

NUTRITION NEWS ABOUT MUSHROOMS

SEPTEMBER 2017



SHEDDING LIGHT ON WHAT'S GROWN IN THE DARK THIS NATIONAL MUSHROOM MONTH

By: Kara Lydon, RDN, LDN, RYT

Did you know that September is National Mushroom Month? The Mushroom Council will be celebrating all month long with its own trendy live stream. Forget giraffe babies, the Shroom Cam is the live stream you're going to want to tune into this month. That's right, all month long you can tune in to a mushroom grower's farm to watch mushrooms grow.

Mushrooms boast a unique and sustainable growing process that's unlike any other fruit or vegetable you'll find in the produce aisle. That's because mushrooms are technically considered fungi – unlike plants, mushrooms lack chlorophyll to make their own food through photosynthesis and instead exist on a substrate of organic, recycled material. Grown indoors on a year round cycle, mushrooms have one of the most interesting farm-to-fork agricultural stories.

Learn more about the growing cycle of mushrooms below and check out the [Mushroom Council's YouTube page](#) for the live stream and fun Shroom Cam events happening throughout the month!

- 1. Making the Mushroom Bed:** Making mushroom compost involves wetting and mixing organic materials including corncobs, hay, straw, cottonseed and cocoa seed shells, and nitrogen supplements to initiate aerobic fermentation (composting), which lasts about 7-14 days.
- 2. Spawning:** In order to propagate the compost with "mushrooms' roots", growers use mushroom spawn (grain or seed that's been inoculated with mushroom spores) to transfer the mycelium to the beds.
- 3. Casing and Pinning:** Casing, made of peat moss and limestone, is spread over the mushroom bed, acting as a reservoir to hold in moisture. Eventually, tiny white protrusions form on the mycelium and push up through the peat casing - a process which is referred to as pinning. The pins continue to grow into buttons and into larger mushrooms.
- 4. Harvesting:** Mushrooms are harvested by hand throughout a 16-35 day cycle.

As you can see, the mighty mushroom not only is healthy on the plate, it's also gentle on the planet thanks to its unique growing process. In fact, mushrooms are one of the most sustainable foods around according to a study published earlier this year measuring the water, energy and carbon emissions required to grow and harvest fresh mushrooms. Researchers collected data for all steps of the mushroom production process, including composting, spawning, casing and pinning, and harvesting. The study finds production of a pound of mushrooms requires only **1.8 gallons of water** and **1.0 kilowatt hours of energy**, and generates only **0.7 pounds of CO₂ equivalent emissions**. In addition, the annual average yield of mushrooms is **7.1 pounds per square foot – meaning up to 1 million pounds of mushrooms can be produced on just one acre.**¹

For more detailed information on the growing process and mushroom sustainability, be sure to download The Council's handouts for RDNs: [Shedding Light on What's Grown in the Dark: A Unique Growing Process](#) and [Healthy on the Plate, Gentle on the Planet: The Mushroom Sustainability Story](#).

For more nutrition talking points for National Mushroom Month, check out our media pitch resource below. If you need any additional support for events or media opportunities, please don't hesitate to reach out directly to me at kara@karalydon.com. Happy Mushroom Month!



Kara Lydon, RD, LDN, RYT, The Foodie Dietitian, is a nationally recognized and award-winning registered dietitian nutritionist, certified intuitive eating counselor and yoga teacher. Kara believes that the key to authentic health and wellbeing is celebrating food and our bodies and she instills this positive philosophy in the kitchen, yoga studio, working one-on-one with clients, and on her food and healthy living blog.

THE LATEST MUSHROOM RESEARCH

Mushroom Blend Burger Acceptance in the School Cafeteria

With the beginning of the school year, attention turns to the school lunch menu and efforts to provide students with healthful food options. The “Trend to Blend” - incorporating mushrooms into school meals - has the potential to expose students to a greater variety of foods, and improve nutrient quality by lowering fat and calories of meals without sacrificing taste and satiety.

A pilot study was conducted to investigate whether elementary/middle school students (grades 3-8) would find a mushroom-soy-beef blend burger comparable to a beef burger when offered in the school cafeteria setting during normal lunch procedures². The beef burger was already part of the school menu; the mushroom-soy-beef-blend burger was available from the same vendor and preparation of both burger types was similar.

A baseline preference for each burger type was established by comparing each burger on separate days to a non-burger choice. The beef burger was compared to a chicken sandwich; the blend burger to a meatball sub. On another day the blend burger was compared directly to the beef burger. Students completed self-administered surveys to help evaluate acceptability and satiety of the entrees. Results reported the number/percentage of students choosing each burger type when compared to the non-burger alternative, when the blend was compared directly to the beef burger, and the proportion of students who suggested they would choose each entree again (blend burger, beef burger, chicken sandwich, meatball sub) in the future.

When the beef burger was offered versus the chicken sandwich, almost 90% of the students chose the chicken sandwich. About half of the students who chose either the chicken sandwich or beef burger responded they would choose it again.

When the blend burger was offered versus the meatball sub, about two-thirds (63%) of the students chose the blend burger. About half of the students responded “maybe” when asked if they would choose the blend burger or the meatball sub again.

When the blend burger was compared directly to the beef burger, slightly less than half the students (48%) chose the blend burger; while slightly more than half (52%) chose the beef burger. When asked if they would choose their entree again most responses were “maybe” for both burger types. About one-quarter of the students who chose either the blend burger or the beef burger would not choose that entree again, suggesting comparable acceptance.

Satiety values were similar for the entrees served on each of the different study days. The blend burger provided 27% fewer calories and 33% fewer grams of fat per serving compared to the beef burger. Both burgers were the same portion size (2.45 ounces), which may have contributed to similar satiety ratings.

While acknowledging some of the study limitations (a pilot study in one school, self-administered questionnaires and not comparing the beef burger and blend burger against the same non-burger alternative), the authors suggest that the results support a practical method for offering a lower energy density entree acceptable to students. They suggest testing the blend burger and mushrooms blended into traditionally-offered recipes (spaghetti, lasagna) in additional schools with a broader range of students as a way to introduce students to try and accept new foods while helping achieve school nutrition quality standards. The study, published in the [Journal of Health Behavior Policy Review](#), is available Open Access.

CLIENT EDUCATION RESOURCE

It's National Mushroom Month, which means it's time to celebrate all the benefits we reap from this unique fungi. Take advantage of this dedicated month to promote nutrient-packed mushrooms with your clients, media and customers. We've made it easy for you with [this resource](#), which includes a sample media pitch, talking points, social media posts and recipes!


CELEBRATE NATIONAL MUSHROOM MONTH THIS SEPTEMBER

Sample Pitch

Local Media Pitch

Social Media Posts

Recipes

 **Twitter:**
It's #NationalMushroomMonth!
DYK that mushrooms contain
B vitamins, potassium (8%),
vitamin D, and antioxidants?
<http://bit.ly/1gG2dd9>



BLENDING BURGER PROJECT™ WINNERS ANNOUNCED!!

The third annual Blending Burger Project™ wrapped up on July 31 with a total of 414 restaurants, across 45 states, serving up their unique version of a blended burger which combines finely chopped mushrooms with meat to create a more delicious, nutritious and sustainable burger. Over 400,000 online votes were cast and the five restaurants with the most votes won the opportunity to cook their blended burgers at the historic James Beard House In New York City.

To learn more about this year's winners, read the [full press release here](#).



RD MUSHROOM LOVE IN THE MEDIA

Recipe for Fitness: Tofu-Stuffed Portobello Mushrooms via *Paste Magazine*

Ashley Sigmund, RDN, shares a vegetarian recipe for portobello mushrooms stuffed with tofu.

Lamb burger with goat cheese mayo and grilled onions via *Men's Fitness*

Toby Amidor, MS, RD, shares a lamb and goat cheese blended burger recipe. She says *"bulk up your burger by blending the meat with chopped mushrooms—they'll beef up the flavor of the meat and nobody will even know they're in there."*

Blended portobello hamburger via *Men's Fitness*

Toby Amidor, MS, RD, highlights the nutritional benefits of mushrooms and shares a portobello beef blended burger recipe. She states that you can *"add an extra earthy taste (and plenty of nutrients) to your usual slider with this mushroom-blended recipe."*

5 Tips For A Healthy Summer BBQ via *Huff Post Canada Living Blog*

Nema McGlynn, in-store registered dietitian at Loblaws, shares five tips to deliver tasty, non-traditional summer eats while keeping food fresh when eating outdoors. In her second tip, get creative on the grill, she encourages switching things up and trying grilled Portobello mushroom caps.

Fruits, Vegetables Offer Body Important Immune Boosters via *The News Journal*

Marianne Carter, registered dietitian nutritionist, encourages grilling fruits and vegetables in addition to the traditional hamburgers, hot dogs and steaks to add more vegetables into your diet. Marianne specifically mentions grilling veggie skewers with mushrooms and trading out your hamburger for a grilled Portobello mushroom.

These foods will boost your mood and make you happy via *USA Today*

Registered dietitian nutritionist Marjorie Nolan Cohn adds mushrooms to a list of top mood-boosting foods.

IN THE KITCHEN WITH MUSHROOMS

Marinated Mushroom Bowls with Lentils and Wild Rice

This meal-in-a-bowl is full of bright flavors and delicious textures. A mix of crimini mushrooms are marinated in an Asian-inspired dressing and paired with hearty grains and lentils alongside crunchy vegetables. You can swap the French lentils with another type of lentil and cooked chickpeas are also a delicious option. Any grain such as brown rice or quinoa can be substituted for the wild rice.

Serves: 4

Prep time: 40 minutes

Ingredients:

For the Mushrooms:

- ¼ cup extra virgin olive oil
- 2 tablespoons unseasoned rice vinegar
- 1 tablespoon low-sodium soy sauce
- 2 teaspoons dark sesame oil
- 1 teaspoon chili oil
- 1 green onion, thinly sliced
- 1 tablespoon chopped fresh cilantro
- 1 teaspoon sesame seeds
- 8 ounces crimini mushrooms, thinly sliced

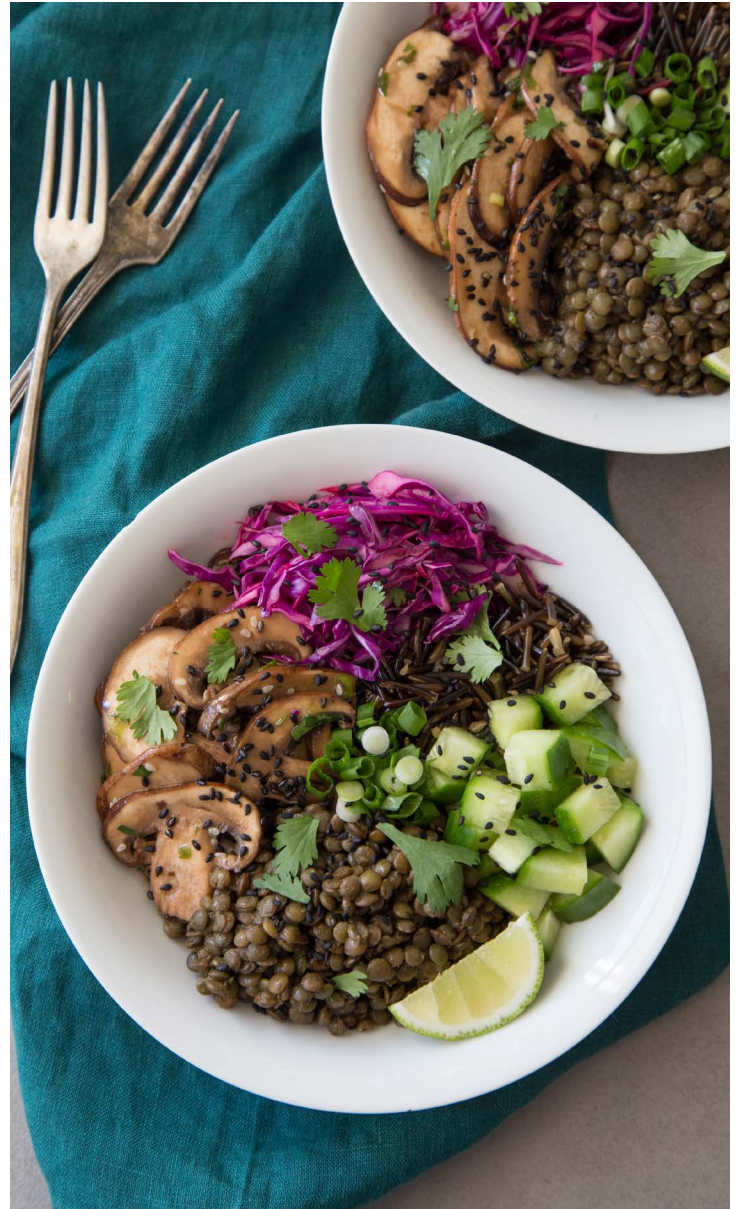
For the Bowl:

- 2 cups thinly sliced purple cabbage
- 1 tablespoon fresh lime juice
- Pinch of salt
- 2 teaspoons low-sodium soy sauce
- 2 cups cooked French lentils
- 1 cup cooked wild rice
- 1 cup chopped cucumber

Garnishes: chopped cilantro, sliced green onions, black sesame seeds, lime wedges

Directions:

1. To marinate the mushrooms, whisk together the olive oil, rice vinegar, soy sauce, sesame oil, and chili oil in a shallow bowl. Stir in the green onion, cilantro, and sesame seeds. Add the mushrooms and gently toss in the marinade. Cover and let rest for 30 minutes.
2. Place the cabbage in a bowl and toss with the lime juice and pinch of salt. Set aside.
3. Stir in 1 teaspoon of soy sauce each to the lentils and the wild rice.
4. To serve, arrange an equal amount of mushrooms, cabbage, lentils, wild rice, and cucumbers in each bowl. Drizzle with any remaining marinade and garnish with cilantro, green onions, and black sesame seeds. Serve with lime wedges. Enjoy room temperature or cold.



Visit www.mushroominfo.com for the latest news, recipes and blog posts from the Mushroom Council.

