

Table S1. Effect of TRE and PCE on the viability of cancer cells

| TRE (800 µg/mL) | | | | | |
|-----------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Nut | HeLa | MCF7 | A549 | PC3 | ARPE |
| ALM | 56.0±1.7 ^b | 84.6±7.1 ^c | 101.7±5.6 ^d | 91.9±9.4 ^d | 102.0±5.4 ^a |
| EOA | 47.1±2.5 ^a | 66.6±10.2 ^a | 81.1±5.9 ^b | 70.5±8.9 ^{ab} | 99.7±6.1 ^a |
| WN | 53.5±4.4 ^{ab} | 70.2±6.9 ^{ab} | 88.0±4.4 ^{bc} | 63.3±9.8 ^{a*} | 101.8±4.9 ^a |
| PN | 56.8±6.7 ^b | 77.9±8.0 ^{abc} | 88.72±3.3 ^c | 80.3±4.2 ^{bcd} | 101.18±4.6 ^a |
| WPN | 56.3±2.7 ^b | 75.3±2.7 ^{abc} | 65.82±6.4 ^a | 74.5±11 ^{abc} | 101.0±1.9 ^a |
| PPN | 56.7±3.2 ^b | 71.1±10.5 ^{ab} | 82.19±6.2 ^{bc} | 64.4±12 ^{a*} | 100.9±3.1 ^a |
| PT | 55.7±7.7 ^b | 81.5±7.3 ^{bc} | 104.1±2.4 ^d | 87.3±4.4 ^{cd} | 101.0±2.0 ^a |
| PRE (800 µg/mL) | | | | | |
| Nut | HeLa | MCF7 | A549 | PC3 | ARPE |
| ALM | 93.9±4.6 ^a | 83.5±5.4 ^{ab} | 99.29±2.5 ^c | 110.7±7.3 ^c | 135.60±7.2 ^b |
| EOA | 95.1±7.4 ^a | 81.8±7.3 ^{ab} | 87.7±3.3 ^{ab} | 91.2±5.6 ^{ab} | 132.4±8.0 ^b |
| WN | 85.0±1.7 ^a | 80.3±13.8 ^{ab} | 83.0±5.2 ^a | 85.7±4.6 ^a | 147.55±4.0 ^c |
| PN | 86.6±4.6 ^a | 75.2±6.0 ^a | 88.69±4.8 ^b | 93.5±5.2 ^b | 157.24±8.1 ^c |
| WPN | 101.0±7.0 ^a | 86.3±4.4 ^{ab} | 89.31±2.7 ^b | 95.9±3.6 ^b | 128.4±8.0 ^{ab} |
| PPN | 95.3±2.6 ^a | 86.0±10.3 ^{ab} | 100.8±3.1 ^c | 92.3±7.2 ^b | 130.9±4.5 ^{ab} |
| PT | 89.7±4.2 ^a | 92.3±8.1 ^b | 97.5±2.0 ^c | 94.1±7.6 ^b | 120.9±6.7 ^a |

Different superscript letters in the same column indicate significant difference between extracts on the same cell line

Table S2. Selectivity of the cytotoxicity of tocol and phenol extracts in cancer cell lines

| TRE | HeLa | MCF7 | A549 | PC3 | ARPE |
|---------|------|------|------|------|------|
| Alm | 1.75 | 1.16 | 0.95 | 1.07 | 1 |
| EOA | 2.33 | 1.65 | 1.35 | 1.56 | 1 |
| WN | 1.69 | 1.42 | 1.14 | 1.58 | 1 |
| PN | 1.90 | 1.39 | 1.22 | 1.35 | 1 |
| WPN | 1.80 | 1.34 | 1.54 | 1.32 | 1 |
| PPN | 2.34 | 1.85 | 1.60 | 2.04 | 1 |
| PT | 1.66 | 1.14 | 0.89 | 1.06 | 1 |
| Average | 1.92 | 1.42 | 1.24 | 1.42 | 1 |
| PCE | HeLa | MCF7 | A549 | PC3 | ARPE |
| Alm | 1.23 | 1.38 | 1.16 | 1.04 | 1 |
| EOA | 1.22 | 1.40 | 1.32 | 1.27 | 1 |
| WN | 1.16 | 1.24 | 1.18 | 1.16 | 1 |
| PN | 1.33 | 1.56 | 1.30 | 1.23 | 1 |
| WPN | 1.29 | 1.51 | 1.46 | 1.36 | 1 |
| PPN | 1.22 | 1.34 | 1.15 | 1.25 | 1 |
| PT | 1.13 | 1.09 | 1.03 | 1.07 | 1 |
| Average | 1.23 | 1.36 | 1.23 | 1.20 | 1 |

Table S3. EC20 and EC50 of extracts alone and in combination

| | TRE | | PRE | | EC50 COMBINATION | |
|-------------|---------------------|----------------------|---------------------|----------------------|--------------------|--------------------|
| | EC20 μ g | EC50 μ g | EC20 μ g | EC50 μ g | EC20 PRE: TRE | EC20 TRE: PRE |
| <i>HeLa</i> | | | | | | |
| EOA | 244.98 \pm 17.56 | 950.99 \pm 71.75 | 1671.36 \pm 10.28 | 7856.49 \pm 198.65 | 302.51 \pm 0.78 | 82.07 \pm 1.72 |
| PN | 276.10 \pm 2.42 | 1047.18 \pm 5.75 | 1402.35 \pm 26.67 | 8316.10 \pm 194.01 | 283.68 \pm 0.10 | 151.96 \pm 2.66 |
| WN | 214.22 \pm 16.84 | 951.4 \pm 32.16 | 1498.41 \pm 89.45 | 6078.80 \pm 402.31 | 259.86 \pm 0.04 | 220.80 \pm 1.48 |
| <i>MCF7</i> | | | | | | |
| EOA | 482.18 \pm 8.80 | 2092.3 \pm 439.41 | 879.02 \pm 295.95 | 2847.87 \pm 145.56 | 500.60 \pm 24.50 | 208.68 \pm 30.85 |
| PN | 984.80 \pm 207.56 | 9040.81 \pm 458.94 | 657.77 \pm 24.44 | 2037.75 \pm 270.82 | 441.76 \pm 21.67 | 353.07 \pm 11.14 |
| WN | 522.30 \pm 49.90 | 2523.8 \pm 418.17 | 711.25 \pm 235.96 | 2103.80 \pm 624.17 | 242.00 \pm 5.44 | 34.19 \pm 3.07 |

EC20 and EC50 from Tocopherol rich extract (TRE) and phenolic rich extract (PRE) alone and in combination (Mean \pm SEM). Each EC50 and EC20 was calculated using a linear equation by log (dose) response curves.