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<th>Title</th>
<th>Stability of tooth minerals in plaque fluid and saliva</th>
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<td>Author(s)</td>
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W. W.-L. LUNG, A.F. DAVIES (National Museum of Science and Technology, University of Hong Kong, Hong Kong).
Previous studies have shown that the rate of demineralization of hydroxyapatite could vary significantly with different saliva conditions. It has been shown that the rate of demineralization is influenced by the pH, temperature, and the presence of certain saliva components. However, the mechanism by which these factors affect the stability of tooth minerals is not fully understood. This study aimed to investigate the stability of tooth minerals in plaque fluid and saliva under different conditions. The results indicated that the stability of tooth minerals in plaque fluid and saliva is influenced by the pH, temperature, and the presence of certain saliva components. Further studies are needed to understand the mechanisms by which these factors affect the stability of tooth minerals.

266 The Mechanism of Hydrolysis and Thrombin Inactivation on Titanium Oxide Surfaces.
Y. Fujitani, J. Mooney, A. Nomura (Second Dept. of Chemistry, Kanazawa University, Kanazawa, Japan).
This study aimed to investigate the mechanism of hydrolysis and thrombin inactivation on titanium oxide surfaces. The results indicated that the hydrolysis of titanium oxide surfaces is affected by the pH, temperature, and the presence of certain saliva components. Further studies are needed to understand the mechanisms by which these factors affect the hydrolysis of titanium oxide surfaces.

267 Influence of Polysaccharide and Phospholipid on the Crystal Growth of Octacalcium Phosphate.
Octacalcium phosphate (OCP) is a transient mineral that forms during the early stages of bone formation. The crystal growth of OCP is influenced by various factors, including pH, temperature, and the presence of certain saliva components. This study aimed to investigate the influence of polysaccharide and phospholipid on the crystal growth of OCP. The results indicated that the crystal growth of OCP is affected by the pH, temperature, and the presence of certain saliva components. Further studies are needed to understand the mechanisms by which these factors affect the crystal growth of OCP.

268 Influence of Polysaccharide and Phospholipid on the Crystal Growth of Octacalcium Phosphate.
Octacalcium phosphate (OCP) is a transient mineral that forms during the early stages of bone formation. The crystal growth of OCP is influenced by various factors, including pH, temperature, and the presence of certain saliva components. This study aimed to investigate the influence of polysaccharide and phospholipid on the crystal growth of OCP. The results indicated that the crystal growth of OCP is affected by the pH, temperature, and the presence of certain saliva components. Further studies are needed to understand the mechanisms by which these factors affect the crystal growth of OCP.

269 Solubility Behavior of Bone Mineral in Solutions of Various pHs.
It has been shown that the solubility behavior of carbonated apatite (CAP) and human dental enamel is best described by the MESS (measurable equilibrium solubility) dissolution process. This study aimed to investigate the solubility behavior of bone mineral in solutions of various pHs. The results indicated that the solubility behavior of bone mineral is influenced by the pH, temperature, and the presence of certain saliva components. Further studies are needed to understand the mechanisms by which these factors affect the solubility behavior of bone mineral.

270 The Possible Role of Calcium Phosphate Formation in Stimulation of Calcium Phosphate Formation.
M. EDULAMAN, M. MATTHEW, B. O. POWERS, E. F. G. GOLDBERG, and D. S. AUER (University of Texas, Austin, TX).
Calcium phosphate formation is an important process in the formation of bone and teeth. This study aimed to investigate the possible role of calcium phosphate formation in stimulation of calcium phosphate formation. The results indicated that calcium phosphate formation is influenced by various factors, including pH, temperature, and the presence of certain saliva components. Further studies are needed to understand the mechanisms by which these factors affect the calcium phosphate formation.

271 Formation and Solubility of Magnesium-substituted Whiskers (6-TCP).
Magnesium-substituted whiskers (6-TCP) is a principal inorganic component in human dental calculus and has been reported in other pathological calcifications and in artificial human dentin. Like other phosphate minerals, the 6-TCP is not formed in vivo and has been proposed as possible human malformation. This study aimed to investigate the formation and solubility of 6-TCP in human dental calculus. The results indicated that the formation and solubility of 6-TCP is influenced by various factors, including pH, temperature, and the presence of certain saliva components. Further studies are needed to understand the mechanisms by which these factors affect the formation and solubility of 6-TCP.

272 Rationale for Laser-Assisted Inhibition of Enamel Demineralization.
Carbon dioxide (CO2) laser treatment of dental enamel can inhibit sub-surface caries lesion progression by up to 85% (Featherstone et al., 1995). This study aimed to determine the feasibility of shielding enamel demineralization by converting efficacy to heat. The results indicated that carbon dioxide (CO2) laser treatment of dental enamel can inhibit sub-surface caries lesion progression by up to 85%. Further studies are needed to understand the mechanisms by which the CO2 laser treatment inhibits enamel demineralization.

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