Rainwater Is Safe To Drink, Australian Study Suggests

ScienceDaily (Nov. 6, 2009) — A new study by Monash University researchers into the health of families who drink rainwater has found that it is safe to drink.

The research was led by Associate Professor Karin Leder from the Department of Epidemiology and Preventive Medicine in conjunction with Water Quality Research Australia (previously the Cooperative Research Centre for Water Quality and Treatment).

"This is the first study of its kind. Until now, there has been no prospective randomised study to investigate the health effects of rainwater consumption, either in Australia or internationally," Associate Professor Leder said.

The study involved three hundred volunteer households in Adelaide that were given a filter to treat their rainwater. Only half of the filters were real while the rest were 'sham' filters that looked real but did not contain filters.

The householders did not know whether they had a real filter. Families recorded their health over a 12-month period, after which time the health outcomes of the two groups were compared.

"The results showed that rates of gastroenteritis between both groups were very similar. People who drank untreated rainwater displayed no measurable increase in illness compared to those that consumed the filtered rainwater," Associate Professor Leder said.

Adelaide was the location chosen for the study as it the city with the highest use of rainwater tanks in Australia.

Associate Professor Leder said some health authorities had doubts about drinking rainwater due to safety concerns, particularly in cities where good quality mains-water is available.

"This study confirms there is a low risk of illness. The results may not be applicable in all situations; nevertheless these findings about the low risk of illness from drinking rainwater certainly imply that it can be used for activities such as showering/bathing where inadvertent or accidental ingestion of small quantities may occur.

"Expanded use of rainwater for many household purposes can be considered and in current times of drought, we want to encourage people to use rainwater as a resource," she said.

The study was funded by the National Health and Medical Research Council and Water Quality Research Australia.