

A DAY AT THE BEACH WITH MY FRIENDS - THE ENTEROCOCCI

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Enterococci are indicator bacteria used to assess marine water quality using the 104 CFU/100ml EPA's standard for a single sample. Unfortunately, this method does not allow us to predict the origin or the prevalence of the enterococci enumerated in the environment. Furthermore, the method does not enable us to predict the residence time of the enumerated enterococci but it assumes, erroneously, that the contamination is fecal and recent. To detect a recent contamination event using this method, we must develop a technique that will allow us to compare the isolates genetic makeup through the “contamination” event, in an attempt to determine if new strains are introduced to seawater system and their possible origin. To accomplish this we used a combination of classical microbiological techniques with a molecular approach that allow us to better understand and assess recreational water quality in a tropical setting.