

A scientific 'go' for commercial production of vitamin-D enhanced mushrooms

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A new commercial processing technology is suitable for boosting the vitamin D content of mushrooms and has no adverse effects on other nutrients in those tasty delicacies, the first study on the topic has concluded. The technology, which involves exposing mushrooms to the same kind of ultraviolet light that produces suntans, can greatly boost mushrooms' vitamin D content. It appears in ACS' *Journal of Agricultural and Food Chemistry*.

Ryan Simon and colleagues note that many people do not get enough vitamin D in their diets. Few natural foods are high in the vitamin, and there are limits on what foods can be fortified to boost the vitamin D content. Although few people realize it, mushrooms are an excellent natural source of vitamin D. Some producers have embraced results of earlier studies, suggesting that exposing mushrooms to ultraviolet B (UVB) light can significantly boost the vitamin D content.

The scientists set out to answer several questions about commercial-scale UV light processing of mushrooms. Among them: Does it produce consistently high levels of vitamin D and does it adversely affect other nutrients in mushrooms? They compared button mushrooms exposed to UVB light, those exposed to natural sunlight and those kept in the dark. The UVB-exposed mushrooms got a dramatic boost in [vitamin D](#) (700 percent more of the vitamin than those mushrooms exposed to no light) and the UVB processing had no effect on levels of vitamin C, [folate](#), riboflavin, niacin and a host of other [essential nutrients](#).

Provided by American Chemical Society

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