

Recycling yogurt waste to produce electricity, nutrients and more dairy foods

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America's appetite for Greek yogurt has skyrocketed over the past decade. But for every container of Greek yogurt consumed, you could fill two or three more with the acid whey it produces. The cover story in *Chemical & Engineering News* (C&EN), the weekly newsmagazine of the American Chemical Society, takes a look at the interesting ways scientists are making use of the byproduct.

Britt E. Erickson, a senior editor at C&EN, reports that in 2015 more than 770,000 metric tons of Greek [yogurt](#) were produced in the U.S., representing nearly 40 percent of the domestic yogurt market. In 2004, it accounted for only 1 to 2 percent of the market. For years, companies paid farmers to spread the acid whey—the liquid byproduct of strained yogurt—on land as fertilizer or to feed it to livestock. But as demand for Greek yogurt ballooned, its makers started working with scientists to develop more economical ways to handle the whey.

There are now more than 3,500 patents related to the use of yogurt acid whey. About 75 percent of those were published within the past five years. Many of them focus on methods for extracting valuable ingredients, such as proteins and lactose, from acid whey. Yogurt makers are also investing in [anaerobic digesters](#) that rely on bacteria to break down the whey into methane for electricity. And one food company has developed a product that can be used to incorporate acid whey back into dairy products, such as cream cheese, dips and even yogurt.

More information: "Acid whey: Is the waste product an untapped

goldmine?," cen.acs.org/articles/95/i6/Aci...roduct-untapped.html

Provided by American Chemical Society

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