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Pure H₂O : Will Solar Distillation Kill Bacteria?

The purpose of my experiment was to see what method of water purification would kill bacteria from creek water the best. I tested with water purification tablets, carbon filter, and solar distillation. My hypothesis was that the solar distillation method would be the best method because the solar oven would heat the water to a temperature that would kill the bacteria. I took water from Coon Creek and tested the three methods. My control was untreated creek water. I took my samples to Animas Surgical Hospital. The techs there showed me how to streak the blood agar plates and then they were put in the incubator. I counted colonies of bacteria after 24 and 72 hours. Unfortunately, I did not have many bacteria in my control. I only counted 1 tiny colony. My solar distilled sample looked the same. My other two samples had bacteria in them. There must have been some contamination. This didn't tell me if my solar distillation method killed the bacteria, so I put creek water in the carbon filter bottle and used this water in the solar oven. The temperature in the oven got over 220 degrees F, which is enough to kill bacteria. I brought the samples to the lab. The distilled plate showed about 10 colonies and the carbon filtered water plate was covered colonies. I concluded that I was able to kill some, but not all the bacteria with solar distillation.