Fig. S1 Schematic representation of inter- (F2) and trans- (F3) generational inheritance and methyl modulator intervention

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