

1 **Home food preparation techniques impacted the availability**  
2 **of natural antioxidants and bioactivities in kale and broccoli**

3 Lu Yu<sup>1</sup>, Boyan Gao<sup>1</sup>, Yanfang Li<sup>1</sup>, Thomas T. Y. Wang<sup>2</sup>, Yinghua Luo<sup>1</sup>, Jing Wang<sup>3\*</sup>, Liangli  
4 (Lucy) Yu<sup>1\*</sup>

5 <sup>1</sup>Department of Nutrition and Food Science, University of Maryland, College Park, MD 20742,  
6 USA

7 <sup>2</sup>Diet, Genomics and Immunology Laboratory, USDA-ARS, Beltsville, MD 20705, USA

8 <sup>3</sup>Beijing Advanced Innovation Center for Food Nutrition and Human Health and Beijing Higher  
9 Institution Engineering Research Center of Food Additives and Ingredients, Beijing Technology  
10 & Business University (BTBU), Beijing 100048, China

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15 \*Corresponding authors E-mail addresses: wangjing@th.btbu.edu.cn (Jing Wang) and

16 [lyu5@umd.edu](mailto:lyu5@umd.edu) (Liangli Yu)

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22 **Supplemental Materials:**

23 **Supplementary Table 1S.** Particle sizes of ground and chopped kale and broccoli (un-  
 24 microwaved). Numbers marked with different small letters indicate significance between kale  
 25 samples, numbers marked with capital letters indicate significance between broccoli samples ( $P$   
 26  $\leq 0.05$ ).

		Average diameter/length (mm)
kale	ground with blenders	0.58-1.95a
	chopped	30.42-35.12b
broccoli	ground with blenders	0.62-1.93A
	chopped	31.52-35.74B

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28 **Supplementary Table 2S.** Antioxidant properties of kale and broccoli processed by grinding  
 29 and chopping with/without microwaving. Antioxidant capacities were present as mean  $\pm$  SD (n =  
 30 3). Numbers marked with different small letters indicate significance without microwaving,  
 31 numbers marked with different capital letters indicate significance with microwaving, and \*  
 32 indicates difference between the same samples without and with microwaving ( $P \leq 0.05$ ).

	DPPH <sup>2</sup> ( $\mu$ mole Trolox FW-1)		ABTS <sup>5</sup> ( $\mu$ mole Trolox FW-1)		
	kale	broccoli	kale	broccoli	
un-microwaved	blender 1	1.34b $\pm$ 0.16	0.54b $\pm$ 0.12	1.41b $\pm$ 0.10	0.99bc $\pm$ 0.09
	blender 2	1.13b $\pm$ 0.31	0.36b $\pm$ 0.04	1.37b $\pm$ 0.34	0.11bc $\pm$ 0.01
	blender 3	0.99b $\pm$ 0.17	0.33b $\pm$ 0.10	1.37b $\pm$ 0.28	1.24c $\pm$ 0.10
	blender 4	0.85b $\pm$ 0.06	0.37b $\pm$ 0.07	1.00b $\pm$ 0.14	0.91b $\pm$ 0.02
	blender 5	1.07b $\pm$ 0.16	0.33b $\pm$ 0.09	1.42b $\pm$ 0.07	1.14bc $\pm$ 0.14
chopped	N/A	N/A	N/A	N/A	
microwaved	blender 1	0.60B* $\pm$ 0.03	0.63B $\pm$ 0.21	1.62B $\pm$ 0.06	1.47B* $\pm$ 0.35
	blender 2	0.85BC $\pm$ 0.32	0.62B $\pm$ 0.10	1.59B $\pm$ 0.10	1.84B* $\pm$ 0.34
	blender 3	0.91BC $\pm$ 0.10	0.62B $\pm$ 0.12	1.08B $\pm$ 0.18	1.82B* $\pm$ 0.094
	blender 4	0.63BC $\pm$ 0.13	0.50B $\pm$ 0.24	1.09B $\pm$ 0.35	1.31B* $\pm$ 0.32
	blender 5	1.08C $\pm$ 0.23	0.68B $\pm$ 0.09	1.67B $\pm$ 0.25	1.80B* $\pm$ 0.094

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<sup>1</sup>DPPH: DPPH radical scavenging capacity

<sup>2</sup>ABTS: ABTS cation radical scavenging capacity

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