

Figure S1. Birefringence assay and locomotion tracking. A) Birefringence assay on wild-type-like non-dystrophic heterozygous (WT) and on dystrophic homozygous *sapje* larvae, at 4 days post-fertilization; B) Example of locomotion tracking of WT and homozygous (OMO) *sapje* larvae.

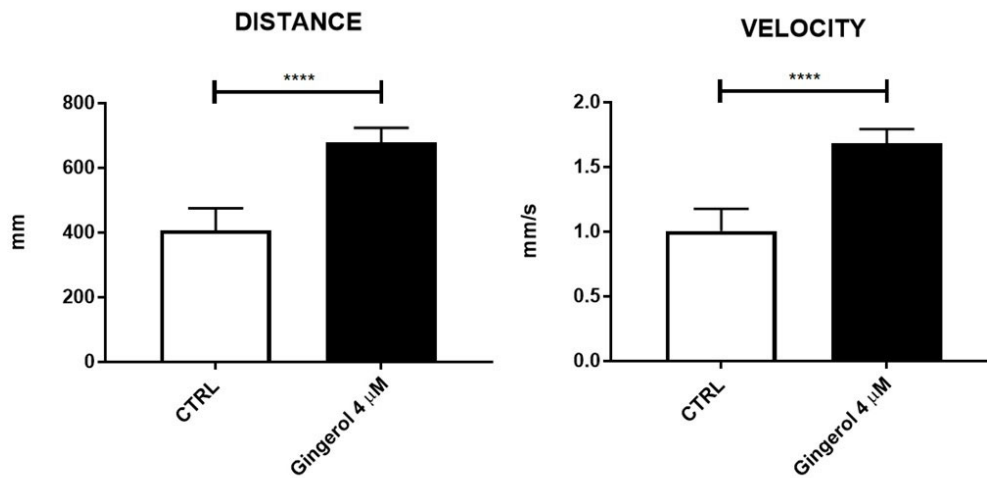


Figure S2. The figure illustrated the effects of Gingerol on locomotion (distance and velocity) of untreated (CTRL $n = 103$) and treated with Gingerol 4 μM ($n = 128$), dystrophic homozygous *sapje* larvae at 5 days post-fertilization **** $p \leq 0.0001$.

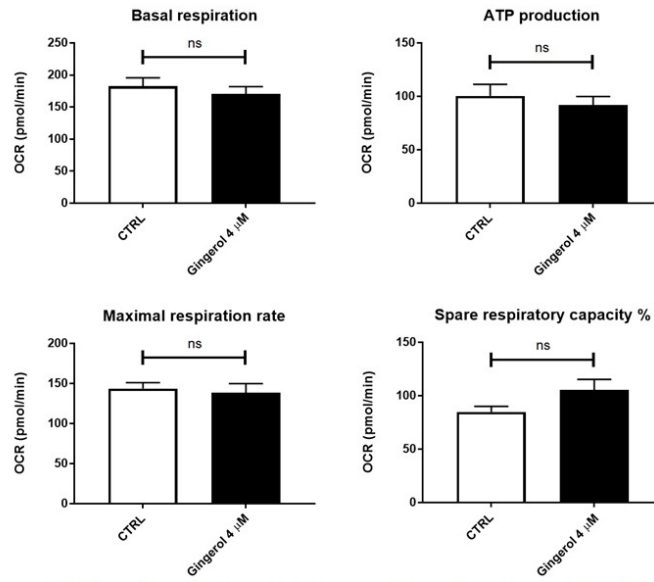


Figure S3. Mitochondrial respiration analysis of untreated (CTRL) and treated with Gingerol 4 μM dystrophic homozygous *sapje* larvae at 5 days post-fertilization, ns $p > 0.05$.