

**Table S1.** Composition of the aqueous extract of pepino leaf (AEPL).

Polyphenolic compound	AEPL ^a (%)
Total phenolic acid (Folin-Ciocalteu method ^b)	5.52 ± 1.27
Total flavonoids (Jia method ^c)	25.32 ± 0.48
Total anthocyanins (Fuleki and Francis method ^d)	2.02 ± 1.13

^a The AEPL was prepared as described in Materials and Methods. ^{b-d} The concentrations of total phenolic acid, flavonoid, and anthocyanin were analyzed according to the Folin-Ciocalteu method [Lakenbrink et al., 2000], Jia method [Jia et al., 1998], Fuleki and Francis method [Fuleki and Francis, 1968], respectively.

Table S2. Composition of the aqueous extract of pepino leaf (AEPL) vs. pepino fruits.

Polyphenolic compounds (mg/100g dry weight)	AEPL ^a	PAE ^b
Total phenolic acid (Folin-Ciocalteu method ^c)	933 ± 228	1217 ± 188
Total flavonoids (Jia method ^d)	4550 ± 86	875 ± 62
Total anthocyanins (Fuleki and Francis method ^e)	360 ± 203	177 ± 51

^a The AEPL was prepared as described in Materials and Methods. ^b The composition of aqueous extract of pepino fruit (PAE) was cited by the study of Hsu, Guo et al. ^{c-e} The concentrations of total phenolic acid, flavonoid, and anthocyanin were analyzed according to the Folin-Ciocalteu method [Lakenbrink et al., 2000], Jia method [Jia et al., 1998], Fuleki and Francis method [Fuleki and Francis, 1968], respectively.

Table S3. Comparison of various plant-derived polyphenols.

		AEPL	HSE	GTE
Full name		aqueous extract of pepino leaf	aqueous extracts from <i>Hibiscus sabdariffa</i>	Green tea extract
Component		phenolic acids, flavonoids, anthocyanins,	phenolic acids, flavonoids, anthocyanins	EGCG, EGC, ECG, EC, caffeine
Major compound (%)		N/A ^a	N/A	EGCG (30–42%)
Anti-cancer and oxidative DNA damage	Animal models	N/A	1–2% (ICR mice)	2% (A/J mice)
	Human studies	N/A	N/A	3 g/day; 10%
Anti-lipid peroxidation and atherosclerosis	Animal models	N/A	0.5%–1% (New Zealand White rabbits)	50 mg/kg; 3% (Wistar rats)
	Human studies	N/A	1 g/day	600 mg/day
Hypoglycemic	Animal models	N/A	200 mg/kg (SD rats)	500 mg/kg (SD rats)
	Human studies	N/A	2 g/day	857 mg/day
Hepatoprotection	Animal models	1–2% (C57BL/6J mice)	1–5% (Wistar rats); 200–600 mg/kg (BALB/c mice)	2.5% (Wistar rats)
	Human studies	N/A	N/A	N/A
Reference	In our manuscript, 2017		Chen et al., 2005; Lin et al., 2007; Liu et al., 2006; Liu et al., 2010; Mozaffari-Khosravi et al., 2008; Pheng et al., 2011	Higdon & Frei, 2003; Hsu et al., 2011; Kuzu et al., 2008; Lin et al., 1998; Li, Sun, Han, & Chen, 1999; Miura et al., 2000; Sano et al., 1995; Xu et al., 1992

N/A, Not available.