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Isolation of Propionibacterium acnes

The purpose of this investigation is to determine if *Propionibacterium acnes* can be cultured and isolated from subject samples for further studies. Persons suffering from acne, a skin condition caused in part by *P. acnes*, will benefit from the data in this study. Scientists may be able to use this data to develop further acne treatments. Culturing and isolation *P. acnes* from samples was the goal. The researcher hypothesized that *P. acnes* could be cultured and isolated based on how it survives and because it had been done by other studies. Control growth tests were run successfully, and then subject samples were taken from acne pustules by penetrating the skin and collecting pus fluid. Samples were streaked out onto Trypticase Soy Agar with 5% Rabbit's blood plates. After 48 hours of growth, biological tests were run to determine *P. acnes* presence. There was growth on 6 subject plates. All subject plates with growth were negative for Indole tests and positive for Catalase tests. *Propionibacterium acnes* was not present in any trials. Data did not support the hypothesis; therefore the hypothesis must be rejected. Because subject plates were negative for the Indole test, and the *P. acnes* control was positive, it was determined that *P. acnes* could not be cultured and isolated from subject samples.