Waist Circumference (WC) and MET-Minutes per Week (MMW)

**CRP** *(Supplementary Figure 1, panel A).* We found no significant interaction effect between WC and MMW for CRP (F=1.426, P=0.234). We found significant main effects for WC (F=159.669, P<0.001) and MMW (F=9.766, P<0.001) on circulating CRP. CRP levels were lower in participants who reported a normal waist circumference and any level of regular exercise (<500, 500-1000, and >1000 MMW), compared to those with an at-risk waist circumference (P’s<0.001) and those no regular exercise (P’s<0.05).

**sICAM-1** *(Supplementary Figure 1, panel B).* We found a significant interaction effect between WC and MMW for sICAM-1 (F=4.846, P=0.002). While sICAM-1 levels were not significantly difference across MMW categories in individuals with a normal WC (P’s>0.05), in individuals with an at-risk WC, sICAM-1 was significantly lower in those reporting 1000+ MMW compared to less than 500 MMW (P=0.007) and tended to be lower in those reporting no regular exercise (P=0.072). Similar to BMI, waist circumference independently contributed to sICAM-1 (F=26.841, P<0.001), such that values were greater in subjects with an at-risk WC compared to those with a normal WC (P<0.001). No effect of MMW was observed (F=1.055, P=0.367) for sICAM-1.

**IL-6** *(Supplementary Figure 1, panel C).* We found no significant interaction effect between WC and MMW for IL-6 (F=1.282, P=0.217). We found significant main effects for waist circumference (F=84.441, P<0.001) and MMW (F=10.255, P<0.001), such that IL-6 levels were lower in participants who reported an normal waist circumference and any level of regular exercise (<500, 500-1000, and >1000 MMW), compared to those with an at-risk waist circumference (P’s<0.001) and those reporting no regular exercise (P’s<0.05).
**Fibrinogen (Supplementary Figure 1, panel D).** We found no significant interaction effect between WC and MMW for fibrinogen (F=2.019, P=0.110). Waist circumference also impacted fibrinogen (F=38.960, P<0.001), such that values were greater in subjects with an at-risk waist circumference compared to those with a normal waist circumference (P’s <0.001). The effect of MMW on fibrinogen bordered on statistical significance (F=2.245, P=0.081), such that values were lower with in individuals who reported greater MMW.

**sE-Selectin (Supplementary Figure 1, panel E).** We found no significant interaction between WC and MMW for sE-Selectin (F=0.041, P=0.989). Waist circumference also independently contributed to sE-selectin (F=40.967, P<0.001), such that values were greater in subjects with an at-risk waist circumference compared to those with a normal waist circumference (P <0.001). No effect of MMW was observed for sE-selectin (F=0.172, P=0.916).

**IL-6sr (Supplementary Figure 1, panel F).** We found no significant interaction effect between WC and MMW for IL-6sr (F=0.769, P=0.511). Like BMI, we found no main effects for waist circumference (F=3.505, P=0.061) or MMW on IL-6sr (F=1.158, P=0.325).

**Interrelationship of Inflammatory Markers.** Correlations between all inflammatory markers are shown in Supplementary Table 1.
Figure Legend

Supplemental Figure 1. Waist Circumference (WC), MET Minutes per Week (MMW) and Inflammatory Markers. Data from 1255 men and women in MIDUS. Joint association of WC category (normal [(≥102.0 cm for men and ≥88.0 cm for women], at risk [(>102.0 cm for men and >88.0 cm for women]) and MMW category (no regular exercise, <500 MMW, 500-1000 MMW and >1000 MMW) for CRP (A), sICAM-1 (B), IL-6 (C), fibrinogen (D), sE-Selectin (E) and IL-6sr (F). These analyses were adjusted for age, sex, smoking and relevant medication use. Error bars represent SEM. WC=WC main effect, MMW=MMW main effect, INT=interaction effect.