LIVER AMPK REGULATES TOTAL BODY LIPID ACCUMULATION ON A LCHF DIET BUT IS DISPENSABLE FOR INSULIN RESISTANCE

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Abstract

Introduction

Methods

* Generating liver-specific AMPKalpha1/2 knockout mice
  + Black 6 mice that harbored homozygous, floxed alleles for both AMPK a1 and a2 were obtained from \_\_\_\_\_. To produce liver-specific AMPKalpha1/2 knockout mice, at 70 days old these mice were injected through the tail vein with adeno-associated virus (AAV2/8?) expressing either GFP (control) or Cre (treatment) recombinase from a liver-specific TBG promoter (AAV-TBG-GFP or AAV-TBG-CRE).
* Confirming Knockout using Western blotting

Results

* Experimental Design
  + 70 day old mice were injected with either AAV-TBG-GFP or AAV-TBG-CRE to produce liver-specific knockouts and controls. These mice were raised on normal chow (Lab Diet; 2.91 kcal/g; 5% fat, 24% protein, 2.7% sucrose, 32% starch) and continued to consume normal chow for another two weeks post injection. After two weeks, mice were placed on either a ketogenic (KD) (6.4 kcal/g; 85% fat, 15% protein, 0% sucrose, 0% starch) or matched control diet (CD) (3.8 kcal/g; 10% fat, 15 protein, 0% sucrose, 75% starch). At week four, blood samples were taken. At week five and insulin tolerance tests was performed. At week seven mice were sacrificed and tissues were collected.

Discussion

Author Contributions

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References

Figure/Table Legends