Primers used in mtDNA copy number analysis:
ND1 forward primer: 5’-CTAGCAGAAACAAACCGGGC-3’,
and ND1 reverse primer: 5’-CCGGCTGCTATTCTACGTT-3’,
16S rRNA forward primer: 5’-CGGCAAGGGAAAGATGAAAGAC-3’,
and 16S rRNA reverse primer: 5’-TCGTTTGGTTTCGGGGTTTC-3’,
HK2 forward primer: 5’-GCCAGCCTCTCCTGATTATTAGTGTT-3’,
and HK2 reverse primer: 5’-GGGAACACAAAAAGACCTTCTGTTGG-3’.
The CT values of ND1 and 16S rRNA were normalized to nuclear genomic DNA (HK2).

Primers used for mtDNA integrity analysis: forward primer; 5’-GCCAGCCTGACCATAAGCCATAAT-3’,
and reverse primer; 5’-GAGAGATTTTATGGCTGAGCTCCTGTTGG-3’, to amplify a 10 kb region of mtDNA.
And primers, forward; 5’-CCAGCTACTACCACATCTACGATT-3’, and reverse primer;
5’-GATGGTTTGGAGATTGGGATTTGAGT-3’, were used to amplify a 100 bp fragment of mtDNA.

Oligonucleotides used in BER analysis. The following oligonucleotides were annealed to their complementary oligos for;
1- AP site incision assay (AP:G), 5’-TAMRA-GATCCTCTAGAGXCGACCTGCA-3’,
2- uracil-excision assay (U:G), 5’-TAMRA-GATCCTCTAGAGUCGACCTGCA-3’,
and 3- 8-oxoG-excision assay (8-oxoG:C) 5’-GAACGACTGT8-oxo-GACTTGACTGCTAGT-3’-TAMRA.
For the gap filling assay the following oligonucleotides were annealed to prepare DNA substrate with a single nucleotide gap:
5’-TAMRA-CATATCCGTCGTCGCCTC-3’, 5’-TTCCGATAGTGACTACA,
and 3’-GTATAGGCACAGCGGGAGTAAGGCTATCAGTATG-5’.