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The Authors' Reply

We thank Dr. Grant for his interest in our contribution [1]. While vitamin D deficiency has been proposed as a cause of atherosclerosis, definitive data are lacking [2]. Regardless, we suggest that it is unlikely that the Egyptians or the several other populations we studied were vitamin D deficient. Grant posits that Egyptians who were mummified may have worn clothing over most of their body and lived predominately indoors. However, a robust supply of murals and statues created during the millennia in which mummification occurred suggest that clothing covered relatively little of the body. Archaeologic findings of the housing of ancient Egyptians commonly demonstrated generous courtyards and outdoor space. This and their use of walking as the predominant form of transportation suggest that much time was spent out of

doors. While modern-day Egyptians wear more clothing and likely spend less time outdoors, Mahmoud and Ali [3] found vitamin D deficiency to be very uncommon in a cohort of healthy modern-day Egyptians.

Another population in which we found that atherosclerosis was common were ancient Peruvians [4]. Iconography of the time (900 BCE to 1500 CE) also demonstrated the use of only light clothing. Modern-day Peruvians also experience only infrequent vitamin D deficiency, which is consistent with the country's tropical location. Similarly, vitamin D deficiency would be unexpected among the ancestral Puebloans who also experienced atherosclerosis while living with little protection from the sun on the Colorado Plateau 1500 BCE to 1500 CE years ago.

As Dr. Grant suggests, we too continue to search for causes of the prevalence of atherosclerosis in ancient times.

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