The purpose of this study was to determine the effect of exercise intensity on acute changes in mood, as well as mood at 1, 4, 8, &12 hours after exercise. Sample size calculations necessary for 95% power in a repeated measures analysis of variance with first order autoregressive correlation among time points resulted in recruitment of twenty four healthy adult men (n=8) and women (n=16) aged 18-25 (M=18.91 ± 1.08) years old. Subjects were randomly assigned to counterbalanced groups of control (n=12), "exercise low intensity" (n=6), or "exercise high intensity" (n=6). At visit one, all subjects completed a standard test of VO_{2Max} on a cycle ergometer. At visit two, subjects in the exercise groups completed twenty minutes of exercise on a cycle ergometer at either 60% or 90% of their anaerobic threshold heart rate from visit one as calculated by the metabolic analyzer. Subjects completed the Profile of Mood States (POMS) before and after exercise or the quiet rest control condition, reporting at each point how they felt "right now". Additionally, all subjects completed the POMS at one, four, eight, and twelve hours following visit two. Compared to controls, exercise subjects had significantly lower total mood disturbance scores acutely ($F=16.553$, $p=.000$, $\eta^2=.612$). Furthermore, exercise group subjects appeared to have significantly lower total mood disturbance than controls at one ($p<0.05$) and four ($p<0.05$) hours following visit two. Differences between low and high intensity exercise groups were not statistically significant at any time point for total mood disturbance score. Our results suggest that moderate intensity aerobic exercise results in acutely improved mood that persists for several hours following exercise in healthy young adults. It appears that these effects occur regardless of aerobic exercise intensity that is below the anaerobic threshold.