

Review of: "Relationship between In Vitro Physical Properties and In Situ Biofilm Formation of Fissure Sealants"

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Potential competing interests: No potential competing interests to declare.

Comments/Questions for Authors:

Clarification on HAP Paste Composition: The article mentions the use of an HAP-containing paste in the in situ experiments, but there is limited information about the composition and properties of this paste. Could the authors provide more details on the specific components of the paste, especially those relevant to its potential impact on biofilm formation?

Consideration of Patient Compliance: The study involves in situ experiments with children using removable space maintainers. While the article mentions good compliance among the volunteers, did the authors face any challenges in ensuring consistent and proper use of the space maintainers and HAP paste by the children throughout the experimental period? How was patient compliance monitored and addressed?

Comparison with Previous Research: The article discusses the correlation between physical properties of materials and biofilm formation. Could the authors elaborate on how their findings align with or differ from previous research in this area? Are there any unexpected results or trends that warrant further investigation?

Exclusion of Enamel in In Situ Study: The article mentions the exclusion of enamel in the in situ study due to concerns about contamination in children's mouths. Could the authors provide more insight into this decision and discuss any potential implications for the study's findings, considering enamel is a natural surface in the oral environment?

Discussion on Clinical Relevance: While the study provides valuable insights into the relationship between physical properties and biofilm formation, it would be helpful to discuss the clinical implications of the findings. How might the observed correlations influence the selection and performance of fissure sealant materials in real-world dental practice, especially in pediatric dentistry?

Overall, the study appears comprehensive and provides valuable information on the relationship between physical properties and biofilm formation in fissure sealant materials. The suggested clarifications and additional context could enhance the readers' understanding and interpretation of the results.