

The Power of the Sun



Use Xenon's Pulsed Lamps to Generate Vitamin D in Mushrooms.

The USDA has reported* that exposure to light causes mushrooms to generate Vitamin D – increasing their nutritional value and giving growers the opportunity to gain a competitive edge in today's health-conscious marketplace.

Xenon's Pulsed Lamps offer the industry's fastest, most effective way to enhance Vitamin D in mushrooms.

Why Xenon's lamps are the right choice.

Some mushroom growers have tried continuous mercury PULSED light to spur Vitamin D growth. But those lights contain mercury and require long exposure times of up to 20 minutes. Xenon's lamps, on the other hand, use a patented pulsed light technology to deliver a high burst of energy that works in just seconds.

- You save energy costs and keep your processing lines moving.
- Xenon's Pulsed Lamps come closer to duplicating real sunlight.
- They contain no mercury so they're environmentally safe.

Give your mushrooms an advantage on the store shelf—with Xenon's lamps!

The advantages of Vitamin D

Research shows that vitamin D improves bone health and reduces the risk of various cancers and diabetes, among other benefits.

Mushrooms are the only non-animal food that can provide vitamin D, but usually only in small amounts. By exposing mushrooms to pulsed light, they can generate up to 100% of a person's daily Vitamin D requirements!



* "JOURNAL of AGRICULTURE and FOOD SCIENCE," United States Department of Agriculture, June 2008



A closer look at Xenon's Pulsed Lamps

Xenon's Pulsed Lamps provide everything you need to rapidly increase the level of Vitamin D enhancement to your mushroom processing lines. The Xenon system consists of a controller, power supply, lamp housing and lamp. The lamps deliver high-energy pulses (207 Joules) at up to 25 pulses per second. Lamps are available in single or dual configurations, so you can adapt them to your processing line.

What the research shows

Robert Beelman, Professor of Food Science Pennsylvania State University, has conducted testing on a variety of mushrooms using a 16-inch Xenon lamp at 505 Joules/pulse. He reports that exposures of less than 2 seconds increased vitamin D by over 100% of the Recommended Daily Allowance.

Talk to Xenon today.

Xenon Corporation is a pioneer in pulsed light technology. Our unique, patented lamps are used in a wide range of industries and applications. Xenon's applications engineers are available to help you customize a solution for your mushroom production. To learn more, visit www.xenoncorp.com/mushrooms, or contact our offices listed below.

Case Study Snapshot

Challenge: A leading international food producer wanted to boost Vitamin D in its fresh mushrooms prior to final packaging, but didn't want to use continuous mercury pulsed light systems.

Solution: The company incorporated Xenon's lamps into its in-line manufacturing process.

Results: By safely exposing mushrooms to less than 2 seconds of pulsed light, the producer has been able to increase the Vitamin D content of Portobello mushrooms to over 100% of the RDA (Recommended Daily Allowance).



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