

**ESM Table 4:** Mice phenotype, pancreas morphology and pancreatic cell proliferation at 12 weeks on control or HFD

<b>Parameters</b>	<b>Control</b>	<b>HFD</b>	<b>P value</b>
<b><i>Mice phenotype</i></b>			
BMI (g/cm <sup>3</sup> )	0.345±0.006	0.484±0.016	<0.05
Perirenal Fat (g)	0.252±0.018	1.012±0.13	<0.05
Epididymal Fat (g)	0.662±0.026	2.981±0.49	<0.05
<b><i>Pancreas morphology</i></b>			
Total endocrine area (%)	0.17±0.038	0.35±0.062	<0.05
Number of islets (%)	23.9±8.45	46.8±5.61	ns
% Small islets (0-5000µm <sup>2</sup> )	70.47±9.31	49.34±5.64	<0.05
% Medium islets (5000-10000µm <sup>2</sup> )	15.52±6.7	29.53±5.3	ns
% Large islets (>10000µm <sup>2</sup> )	7.8±4.49	17.23±4.06	<0.05
Total β cell area (% of endocrine area)	92.79±0.84	89.67±1.05	<0.05
<b><i>Proliferation (BrdU 18h)</i></b>			
Total proliferation (% total cells)	27x10 <sup>-3</sup> ±43x10 <sup>-4</sup>	14x10 <sup>-3</sup> ±24x10 <sup>-4</sup>	<0.05
Endocrine proliferation (% of endocrine cells)	0.144±0.053%	0	<0.05