

Table S1. Effects of thermal and thermosonication processing on myrosinase activity, glucoraphanin content, and sulforaphane yield in broccoli puree.

		Glucoraphanin (aqueous extract; µg/g DW)	Glucoraphanin (methanolic extract; µg /g DW)	Sulforaphane (µg/g DW)	Myrosinase activity (U/gDW)
Thermal Treatment	Untreated broccoli	355.5±15.2 ^{ilr}	405.3±41.9 ^{nop}	196.0±57.9 ^{mn}	88.2±0.7 ^{gh}
	3 min	331.3±12.0 ^{lms}	369.3±29.7 ^{op}	219.7±34.5 ^{mno}	83.8±1.4 ^j
	40 °C 5 min	340.1±42.5 ^{ikmqr}	364.6±23.7 ^p	258.1±30.8 ^{lm}	86.0±1.7 ^{hij}
	7 min	394.6±29.1 ^{ejq}	493.9±23.5 ^{kl}	246.9±40.0 ^{mn}	85.3±2.6 ^{hij}
	Untreated broccoli	355.5±15.2 ^{rs}	405.3±41.9 ^{nop}	180.6±31.6 ^{no}	89.3±2.5 ^{dfigh}
	3 min	370.4±58.5 ^{gklmp}	451.4±7.4 ^{mn}	287.5±45.5 ^{klm}	76.0±1.4 ^k
	50 °C 5 min	470.0±20.6 ^{fn}	478.7±45.3 ^{iklmnr}	307.3±57.4 ^{hiklm}	73.4±3.7 ^{klm}
	7 min	488.6±30.8 ^{ef}	543.8±94.4 ^{efghkm}	412.3±37.6 ^{fg}	68.0±2.8 ^{mn}
	Untreated broccoli	355.5±15.2 ^{ks}	405.3±41.9 ^{nop}	592.6±99.2 ^e	110.9±4.3 ^b
	3 min	379.9±29.5 ^{hijp}	422.2±46.5 ^{lmnop}	996.4±18.1 ^d	71.6±0.6 ^{lm}
	60 °C 5 min	502.5±48.3 ^{no}	551.9±28.8 ^{ghr}	1202.8±38.7 ^e	63.7±2.2 ⁿ
	7 min	643.4±47.5 ^{cd}	714.0±0.0 ^d	1496.96±100.81 ^b	45.1±5.4 ^o
Thermosonication (18 kHz, 500 W) Treatment	Untreated broccoli	355.5±15.2 ^{js}	405.3±41.9 ^{nop}	196.0±57.9 ^{mno}	88.2±0.7 ^{figh}
	3 min	347.1±23.2 ^{im}	382.4±10.9 ^{op}	160.2±34.1 ^o	98.2±2.8 ^c
	40 °C 5 min	413.5±32.0 ^{gi}	469.3±32.8 ^{klmn}	268.0±33.9 ^{clm}	113.8±1.7 ^b
	7 min	429.0±40.9 ^{figho}	523.4±15.1 ^{hi}	282.3±49.0 ^{clm}	93.9±3.2 ^{cd}
	Untreated broccoli	355.5±15.2 ^{js}	405.3±41.9 ^{nop}	180.6±31.6 ^{no}	89.3±2.5 ^{dfigh}
	3 min	422.1±1.3 ^g	468.2±53.5 ^{iklmnr}	343.2±6.0 ⁱ	81.6±4.2 ^{ijk}
	50 °C 5 min	561.4±61.6 ^{de}	633.0±40.6 ^{efq}	341.4±61.2 ^{ghik}	126.7±5.2 ^a
	7 min	766.2±66.5 ^{ab}	825.2±43.9 ^{bc}	446.5±28.1 ^f	87.4±3.4 ^{efghij}
	Untreated broccoli	355.5±15.2 ^{js}	405.3±41.9 ^{nop}	592.6±99.2 ^e	110.9±4.3 ^b
	3 min	526.9±10.1 ^e	591.9±11.5 ^{figq}	1101.0±75.5 ^e	85.5±3.0 ^{ghij}
	60 °C 5 min	706.7±54.1 ^{bc}	804.4±1.2 ^e	1140.3±98.5 ^e	83.3±2.0 ^{ij}
	7 min	837.7±52.4 ^a	917.3±53.6 ^{ab}	1734.1±70.0 ^a	51.0±3.7 ^o