Using Urine and Saliva Solutions in a Capillary Tube Precipitation Test to Detect Dust and Dander Allergens in IgE Sensitized Individuals: A New Non-Intrusive Antigen/Antibody Reaction Test

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The purpose of this research is to create a new non-intrusive allergy test, that is less expensive, more time efficient, and can provide an alternative for not only the general majority of patience, but also the elderly, young children, and at-risk people with lower immune systems. The trials involved eight participants (eight who provide saliva & five of those provided urine) that were either allergic to both cats and dogs, one or the other, or were not allergic to either. Along with that, two cats and three dogs provided fur that was then used to extract dander from, by either water or in another trial acetone. One milliliter of the antibody (saliva or urine) was put into a test tube followed up by one milliliter of the antigen (dander). This process was used from five of the trials and then the last four trials were used as a positive and negative control. This resulted in nine trials with 156 test tubes. Further research needs to be done on commercial antigen solutions and reaching maximum consistency. This research and further research can accomplish the goal of creating a safer alternative for patience to never have to come in contact with what they are allergic to during an allergy test.

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