

Figure S1. Impact of guarana (100 µg/mL) on the catalase (CAT) (a) and superoxide dismutase (SOD) (b) activity of *C. elegans* (N2). Results are presented as mean and SD of (a) CAT activity (nmol/min/mL) and (b) SOD activity (U/mL). Experiments repeated twice with 300 animals per condition in each experiment (* $p < 0.05$).

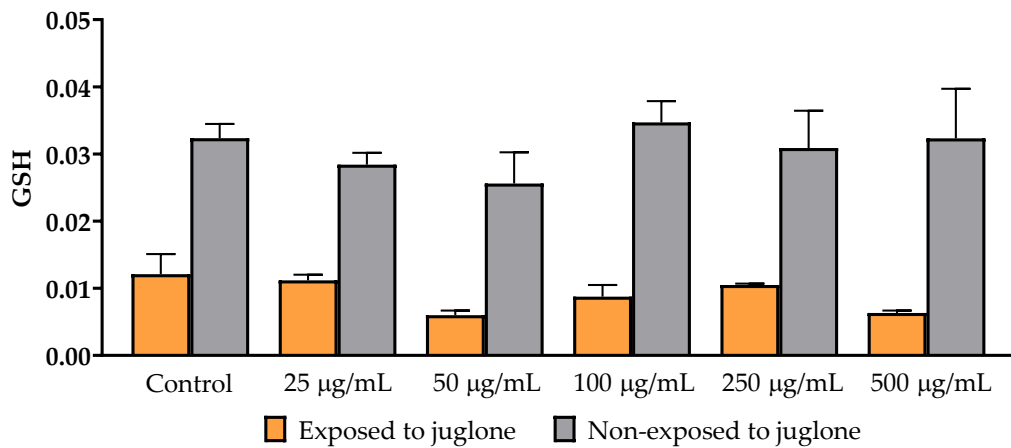


Figure S2. Glutathione (GSH) production of *C. elegans* (N2) when treated with different concentrations of guarana (25, 50, 100, 250 and 500 µg/mL). Orange columns represent GSH production after exposure to oxidative stress caused by juglone, while gray columns represent *C. elegans* GSH production without juglone treatment. Results presented as mean and SEM of GSH levels. Experiments were repeated three times with a total of 150 animals per condition in each experiment.

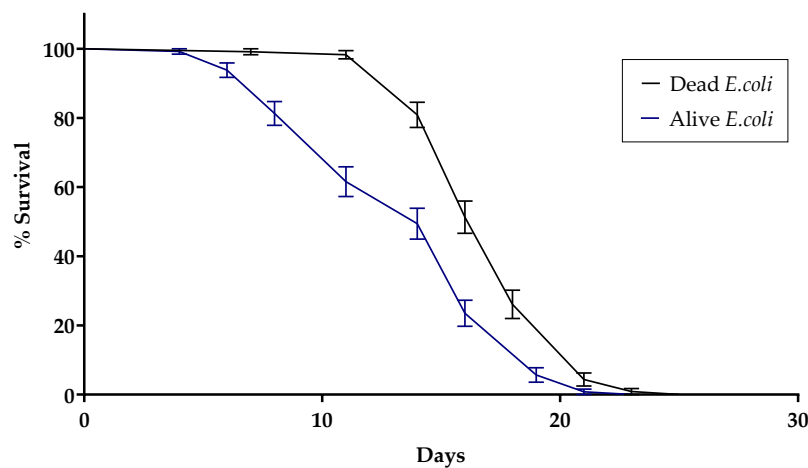


Figure S3. Percentage of survival of SS104 *glp-4* animals (25°C) fed with alive (n=125) or dead *E. coli* OP 50 (n=115).

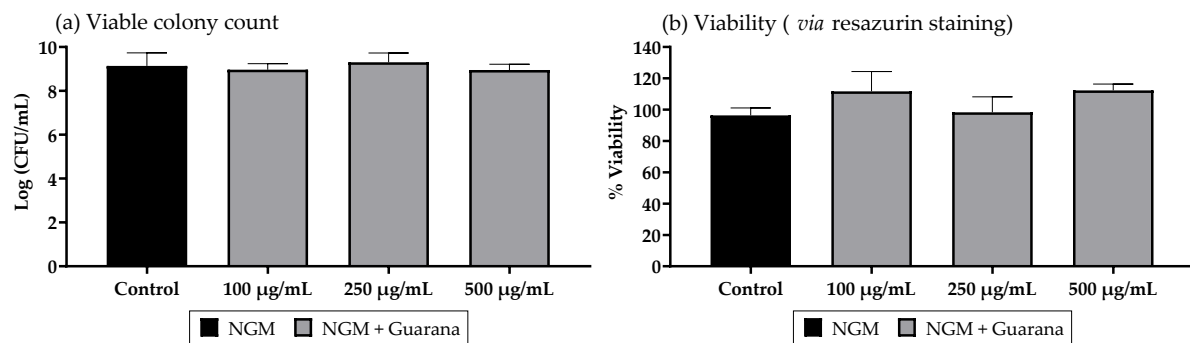


Figure S4. Effects of different concentrations (100, 250 and 500 µg/mL) of guarana on the viable colony counts (a) and the viability (b) of *E. coli*. The effect on viable colony counts (a) is expressed as the log of colony-forming units (CFU)/mL while the viability (b) is expressed as percentage of viable bacterial cells respect the untreated control. Results expressed as mean and SD of three biological repetitions.