pico de gallo and guacamole.
	<b>Sizzling Fajita Salad:</b> Topped tableside with sizzling grilled portabella or grilled vegetables, guacamole, sour cream, pico de gallo & mixed cheeses.
Unos Pizzaria and Grill	<b>Aged Cheddar and Mushroom Burger</b> , topped with aged cheddar, sautéed mushrooms and ultimate burger sauce.
	<b>Gluten Free Pizza – Veggie</b> : Mushrooms, onions, peppers, freshly-shredded mozzarella, romano and our own all-natural tomato sauce.
	<b>Vegetable Medley Pasta</b> : Wild mushrooms, tomato, spinach and basil in a garlic, white wine and tomato sauce tossed with penne and parmesan.
Eat n' park	<b>Black Angus Mushroom and Onion Burger:</b> Topped with grilled onions and mushrooms, and your choice of cheese

#### Meetings and Conferences a Hands-on approach to Demonstrate Blendability

The Council had the opportunity to sponsor the Culinary Institute of America's (CIA) ninth annual Worlds of Healthy Flavor event held January 23-25, 2013 in Napa Valley, CA. The CIA and Harvard School of Public Health developed Worlds of Healthy Flavors as a major initiative to increase healthy menu choices available to consumers. Several sessions showcased how mushrooms were being used on menus to reduce sodium and calories, while improving flavor. Chef Jehangir Mehta and Chef Steven Petusevsky, formerly of Whole Foods, both conducted cooking demos using mushrooms. Participants also had the opportunity to see swapability in action by sampling several meatmushroom items while working in group settings to help name the concept on the menu.

September 4-7, in St. Helena, CA , the Council presented "blendability" at the CIA Flavor Quality on the American Menu conference. The Council made a blendability presentation to the attendees, consisting of chains and colleges, which focused on the incorporation of mushrooms onto menus to reduce calories, and promote overall health. The attendees sampled blended mushroom recipes; Two different Sliders and Carnitas.

Based on hearing the Council's presentation on blendability at the CIA Flavor Quality on the American Menu conference, The Salt published an article, Make Room For Mushrooms: Fungi Compete With Meat In Burgers. This editorial talked about how the "trend to blend" is taking off and helping to make meals, kids and families healthier along the way. In addition to blendability messaging, the article mentioned the Mushrooms and Health Summit, mushroom research and numerous health benefits. This article echoed across social media resulting in 6,028,449 online impressions with highlights from *The Cheesecake Factory*, PHA, *The Consumerist* and several influential Registered Dieticians. Comments that were made on the article, as well as social media posts, were positive in sentiment noting receptiveness to the blendability approach and mushrooms as an on-trend ingredient.



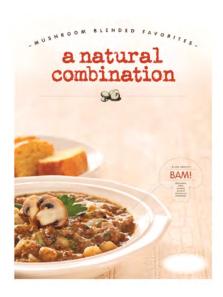


#### Comments on the NPR Article:

"What a wonderful idea, ground beef is expensive and mushrooms are delicious. This would be a great addition to any menu. Although this could create confusion on menus between the mushrooms-swiss burger and the portobello burger and now including '50/50' mushroomm burger." - Katy C

In October, mushrooms were featured again at Culinary Institute of America's (CIA) Latin Flavors, American Kitchens conference, attended by foodservice chains and colleges. Well-known chef and friend of the Mushroom industry, Guillermo Pernot from Cuba Libre, created a Mango Mojito Shrimp with Crispy Kale and Shiitake Mushrooms. Other dishes included Huitlacoche Flan and Adobo Mushrooms as well as Traditional Peruvian Soup with Shrimp, Choclo, Shiitake and Black Andean Mint and Mote & Mushrooms in a Taro Consommé. Several chains spoke on a panel about their success with mushrooms and other vegetables. Blendability was highlighted in a talk about the Healthy Menus Collaborative.

The Southeastern chapter of the American Culinary Federation (ACF) held its second annual Mushroom Signature Recipe Contest and blendability was on the plate. Items included Chicken Florentine with a Chicken-Shiitake-Boursin Stew, a Mushroom Meatball made with ground pork and beef and duxelle mushrooms, and a Duck-Mushroom Sausage with Mascarpone Polenta and Fennel to name a few.



### Foodservice Management Company Develops Familiar Dishes using Blendability

Throughout 2013 Compass Group North America developed a new initiative, Mushroom Blended Favorites, to create familiar dishes that now have an enhanced nutritional profile and a better sustainability message for its varied audiences. During the year, they engaged in culinary ideation with the Council to determine the best mushroom-to-meat ratios and flavor that would resonate with guests in popular ground-meat items like burgers, meatloaf, tacos and hash. The initiative has been approved as a focal point of all their training programs for 2014, with support from the Council with training materials, handouts, menuing and a recipe contest.

- Mushrooms are the fastest growing segment for mushrooms
  - is Fast Casual with 17% growth since 2006

### SPOTLIGHT: COLLEGE AND UNIVERSITIES

Colleges and Universities Partnerships are Making an Impact on Student Eating Habits

the Mushroom Council Reached 250 colleges/ universities in 2013 The Council worked one-on-one with colleges to discuss mushrooms on the menu and how to take advantage of blendability. Colleges remain a primary focus of the Council's menu development and promotional program since colleges are so interested in the intersection of wellness and sustainability, and it is in this segment where students/Millennials form eating habits for life. Yale, Harvard, Stanford, University of California at Riverside and the University of Massachusetts all introduced new blendable items and continue to explore opportunities.

The Council worked with Washington University, in St. Louis, to hold a recipe contest amongst their chefs on blendability and swapability. 12 chefs competed and developed recipes like Mushroom-Chicken Cannoli, Mushroom Chicken Meatballs, Chicken and Mushroom Roulade with Faro, Vegetable Confetti and Smoked Shiitake and Zucchini ships, Country Fried Mushrooms, Mushroom Chipotle Torta, Mushroom Teriyaki and Crab-Mushroom Sushi with Pickled Mushrooms.













#### Recipe contests to Showcase the Ease of Swapability



#### **Innovate the Plate**

The Council participated in the 2nd annual Produce Marketing Association (PMA) competition to develop recipes for the theme of "Innovate the Plate". The Council competed against entries by Chef Todd Fisher, host of Discovery Communication's United States of Bacon, with his Lobster Taco; Chef Tony Baker, from Montrio Bistro in Monterey known as the "Artichoke Chef", with his Citrus Shaved Brussels Spout Salad with Shrimp; Chef Joey Elenterio, who has received a Michelin Star and an award as a San Francisco Rising Star Chef, with his Charred Smashed Potatoes; and Chef Chris Hanmer, winner of Bravo's "Top Chef: Just Desserts", with his Orange-Poached Peaches & Cream, Panna Cotta and Churro.

Based on votes by the participants, the Mushroom Council won the competition by showcasing Mushroom-Beef Blended Sliders and Mushroom-Turkey Blended Sliders with a variety of slaws. Voters could create a healthier BBQ burger, a Farmstead Burger, a Mediterranean Burger, an Asian Burger, a Korean Burger or a Southwestern Burger with the available toppings. Once again, the significance and relevance of the Blendability concept triumphed, demonstrating just how popular this concept can be.

#### K-12 Chefs amaze in Mushroom Recipe Contest

FLIK International, a division of Compass, held a recipe contest in conjunction with the Council where school foodservice directors from private preparatory schools submitted mushroom sandwiches, entrees, breakfasts and swappable menu items. Judges included the President of FLIK, the Chief Culinary Officer of FLIK, the President of Meatless Monday, an Associate Editor of Food Management Magazine, and Bart Minor, President of the Mushroom Council.

From the 12 finalists, Winning items included: Grilled Portobello with Sausage, Sunny Side Egg and Hollandaise; Shiitake and Button Mushroom Whole Grain Salad with Portobello Vinaigrette; Mushroom Stroganoff with Crème Fraiche in Phyllo Cups; and Mushroom Strudel with Gorgonzola and Mushroom Demi Glaze. The Grand Prize winner was Baked Maitake Oyster New Orleans Style. The winning recipes were professionally photographed and are featured on the Mushrooms on the Menu Website.



#### Training and Resources

In 2013, the Mushroom Council launched a new foodservice website, www.mushroomsonthemenu.com. The website features information about incorporating mushrooms onto menus, as well as case studies and recipes pertaining to foodservice. Useful materials are also available on the site including sell sheets and cost comparison excel forms which allows for collaboration with



distributors and operators to determine how much money they can save by cutting the portion size of ground meat and adding chopped mushrooms. Several Infographics were developed throughout the year and are available to help foodservice sales teams. The infographics are short, simple, visually-focused information sheets that show the significant growth of mushrooms in foodservice and as a topping for pizza.

The Council was host to foodservice sales training webinars:

On March 5, the Council hosted a webinar for the industry on swapability. The *Mushroom Market Update and Swapability* webinar discussed how the concept has progressed, who is menuing the concept successfully, new tools and how to leverage the concept with your accounts

Another industry webinar on *Mushroom Market & Sales Resource Update* was held on August 1. The webinar provided an interactive forum where the Council shared the latest retail and foodservice; sales resources, opportunities, successes to date, customer benefits and tools to further your business. Topics included:

- New Mushroom Council foodservice and school websites
- Trends affecting fresh produce at retail and foodservice
- Materials and case histories
- Progression of blendability
- Introduction to the new Retail Sales Online Data Tool and refresh



The Mushroom Council's School Nutrition Program has successfully catalyzed the outstanding introduction and acceptance of mushroom blendability and fresh mushrooms into the National School Lunch Program. Through a joint effort between the American Mushroom Institute (AMI), U.S. Department of Agriculture, industry partners and the School Nutrition Association mushrooms have been added to the USDA Food Catalogue, introduced to hundreds of school foodservice directors and added to the

menus of school districts in both processed and scratch cooked entrees.

With blendability available through the National School Lunch Program it increases the visibility of mushrooms to school foodservice directors. Through a variety of avenues schools can purchase fresh mushrooms to incorporate in the ever increasing salad bars and fresh food offerings.

# SPOTLIGHT: 2013 SUCCESSES

- Mushrooms became available through USDA Foods available to schools across the Nation. USDA Foods have to be 100% US Origin. Material Code – 110421
- Mushroom blended entrees were added to the weekly offerings replacing all-beef menu items in Cincinnati Public Schools, Maplewood Richmond Heights, Hickman Mills School District and many more
- Mushrooms were featured as THE on trend addition to the lunch tray in the Huffington Post - Trend Spotting at School, NPR'S The Salt Blog Make Room for Mushrooms:
- Fungi Compete with Meat in Burgers, School Nutrition Smart Brief Mushrooms may be the Next Meat Substitute, Food Business News -Children's Menu Trends and several highlights in School Nutrition Magazine
- Five mushroom blended products have been developed by a commercial producer and are on the market utilizing USDA Mushrooms.
- Mushroomsinschools.com was launched as a recipe and information resource to the school nutrition industry

#### Working with the USDA

To increase demand for mushrooms in schools the Mushroom Council and AMI

have worked with the USDA to both add mushrooms to the catalogue and allow mushrooms to count as a visible vegetable credit in blended entrees. Mushroom blended processed entrees now receive a Child Nutrition Label allowing the

mushrooms to count as a vegetable credit towards the mandatory number of vegetables served to students each week.

The USDA continues to highlight blendability as a solution and example for schools meeting new nutrition requirements.

One truck of USDA Mushrooms was ordered by Maryland and Virginia to incorporate into blended entrees in early 2014.

**USDA Material Code** 

110421

### SPOTLIGHT: MUSHROOM IN SCHOOLS



South Bend School District: Mushroom blended burger



Hickman Mills School District: Chefs Barb Scott and Aaron Woods



Maplewood Richmond Heights: Turkey Mushroom Meatball Sub

Mushroom Pilots prove Students Love Mushrooms

Districts in Cincinnati, Indiana, St. Louis, Kansas City, and Denver have all already implemented mushroom blended items into their lunch programs.

**Hickman Mills School District** in Kansas City, MO increased student satisfaction and vegetable consumption with Mushroom Blendability. Chefs Barb Scott and Aaron Woods served Mushroom Taco Salad and Mushroom Marinara to students.

#### Results:

- Students received a HEALTHIER entrée and LIKED it.
- 90% of students surveyed enjoyed the Mushroom and Beef Taco Salad and requested it be served again

Maplewood Richmond Heights introduced students to the versatility of using fresh vegetables in an array of entrees during their Mushroom Month. On the Menu, Chef Robert Rusan served Mushroom Turkey Meatloaf, Garden Pizza, Turkey Mushroom Meatball Sub and Chili with Beans and Mushrooms.

#### Results:

 Students were served HEALTHIER entrée with mushrooms and PREFERRED them to the standard recipe. • 67% of students surveyed would like the mushroom and turkey meatloaf added to the menu.

Students at **South Bend School District** under foodservice director Victoria Moore were served a healthier mushroom blended burger instead of their regular all beef burger resulting in overwhelming acceptance.

#### Results:

- 81% of Students preferred the Mushroom and Beef Blended Burger
- Without sacrificing for taste foodservice directors can continue to serve the foods students crave while reducing calorie, sodium and fat intake by approximately 30%.

Several additional districts including Cincinnati, Dallas, New Orleans and Baltimore Public Schools are incorporating mushroom promotions into their meal cycle in the Fall of 2013.

**67**%

of students surveyed would like the mushroom and turkey meatloaf added to the menu.

### Mushrooms take center stage at School Nutrition Events

Mushroom blendability has been introduced to school nutrition influencer events throughout the country in 2013. An Innovation Station at the annual Child Nutrition Industry Conference in San Antonio, TX in January featured mushroom blended meatballs, burgers and turkey meatloaf.

In May several foodservice directors and chefs including Dallas Independent School District Chef, Brad Trudeau, demonstrated mushroom blendability to attendees at the Culinary Institute's Healthy Flavors Healthy Kids Conference.

In July, Council members exhibited at the School Nutrition Association's Annual National Conference and sampled mushroom marinara, Shroom'n Turkey Meatloaf and Mushroom Fiesta Taco Blend. Chefs Barb Scott and Aaronn Woods demonstrated mushroom blendability recipes from their successful pilot to attendees at a Culinary Demonstration.



Chefs Barb Scott and Aaronn Woods demonstrated mushroom blendability recipes

"Mushrooms are on Trend - the coolest thing to eat - We need to be thinking about capturing our customers in our meals in different ways. We need to be on trend, we need to be serving those foods and meals that have a trendy buzz about them. When you are beginning to utilize mushrooms on your menus it's something to talk about," says Dayle Hayes, during the School Nutrition webinar.

### Webinar presented to hundreds of Foodservice Directors

The School Nutrition Foundation presented a 90 minute mushroom webinar as part of their Webinar Wednesday educational series. The webinar titled "Menuing Mushrooms; Strategies to Extend Meat Entrees, Add Veggies and Gain Student" was presented by School Nutrition Advocate Dayle Hayes, School Foodservice Director from Cincinnati Public Schools Jessica Shelley, USDA representative Christina Conell and Foodservice Director from Maplewood Richmond Heights Chef Robert Rusan.

The webinar presenters demonstrated to the hundreds of attendees that mushrooms aren't just for salad bars and pizza toppings anymore. Mushrooms can play a starring role in extending portion size and adding an extra vegetable serving while maintain calorie, fat and sodium maximums. The panel of school nutrition professionals discussed creative ways to use mushrooms to enhance recipes, manage food costs and procure through the USDA Foods Program.

### Mushroom and School Resources

Mushroomsinschools.com launched in 2013 as the one stop resource for school foodservice directors to learn how to incorporate more mushrooms on the serving line.

The fresh website provides school nutrition developed mushroom recipes, case studies demonstrating how to replicate successful mushroom pilots, cafeteria educational posters and PowerPoints, student educational information, menu planning suggestions and blog.

Several informative e-blasts including one distributed through School Nutrition Association's Smart Brief to over 19,000 school foodservice directors promoted mushrooms and mushroom blendability as a solution to meeting meal pattern requirements and maintaining student participation.

For the mushroom industry new resources developed include: How To Sell To Schools

Toolkit, School Nutrition Association State Show Directory, Selling to Foodservice Director Info Sheets, Selling to Meat Processor Info Sheets, and additional school nutrition resources to share with district and industry partners.

> An e-blast, through the School Nutrition Association's Smart Brief was send to over

19,000 SCHOOL FOODSERVICE DIRECTORS



#### Mushroom Label Report

The purpose of this research is to quantitatively measure the effectiveness of various claims that could be made on a mushroom label and to determine which background color and label vignette was most attractive or appetizing. The claims were jointly developed by the research team and the subcommittee from the Mushroom Council (MC).

The major findings of this research were:

- The most effective single attribute on the label that most influenced intention to buy was a nutrition claim. If a grower/processor wanted to put only one claim on a label it should be a nutrition claim.
- 2. The second most effective claim was "origin".
- 3. The third most effective claim was a vitamin D claim.

For each of the attributes we looked at what specific statement within the category had the most effect. Thus the most effective statements to communicate are:

- 1. Nutrition "A Good Source of B Vitamins"
- 2. Origin "Picked Fresh Daily"
- 3. Vitamin D 100% Vitamin D (+100% Vitamin D on NFP)

These results are consistent with the current thought and research on what consumers value in general...nutrition and quality. In order to measure the effect on forecasted sales, the value of each of the label claims was used to increment forecasted sales without any changes in labels. As shown in section 4, there are different assumptions made about the speed in which an industry-wide rollout would occur (as this is an industry level analysis not a company analysis).

The attribute with the greatest likelihood of increasing sales for a single label claim would be:

 Vitamin D was 100% Vitamin D (+100% Vitamin D on Nutrition Fact Panel (NFP)). The sales increase is estimated to be 6,338,063 pounds or a 2.39% increase in sales. Note that the forecast making no change estimated a 0.99% increase in sales.

The largest potential increase in sales would be from adding two claims to the label and have 100% diffusion in 6 months. The estimated increase is 3.55% for two claims, such as "A Good Source of B Vitamins" and "Picked fresh daily".

The advantage of using the vitamin D claim is that there is a high awareness of vitamin D in general, and a low awareness of mushrooms' virtually unique ability to be a food source of vitamin D. It provides a differential advantage that may not exist to the same extent with the other two claims.

### INDENDENT AUDITORS REPORT



The Governing Body Mushroom Council

#### **Report on the Financial Statements**

We have audited the accompanying financial statements of the governmental activities and the general fund of Mushroom Council, an instrumentality of the United States Department of Agriculture, as of and for the year ended December 31, 2013, and the related notes to the financial statements, which collectively comprise Mushroom Council's basic financial statements as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### **Auditor's Responsibility**

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

#### **Opinions**

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, and the general fund of Mushroom Council, as of December 31, 2013, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### Other Matters

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information, such as management's discussion and analysis and budgetary comparison information on pages 4-6, and 17 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise Mushroom Council's basic financial statements. The schedules of general and administrative expenses – budget and actual, the schedule of program expenses – budget and actual, the schedule of cash flows, the schedule of cash receipts and disbursements and the schedule of property and equipment are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supplementary information listed in the table of contents is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

#### Other Reporting Required by Government Auditing Standards

Tenney and Company

In accordance with Government Auditing Standards, we have also issued our report dated March 31, 2014, on our consideration of Mushroom Council's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering Mushroom Council's

March 31, 2014

#### MUSHROOM COUNCIL BALANCE SHEET December 31, 2013

<u>ASSETS</u>	_	General Fund	General Fixed Assets Account Group	Total	
Cash	\$	1,084,045 \$		\$ 1,084,04	5
Accounts receivable		989,741		989,74	
Fixed assets	_		55,614	55,61	4
Total Assets	\$=	2,073,786 \$	55,614	\$ 2,129,40	0
LIABILITIES AND FUND BALANCES					
Accounts payable	\$	476,248 \$	-	\$ 476,24	8
Accrued wages and payroll taxes	_	33,868		33,86	8
Total Liabilities	_	510,116		510,110	6_
Fund Balances:					
Investments in general fixed assets			55,614	55,61	4
Restricted		300,000		300,000	0
Unrestricted	_	1,263,670		1,263,67	0_
Total Fund Balances	) <u>-</u>	1,563,670	55,614	1,619,28	4_
Total Liabilities and Fund Balances	\$	2,073,786 \$	55,614	\$ 2,129,40	0

## MUSHROOM COUNCIL COMBINED STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE

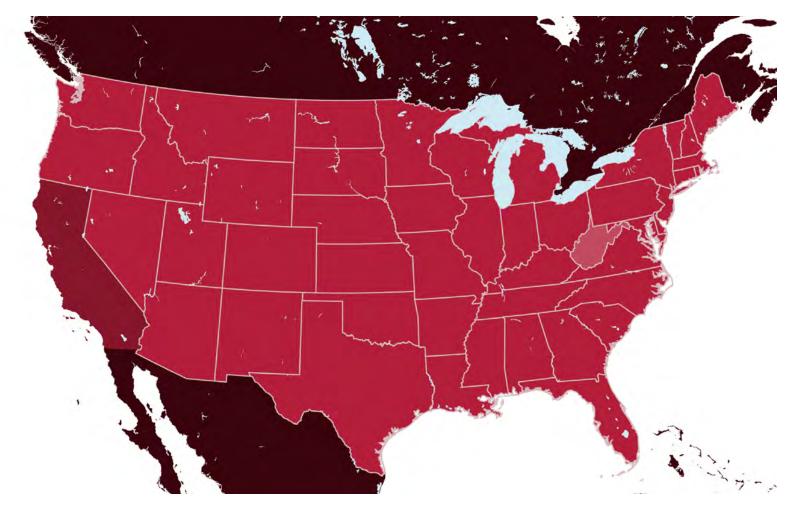
#### For The Year Ended December 31, 2013

REVENUES:		General Fund
Assessments:		
Domestic	\$	3,995,333
Imports		504,348
PDA income		36,000
Other income and interest	_	74,797
Total Revenues	_	4,610,478
EXPENDITURES:		
Administrative expenditures		301,677
Government and professional services -		
including compliance inspections		207,801
Research and information expenditures	_	4,072,451
Total Expenditures	_	4,581,929
EXCESS OF REVENUES OVER EXPENDITURES		28,549
FUND BALANCE - Beginning of year	_	1,535,121
FUND BALANCE - End of year	\$_	1,563,670

#### MUSHROOM COUNCIL SCHEDULE OF CASH FLOWS For The Year Ended December 31, 2013

#### NET CASH FLOW FROM OPERATING ACTIVITIES:

Excess of revenues over expenditures	\$	28,549
Adjustments to reconcile net income to net cash provided by operating activities:		
(Increase) decrease in: Accounts receivable		(77,763)
Increase (decrease) in: Accounts payable Accrued wages and payroll taxes	1	25,349 4,593
Net Cash Used by Operating Activities  NET DECREASE IN CASH	-	(19,272)
CASH - beginning of year	_	1,103,317
CASH - end of year	\$	1,084,045





Region 1



Region 2



Region 3



**Region 4, Including Importers** 

# **COUNCIL MEMBERS**

YEAR	REGION	COUNCIL MEMBER	POSITION
	3	Joe Caldwell	
	2	Tony D'Amico	Vice Chair
	1	Fletcher Street	Chair
	2	Dave Carroll	
2013	1	Pat Jurgensmeyer	Treasurer
	4	Elizabeth O'Neil	Secretary
	3	Roberto Ramirez	
	2	Jim Angelucci	
	2	Gale Ferranto	
	2	Jim Angelucci	
	2	Jim Howard	
	3	Roberto Ramirez	
	3	Joe Caldwell	Chair
2012	2	Tony D'Amico	Treasurer
	1	Fletcher Street	Vice Chair
	2	Dave Carroll	
	1	Pat Jurgensmeyer	
	4	Elizabeth O'Neil	Secretary

YEAR	REGION	COUNCIL MEMBER	POSITION
2011	2 2 1 2 4 3 3	Greg Sagan Jim Angelucci Greg McLain Jim Howard Hank Vander Pol Roberto Ramirez Joe Caldwell	Secretary Chair
2010	2 2 1 2 4 3 3 2 1	Greg Sagan Jim Angelucci Greg McLain Jim Howard Hank Vander Pol Roberto Ramirez Joe Caldwell Kathleen Lafferty Fletcher Street	Chair Secretary Vice Chair Treasurer
2009	2 1 1 2 4 3 3 2 1	Greg Sagan Virgil Jurgensmeyer Greg McLain Paul Frederic Hank Vander Pol Robert Crouch Joe Caldwell Kathleen Lafferty Fletcher Street	Chair Secretary Vice Chair Treasurer
2008	2 1 1 2 5 3 3 2 1	Carla Blackwell-McKinney Virgil Jurgensmeyer Greg McLain Paul Frederic Hank Vander Pol Robert Crouch Joe Caldwell Kathleen Lafferty Fletcher Street	Chair Vice Chair Secretary Treasurer
2007	2 4 4 2 3 1 2 5 3	Carla Blackwell-McKinney Curtis Jurgensmeyer Greg McLain Lynn James Angelucci Charlee Kelly Mortensen Paul Frederic Hank Vander Pol Robert Crouch	Vice Chair Chair Treasurer Secretary
2006	2 4 4 2 3 1 2 5 3	Carla Blackwell-McKinney Curtis Jurgensmeyer Greg McLain James Angelucci Charlee Kelly Lynn Mortensen Michael Pratola Hank Vander Pol Robert Crouch	Vice Chair Chair Treasurer Secretary

YEAR	REGION	COUNCIL MEMBER	POSITION
2005	2 4 4 2 3 1 2 5	Carla Blackwell-McKinney Curtis Jurgensmeyer Darrell McLain James Angelucci Charlee Kelly Vacant Michael Pratola Murray O'Neil Robert Crouch	Treasurer Vice Chair Chair Secretary
2004	2 4 4 2 3 1 2 5 3	Carla Blackwell-McKinney Curtis Jurgensmeyer Darrell McLain James Angelucci John Davids Lisa Hemker Michael Pratola Murray O'Neil Robert Crouch	Treasurer Secretary Chair Vice Chair
2003	3 2 4 2 4 2 3 5 1	Carl Fields Carla Blackwell-McKinney Curtis Jurgensmeyer Dan Lucovich Darrell McLain James Angelucci John Davids Murray O'Neil Wilhelm Meya	Vice Chair Treasurer Secretary Chair
2002	3 2 2 4 1 2 3 3 3	Carl Fields Chris Alonzo Dan Lucovich Darrell McLain Greg Sagan James Angelucci John Davids Robert Crouch Wilhelm Meya	Vice Chair Treasurer Chair
2001	2 3 2 2 4 1 3 3	Charles Brosius Carl Fields Chris Alonzo Dan Lucovich Darrell McLain Greg Sagan John Davids Robert Crouch Wilhelm Meya	Chair Secretary Treasurer Vice Chair
2000	2 2 3 4 2 3 3 1 1	Charles Brosius Chris Alonzo Clark Smith Darrell McLain James Angelucci John Davids Shah Kazemi Greg Sagan Vacant	Chair Secretary Vice Chair Treasurer

YEAR	REGION	COUNCIL MEMBER	POSITION
1999	2 2 1 2 1 3 3	Charles Brosius Edward Leo Jack Reitnauer James Angelucci James Howard John Davids Shah Kazemi Virgil Jurgensmeyer	Chair Vice Chair Secretary
	3	William Street, Sr.	Treasurer
1998	3 2 1 2 1	Douglas Tanner Edward Leo Jack Reitnauer James Angelucci James Howard	Chair
	2 3 4 3	Roger Claypoole Shah Kazemi Virgil Jurgensmeyer William Street, Sr.	Vice Chair Secretary Treasurer
1997	3 2 2 1 2	Douglas Tanner Edward Leo James Angelucci Robert Miller Roger Claypoole	Vice Chair Chair
1557	3 4 1 3	Shah Kazemi Virgil Jurgensmeyer Wilhelm Meya William Street, Sr.	Secretary Treasurer
1996	3 2 2 3 1 2 3 4 1	Douglas Tanner James Angelucci James Ciarrochi John Haltom Robert Miller Roger Claypoole Shah Kazemi Virgil Jurgensmeyer Wilhelm Meya	Secretary Vice Chair Treasurer Chair
1995	3 2 2 2 2 3	Douglas Tanner Edward Leo James Angelucci James Ciarrocchi John Haltom	Secretary Treasurer
1995	1 3 4 1	Robert Miller Shah Kazemi Virgil Jurgensmeyer Wilhelm Meya	Chair Vice Chair
1994	3 2 2 3 2	Douglas Tanner Edward Leo James Ciarrocchi John Haltom Michael Pia	Secretary Treasurer
	1 4 1 3	Robert Miller Virgil Jurgensmeyer Wilhelm Meya William Street, Sr.	Chair Vice Chair

YEAR	REGION	COUNCIL MEMBER	POSITION
	3	Douglas Tanner	
	2	Edward Leo	Secretary
	2	James Ciarrocchi	·
	3	John Haltom	Treasurer
1993	2	Michael Pia	
	1	Robert Miller	Chair
	4	Virgil Jurgensmeyer	Vice Chair
	1	Wilhelm Meya	
	3	William Street, Sr.	



Mushroom Council 2880 Zanker Road, Suite 203, San Jose, CA 95134 Tel: 408-432-7210 | Fax: 408-432-7213 (fax) Email: info@mushroomcouncil.org