Interest in Vitamin D Continues to Rise

For more than 30 years, Michael F. Holick, Ph.D., M.D., has studied vitamin D. Today he works ceaselessly to increase awareness of the "sunshine vitamin," and its role in nutrition and overall health. His research indicates that increased levels of vitamin D may play a positive role on immunity and a remarkable number of daily ailments and chronic diseases, including obesity, heart disease, depression, asthma and diabetes.

"The benefits of vitamin D are varied and profound," says Dr. Holick. "In order to get more vitamin D, I recommend a combination of sun exposure, supplements and food for my patients. Specifically, I recommend mushrooms because they happen to be one of the top natural food sources of vitamin D."

Mushrooms are the only source of vitamin D in the produce aisle. The mechanism mushrooms use to convert light to vitamin D is similar to the way humans process this essential vitamin: mushrooms’ plant sterol – ergosterol – converts to vitamin D when exposed to light. All mushrooms contain vitamin D, but growers also have the unique ability to increase D levels in mushrooms to up to 97 percent of the Daily Value (400 IU) per raw 84 gram serving by exposing mushrooms to light.

Mushrooms continue to earn recognition as a valuable source of vitamin D. For the first time ever, mushrooms are listed as one of the leading food sources of vitamin D in the 2010 Dietary Guidelines Advisory Committee’s Report to the secretaries of Agriculture (USDA) and Health and Human Services (HHS). This report will inform USDA and HHS as they update the Dietary Guidelines for Americans.

Further, the Institute of Medicine (IOM) has appointed an Expert Committee to assess current relevant data and update as appropriate the Dietary Reference Intakes (DRIs) for vitamin D and calcium. The Committee’s Report is expected in October or November 2010.

To learn more about mushrooms and vitamin D, visit the "All About Vitamin D" section at www.mushroominfo.com.

Mushroom Research and Online Resources

Visit the nutrition section of the Mushroom Council’s website and explore "Mushroom Research by the Minute" to read the latest research on mushrooms and health. For example, a study published in the July issue of the Nutrition Journal explores the effects of mushrooms on cardiovascular disease. Results indicate that both common (white button and crimini), and specialty (shiitake, oyster and maitake) mushrooms may protect against cardiovascular disease by interfering with events that contribute to atherogenesis. Consumption of mushrooms significantly reduced the formation of adhesion molecules with subsequent reductions in cells binding to human aortic endothelial cells which contribute to atherogenesis and to cardiovascular disease development.

An additional resource for information regarding mushrooms and health is the International Society for Mushroom Science's (ISMS) new website, www.mushroomsandhealth.com. The site features Mushrooms and Health 2008, a comprehensive report prepared by the Commonwealth Scientific and Industrial Research Organization (CSIRO) and Food Science Australia, which assesses the state of the science linking mushrooms and health.
Baja Salmon with Mushrooms

Preparation Time: 7 minutes
Cooking Time: 8 minutes
Serves: 4

• 1 tablespoon olive oil, divided
• 6 ounces white button mushrooms, quartered or halved
• 1 packet dry citrus marinade
• 3/4 cup frozen white sweet corn kernels, thawed
• 1/2 cup red onion, diced, run under cold water
• 1/2 cup red bell pepper, diced
• 1/4 cup cilantro leaves, minced
• 2 tablespoons lime juice, freshly squeezed
• 1/2 teaspoon kosher salt
• 4 salmon filets (about 5 ounces each)
• 1/4 cup water

Heat a large sauté pan over medium high heat. Add 2 teaspoons oil and swirl to coat bottom of pan. Add mushrooms and sauté 2 minutes. Add 1 tablespoon of dry citrus marinade mix to the mushrooms and continue cooking another 3 minutes.

Remove mushrooms from the pan and place in a large mixing bowl. Add the corn, onion, red pepper, cilantro, lime juice and salt to the cooked mushrooms and toss to combine. In same sauté pan, add remaining teaspoon of oil and swirl to coat pan.

Sprinkle the top of each salmon filet with 1 teaspoon dry citrus marinade mix. Add salmon, seasoned side down, to hot pan and sear 1 minute. Flip over and add water to the pan. Cover and cook another 2 minutes, or until done to taste preferences. Remove from the heat and uncover.

Place a spoonful of the mushroom salsa on each serving plate, top with a salmon filet. Garnish with a sprig of cilantro and a lime wedge.

Umami Update

The American Heart Association (AHA) and the Dietary Guidelines Advisory Committee recommend striving for no more than 1,500 mg of sodium each day – which is less than 1 teaspoon of salt. Umami – the fifth basic taste after sweet, salty, bitter and sour – is used to describe a savory, brothy, rich or meaty taste sensation. The unique taste of umami counterbalances saltiness and allows up to a 50 percent salt reduction without compromising flavor. All mushrooms are a rich source of umami and a perfect way to enhance flavor while reducing sodium.

Generally speaking, the darker the mushroom the more umami it contains. Dried mushrooms tend to have more umami than fresh ones, and cooked mushrooms provide more umami than raw. However, adding mushrooms in virtually any form – raw, sautéed, whole cap, even a dusting of dried powder – will add umami lift to any dish.

Nutrition Information per Serving:
Calories: 340; Fat: 19g (Saturated Fat: 5g, Monounsaturated Fat: 9g); Cholesterol: 70.8mg; Sodium: 827mg; Carbohydrate: 12g; Dietary Fiber: 3g; Protein: 31g; Niacin: 13.6mg; Vitamin B6: 0.7mg; Vitamin B12: 1.9mg; Vitamin C: 44.8mg; Vitamin A: 1336 IU; Vitamin K: 25.6mcg; Calcium: 70mg; Potassium: 937 mg; Iron: 1.5 mg; Selenium: 56.4mcg; Vitamin D: 516 IU

This recipe is an excellent source of protein, vitamin D, vitamin A, niacin, vitamin B6, vitamin B12, vitamin C, vitamin K, potassium and selenium.