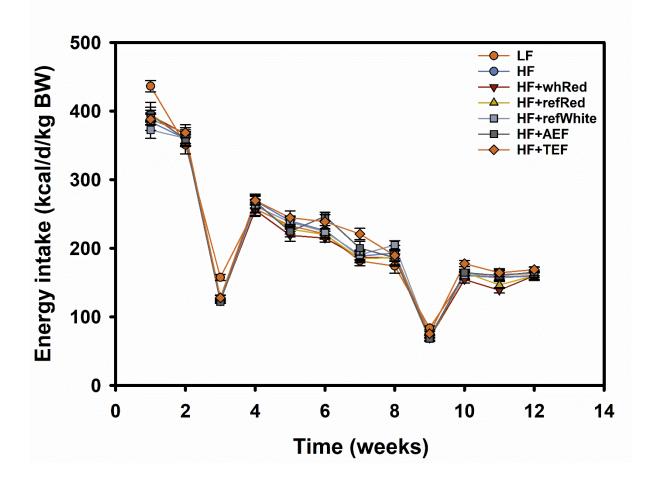
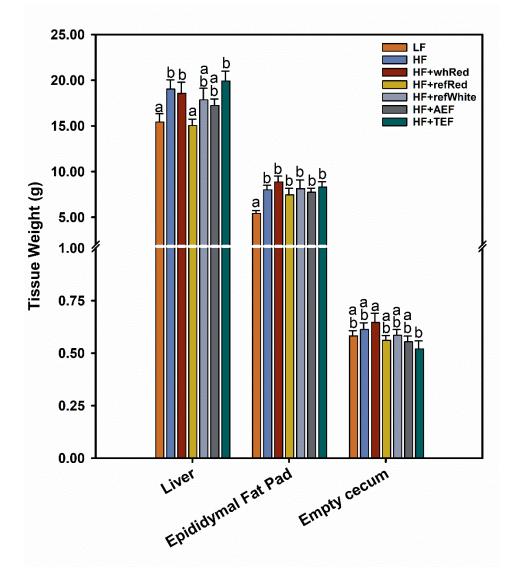


**Supplemental Figure 1** Effect of wheat-and wheat fraction-containing diets on (A) final body weight and (B) body weight over the course of the 12-weekstudy. Differences among groups were tested using ANOVA and Duncan's multiple range test. \* indicates that NF tended to be lower than all other diet groups except HF+refRed (P < 0.1). Bars that do not share are significantly different (P < 0.05). Abbreviations are as follows: NF = normal fat diet (AIN-93G); HF = high-fat diet; HF+whRed= HF + whole red wheat; HF+refRed= HF + refined red wheat; HF+refWhite= HF + refined white wheat; HF+AEF = HF + aleurone-enriched fraction; HF+TEF = HF + testa-enriched fraction.



Supplemental Figure 2 Effect of wheat-and wheat fraction-containing diets on energy intake over the course of the 12-week study. Differences among groups were tested using ANOVA and Duncan's multiple range test. \* indicates that NF was significantly greater than all other groups (P = 0.0153 for week 1; P < 0.001 for week 3). \*\* indicates that HF+TEF was significantly greater than all other groups except HF+AEF (P = 0.0090). # indicates that HF+TEF was significantly greater than all other groups except HF+refRed and HF+AEF (P = 0.0431). ## indicates that HF+TEF was significantly greater than HF+refRed and HF+whRed(P = 0.0218). Abbreviations are as follows: NF = normal fat diet (AIN-93G); HF = high-fat diet; HF+whRed= HF + whole red wheat; HF+refRed= HF + refined red wheat; HF+refWhite= HF + refined white wheat; HF+AEF = HF + aleurone-enriched fraction; HF+TEF = HF + testa-enriched fraction.



**Supplemental Figure 3** Effect of wheat-and wheat fraction-containing diets liver, epididymal fat pad, and empty cecum weights. Differences among groups were tested using ANOVA and Duncan's multiple range test. Bars that do not share the same letter are significantly different (P < 0.05). Abbreviations are as follows: NF = normal fat diet (AIN-93G); HF = high-fat diet; HF+whRed= HF + whole red wheat; HF+refRed= HF + refined red wheat; HF+refWhite= HF + refined white wheat; HF+AEF = HF + aleurone-enriched fraction; HF+TEF = HF + testa-enriched fraction.