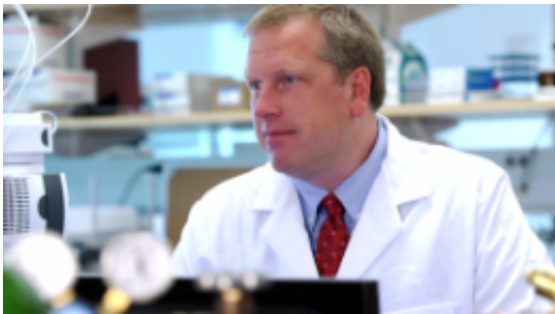


# UA tests consumer water filters for contaminant removal

February 16 2012, By Steve Delgado

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Shane Snyder, professor in the UA department of chemical and environmental engineering and co-author of the water filter report.

A University of Arizona study of pour-through and refrigerator water filtration devices and the chemicals they removed is scheduled for publication in the March issue of Good Housekeeping.

The Good Housekeeping Research Institute, or GHRI, has partnered with the University of Arizona to perform extensive testing on everyday filters found in [water](#) pitchers and refrigerators to see if the consumer products are able to remove chemicals considered an emerging concern for public safety.

The investigation found that refrigerator filters worked the best, and some pitcher-style filters worked to some degree to remove contaminants. This is the first such removal analyses performed on these

products, according to the magazine.

The study, funded by the GHRI, looked at the removal efficiency of 15 chemicals of emerging concern, also known as CECs, by five commercially available refrigerator and pour-through pitcher devices. The testing was performed in Tucson, Ariz., in 2011 and included several antibiotics, two anticonvulsants, a pesticide and an [insect repellent](#).

The project was completed by the Snyder Research Group and the Arizona Laboratory for Emerging Contaminants, or ALEC, at the UA. The group is headed by Shane Snyder, a professor in the department of chemical and environmental engineering at the UA and a leading expert on the detection of emerging [water contaminants](#).

Snyder operates two core labs, one on the main campus of the UA and the other at the UA's BIO5 Institute. Snyder's research focus is on the fate, transport and treatment of known emerging contaminants, such as endocrine-disrupting compounds, [perchlorate](#), [nanoparticles](#) and pharmaceuticals.

To test the drinking water filters, municipal water was spiked with 15 contaminants of concern which have been discovered in drinking water. Then, to simulate the weeks or months of use that pitcher and fridge filters would get in a real home, researchers passed gallons of [contaminated water](#) through each device until it reached the manufacturer's estimated filter lifetime, then recorded the results.

"Studies on treatment efficacy of point-of-use ([water filtration](#)) devices are becoming increasingly relevant, as some emerging contaminants are known to pass through conventional treatment plants without much attenuation," said Tarun Anumol, UA chemical and environmental engineering graduate student and co-author of the filter report.

"Especially when it comes to concerned consumers," he says.

"These are chemicals that are not on the government's list of contaminants to regulate, so they won't appear on your local water report," said Rosemary Ellis, Good Housekeeping editor in chief. "The filters that we're recommending have gone through rigorous evaluations and we are happy to report that they work."

The [full report](#), with information on how to read annual federal Consumer Confidence Reports and advice on how to help reduce chemicals in drinking water, is available in *Good Housekeeping's* March 2012 issue.

ALEC is co-directed by UA professors Shane Snyder (College of Engineering) and Jon Chorover (College of Agriculture and Life Sciences). ALEC is a state-of-the-art laboratory facility dedicated to the development and implementation of novel methods to identify and quantify emerging environmental contaminants.

The Snyder Research Group focuses on safe and sustainable water for urban, agricultural, and industrial needs. Team expertise includes three major disciplines: engineering, chemistry and toxicology. Engineering research focuses on the development of water treatment technologies that minimize energy consumption and maximize water quality.

Founded in 1885, Good Housekeeping magazine reaches nearly 25 million readers each month. In addition to the print title, the Good Housekeeping Research Institute, the consumer product evaluation laboratory of Good Housekeeping magazine, was founded in 1900 and continues today with the mission of improving the lives of consumers and their families through education and product evaluation.

Only products evaluated by the Good Housekeeping Research Institute

can be accepted for promotion in the magazine and are eligible to display the Good Housekeeping Seal, the hallmark that provides assurance to readers that the products are backed by a two-year limited warranty against being defective, with specified exceptions.

In 2009, the Green Good Housekeeping Seal was introduced as an environmental overlay to the original Good Housekeeping Seal, offering consumers guidance on products making environmental claims.

Good Housekeeping is published by Hearst Magazines, a unit of Hearst Corp., the largest publisher of monthly magazines in the U.S. reaching some 87 million adults.

Provided by University of Arizona

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