SUPPLEMENTAL MATERIAL

Table S1: Strain×diet interactions for the number of c-Fos (Table 1) and Zif268 (Table 2) positive cells after (15×CS) extinction retrieval in unconditioned mice fed control (Ctl) or Zn-restricted (ZnR) diets 3 weeks prior to conditioning. n=4/group.

Region (distance from Bregma)	c-Fos Strain×diet interaction	Zif268 Strain×diet interaction
Cortical regions		
Primary motor (M1, 1.78 mm)	$F_{(1, 12)}$=0.09, p=0.77	$F_{(1, 12)}$=0.12, p=0.74
Secondary motor (M2, 1.78 mm)	$F_{(1, 12)}$=0.05, p=0.83	$F_{(1, 12)}$=0.25, p=0.62
Cingulate area 1 (Cg1, 1.78 mm)	$F_{(1, 12)}$<0.01, p=1.00	$F_{(1, 12)}$=0.16, p=0.70
Cingulate area 1 (Cg1, 1.54 mm)	$F_{(1, 12)}$=0.05, p=0.82	$F_{(1, 12)}$=2.53, p=0.14
Cingulate area 2 (Cg2 ,1.10 mm)	$F_{(1, 12)}$=0.04, p=0.85	$F_{(1, 12)}$=0.08, p=0.78
Prelimbic (PrL, 1.98 mm)	$F_{(1, 12)}$=1.15, p=0.30	$F_{(1, 12)}$=1.13, p=0.31
Prelimbic (PrL, 1.78 mm)	$F_{(1, 12)}$=0.08, p=0.78	$F_{(1, 12)}$=1.67, p=0.22
Prelimbic (PrL, 1.54 mm)	$F_{(1, 12)}$=0.03, p=0.87	$F_{(1, 12)}$=0.08, p=0.77
Infralimbic (IL, 1.98 mm)	$F_{(1, 12)}$=0.41, p=0.53	$F_{(1, 12)}$=0.69, p=0.42
Infralimbic (IL, 1.78 mm)	$F_{(1, 12)}$=3.16, p=0.11	$F_{(1, 12)}$=0.10, p=0.75
Infralimbic (IL, 1.54 mm)	$F_{(1, 12)}$=0.25, p=0.62	$F_{(1, 12)}$=0.10, p=0.76
Insular cortex (AI, 1.98 mm)	**No detectable expression**	$F_{(1, 12)}$=0.32, p=0.58
Insular cortex, dorsal (AID, 1.78 mm)	**No detectable expression**	$F_{(1, 12)}$=0.02, p=0.90
Insular cortex, dorsal (AID, 1.54 mm)	**No detectable expression**	$F_{(1, 12)}$=0.18, p=0.68
Ínsular cortex, ventral (AIV, 1.78 mm)	**No detectable expression**	$F_{(1, 12)}$=0.14, p=0.71

Insular cortex, ventral (AIV, 1.54 mm)	**No detectable expression**	$F_{(1, 12)}$**=1.00,** p**=0.34**
Perirhinal cortex (PRh, -1.58mm)	**No detectable expression**	$F_{(1, 12)}$**=1.18,** p**=0.30**
Ectorhinal cortex (Ect, -1.58mm)	**No detectable expression**	$F_{(1, 12)}$**=0.03,** p**=0.88**
Amygdala nuclei **(all -1.58 mm)**		
Lateral, dorsal (LAd)	$F_{(1, 12)}$**=0.01,** p**=0.93**	$F_{(1, 12)}$**<0.01,** p**=0.96**
Lateral, ventral (LAv)	**No detectable expression**	$F_{(1, 12)}$**=1.40,** p**=0.26**
Basolateral, anterior (BA)	$F_{(1, 12)}$**=1.05,** p**=0.32**	$F_{(1, 12)}$**=0.78,** p**=0.39**
Central, medial (CeM)	$F_{(1, 12)}$**=0.02,** p**=0.90**	$F_{(1, 12)}$**=0.32,** p**=0.58**
Central, lateral (CeL)	$F_{(1, 12)}$**=0.02,** p**=0.87**	$F_{(1, 12)}$**=0.22,** p**=0.64**
Central, capsular (CeC)	$F_{(1, 12)}$**=0.11,** p**=0.75**	$F_{(1, 12)}$**=0.02,** p**=0.90**
Medial paracapsular ITC (Imp)	**No detectable expression**	$F_{(1, 12)}$**=0.78,** p**=0.40**
Lateral paracapsular ITC (Ilp)	**No detectable expression**	$F_{(1, 12)}$**=0.02,** p**=0.90**
ITC nucleus (In)	**No detectable expression**	$F_{(1, 12)}$**<0.01,** p**=0.96**
Medial, posterodorsal (MePD)	$F_{(1, 12)}$**=0.06,** p**=0.82**	$F_{(1, 12)}$**=0.26,** p**=0.62**
Medial, posteroventral (MePV)	$F_{(1, 12)}$**=0.96,** p**=0.35**	$F_{(1, 12)}$**=0.53,** p**=0.48**
Anterior cortical (ACo)	$F_{(1, 12)}$**=0.10,** p**=0.76**	$F_{(1, 12)}$**<0.01,** p**=0.99**
Posterolateral cortical (PLCo)	$F_{(1, 12)}$**=1.46,** p**=0.25**	$F_{(1, 12)}$**=0.11,** p**=0.75**

Figure S1: Effect of time between fear conditioning and fear extinction training on potential savings in extinction learning. Extinction training performed 14 days, as opposed to 1 day, after fear conditioning resulted in savings in extinction learning in ZnR S1, control-fed B6 (B6 Ctl) and ZnR B6, but not in control-fed S1 (S1 Ctl). Data are presented as Means ±SEM. *p<0.05 S1 Ctl vs. B6 Ctl; #p<0.05 S1 Ctl vs. S1 ZnR; †p<0.05 B6 ZnR vs. S1 Ctl; §p<0.05 B6 Ctl vs B6 ZnR.