

**Supplement Table 8. Bone Mineral Analysis at 5 months ( $\mu\text{g/g}$ )**

**Male**

<b>Mineral / Diet Group</b>	<b>AIN 76A</b>	<b>AIN 76A+ AQ</b>	<b>HFWD</b>	<b>HFWD+ AQ</b>
<b>Fluoride</b>	1.09	0.91	1.15	0.79
<b>Barium</b>	4.36	5.9	7.72	4.16
<b>Boron</b>	<0.5	<0.5	<0.5	<0.5
<b>Calcium</b>	199500	199400	193100	209300
<b>Copper</b>	<0.5	<0.5	<0.5	<0.5
<b>Iron</b>	144	69	380	134
<b>Lanthanum</b>	1.24	1.13	1.26	0.88
<b>Magnesium</b>	3036	3250	2927	3208
<b>Manganese</b>	2	1.97	7.2	1.63
<b>Phosphorus</b>	95403	95565	90000	98306
<b>Potassium</b>	759	724	758	903
<b>Selenium</b>	<0.5	<0.5	<0.5	<0.5
<b>Silicon</b>	4.75	<0.5	4.34	<0.5
<b>Strontium</b>	50.2	210	112	231
<b>Zinc</b>	111	124	246	140

The long bones (one femur and tibia from each animal in the group) were “pooled” and analyzed for levels of trace metals found in the multi-mineral-rich product to give a single value at each time point. Some of these elements were recorded below detectable levels when their concentration level found below  $0.5\mu\text{g/g}$ . The levels of individual trace elements were determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES) except Flouride which was done by AOAC 984.37 assay.