CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)

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Project Number

22046

Project Title

Dental Sealants Alone versus Dental Sealants and Proper Brushing Habits

Abstract

Objectives/Goals

To find whether Dental sealants can alone stop decay, or if proper brushing habits are more important than dental sealants.

Methods/Materials

1. First, prepare 12 extracted molars by thoroughly (3 min. each) brushing. Six will be sealed by x professional dentist. Six will be unsealed.
2. SOAK ALL TEETH in 50 mL of carbonated brown soda for 15 minutes daily.
3. TAKE the molars out of the soda.
4. BRUSH two sealed and two unsealed teeth three times/day, for 3 minutes/tooth.
5. BRUSH two sealed and two unsealed teeth once/day, for thirty seconds/ tooth.
6. KEEP two sealed teeth and two unsealed teeth as controls by not brushing, just rinsing after the exposure to the soda.
7. CHECK daily for any signs of decay.
8. CONCLUDE experiment after six days of testing.

12 teeth: 6 sealed 6 unsealed toothpaste 1 toothbrush

Results

I have found that the teeth that are unsealed and not brushed decayed the most. The sealants helped prevent cavities on the teeth with good brushing habits, but showed little aid in helping the teeth with bad brushing habits. Tooth S, a sealed and unbrushed tooth, showed the second most decay, meaning that tx sealants did help prevent cavities, which proved my thesis right, sealants DO have an effect on teeth with bad brushing habits, although they did not completely stop decay. On scale from one to ten, tooth U had the most decay at the number of 4. In second place of most decay, tooth S measured in 3. Tooth O had the third most decay, rating 2 points. The other 9 teeth showed no signs of decay. In conclusion, remember to brush and don#t forget to ask your dentist about sealants!

Conclusions/Discussion

Dental Sealants did have a small effect on teeth with both poor and proper brushing habits, but I hax found that proper brushing habits are the most important factor in keeping your mouth cavity-free.

Summary Statement

This project compares sealed teeth versus unsealed teeth with regards to brushing habits.

Help Received

Mrs. Maria Hoelck helped glue board, Dr. Tim Christian D.D.S. sealed teeth, Dr. Diane J. Milberg D.D.S. supplied the instrument used to measure decay in this project, the dental offices of Dr.Lester Machado, M.D., D.D.S., F.R.C.S. (Ed) and Dr. Joel S. Berger, D.D.S., M.D. for supplying the teeth used in this

Preliminary