

1 Fig. S1 Schematic representation of inter- (F₂) and trans- (F₃) generational inheritance and methyl
2 modulator intervention
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4 Schematic representation of methyl modulator intervention: The fetal undernourished model rats used in
5 the present study were offspring born to mothers who were fed a low-carbohydrate diet throughout
6 pregnancy period. For the methyl modulator intervention, a methyl modulator diet enriched with folic acid,
7 vitamin B₁₂, choline, zinc and betaine was fed to lactating maternal rats for 1 week immediately after birth.
8 Next-generation offspring (F₂ and F₃) were fed a standard diet during all the periods. Since eggs of the F2
9 generation are also exposed to starvation in the mother's womb during the fetal, we investigated up to the
10 F3 generation. Experiments on pituitary gene expression and stress exposure were all conducted at 6 weeks
11 of age.