

1 **Supplemental Data**

2 **Supplemental Table 1:** Sequences of primers used in hypothalamus gene expression analysis

Gene of Interest	Primer	Sequence (5'-3')
<i>Lepra</i>	Sense	CAGTCCCTCCCCTCTCCTAAGT
	Antisense	AGTCTCTAACCCCTTGCTTTTCATG
<i>Leprb</i>	Sense	GAGCCCTGAACCCATTTTCAGAAG
	Antisense	ACCATAGCTGCTGGGACCAT
<i>Agrp¹</i>	Sense	GGTGCTAGATCCACAGAACCG
	Antisense	CCAAGCAGGACTCGTGCCAG
<i>Cart¹</i>	Sense	TGGATGATGCGTCCCATGA
	Antisense	CGGAATGCGTTTACTCTTGAGC
<i>Npy¹</i>	Sense	CGCTCTGCGAGACTACATCAA
	Antisense	GGGCTGGATCTCTTGCCAT
<i>Pomc¹</i>	Sense	CGAGGCCTTTCCCCTAGAGT
	Antisense	CCAGGACTTGCTCCAAGCC
<i>Actb²</i>	Sense	GATGACCCAGATCATGTTTGAGACC
	Antisense	AGATGGGCACAGTGTGGGTGA

3 ¹ (Heijboer et al., 2005) ² (Schroder et al., 2009)

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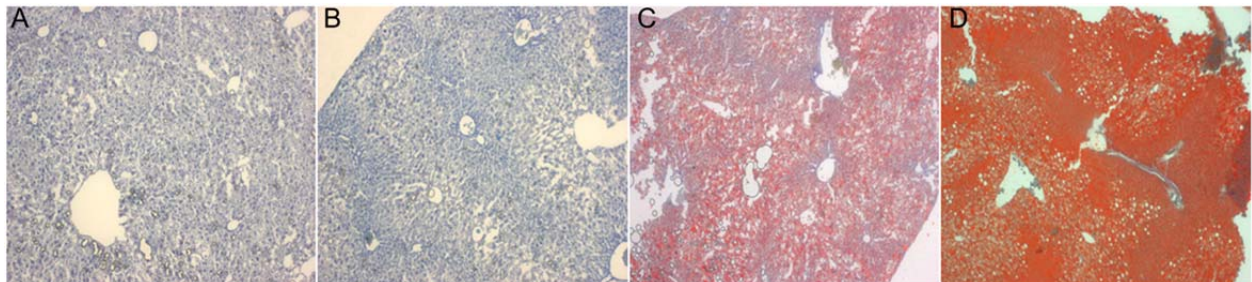
17 **Supplemental Table 2:** Offspring behavior assessment. Activity is measured in centimeters traveled over
 18 an hour and compared among groups within a trial. Anxiety is represented as less time (minutes: seconds)
 19 spent in the center of the open field and was compared among groups within a trial.

Behavior	Males			Females		
	Control	Restricted	Leptin	Control	Restricted	Leptin
Activity (cm/hr)						
Trail 1	174.4±13.7	204.6±19.8	216.5±12.6	204.5±13.2	208.7±11.8	204.5±13.4
Trail 2	170.0±20.8	202.7±21.1	220.0±14.4	216.2±17.4	187.9±10.8	203.7±16.6
Trail 3	178.4±23.2	233.8±15.7	203.4±14.0	204.9±9.6	190.6±15.6	180.7±15.7
Anxiety (mm:ss)						
Trail 1	16:29±1:17	15:30±1:49	16:46±1:09	16:35±1:43	16:09±2:15	16:56±1:06
Trail 2	12:20±0:57	11:19±1:46	14:39±1:28	12:15±1:05	12:25±0:39	10:57±1:17
Trail 3	12:26±1:31	12:59±0:48	14:32±1:35	12:30±1:01	12:15±2:02	10:38±0:53

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22 **Supplemental Figure 1:** Examples of the classifications of NAFLD. A) Normal liver; grade 0. B) Mild
 23 disease; grade <0-3. C) Moderate disease; grade >3-6.9. D) Severe disease; grade 7-9.



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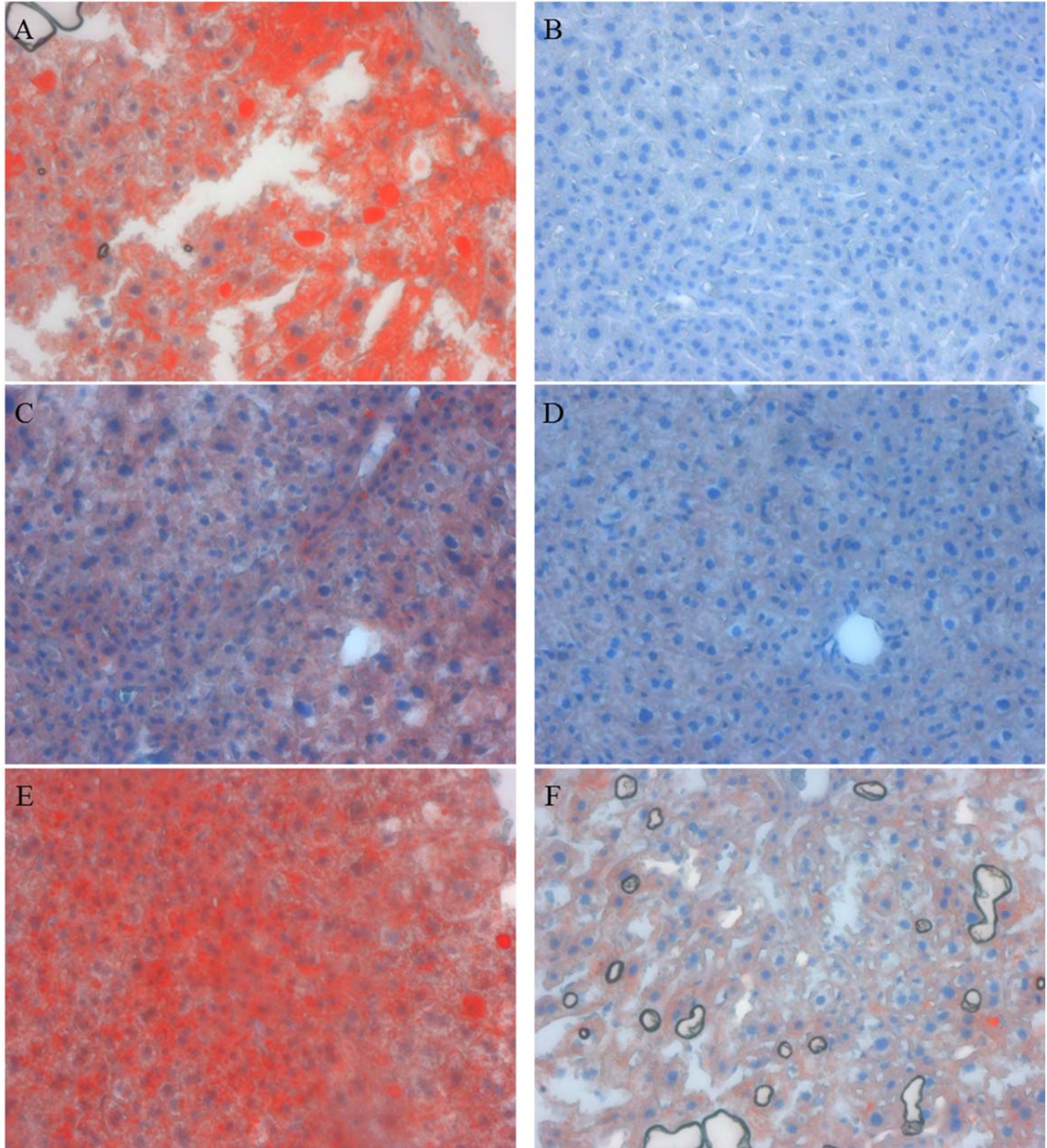
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32 **Supplemental Figure 2:** Representative higher magnification images of NAFLD. A) Male control, B)
33 Female control, C) Male restricted, D) Female restricted, E) Male restricted, leptin treated F) Female
34 restricted, leptin treated



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