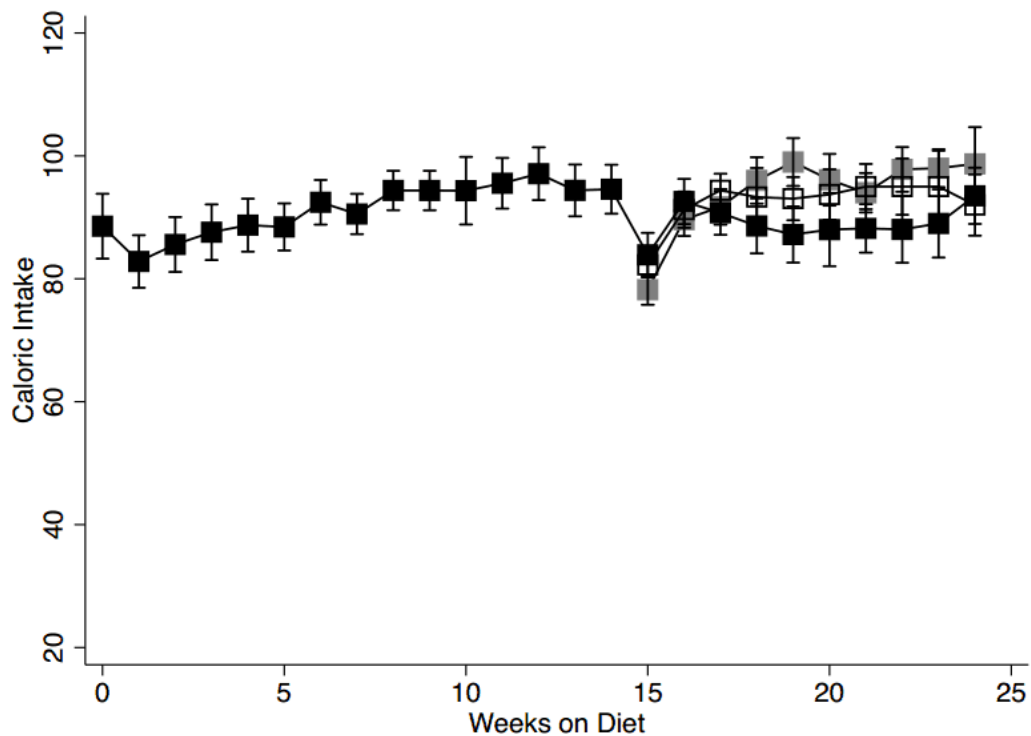


SUPPLEMENTARY DATA

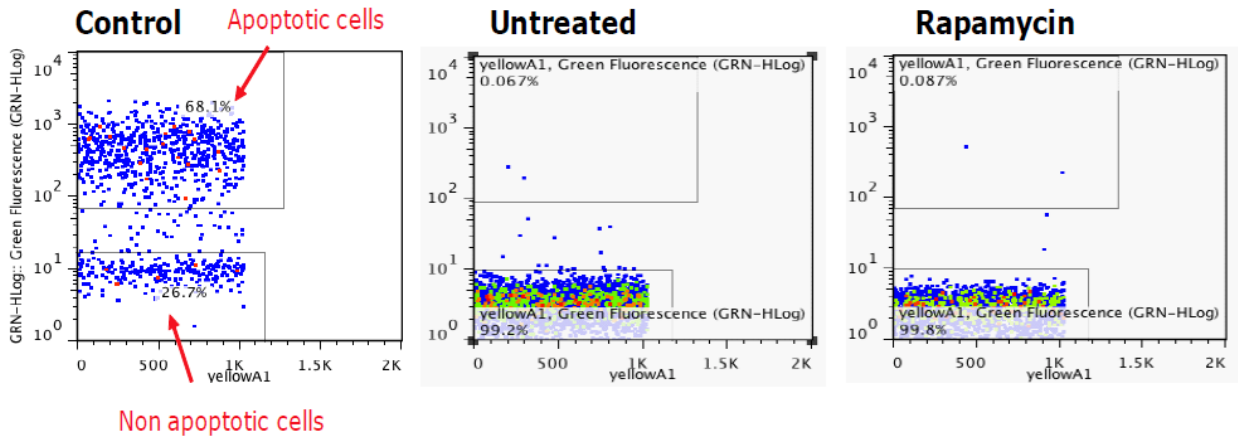
Supplementary Figure 1. Effect of metformin versus rapamycin on caloric intake in obese/diabetic mice. Caloric intake was measured throughout the study in C57BL/6 male mice fed the DIO diet and treated with either metformin (250mg/kg), rapamycin (2.5 mg/kg) or vehicle (0.1% DMSO in saline). The bar graph represents mean \pm SD. No differences were observed between vehicle and treatment conditions.



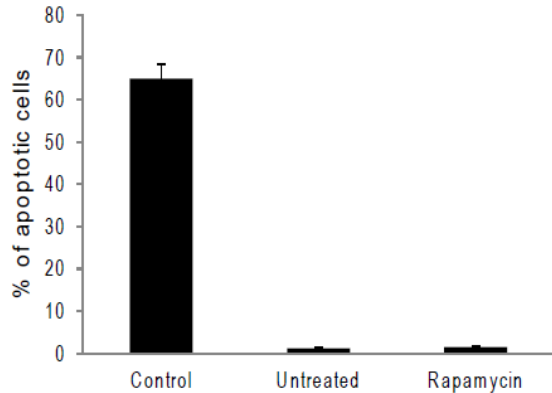
SUPPLEMENTARY DATA

Supplementary Figure 2. Rapamycin treatment did not induce apoptosis in Panc02 cells. (a-b) Level of DNA fragmentation was measured in Panc02 cells exposed to rapamycin (0.1 mM) or regular growth media for 24 h using a Bromodeoxyuridine (BrdU) immunofluorescence staining kit. BrdU positive cells were detected by flow cytometry (n=3/treatment). The bar graph represents percentage \pm SD. * $p < 0.05$ by Student *t* test.

A



B



SUPPLEMENTARY DATA

Supplementary Table 1. Screening of miRNAs expression in tumor samples treated with metformin or rapamycin in pre-diabetic obese mice. Expression profile of highly regulated miRNAs in pancreatic cancer during obesity and diabetes performed in pancreatic tumors (n=3/group) by q-RT-PCR. Statistical analysis was performed by two-tailed Student *t* test.

miR	CONTROL	RAPAMYCIN		METFORMIN	
	Expression	Expression	<i>p-value</i>	Expression	<i>p-value</i>
let-7b	1.01 ± 0.09	1.17 ± 0.03	0.15	0.99 ± 0.05	0.88
miR-21	1.00 ± 0.03	1.1 ± 0.08	0.33	1.07 ± 0.03	0.22
miR-26a	1.00 ± 0.07	1.06 ± 0.06	0.55	0.97 ± 0.02	0.65
miR-34a	1.00 ± 0.05	0.91 ± 0.08	0.38	1.16 ± 0.04	0.08
miR-100	1.00 ± 0.07	1.12 ± 0.07	0.32	1.02 ± 0.07	0.92
miR-101	1.01 ± 0.08	0.81 ± 0.10	0.19	1.02 ± 0.09	0.9
miR-146a	1.07 ± 0.07	1.25 ± 0.17	0.42	1.24 ± 0.02	0.09
miR-200a	1.01 ± 0.04	0.84 ± 0.13	0.36	1.39 ± 0.78	0.65
miR-200b	1.01 ± 0.08	0.75 ± 0.14	0.19	1.21 ± 0.65	0.77
miR-200c	1.29 ± 0.66	1.03 ± 0.26	0.73	1.02 ± 0.56	0.78