

Table 1. Properties of test solutions

pH	Added Ca mmol/L	Increase in ionic strength mmol/L	Buffer capacity β mmol/(L.pH)	Added P mmol/L	Increase in ionic strength mmol/L	Buffer capacity β mmol/(L.pH)	[PO ₄ ³⁻] mmol/L
2.5	0		13.5	0		13.5	
	10	29.7	14.8	10	10.2	19.0	7.24.10 ⁻¹²
	20	59.5	15.4	20	20.3	24.1	1.81.10 ⁻¹³
3.25	0		10.6	0		10.6	
	10	28.1	10.8	10	9.5	12.3	4.04.10 ⁻¹²
	20	56.8	11.0	20	19.0	13.9	9.84.10 ⁻¹²
4.0	0		9.0	0		9.0	
	10	28.2	9.0	10	17.4	9.6	1.67.10 ⁻¹⁰
	20	53.6	9.4	20	27.6	10.1	3.92.10 ⁻¹⁰

β = buffer capacity; P = total phosphate

Figures

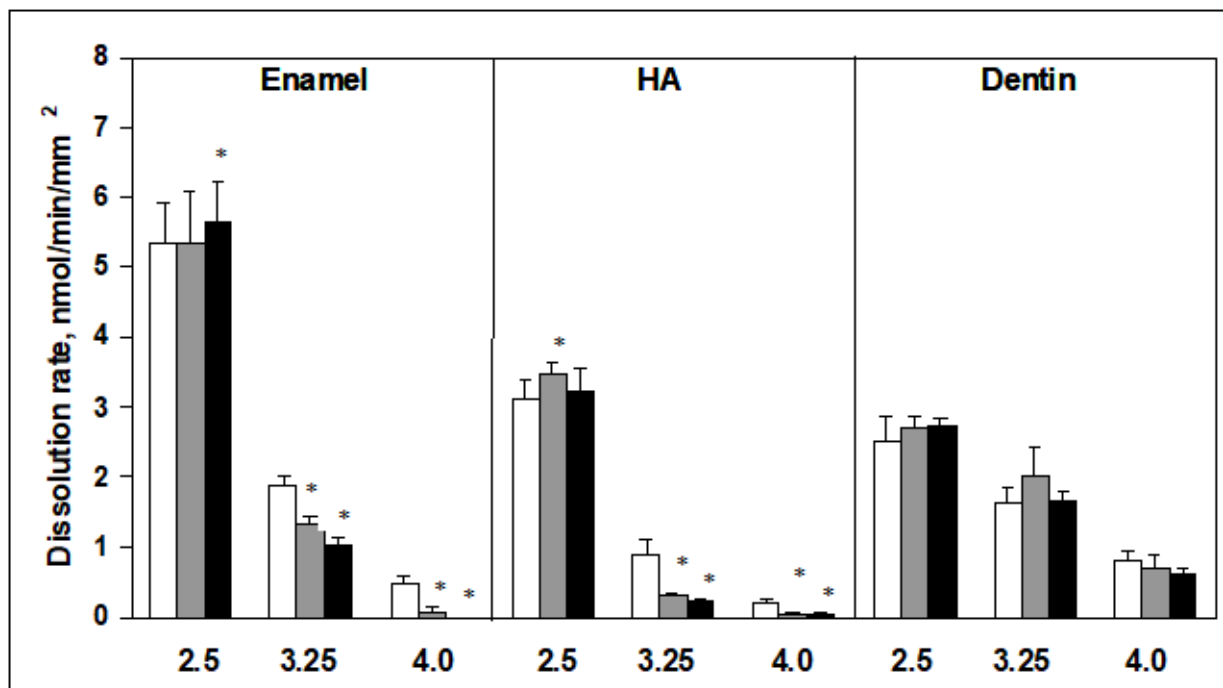


Figure 1. Effect of calcium on dissolution of enamel, compressed hydroxyapatite and dentin. White bars = control (no calcium); grey bars = 10 mmol/L calcium; black bars = 20 mmol/L calcium. Error bars = 1 SD. Asterisks indicate significant difference from control.

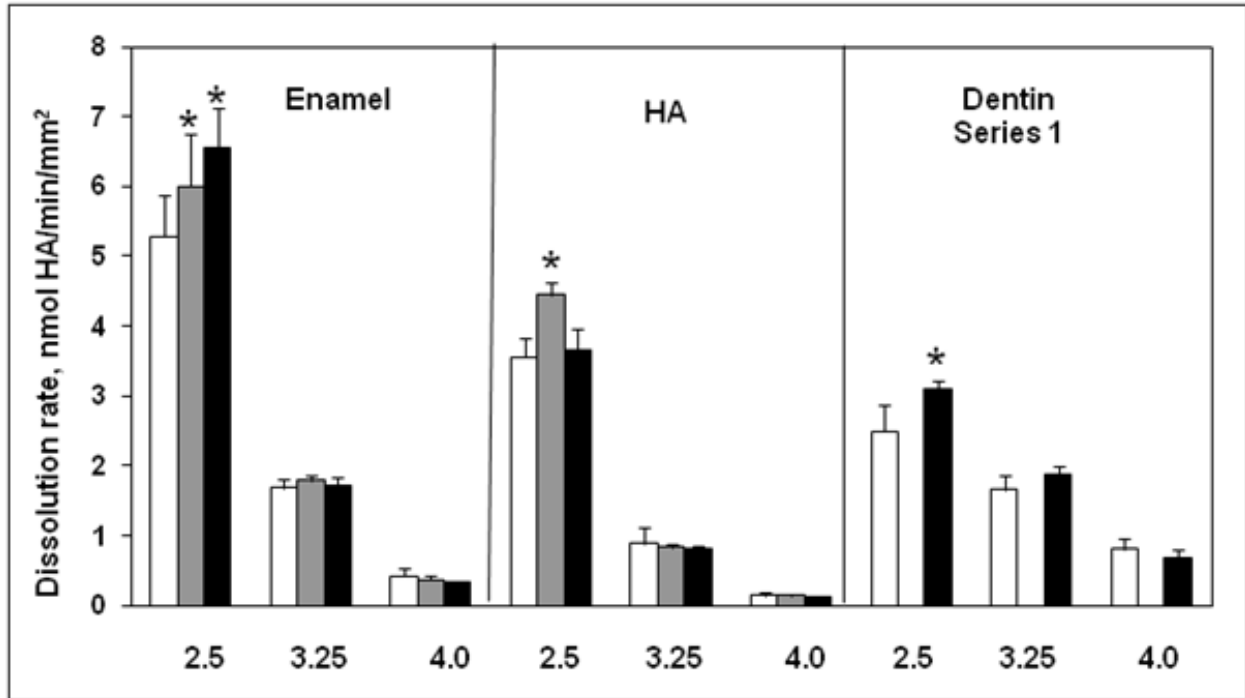


Figure 2. Effect of phosphate on dissolution of enamel, compressed hydroxyapatite and dentin (Series 1). White bars = control (no phosphate); grey bars = 10 mmol/L phosphate; black bars = 20 mmol/L phosphate. Error bars = 1 SD. Asterisks indicate significant difference from control.

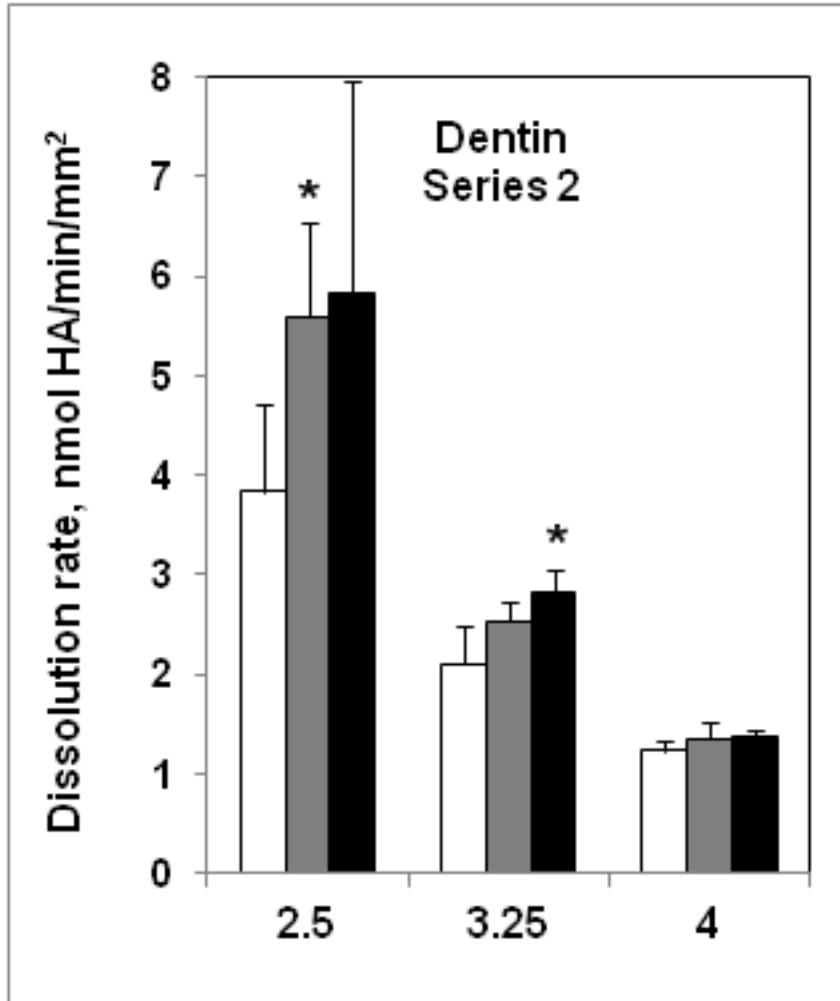


Figure 3. Effect of phosphate on dissolution of dentin (Series 2). White bars = control (no phosphate); grey bars = 10 mmol/L phosphate; black bars = 20 mmol/L phosphate. Error bars = 1 SD. Asterisks indicate significant difference from control.

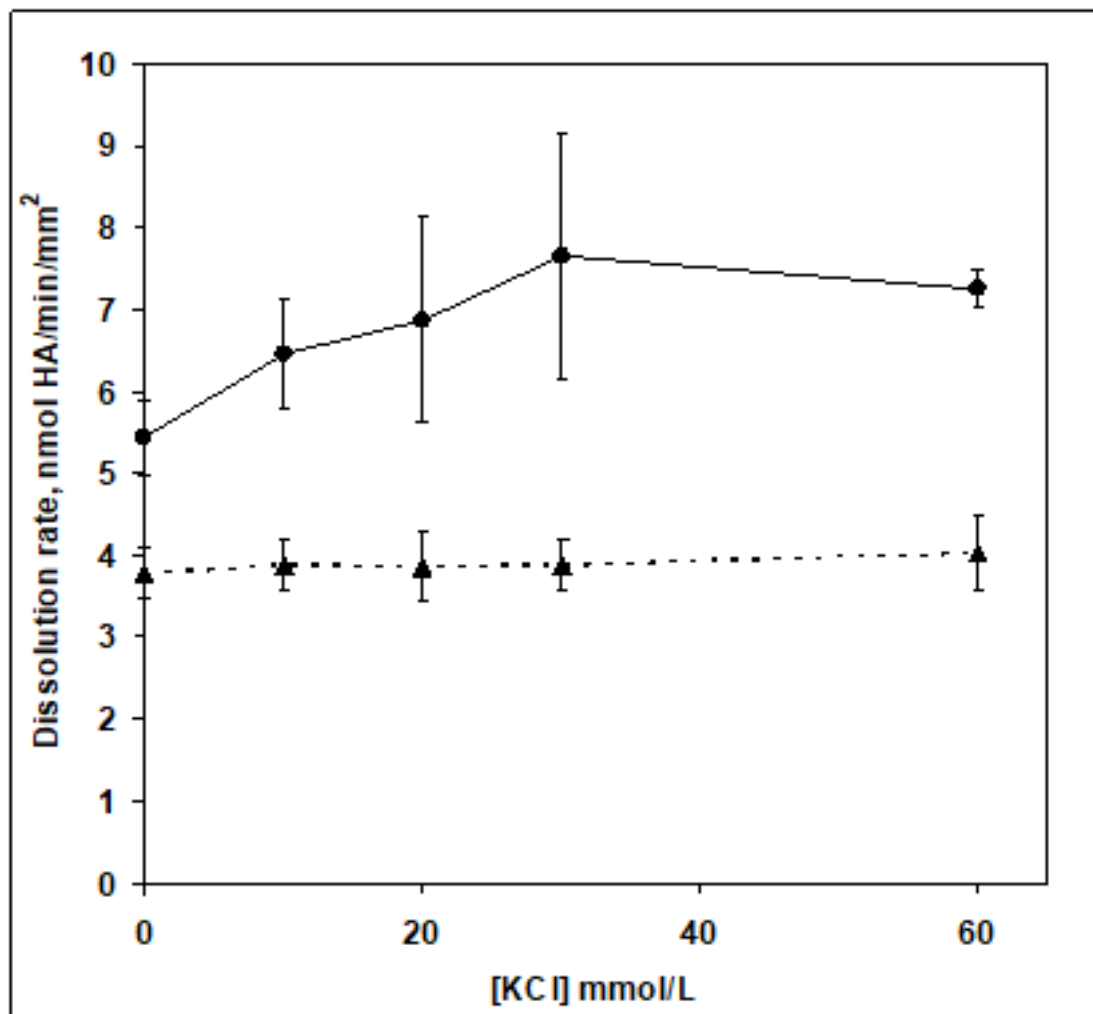


Figure 4. Effect of KCl concentration on dissolution rate of enamel (solid line) and compressed hydroxyapatite (broken line). Error bars = ± 1 SD.