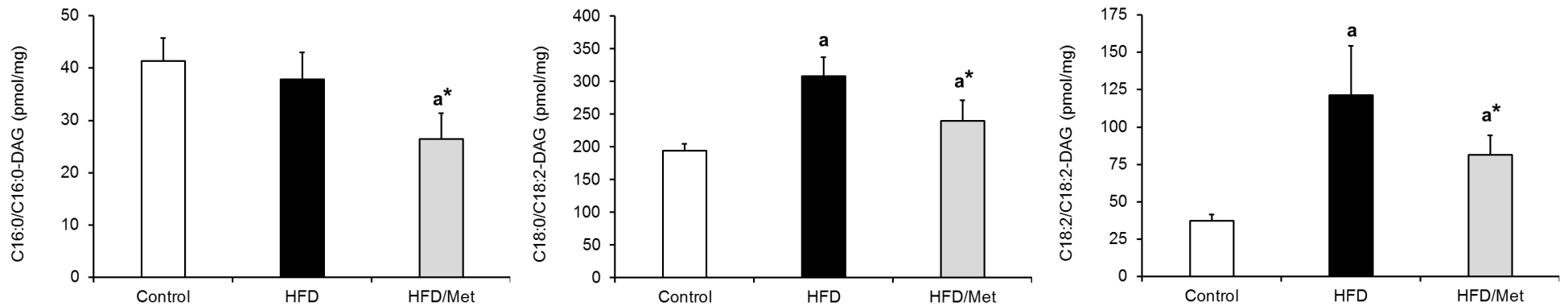


**Supplementary Table S6.** Content of rat skeletal muscle diacylglycerol (DAG) molecular species in skeletal muscle of rats with HFD-induced insulin resistance and under metformin (HFD/Met) treatment.

DAG	16:0/16:0 <sup>#</sup>	16:0/18:0	16:0/18:1 <sup>#</sup>	16/18:2	18:0/18:0	18:0/18:1	18:0/18:2	18:1/18:1	18:1/18:2	18:2/18:2
<b>Control</b>	41.2±5.1	154.9±26.4	156.9±28.8	28.1±5.4	8.6±1.4	38.9±4.6	195.5±11.5	27.9±3.3	32.2±5.1	38.1±4.6
<b>HFD</b>	38.1±6.0	94.4±4.9 <sup>a</sup>	82.4±7.4 <sup>a</sup>	40.1±8.9 <sup>a</sup>	15.3±2.2 <sup>a</sup>	45.3±7.0	310.9±30.7 <sup>a</sup>	16.3±2.9 <sup>a</sup>	47.1±6.2 <sup>a</sup>	120.4±38.1 <sup>a</sup>
<b>HFD/Met</b>	26.5±5.3 <sup>a*</sup>	73.0±11.7 <sup>*</sup>	78.3±11.8	25.1±3.4 <sup>*</sup>	13.5±3.3	32.1±7.3 <sup>*</sup>	243.8±31.5 <sup>*</sup>	14.0±2.1	31.7±5.3 <sup>*</sup>	81.0±14.0 <sup>a*</sup>

Values are mean (pmol/mg) +/- SD (n=8 for each group), p<0.05; a -vs Control; \*- vs HFD; # - lipid species with measured FSR



The content of C18:0/C18:2-DAG and C18:2/C18:2-DAG species display greatest increase in skeletal muscle of HFD animals. The content of palmitate-derived DAG (except C16:0/C18:2-DAG), does not increase in skeletal muscle under HFD treatment.