Supplementary Figure 1. Sulforaphane induces NRF2 in HPV-negative and HPV-positive HNSCC cells. HPV-negative (UMSCC-22A, UMSCC-1, Cal33) and HPV-positive (UPCI:SCC090) HNSCC cells were treated for 6 hours with 0.1% DMSO or 10 M SF, followed by immunoblotting for NRF2 or -actin.

Supplementary Figure 2. Proteasome inhibitors induce NRF2 in HNSCC cells. UMSCC-22A and UMSCC-1 cells were left untreated, or were treated for 24 hours with 0.1% DMSO, 10 nM bortezomib (BTZ), 100 nM carfilzomib (CFZ), 100 nM oprozomib (OPZ), 50 nM paclitaxel (PTX), or 10 M cisplatin (CP) . Whole cell lysates were subjected to immunoblotting for NRF2 and -actin.

Supplementary Figure 3. Sulforaphane induces NQO1 in HPV-negative and HPV-positive HNSCC cells. HPV-negative (UMSCC-22A, UMSCC-1, Cal33) and HPV-positive (UPCI:SCC090) HNSCC cells were treated for 4 hours with 0.1% DMSO or 10 M SF, followed by qPCR for NQO1 RNA.

Supplementary Figure 4. Sulforaphane induces GCLC in HPV-negative and HPV-positive HNSCC cells. HPV-negative (UMSCC-22A, UMSCC-1, Cal33) and HPV-positive (UPCI:SCC090) HNSCC cells were treated for 4 hours with 0.1% DMSO or 10 M SF, followed by qPCR for GCLC RNA.

Supplementary Figure 5. Sulforaphane IC50 values in Het-1A, and HPV-negative and HPV-positive HNSCC cell lines. Het-1A cells, HPV-negative HNSCC cells (UMSCC-22A, UMSCC-1, Cal33), and HPV-positive HNSCC cells (UPCI:SCC090, UMSCC-47) were treated in triplicate for 48 hours with varying concentrations SF, followed by performance of MTT assays. Error bars represent standard deviations.

Supplementary Table 1. Urinary excretion of sulforaphane-N-acetylcyteine and free sulforaphane in human subjects following administration of three different regimens of BSE beverage.