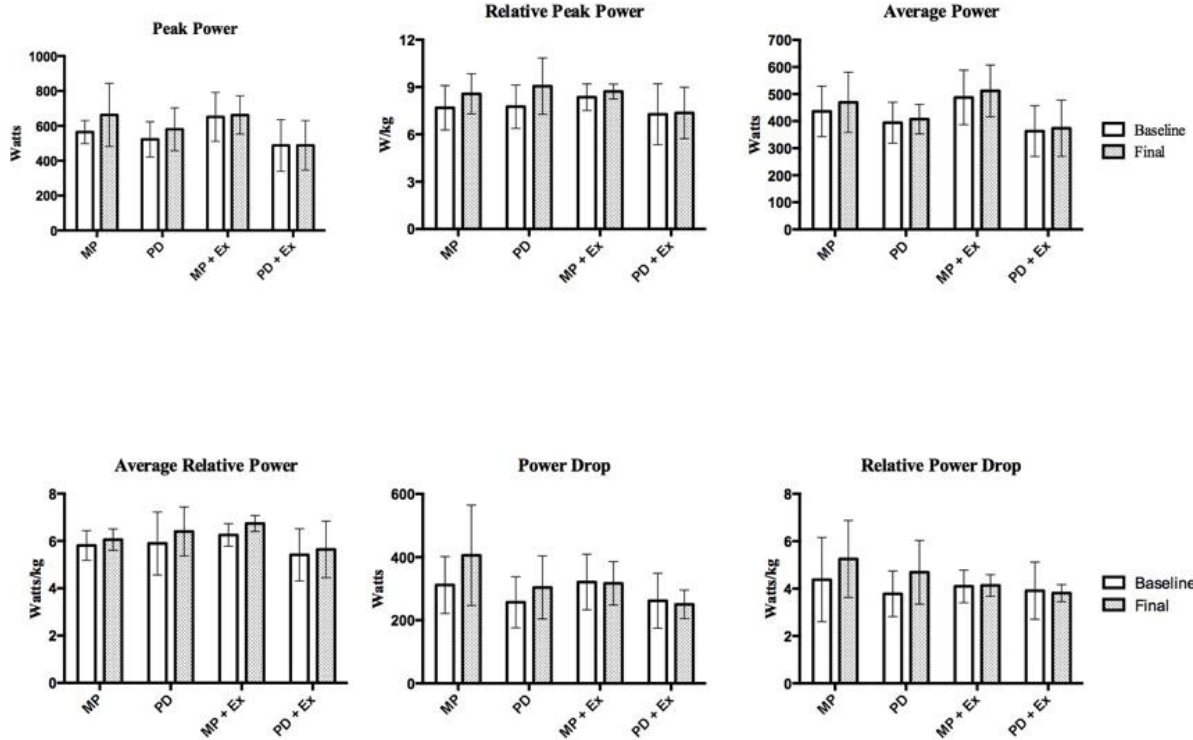
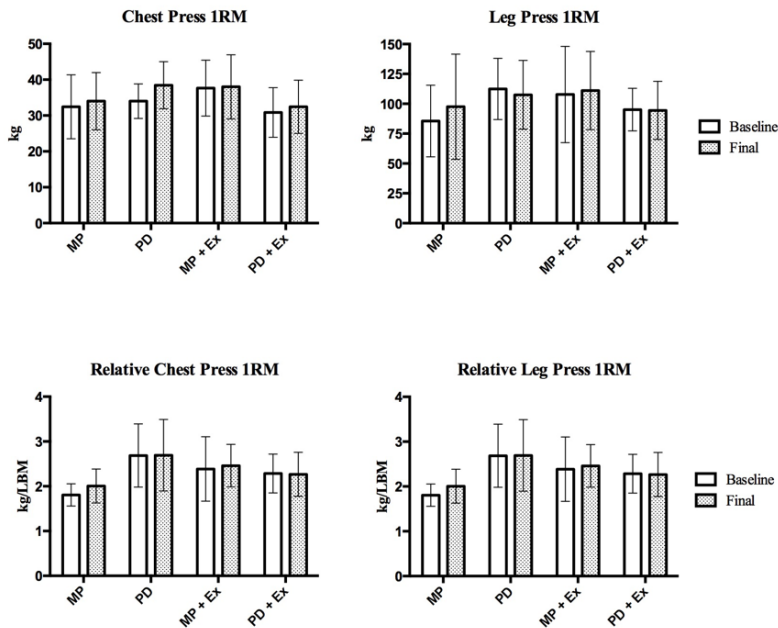


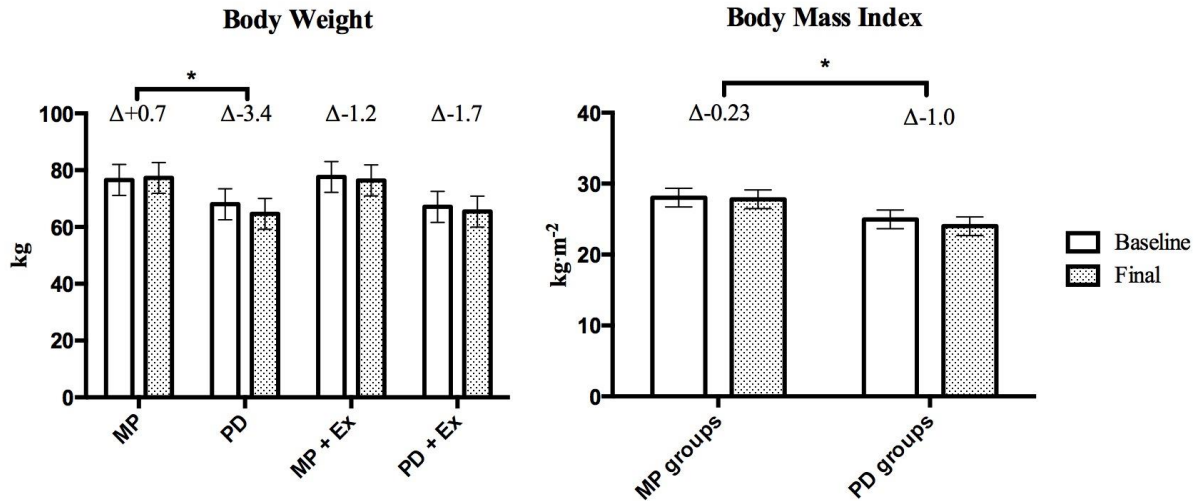
Supplementary Material



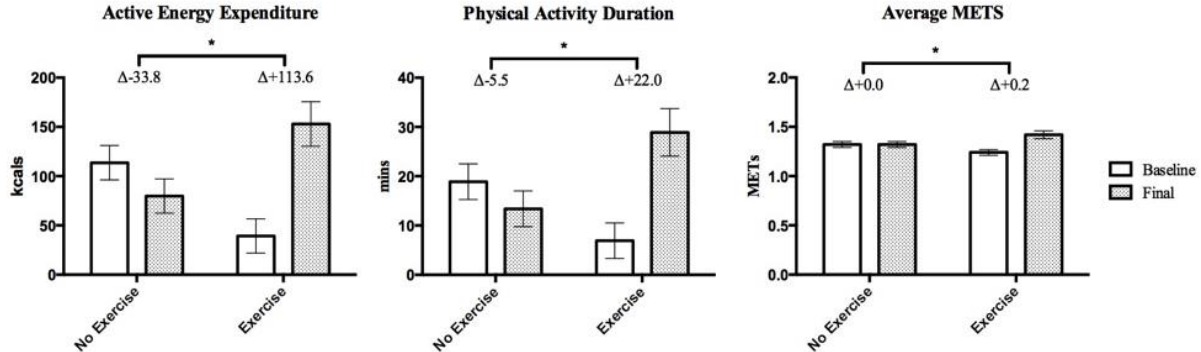
Anaerobic Power. There was a non-significant interaction between TP*D*Ex for all anaerobic power variables, peak power ($p = 0.732$), relative peak power ($p = 0.498$), power drop ($p = 0.708$), relative power drop ($p = 0.855$). TP, time point; D, diet; Ex, exercise; MP, MyPlate diet; PD, Paleolithic-based diet; MP + Ex, MyPlate diet + exercise; PD + Ex, Paleolithic-based diet + exercise. Data represent mean \pm SEM; $p < 0.05$.



Upper and lower body strength¹. There was no significant interaction between TP*D*Ex for leg press ($p = 0.427$), and chest press ($p = 0.753$). LBM, lean body mass; TP, time point; D, diet; Ex, exercise; MP, MyPlate diet; PD, Paleolithic-based diet; MP + Ex, MyPlate diet + exercise; PD + Ex, Paleolithic-based diet + exercise. Data represent mean \pm SEM; $p < 0.05$. ¹ Relative measures of chest press and leg press were determined by dividing body mass by LBM. LBM was determined using dual energy x-ray absorptiometry at baseline. LBM: Lean body mass



Body weight and body mass index. There was a statistically significant three-way interaction between TP*D*Ex for only BW ($p = 0.047$). The contrast suggests the Δ BW for participants in the PD group was significantly different than the Δ BW for those in the MP group ($p = 0.0029$). BMI followed a similar trend; the Δ BMI was significantly different for the PD group than the Δ BMI for the PD ($p = 0.042$). BW, body weight; BMI, body mass index; TP, time point; D, diet; Ex, exercise; MP, MyPlate diet; PD, Paleolithic-based diet; MP + Ex, MyPlate diet + exercise; PD + Ex, Paleolithic-based diet + exercise. Data represent mean \pm SEM; $p < 0.05$.



Active energy expenditure, physical activity duration and METs. There was a non-significant difference in TEE ($p = 0.385$), PAL ($p = 0.561$), sedentary time ($p = 0.671$) and steps ($P = 0.573$) for all four groups (not shown). There was a two-way interaction for TP*Ex for AEE ($p = 0.001$), physical activity duration ($p = 0.004$) and METs ($p = 0.013$). AEE, PAD and METs also had two-way interactions for TP*D. TEE, total energy expenditure; PAL, physical activity level; AEE, active energy expenditure; METs, metabolic equivalents of task; TP, time point; D, diet; Ex, exercise; MP, MyPlate diet; PD, Paleolithic-based diet; MP + Ex, MyPlate diet + exercise; PD + Ex, Paleolithic-based diet + exercise. Data represent mean \pm SEM; $p < 0.05$.