Vitamin D Remains A Nutrient Of Concern

The 2015-2020 Dietary Guidelines for Americans identifies vitamin D as a “shortfall nutrient” because most Americans fall short on consumption compared to the Institute of Medicine’s (IOM) recommendations for intake. It also named vitamin D a “nutrient of public health concern” because its underconsumption has been linked to poor health outcomes.

Vitamin D helps the body absorb calcium, making it an essential nutrient for bone health; insufficient levels can lead to rickets in children and osteoporosis in adults.

With sufficient research on the role vitamin D plays in bone growth and maintenance, the IOM changed its recommended intake level for vitamin D for children and adults (1-70 years old) from 200 IU to 600 IU – that’s three times the original recommendation. The current recommendation for adults 70+ years is even higher at 800 IU.

Mushrooms As A Source of Vitamin D2

Few foods naturally contain vitamin D, but mushrooms are unique for being the only food in the produce aisle that contains vitamin D. In fact, the IOM recognizes UV-exposed mushrooms as the exception to the rule that plant foods don’t naturally contain vitamin D. Some mushrooms contain higher levels of a plant sterol, ergosterol, which converts to vitamin D upon exposure to UV light.

Mushroom growers have the ability to increase vitamin D levels in mushrooms to a controlled amount by exposing them to ultraviolet (UV) light and several large mushroom suppliers now make mushrooms high in vitamin D available in grocery stores across the country. UV-exposed portabella mushrooms found at the supermarket provide close to 400 IU vitamin D per serving (4-5 white button mushrooms or one portabella).

DID YOU KNOW?

Did you know you could potentially increase vitamin D content in mushrooms at home? A recent study showed that vitamin D in sliced white button mushrooms spread on a reflective surface increased by as much as 25% of the Daily Reference Intake (DRI) or 150 IU per 70 gram serving in some cases by exposure to sunlight for as little as 15 minutes.

Mushrooms vs. Supplements

Although the results are not conclusive, some clinical trials have demonstrated that the vitamin D2 present in mushrooms is bioavailable and is equally effective in raising and maintaining a healthy adult’s vitamin D status as taking a supplement that contains vitamin D. In fact, a 2012 study in Dermato-Endocrinology showed that 25 adults who consumed 2,000 IU of vitamin D2 from white button mushroom extract daily for a three-month period were able to raise and maintain their vitamin D (25(OH)) levels similar to healthy adults who consumed 2,000 IU of supplements containing vitamin D2 or D3.

Vitamin D White and Crimini Mushrooms Now in USDA Nutrient Database

USDA’s National Nutrient Database – the foundation of most food and nutrition databases in the U.S. – now includes white and crimini mushrooms exposed to UV light. One serving of raw, UV-exposed, white and crimini mushrooms contains 890 IU and 1086 IU of vitamin D, respectively.

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