

## SUPPLEMENTARY MATERIAL

Limeback H, Enax, J, Meyer F. Biomimetic hydroxyapatite and caries prevention: a systematic review and meta-analysis. *Can J Dent Hyg.* 2021;55(3):148–59.

*This table lists the 291 publications found from the search described in Table S2, showing for each author what kind of a publication it was, what basic mechanism was tested (what experimental design it had), and whether the study was in vitro, in vivo, in situ or an RCT. The full bibliographic citations for these publications follow this table.*

**Table S3.** Summary of studies on hydroxyapatite and enamel interactions

Study & publication date (in alphabetical order)	Focus of investigation								Type of study			
	Review	Tooth surface effects	Anti plaque	Remin	Caries reduction	Prevent tooth erosion	Whitening	Desensitization	In vitro	In vivo	In situ	RCT
Abdelnabi et al. 2020	√											
Ajami et al. 2016		√								√		
Al Asmari & Almutairi 2019			√									√
Al Asmari & Khan 2019								√	√			
Alharith et al. 2021								√				√
Al-Maliky et al. 2014								√	√			
Al-Sanabani 2012	√											
Amaechi et al. 2020					√				√			
Amaechi et al. 2019					√						√	
Amaechi et al. 2018								√				√
Amaechi et al. 2015								√	√			
Amaechi 2015	√											
Amin et al. 2015								√				
Anand et al. 2017								√				√
Aoki et al. 1998							√			√		
Arakawa et al. 2010			√						√			
Aras et al. 2020				√						√		
Arifa et al. 2019	√											
Arnold et al. 2016								√	√			
Arnold et al. 2015								√	√			
Ata 2019		√							√			
Aykut-Yetkiner et al. 2014						√			√			

Table S3. *continued*

Study & publication date (in alphabetical order)	Focus of investigation									Type of study		
	Review	Tooth surface effects	Anti plaque	Remin	Caries reduction	Prevent tooth erosion	Whitening	Desensitization	In vitro	In vivo	In situ	RCT
Badiee et al. 2020					√							√
Bajaj et al. 2016				√						√		
Bandekar et al. 2019				√						√		
Besinis et al. 2012								√		√		
Besinis et al. 2014				√						√		
Bologa et al. 2020								√		√		
Bommer et al. 2018							√	√				
Bonetti et al. 2014				√						√		
Bordea et al. 2020	√											
Bossù et al. 2020		√										√
Bossù et al. 2019		√										√
Brambilla et al. 2014			√							√		
Brown & Constanz 1994	√							√				
Browning et al. 2012								√				√
Carrouel et al. 2020	√											
Ceballos-Jimenez et al. 2018						√				√		
Chandru et al. 2020				√						√		
Choi et al. 2014								√				√
Cieplik et al. 2020				√						√		
Clarkson & Exterkate 2015	√											
Coceska et al. 2016				√						√		
Colombo et al. 2016				√						√		
Comar et al. 2013				√						√		
Cosola et al. 2017			√									√
Daas et al. 2018				√						√		





Table S3. *continued*

Study & publication date (in alphabetical order)	Focus of investigation									Type of study		
	Review	Tooth surface effects	Anti plaque	Remin	Caries reduction	Prevent tooth erosion	Whitening	Desensitization	In vitro	In vivo	In situ	RCT
Hannig & Hannig 2010a	√											
Hannig & Hannig 2010b	√											
Hannig & Hannig 2012	√											
Harks et al. 2016			√									√
Hegazy & Salama 2016			√	√							√	
Hill et al. 2015a								√		√		
Hill et al. 2015b				√						√		
Hiller et al. 2018								√		√		
Hojabri et al. 2020							√			√		
Hornby et al. 2009				√						√		
Hu et al. 2019	√							√				
Hu et al. 2018	√							√				
Huang et al. 2009				√						√		
Huang et al. 2011				√						√		
Hüttemann & Dönges 1987	√											
Hwang et al. 2010							√			√		
Iijima et al. 2019				√						√		
Iijima et al. 2017				√						√		
Ionescu et al. 2020	√											
Itthagarun et al. 2010					√					√		
Jena et al. 2017								√		√		
Jena & Shashirekha 2015								√				√
Jenabian et al. 2019	√							√				
Jeong et al. 2007		√								√		
Jeong et al. 2006					√					√		
Jiang et al. 2008		√					√			√		
Jin et al. 2013							√			√		
Joshi et al. 2019				√						√		
Jumanca et al. 2019				√						√		

Table S3. *continued*

Study & publication date (in alphabetical order)	Focus of investigation								Type of study			
	Review	Tooth surface effects	Anti plaque	Remin	Caries reduction	Prevent tooth erosion	Whitening	Desensitization	In vitro	In vivo	In situ	RCT
Juntavee et al. 2017	√											
Juntavee et al. 2018				√					√			
Kamath et al. 2017					√				√			
Kani et al. 1989					√							√
Kani et al. 1988					√				√			
Kani 1994					√							√
Karumuri et al. 2020				√					√			
Kengadaran et al. 2020					√				√			
Kensche et al. 2017			√									√
Kensche et al. 2016						√						√
Khandelwal et al. 2020					√				√			
Khonina et al. 2020				√					√			
Kim BI et al. 2006								√				√
Kim MY et al. 2007				√					√			
Kim SH et al. 2009								√		√		
Koçyi it et al. 2020		√							√			
Kolmas et al. 2014			√						√			
Körner et al. 2020					√				√			
Krishnan et al. 2016		√							√			
Kuilong et al. 2007				√					√			
Kulal et al. 2016								√	√			
Kunam et al. 2019		√							√			
Kutsch et al. 2013	√											
Leal et al. 2020								√	√			
Lee SY et al. 2008								√	√			



Table S3. *continued*

Study & publication date (in alphabetical order)	Focus of investigation									Type of study		
	Review	Tooth surface effects	Anti plaque	Remin	Caries reduction	Prevent tooth erosion	Whitening	Desensitization	In vitro	In vivo	In situ	RCT
Meyer & Enax 2019a	√											
Meyer & Enax 2019b	√											
Meyer et al. 2017	√											
Meyer & Sztajer 2020	√											
Mielczarek & Michalik 2014				√					√			
Min et al. 2015						√					√	
Min et al. 2011						√			√			
Mohd Janurudin et al. 2007							√		√			
Monterubbianesi et al. 2020								√				√
Mowafy et al. 2019					√					√		
Muntean et al. 2019		√							√			
Najibfard et al. 2011				√							√	
Niwa et al. 2001							√		√	√		
Nobre et al. 2020a		√									√	
Nobre et al. 2020b			√								√	
Nocerino et al. 2014			√						√			
Nozari et al. 2017				√					√			
Oliveira et al. 2016									√			√
Onuma et al. 2005		√							√			
Onwubu et al. 2018	√											
Orsini et al. 2013								√				√
Orsini et al. 2010								√				√
Pajor et al. 2019	√											
Pałka et al. 2020								√	√			
Pallepati & Yavagal 2020				√					√			
Palmieri et al. 2013			√						√			
Park et al. 2007		√	√						√			



Table S3. *continued*

Study & publication date (in alphabetical order)	Focus of investigation								Type of study			
	Review	Tooth surface effects	Anti plaque	Remin	Caries reduction	Prevent tooth erosion	Whitening	Desensitization	In vitro	In vivo	In situ	RCT
Paszynska et al. 2021					√							√
Pedreira et al. 2011								√	√			
Peetsch & Epple 2011		√							√			
Pei et al. 2019								√	√			
Pepla et al. 2014	√											
Philip 2018	√											
Pinojj et al. 2014								√				√
Poggio et al. 2010						√			√			
Poggio et al. 2014						√			√			
Poggio et al. 2017						√			√			
Polyakova et al. 2019				√						√		
Porcelli et al. 2015				√					√			
Prihartini Devitasari et al. 2019		√							√			
Raj et al. 2016	√											
Ramis et al. 2018	√											
Rao & Malhotra 2011	√											
Raoufi & Birkhed 2010							√					√
Reddy et al. 2019	√											
Reis et al. 2018		√							√			
Reynolds & Wong 1983			√						√			
Rezvani et al. 2015							√		√			
Rezvani et al. 2016							√					
Rifada et al. 2020			√						√			
Rimondini et al. 2007				√					√			
Roveri et al. 2009a				√					√			

Table S3. continued

Study & publication date (in alphabetical order)	Focus of investigation								Type of study			
	Review	Tooth surface effects	Anti plaque	Remin	Caries reduction	Prevent tooth erosion	Whitening	Desensitization	In vitro	In vivo	In situ	RCT
Roveri et al. 2008	√											
Roveri et al. 2009b	√											
Roveri & lafisco 2010	√											
Ryu et al. 2009				√								
Sadiasa et al. 2013	√											
Sanavia et al. 2017	√						√			√		
Sarembe et al. 2020												
Schaefer et al. 2009		√								√		
Schlagenhauf et al. 2019					√							√
Scribante et al. 2020			√	√						√		
Seong et al. 2021								√				√
Shaffiey & Shaffiey 2016				√						√		
Shahmoradi et al. 2018					√					√		
Sharan et al. 2017	√											
Sharma et al. 2017				√						√		
Shetty et al. 2010								√		√		
Singh et al. 2017				√						√		
Singhal & Rai 2017				√						√		
Soares et al. 2018		√								√		
Souza et al. 2015				√								√
Srinivasan et al. 2014				√						√		
Steinert et al. 2020a	√											
Steinert et al. 2020b							√					√
Steinert et al. 2020c	Questionnaire	√						√				

Table S3. *continued*

Study & publication date (in alphabetical order)	Focus of investigation								Type of study			
	Review	Tooth surface effects	Anti plaque	Remin	Caries reduction	Prevent tooth erosion	Whitening	Desensitization	In vitro	In vivo	In situ	RCT
Sudradjat et al. 2020					√					√		
Surdacka et al. 2007				√							√	
Suryana et al. 2018		√							√			
Swarup & Rao 2012	√											
Tahmasbi et al. 2018					√				√			
Talaat et al. 2018					√				√			
Tamilselvi et al. 2018					√				√			
Tempesti et al. 2018								√	√			
Triwardhani et al. 2019					√				√			
Tschoppe et al. 2011	√											
Vano et al. 2014								√				√
Vano et al. 2015							√					√
Vano et al. 2018								√				√
Varghese et al. 2019				√					√			
Venegas et al. 2006		√						√				√
Verma et al. 2013												
Vijayasankari et al. 2019				√					√			
VJ & Thakur 2014								√		√		
Vyavhare et al. 2015				√					√			
Wang L et al. 2016								√		√		
Wang R et al. 2014								√	√			
Wierichs et al. 2020				√							√	
Yaberi & Haghgoo 2018						√						√
Yacout et al. 2015					√				√			

Table S3. continued

Study & publication date (in alphabetical order)	Focus of investigation								Type of study			
	Review	Tooth surface effects	Anti plaque	Remin	Caries reduction	Prevent tooth erosion	Whitening	Desensitization	In vitro	In vivo	In situ	RCT
Yamagishi et al. 2005				√					√			
Yu J et al. 2017a		√							√			
Yu Q et al. 2017b								√	√			
Yu J et al. 2016								√	√			
Yuan et al. 2019								√	√			
Yuan et al. 2012								√	√			
Zaharia et al. 2017				√					√			
Zalite & Locs 2017	√											
Zarem et al. 2016				√					√			
Zhang et al. 2015			√						√			

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