**Supplemental Figure 1:** **Effect of dietary nicotinamide in an early- and late-stage intervention model.** A) Additional studies using 0.25% and 0.75% dietary nicotinamide resulted in substantial and statistically significant inhibition of 48% when started 1 week post-carcinogen, and a smaller level of inhibition (21%) which fell just short of being statistically significant when administered starting 8 weeks after B[a]P. No statistically significant inhibition was found for the low dose at 1 or 8 weeks post-carcinogen. B) End point mean body weights show decrease weight gain in early and late stage intervention at the high dose \*, P < 0.05; \*\*, P<0.0001. 25 animals per group were used. Dose dependent decrease in treatments by ANOVA analysis show significance in the early stage intervention, F(2,727)=10.36, P=0.0001. Dunnett’s post test demonstrated significance between high dose and control at P<0.05.

**Supplemental Figure 2: Safety of dietary nicotinamide.** A) Initial studies using 0.125, 0.25, and 0.375% dietary nicotinamide resulted in no statistically significant inhibition at 8 weeks post B[a]P administration. B) End point mean body weights show no significant changes in final body weight at these doses.