Bioapatite, the mineral essential to human bones and teeth

H. CATHERINE SKINNER[1], HELEN E. KING[2] AND HOLGER PETERMANN[3]

Department of Geology and Geophysics, Yale University, New Haven, U.S.A.
[1]catherine.skinner@yale.edu
[2]helen.king@yale.edu
[3]holger.petermann@yale.edu

The skeletal structure essential for vertebrates is composed of bioapatite, the mineral that resembles geoapatites. Distinctions of this remarkably fine grained and constantly replaced biomineral species over our lifetimes have been the focus of investigations for over 200 years. Today's research efforts illustrate that maintenance is markedly influenced not only by genetics, but by personal choices, and variables such as activity and nutrition. An overview of the normal bone mineral species, hydroxylapatite will be presented to illustrate the latest understanding of this dynamic material and some of the issues that actively remain under investigation.

[1] Skinner, HCW (2013) *Mineralogy of Bones*. "Essentials of Medical Geology" Rev. Edition, Selinus *et al* (Eds) Springer Science, Dordrecht .