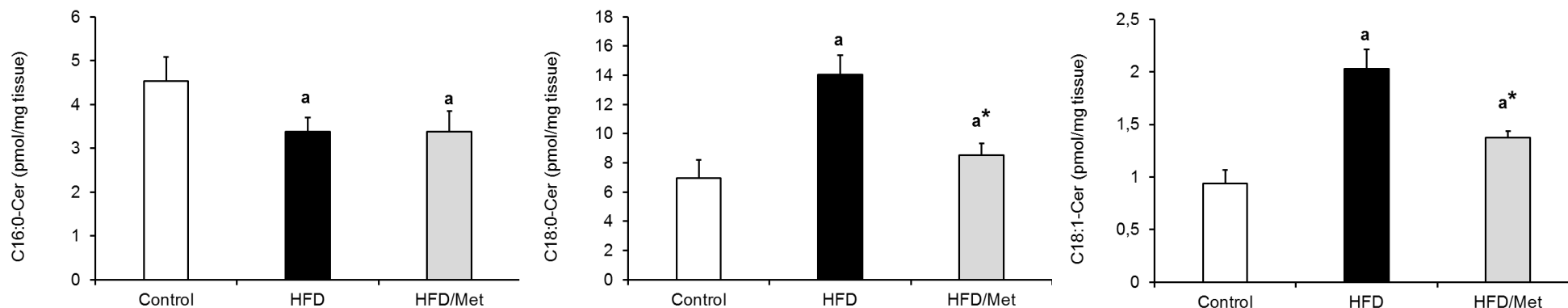


Supplementary Table S5. Content of skeletal muscle ceramide (Cer) molecular species in skeletal muscle of rats with HFD-induced insulin resistance and under metformin treatment (HFD/Met).

Cer	C14:0	C16:0 [#]	C18:0	C18:1	C20:0	C22:0	C24:0	C24:1
Control	0.13±0.03	4.61±0.61	7.18±1.35	0.96±0.14	0.71±0.06	0.72±0.07	3.65±0.43	0.82±0.13
HFD	0.05±0.004 ^a	3.39±0.33 ^a	14.18±1.42 ^a	2.03±0.20 ^a	0.70±0.09	0.68±0.05	3.00±0.38 ^a	0.41±0.05 ^a
HFD/Met	0.05±0.005 ^a	3.38±0.47 ^a	8.51±0.81 ^{a*}	1.37±0.06 ^{a*}	0.75±0.14	0.63±0.10	2.56±0.41 ^a	0.48±0.11 ^a

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



HFD selectively increases stearoyl- and oleoyl-ceramide (C18:0-Cer and C18:1-Cer) but not palmitoyl-ceramide (C16:0-Cer) in skeletal muscle of insulin –resistant rats. Insulin-sensitizing effect of metformin treatment is connected with decrease in stearoyl- and oleoyl-ceramide as compared to HFD without impact on palmitoyl-ceramide.