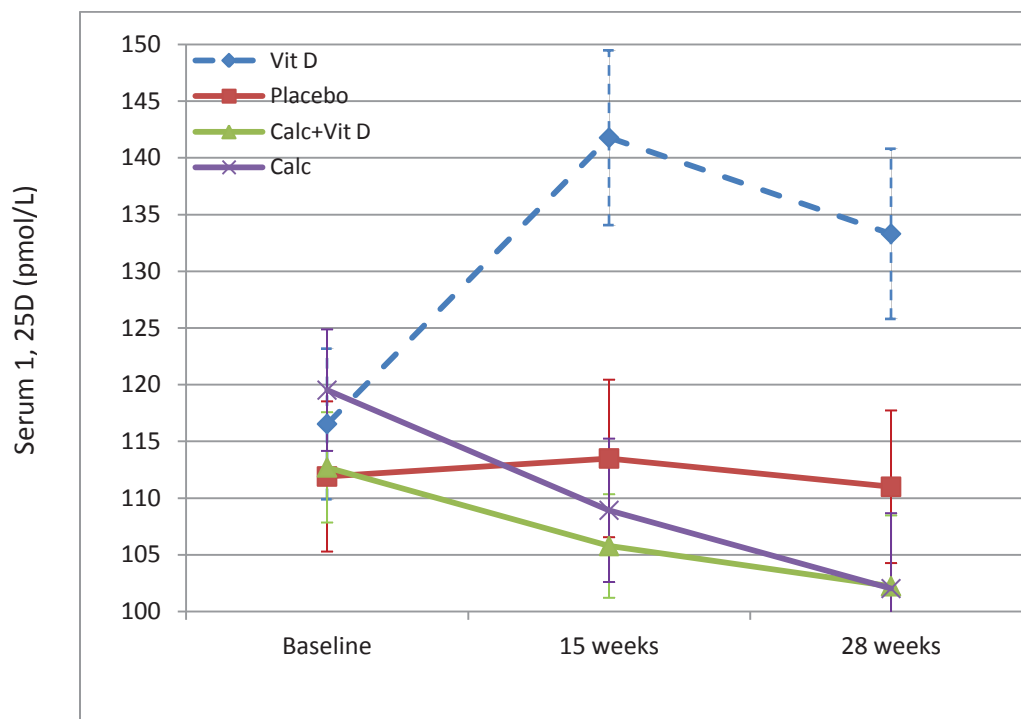


Supplemental Figure 1: The response of serum 25OHD. The dose-response of vitamin D supplemented groups is curvilinear. Mixed effect model illustrated that the interaction terms 'Time*Vit_D' was highly significant [$F=176.5$, $df=(1, 271)$, $p<.0001$] and 'Time*Calcium' was non-significant [$F=0.06$, $df=(1., 271)$, $p=0.79$]. [Error bars represent standard errors]



Supplemental Figure 2: The response of serum calcitriol to a calcium load under each condition. Serum calcitriol does not decrease even after a calcium load in the vitamin D group. Mixed effect model revealed that the interaction terms 'Time*Calcium' was significant [$F=11.26$, $df=(1, 260)$, $p<.001$] and 'Time*vit_D' was non-significant [$F=3.38$, $df=(1, 260)$, $p=0.067$]. [Error bars represent standard errors].