

DENTAL CARIE RESISTANCE AND THE APPLICATION OF SEALANTS

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Dental Caries are a commonly seen issue in the oral health of almost all individuals. Also known as cavities, dental caries occur when a combination of acid-producing bacteria and the fermentation of carbohydrates takes place in the presence of saliva and left-over foods. Cavities are prevalent in the primary teeth of children due to the weak outer coating of the teeth, also known as enamel. Cavities form under various conditions including the presence of cariogenic bacteria, lack of fluoride exposure, or lack of oral care. Methods used to prevent dental caries from forming include brushing teeth regularly, fluoride rises, and the application of sealants. Sealants are a UV-light cured resin that is applied to the chewing surfaces of teeth. Once applied, the teeth are temporarily protected from decay. Sealants are commonly placed as a precaution to potential decay, but are they worth the money? In a laboratory setting, Sealants were placed on bovine teeth and exposed to vinegar to determine the resistance to erosion over time. The teeth will come in contact with the vinegar solution for four hours for 30 days. Results are not yet finalized, but at the conclusion of the trial, a scanning electron microscope and photographic images will determine the amount of sealant and tooth erosion.