

New technology aims to improve taste, shelf life, production of beer, food

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Just in time for summer—a new technology to improve the taste, quality and shelf life of juice and other beverages, and help craft brewers make more beer.

Purdue University-affiliated startup Induction Food Systems (IFS) has finished the major first round of testing on a [technology system](#) to

provide on-demand heating options for [food](#) and beverage manufacturers.

"We were tired of seeing the old-school processes for heating food and [beverages](#) during manufacturing," said entrepreneur Francesco Aimone from Columbia University, who co-founded IFS with George Sadler, an alumnus of Purdue's College of Agriculture. "Those legacy systems like steam are slow, energy-consuming and can take away some of the food's natural flavors and textures."

IFS plans to launch in the next few months its first go-to-market line, which involves a fluid heating system for use in the manufacturing of beer, water products and juices.

Aimone said their technology increases the speed and efficiency for producing beverages and foods, and helps manufacturers grow. He said the IFS on-demand heating system uses plug-and-play heating components involving [electromagnetic energy](#) and induction, which has been shown to be about six times more precise in controlling temperature than conventional methods.

IFS' technology uses a coil and core design in its heating systems. It uses solid-state electronics to generate electromagnetic energy instead of the traditional combustion that creates steam in boilers.

"We know that manufacturers need and want more nimble, responsive and sustainable heating options," Aimone said. "We are prepared to meet those needs with our technology."

Aimone said their technology is part of a \$20 billion market for heating equipment in the food and beverage segment.

Aimone said the next focus for the startup is to address the problem of

fouling—which is sticky substances left behind after processing—for manufacturers.

"It's similar to when you are making eggs and you have the gunk stuck to your pan when you're preparing them," Aimone said. "Our preliminary testing shows we can reduce fouling in some applications by up to 30 percent."

Provided by Purdue University

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