

Figure S1: (a) Flowchart of the experimental design. (b) Bar graphs showing the change in body weight and fasting glucose levels in control mice after 4 weeks feeding on HFD compared to RD. The error bars represent the standard error of the mean. **** $p \leq 0.0001$ and no significance (NS) compared to RD mice.

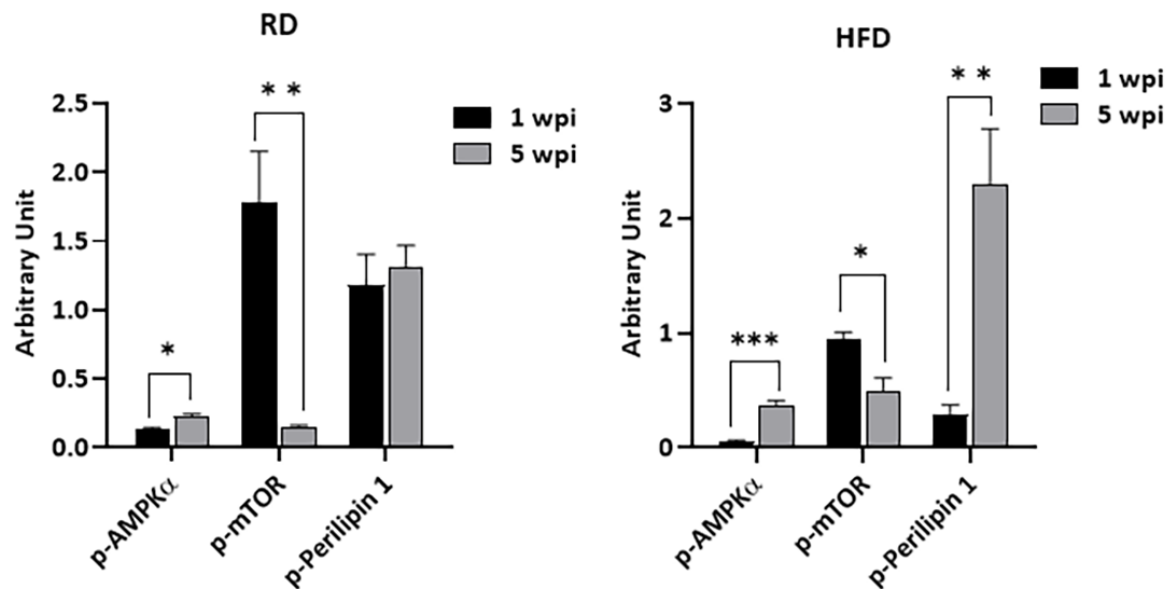


Figure S2: Bar graphs showing the levels of p-AMPKα, p-mTOR and p-Perilipin 1 normalized to β-Actin between 1 wpi and 5 wpi in both RD (left) and HFD (right) mice tumors. The error bars represent the standard error of the mean. * $p \leq 0.05$, ** $p < 0.005$ and *** $p \leq 0.001$.

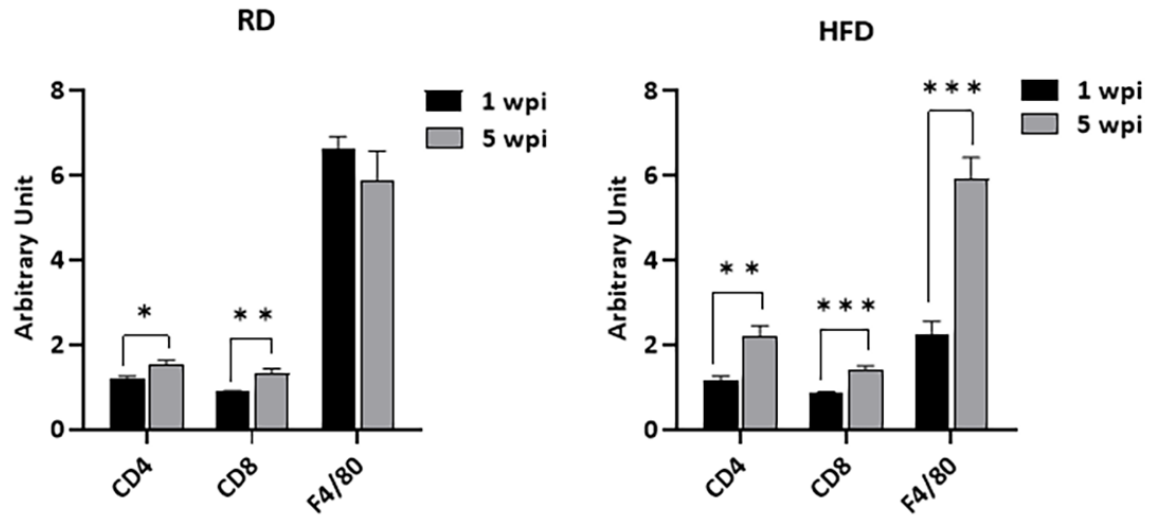


Figure S3: Bar graphs showing the levels of infiltrated immune cells (CD4, CD8 and F4/80 macrophages) normalized to β -Actin between 1 wpi and 5 wpi in both RD (left) and HFD (right) mice tumors. The error bars represent the standard error of the mean. * $p \leq 0.05$, ** $p < 0.005$ and *** $p \leq 0.001$.

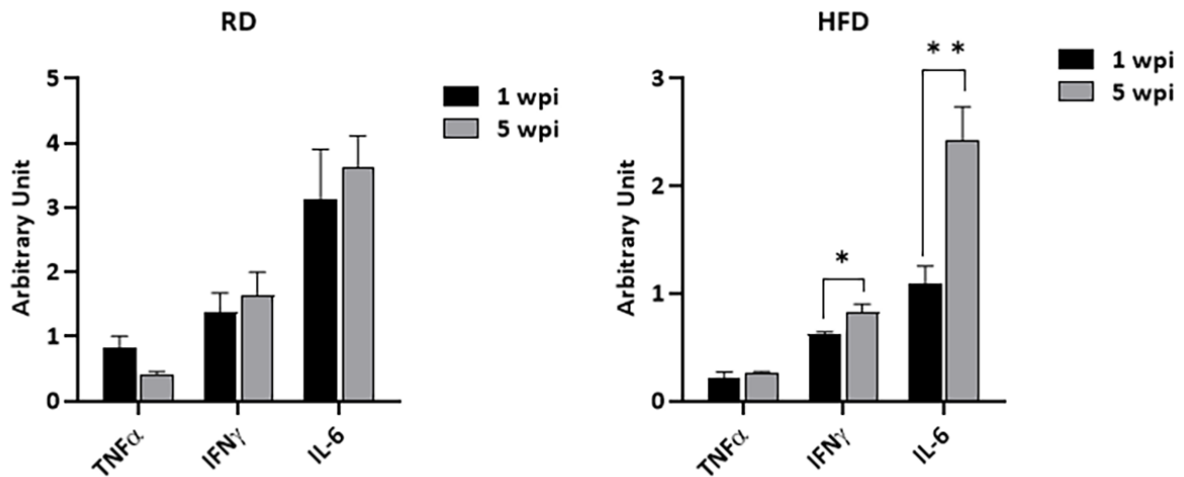


Figure S4: Bar graphs showing the levels of inflammatory markers (TNF α , IFN γ and IL-6) normalized to β -Actin between 1 wpi and 5 wpi in both RD (left) and HFD (right) mice tumors. The error bars represent the standard error of the mean. * $p \leq 0.05$ and ** $p \leq 0.005$.

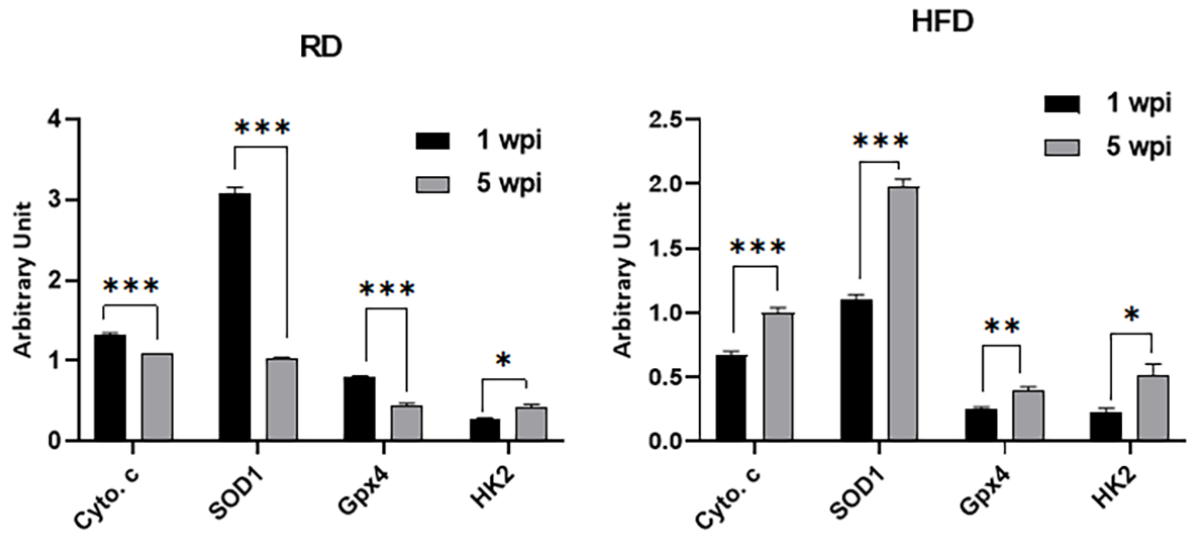


Figure S5: Bar graph showing the protein expression levels of energy metabolism (oxidative phosphorylation vs. glycolysis) normalized to β -Actin between 1 wpi and 5 wpi in both RD (left) and HFD (right) mice tumors. The error bars represent the standard error of the mean. * $p \leq 0.05$, ** $p \leq 0.005$ and *** $p \leq 0.001$.

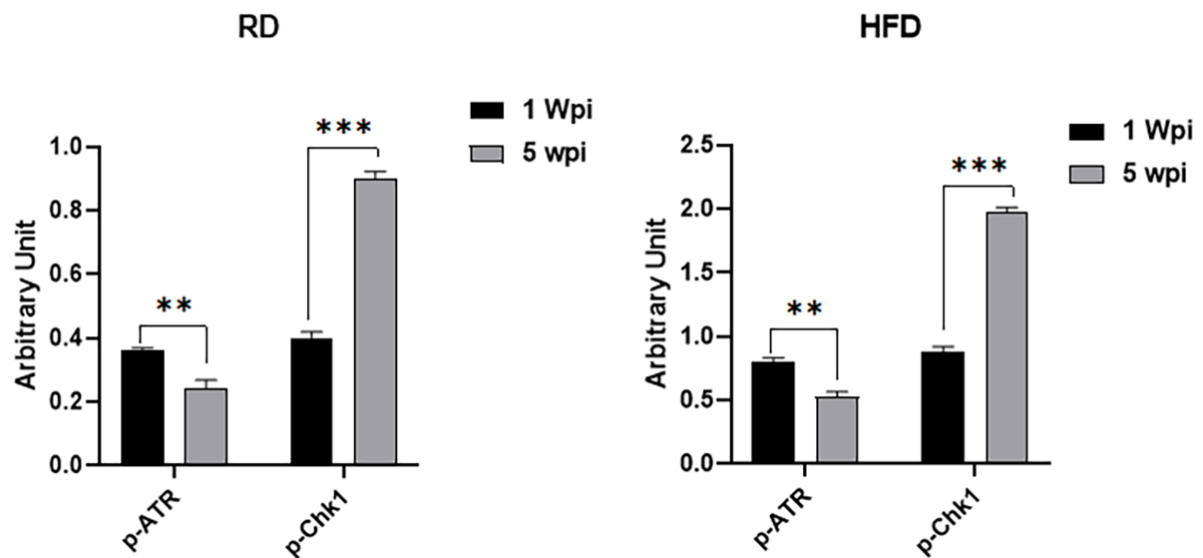


Figure S6: Bar graph showing the protein expression levels of DNA damage marker (p-Chk1 and p-ATR) normalized to β -Actin between 1 wpi and 5 wpi in both RD and HFD mice tumors. The error bars represent the standard error of the mean. ** $p \leq 0.005$ and *** $p \leq 0.001$.