



The Mushroom Council Call for Proposals
Mushroom Intake in the USDA Healthy Eating Patterns
Deadline to Respond – July 15, 2019

The Mushroom Council (Council), authorized by the Mushroom Promotion, Research and Consumer Information Act of 1990, conducts research to discover new and/or add validity to the health and nutrition benefits of eating mushrooms. Research efforts focus on *Agaricus bisporus* (white, crimini, portabella) as the most commonly consumed mushroom; on mushrooms exposed to ultraviolet light to increase vitamin D levels to address an under consumed nutrient identified by the Dietary Guidelines; and specialty mushrooms including but not limited to oyster mushrooms as a source of the bioactive ergothioneine.

A previous analysis of NHANES data on mushroom intake and diet quality suggests that mushroom intake is associated with improved diet quality, but that intake remains below an 84 g *Nutrition Facts* serving. See "Mushroom intake is associated with better nutrient intake and diet quality: 2001-2010 National Health and Nutrition Examination Survey. O'Neil et al., *J Nutr Food Sci* 2013, 3:5.

The Council invites **non-binding Proposals** to discover through food pattern modeling the unique nutrient benefits when white button mushrooms are regularly consumed as part of the 2.5 cups of vegetables (based on 2000 calories) daily recommendation in the USDA Healthy Eating Patterns. Mushrooms are identified as belonging in the "Other vegetable" category which has a recommended intake of 4 cups per week. Modeling should include mushrooms at a minimum of 4 cups per week with intake that averages 84 g raw (*Nutrition Facts* serving) or ½ cup cooked (a vegetable serving in the USDA food patterns) per eating occasion; quantify the contribution to vitamin D in the pattern (assuming a *Nutrition Facts* serving provides 100% Daily Value for vitamin D), and the amount of the bioactive ergothioneine provided by the mushrooms. See "Identification and Quantification of Ergothioneine in Cultivated Mushrooms by Liquid Chromatography-Mass Spectroscopy", Dubost J et al. *International Journal of Medicinal Mushrooms*, Vol. 8, pp. 215–222 (2006).

Proposal Submission and Timeline

The Proposal is not to exceed 5 pages in non-technical language that describes what the research proposes to do, approximate cost and must include:

- Brief/pertinent literature review not to exceed 1 page to establish the current relevance of the study relating the unique contributions of mushrooms to nutrient intake consistent with dietary guidance.
- Specific objectives and methods to meet the research goal and estimated timeline. The study must be completed within 2 years and published in a peer-reviewed journal by 2023 for consideration during deliberations of the 2025 Dietary Guidelines.



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- Total budget by broad category such as personnel, supplies/materials. **It is the policy of the Council not to pay administrative overhead or management costs.** In general, food intake/survey analysis studies do not exceed \$150,000 without significant rationale provided by the principal investigator.

- Experience of the personnel/institution responsible for the research. A separate CV of the principal investigator not to exceed 2 pages may be submitted along with the 5-page proposal

Mushroom Council staff, consultants, selected members of the Council's Nutrition Research Advisory Panel and others with expertise in the specific research area will review and evaluate Proposals based on clearly stated objectives and methods, cost-effectiveness, timeliness and impact potential. Successful applicants will be notified by September 20.

Return full proposals in a Word file via e-mail by noon Pacific Time, Monday July 15 to Mary Jo Feeney, MS, RD, FADA, FAND Nutrition Research Coordinator, Mushroom Council, e-mail: mj@feeney.us.com.