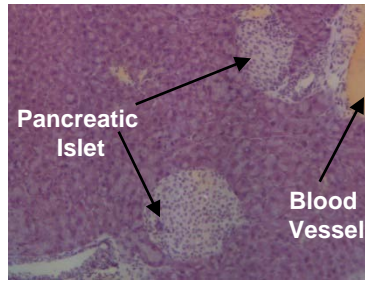


**a** Cryosections (14  $\mu\text{m}$ )

**b** Cresyl Violet staining (10 min)

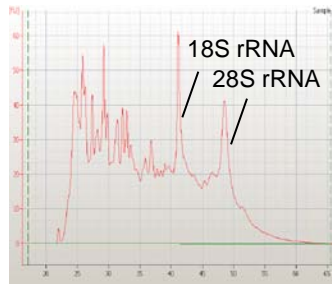


**c** Laser capture microdissection



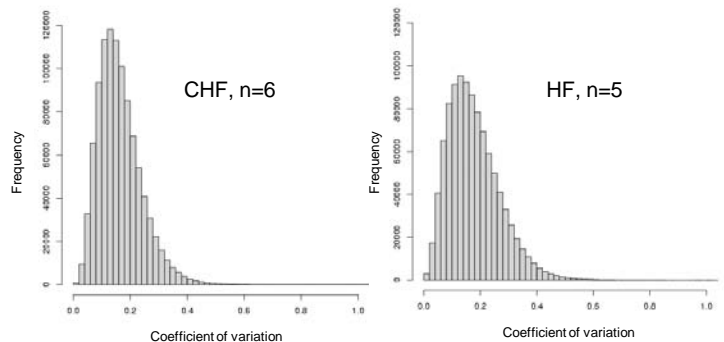
**d** RNA QC on Agilent PicoChip

Mean RIN numbers:  
islets = 5.2  
total pancreas = 7.0



**e** QC of hybridized Affymetrix Chips

Coefficient of variation (CV) plots  
of biological replicate experiments.  
HF, high fat diet;  
CHF, Carbohydrate-free high fat diet;



### Electronic supplementary material

**ESM Fig. 1** Workflow for isolation of pancreatic islets by laser capture microdissection. **a** Cryosections (14  $\mu\text{m}$ ) and Cresyl violet staining (10 min), **(b)** laser capture microdissection and **(c)** RNA quality control on Agilent PicoChip. Mean RNA integrity numbers: islets 5.2, total pancreas 7.0. **d** Quality control of hybridised Affymetrix chips for CHF ( $n=6$ ) and **(e)** HF ( $n=5$ ), depicted as coefficient of variation plots of replicate experiments