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(54) **Title**: METABOLITES FOR ORAL HEALTH AND USES THEREOF

(57) **Abstract**: The present invention provides various methods of using metabolite profiles correlated with periodontal disease or a health oral status for the diagnosis of periodontal disease, identification of responders and, or non-responders to therapeutic agents for periodontal disease, a method to test the efficacy of test compounds to prevent periodontal disease. The present invention also provides for a dentifrice composition containing an effective amount of a metabolite therapeutic agent which brings about a greater change in metabolite levels compared to a control dentifrice composition.