

SUPPLEMENTARY INFORMATION

Table S1. Predicted BMD loss in the femoral neck of crewmembers of different ages and ethnicities in an opposition-class mission to Mars with a total duration of 400 days.

Astronauts age (year)	Male						Female					
	Non-Hispanic white		Non-Hispanic black		Mexican American		Non-Hispanic white		Non-Hispanic black		Mexican American	
	Before mission	After mission	Before mission	After mission	Before mission	After mission	Before mission	After mission	Before mission	After mission	Before mission	After mission
30-39	0.887±0.134	0.749	1.005±0.158	0.848	0.922±0.127	0.778	0.825±0.120	0.696±0.120	0.913±0.130	0.771	0.867±0.125	0.732
40-49	0.839±0.124	0.708	0.935±0.145	0.789	0.870±0.121	0.734	0.791±0.125	0.668±	0.915±0.153	0.772	0.848±0.127	0.716