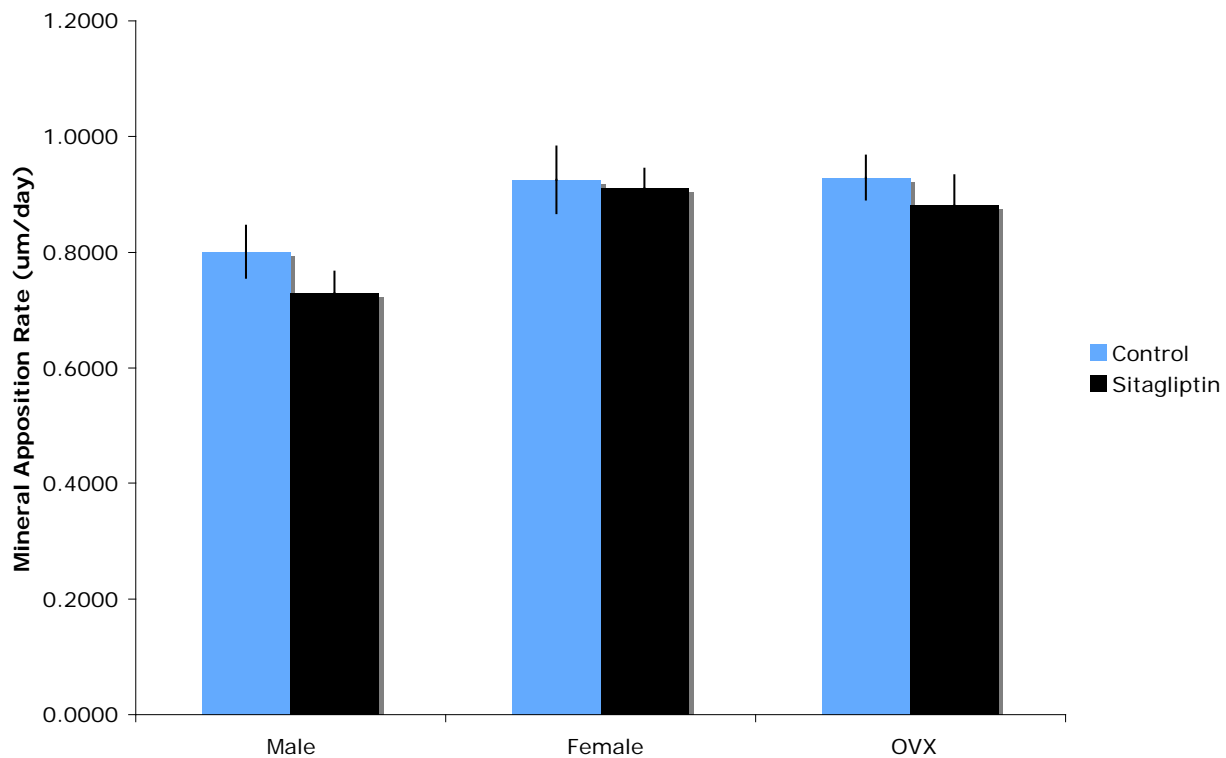


## Supplemental Figure 1

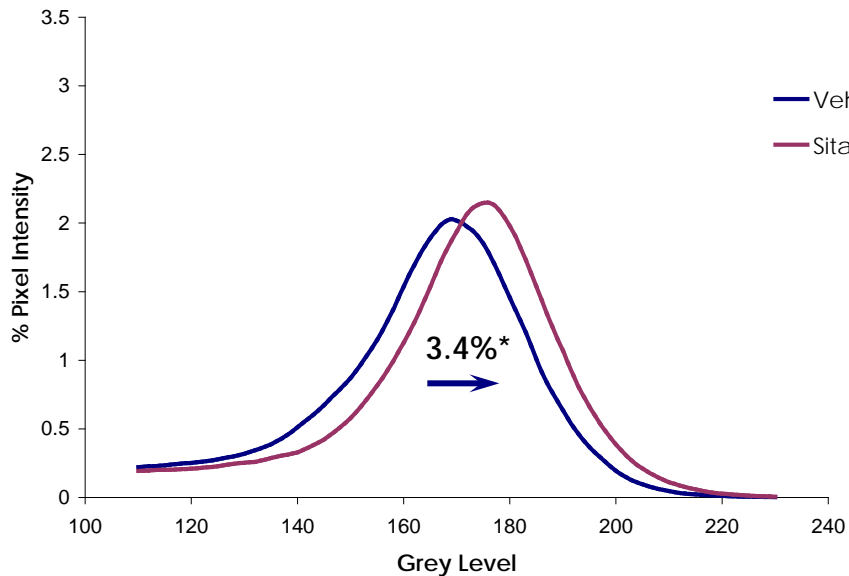
Mineral apposition rate for male, female, and OVX HFD mice treated with vehicle or pioglitazone\* =  $p < 0.05$



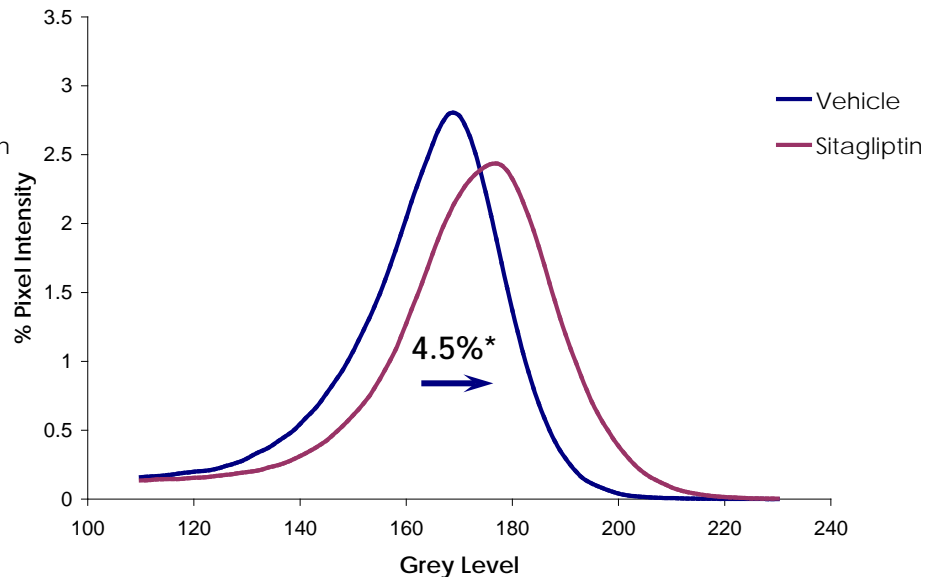
## Supplementary Figure 2

Mineral apposition rate for male, female, and OVX HFD mice treated with vehicle or sitagliptin \*=  $p < 0.05$

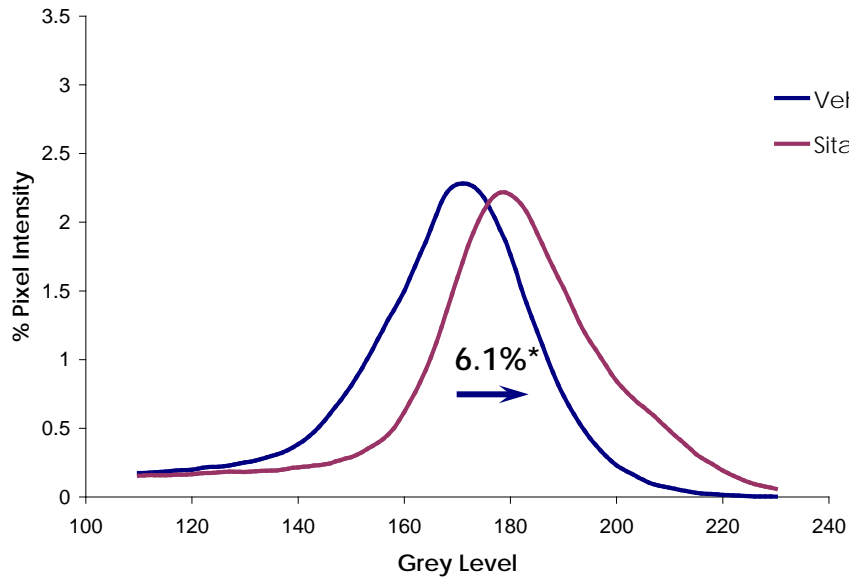
Trabecular Mineralization Profiles of Male Mice



Trabecular Mineralization Profiles of Female Mice

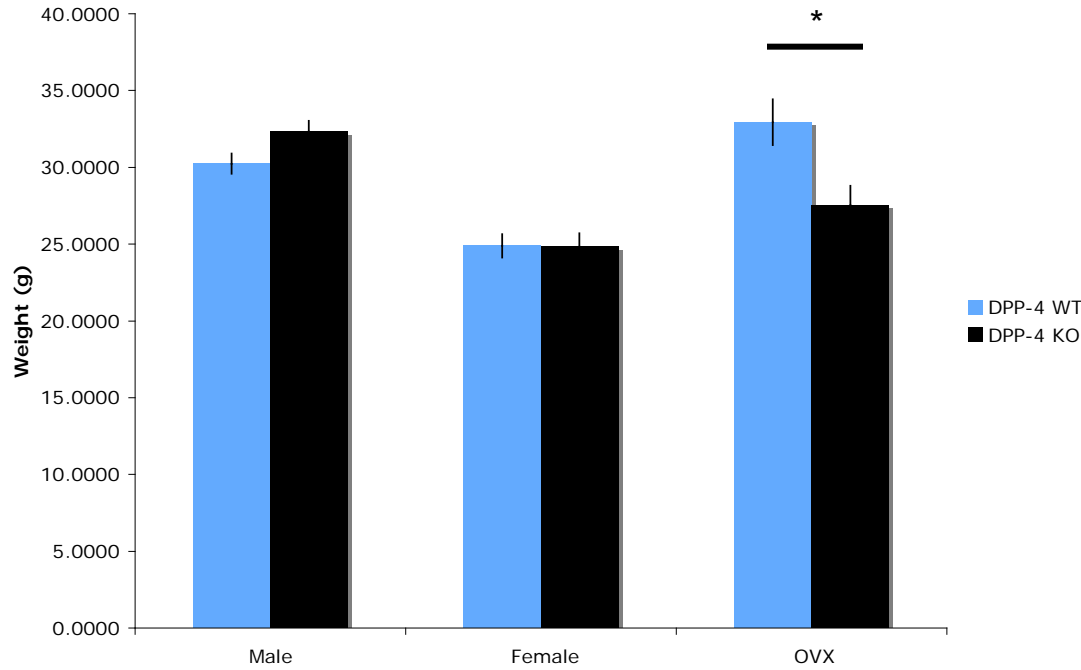


Trabecular Mineralization Profiles of OVX Mice



Average mineralization profiles for trabecular bone area in sitagliptin- vs. vehicle-treated HFD mice  
\* =  $p < .05$  vehicle vs. sitagliptin

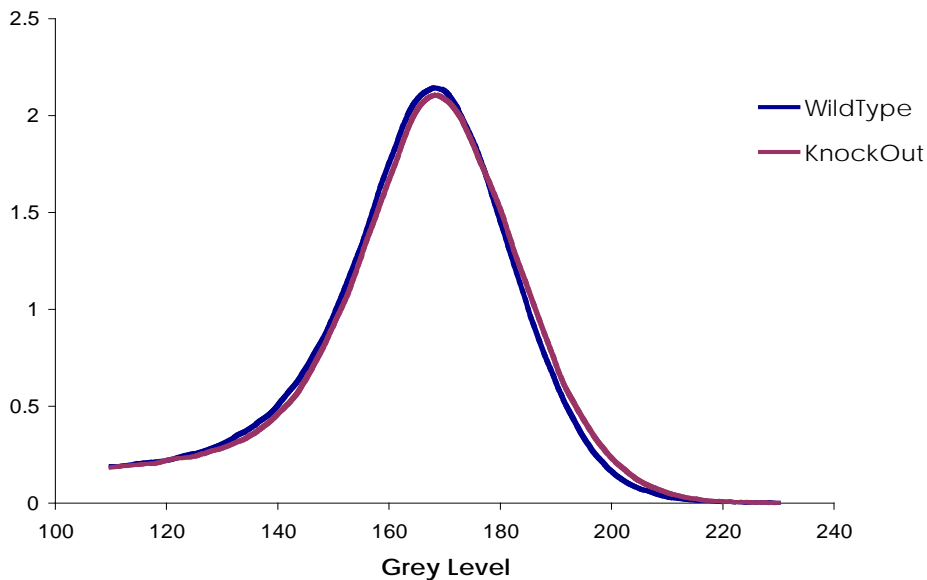
## Body weight in *Dpp4*<sup>+/+</sup> and *Dpp4*<sup>-/-</sup> mice



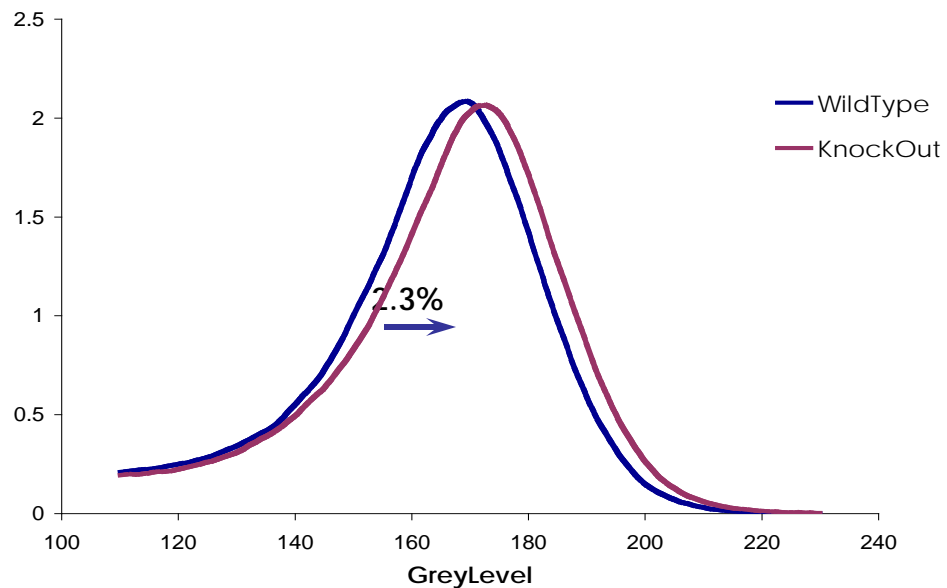
## Supplementary Figure 4

Body weight in male and female littermate *Dpp4*<sup>+/+</sup> and *Dpp4*<sup>-/-</sup> 7 month old mice \* = p<.05, DPP-4 WT vs. DPP-4 KO

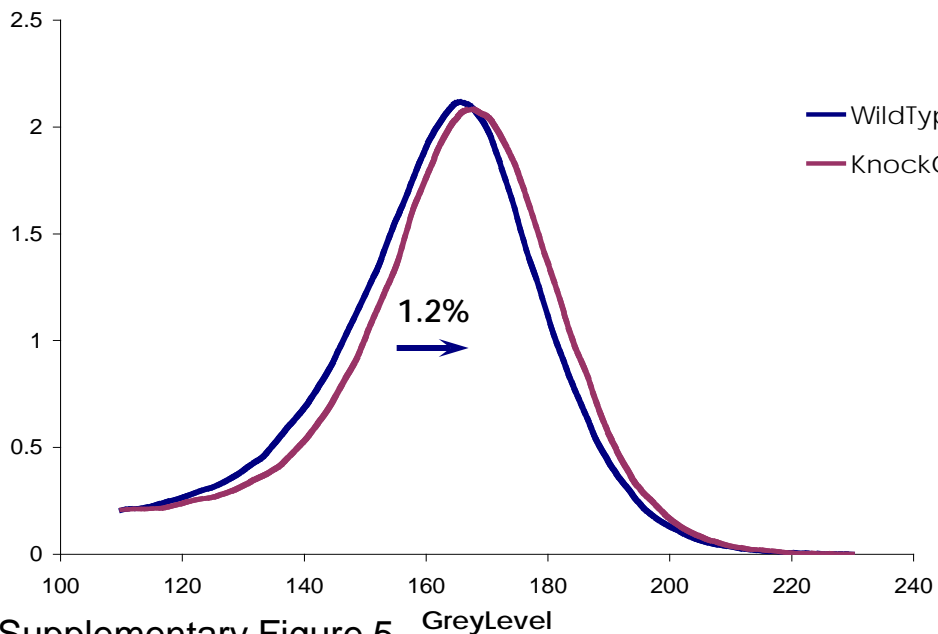
Trabecular Mineralization Profiles of Male Mice



Trabecular Mineralization Profiles of Female



Trabecular Mineralization Profiles of OVX Female Mice



Average mineralization profiles for trabecular bone area in *Dpp4*<sup>+/+</sup> and *Dpp4*<sup>-/-</sup> mice

