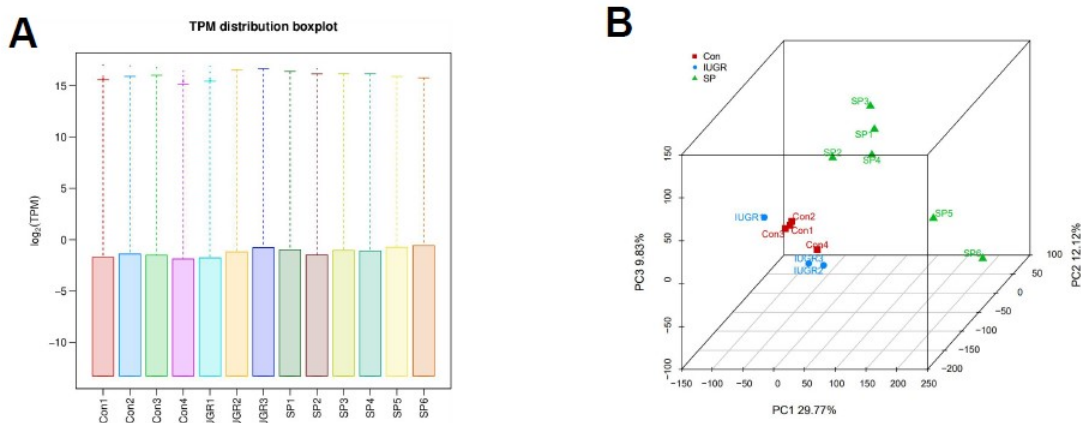
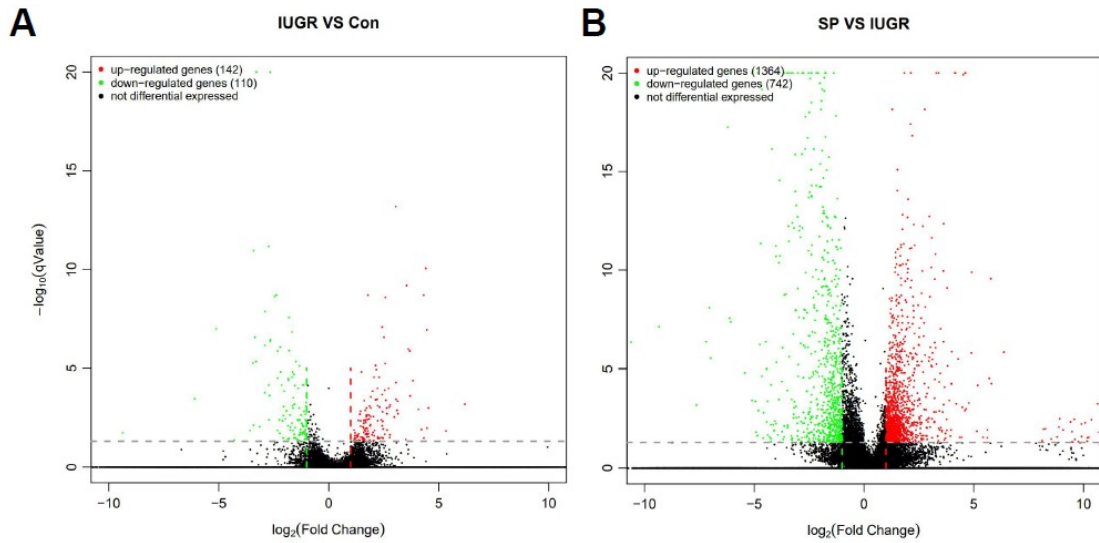


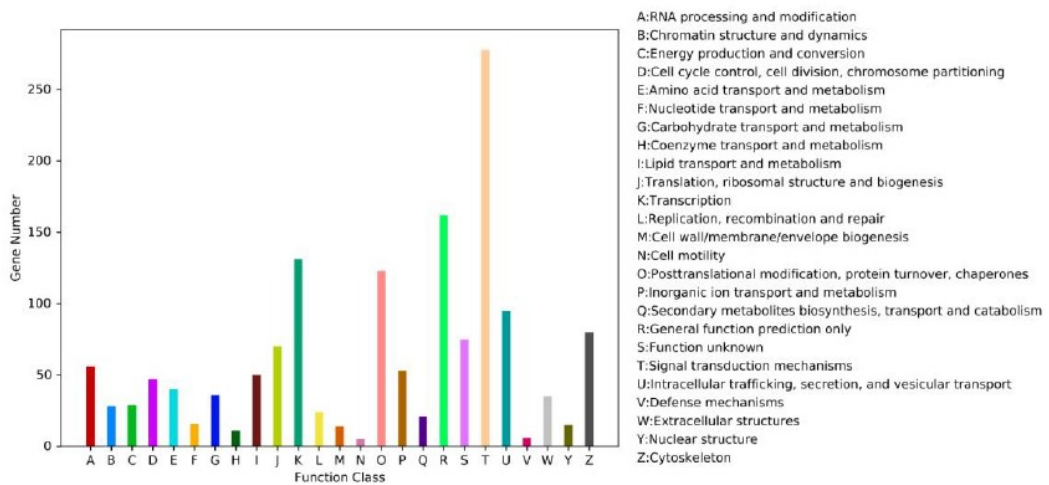
Supplement Fig 1. The effect of SP treatment on a number of pups and inflammation and oxidative stress in IUGR offspring. A. The effect of SP treatment on a number of pups. B. Relative mRNA levels of chemokines and inflammatory factors. C. Relative mRNA levels of genes involved in antioxidant. # $P < 0.05$  vs. Con offspring; ## $P < 0.01$  vs. Con offspring; ### $P < 0.001$  vs. Con offspring; \* $P < 0.05$  vs. IUGR offspring; \*\* $P < 0.01$  vs. IUGR offspring. Values are mean  $\pm$  SE,  $n = 4-6$  per group.



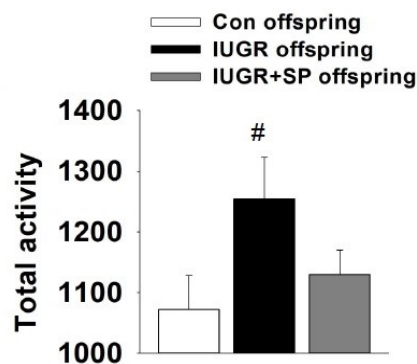
Supplement Fig 2. Hepatic Transcriptome. A. Boxplots of gene expressions for each group. B. Three dimensional principal component analysis.  $n = 4$  per group



Supplement Fig 3. Differentially expressed genes (DEGs). A. Volcan plot of the distributions of upregulated expressed genes. B. Volcan plot of the distributions of downregulated expressed genes. Red dots indicate significantly upregulated proteins, green dots denote significantly downregulated proteins, and black dots symbolize proteins with no significant change. n=4 per group



Supplement Fig 4. KOG function classification of assembled unigenes. n=4 per group



Supplement Fig 5. SP increases energy expenditure in adulthood in hypoxia-induced fetal growth restriction mice. # $P < 0.05$  vs. Con offspring; ### $P < 0.001$  vs. Con offspring; \*\*\* $P < 0.001$  vs. IUGR offspring. Values are mean  $\pm$  SE, n=4-6 per group.