Lanham-New, Susan, “Importance of calcium, vitamin D and vitamin K for osteoporosis prevention and treatment”

Bones get broken because the load placed on them is more than they can absorb. Loss of bone density means that they can withstand less and less load. Menopause is a peak time for bone loss. We’re seeing that calcium intake >5 years post menopause is helpful whereas calcium intake <5 years post menopause is negligible in stopping bone loss. Hips fractures account for a great amount of the fractures. Calcium in absorbed better when vitamin D is present, vitamin D stimulates proteins that help bind the calcium into our system. Calcium is lost primarily through renal excretion. That you need both vitamin D and calcium supplemented at the same time in elder years in order to reduce bone loss and lead to less fractures. Vitamin D alone actually increases fracture rates. Note that there is a difference in studies performed of free-living populations versus institutionalized populations.