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## Supplementary Information for

# Long-Term Effect of Aspartame on Male Reproductive System: Evidence for Testicular Histomorphometrics, Hsp70-2 Protein Expression and Biochemical Status

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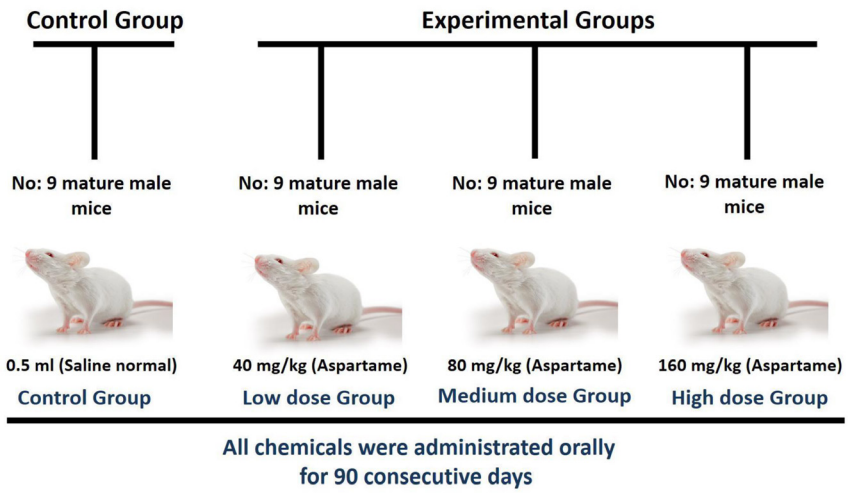


**Fig.S1:** Schematic view of grouping of the animals and treatment time.

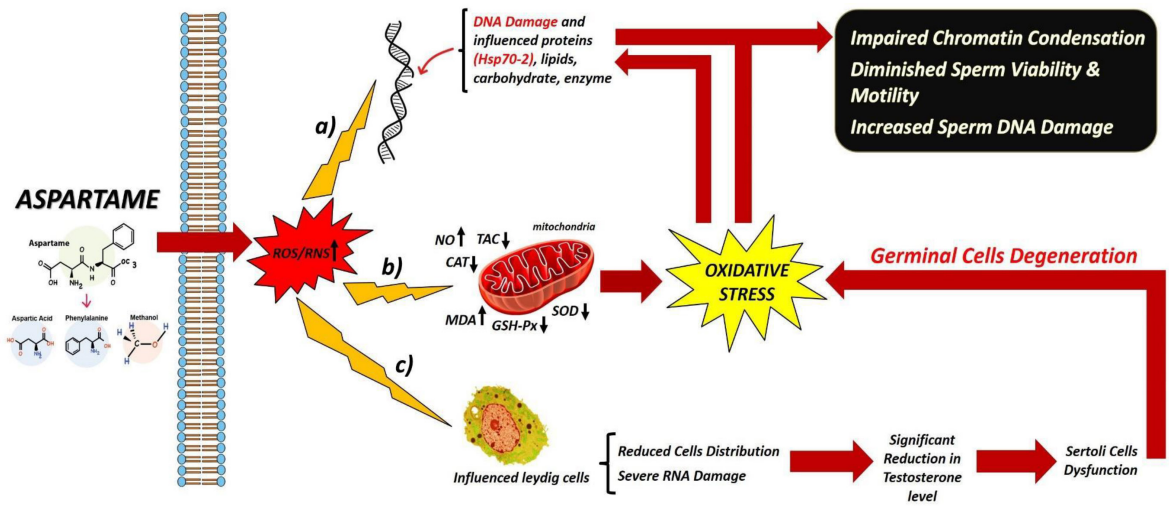


**Fig.S2:** Aspartame intake, by producing excessive free radicals (ROS/RNS), affect sperm characteristics in three different pathways inducing oxidative stress; a) direct effects on the cellular proteins, lipids, carbohydrates, and enzymes and inducing DNA damage, b) affecting mitochondrial membrane integrity and consequent oxidative stress and, c) it affects Leydig cells, resulting in a significant decrease in testosterone level, dysfunction of Sertoli cells and consequent oxidative stress which affect cellular ingredients. All these pathways result in impaired chromatin condensation, reduced sperm motility and viability and increased damage to sperm DNA. ROS; Reactive oxygen species and RNS; Reactive nitrogen species.

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