

History of the Water Pasteurization Indicator (WAPI)

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How can one determine if heated water has reached 154°F? In 1988, **Dr. Fred Barrett** (USDA, deceased) developed the prototype for the Water Pasteurization Indicator (WAPI). In 1992, **Dale Andreatta**, a mechanical engineer from Ohio State University and a Ph.D. from University of California joined forces with *Solar Cookers International* and finished the design of the original WAPI. He now travels to colleges where he teaches water sanitation procedures and how to take that knowledge to under-developed countries.

Dr. Robert Metcalf, one of the original founders of *Solar Cookers International* (SCI), is a retired professor of Microbiology at University of California. Robert has traveled extensively on projects for SCI and is well known for his work on water pasteurization and solar cookers in many countries. He has confirmed that contaminated water need only be pasteurized to make it safe to drink, whereas it is commonly thought that water must be boiled at the high temperature of 212°F / 100°C for 20 minutes to render safe.



In 2010, **Robert (Bob) Tait** came on the scene gathering research and ideas to enhance the WAPI. Currently he has donated over 55,000 WAPI units around the world to those in need of safe water. Dale Andreatta and Dr. Robert Metcalf, both Ph.D.'s, were involved in creating the WAPI. They shared their ideas with Bob Tait who improved, intensified, and perfected the device to where the co-creators agreed and requested Bob to make WAPIs for them. They were impressed and pleased that "*WAPIs for the World*" has dedicated volunteers who donate their time by assembling, by-hand, the small WAPI made to the highest standards.

The WAPI is useful immediately for people who currently boil water to make it safe for drinking. The WAPI clearly indicates when a safe pasteurization temperature has been reached and will save much fuel which is being wasted by excessive heating, deforestation and urban air pollution. Carry a WAPI in an emergency pack when camping, hunting, bicycling, hiking on the back roads and if your city says to boil your water.

