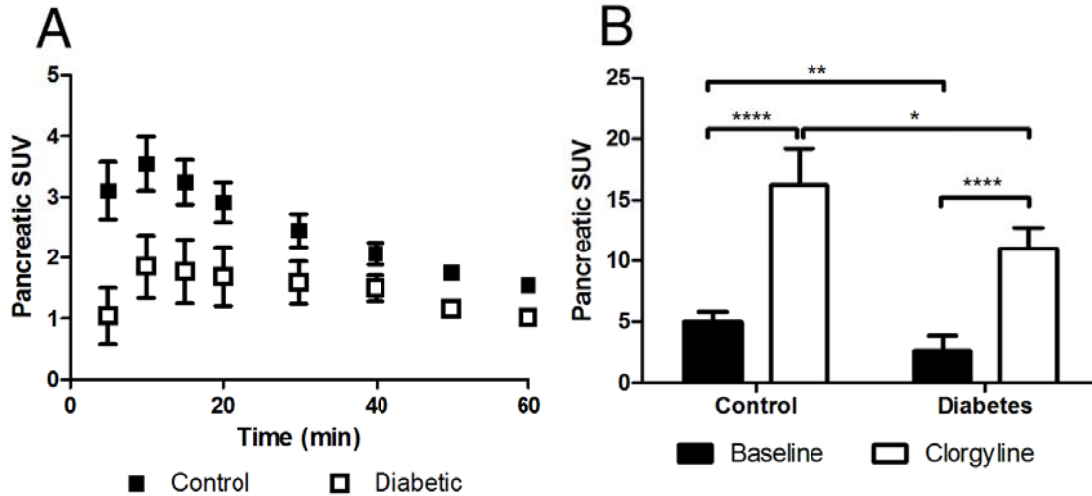


Supplemental figure 1. The PET measurements of [^{11}C]5-HTP uptake in liver (A) or percentage of native [^{11}C]5-HTP in blood plasma (B) of non-human primate are plotted over time. Pretreatment with carbidopa (A, filled squares) increased hepatic uptake when compared with tracer alone (A, filled circles) by increasing the amount of native [^{11}C]5-HTP in plasma (B, filled squares). Pretreatment with clorgyline did not affect hepatic retention (A, open circles) indicating low MAO-A activity in the liver. Correspondingly, inhibition of MAO-A has marginal effects on the levels of native [^{11}C]5-HTP in plasma (B, open circles).



Supplemental figure 2. Uptake of [¹¹C]5-HTP in Sprague Dawley rats measured by μ PET/CT (A). The animals were either hyperglycemic through STZ induced diabetes (n=3) or healthy, normoglycemic controls (n=4). Time-dependent uptake of tracer in pancreas is decreased in animals with induced diabetes. Pretreatment by MAO-A inhibitor clorgyline significantly increased the accumulation of [¹¹C]5-HTP 30 minutes after tracer administration in both healthy and diabetic rats (B).