

### **SUPPLEMENTAL FIGURE 1. Body weights and food intakes of baboons during Part 2**

Body weights of 4 animals, studied in Part 2 of this research, were measured weekly from 2 weeks after the sham tether (diamond on x-axis), the surgical catheter placement (arrow on x-axis), and the isotope infusion study (time zero). The food intake was measured daily beginning at least 2-weeks after the sham tether, through catheter placement, up until the infusion study. Food intake was adjusted if the animal lost or gained more than 0.5 kg during a weekly measurement. Note varying time frames on x-axes between animals.

### **SUPPLEMENTAL FIGURE 2. Serum cortisol concentrations during the daylight hours**

Values are mean  $\pm$  SEM for 7 animals. The light in the room went on at 0600 and off at 1800. Animals were presented with food at 0800; water was given ad lib.

### **SUPPLEMENTARY FIGURE 3. Relationships between RaFFA, body fat and waist circumference**

Significant associations between fasting RaFFA and body fat (A) and waist circumference (B). Data from Part 1, are represented by the open diamond for the male animal 11597, who received 0.01 mg/kg/hr of midazolam (his 2nd study, see **table 1**); the unfilled triangles represent data from both female animals in Part 1, in which the midazolam was given using 0.04 mg/kg/h (2<sup>nd</sup> study for 11953 and 2<sup>nd</sup> study for 11044). This is the same midazolam dose that was used in the subsequent 7 male animals studied in Part 2 (data denoted with filled diamonds). The symbol **x** presented on the graphs denotes paired data from Part 1, in which each animal underwent 2 studies. These data sit directly in line with their paired data, are added for the reader's interest, and were not used in the correlation.