

Applicant

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Project Title

Do taste receptors play a role in rheumatic disease?

Project Summary

People with inflammatory arthritis like rheumatoid arthritis (RA) have more mouth disease than healthy people. Mouth disease may even cause RA. People with mouth disease are also more likely to have other chronic medical problems including heart disease, diabetes and lung disease which are also more common in RA. We believe RA is caused by how the body fights infection and that changes to bacteria, and/or the proteins that fight bacteria play a role. New research suggests proteins which help us taste bitter foods, called T2Rs, help fight bacteria. We believe that variations in T2Rs may impact how well the body fights mouth bacteria and that this may impact risk of autoimmune diseases like RA, or other even the risk of other chronic conditions. In this study we will test for associations between differences in the genes that code for T2Rs with both arthritis and oral disease.

Keywords

Autoimmune, Arthritis, Oral health