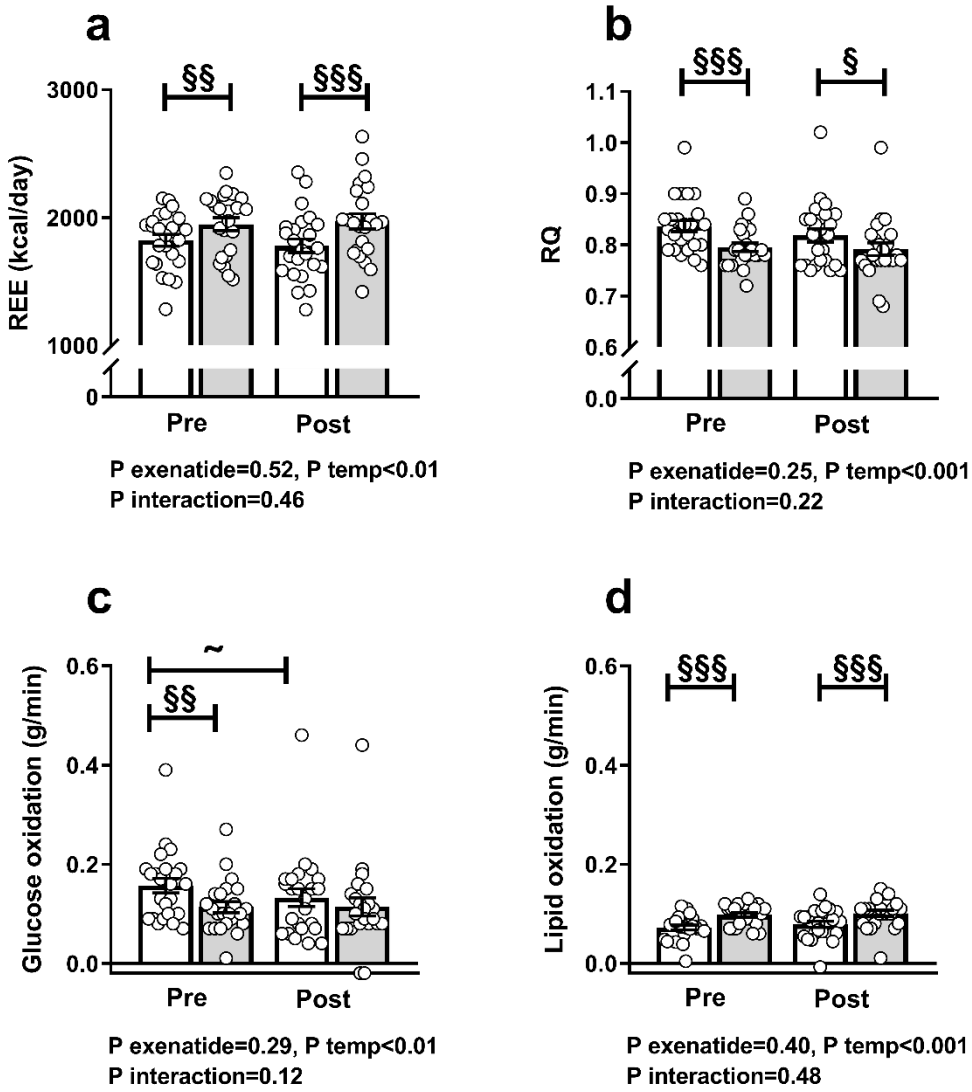Hereafter, we investigated whether an altered energy metabolism could underlie these weight-lowering effects of exenatide. Aside from a trend towards a lower glucose oxidation, exenatide did not evidently affect the REE (nor when corrected for lean mass), respiratory quotient (RQ) or substrate oxidation in the total study cohort (**Fig. 1**) or when studying ethnicities separately (**Supplemental Fig. 2**). As expected, both before and after exenatide, cold exposure increased REE (+7%, p<0.01 and +11%, p<0.001) and lowered the RQ (-5%, p<0.001 and -3%, p<0.05), reflected by an increased lipid oxidation (+35%, p<0.001 and +28%, p<0.001) and decreased glucose oxidation (-28%, p<0.01 and -14%, p=0.12) in the total study cohort (**Fig. 1**), which was not significantly different before and after exenatide.