**Supplementary Table 1.** Quantitation of ellagitannins obtained after acid hydrolysis, in different parts of pomegranate (expressed in  $\mu g/g$  FW), pressed arils juice and commercial juice (expressed in mg/L). The results are the mean  $\pm$  SD of the data obtained in four pieces of pomegranate fruits

	Husk	Membrane	Seeds	Arilsa	Pressed arils juice <sup>b</sup>	Commercial juice <sup>b</sup>
Gallic acid	$2,426.3 \pm 369.7$	$1,758.9 \pm 161.8$	$186.9 \pm 47.4$	$140.5 \pm 14.9$	$159.9 \pm 8.0$	$131.5 \pm 2.38$
Valoneic acid dilactone	$1,011.2 \pm 435.2$	$953.2 \pm 207.9$	$46.5 \pm 7.01$	$18.8 \pm 2.3$	$10.2 \pm 2.1$	$4.4 \pm 2.3$
Sanguisorbic acid						
dilactone	$6,595.5 \pm 584.5$	$6,294.5 \pm 1,036.6$	$361.5 \pm 137.3$	$169.0\pm12.4$	$108.4 \pm 5.9$	$45.7 \pm 30.7$
Gallagic Acid dilactone	$30,314.6 \pm 3,591.5$	$27,151.0 \pm 3,767.9$	$1,080.1 \pm 212.8$	$236.2 \pm 59.1$	$32.3 \pm 7.7$	$155.5 \pm 28.6$
Ellagic Acid	$27,053.8 \pm 1,434.6$	$17,488.4 \pm 131.8$	$1,132.6 \pm 143.7$	$322.1 \pm 53.4$	$147.6 \pm 16.1$	$287.1 \pm 17.8$
Ellagic acid C-glucoside	$2,659.1 \pm 245.9$	$2,446.3 \pm 111.5$	$263.8 \pm 35.9$	$63.6 \pm 8.6$	$26.5 \pm 1.1$	$103.5 \pm 62.7$
<b>Total Ellagitannins</b>	$70,060.5 \pm 6,385.6$	$56,092.3 \pm 4,793.1$	$3,071.4 \pm 479.9$	$950.2 \pm 51.0$	$484.9 \pm 26.3$	$727.6 \pm 116.9$

- a) Arils concentrations was calculated as sum of 30% of the concentration of the residue obtained after juice extraction (press cake) and 70% of the concentration of the pressed arils juice
- b) Juice concentration (pressed arils and commercial) was calculated as sum of juice and pellet

Supplementary Table 2. Concentration of the main ellagitannins and ellagic acid derivatives present in different parts of pomegranate ( $\mu g/g$ ), homemade juice and commercial juice (mg/L) The results are the mean  $\pm$  SD of the data obtained in four pieces of pomegranate fruits

	Husk	Membrane	Seeds	Arilsa	Pressed arils juice <sup>b</sup>	Commercial juice <sup>b</sup>
Punicalagin	$26,182.5 \pm 1,865.2$	$27,910.3 \pm 2,765.4$	$939.5 \pm 80.6$	$190.7 \pm 44.2$	$6.1 \pm 2.7$	$191.5 \pm 8.1$
Punicalin	$667.8 \pm 75.7$	$480.6 \pm 95.4$	-	$7.1 \pm 2.4$	$2.1 \pm 0.1$	$69.8 \pm 1.3$
Ellagic Acid	$1,404.9 \pm 128.5$	$729.1 \pm 165.0$	$32.3 \pm 2.5$	$8.4 \pm 2.8$	$2.8 \pm 0.9$	$29.4 \pm 2.0$
Ellagic acid glucoside	$1,153.7 \pm 106.0$	$983.2 \pm 149.8$	$63.6 \pm 6.4$	$15.3 \pm 1.2$	$7.3 \pm 2.2$	$31.3 \pm 1.6$
Ellagic acid pentoside	$1,216.4 \pm 173.0$	$282.3 \pm 43.6$	$18.8 \pm 3.5$	$9.0 \pm 0.8$	$8.8 \pm 0.4$	$11.7 \pm 0.1$
Total	$30,625.3 \pm 2,043.3$	$30,385.5 \pm 3,061.3$	$1,054.2 \pm 77.6$	$230.5 \pm 51.3$	$27.1 \pm 5.8$	$333.7 \pm 9.3$

- a) Arils concentrations was calculated as sum of 30% of the concentration of the residue obtained after juice extraction (press cake) and 70% of the concentration of the pressed arils juice
- b) Juice concentration (pressed arils and commercial) was calculated as sum of juice and pellet

Supplementary Table 3. Concentration of anthocyanins in different parts of pomegranate ( $\mu g/g$ ), pressed arils juice and commercial juice (mg/L). The results are the mean  $\pm$  SD of the data obtained in four pieces of pomegranate fruits

	Husk	Membrane	Seeds	Arilsa	Pressed arils juice <sup>b</sup>	Commercial juice <sup>b</sup>
Delphinidin 3,5-diglucoside	-	-	-	$120.9 \pm 34.2$	$153.7 \pm 57.3$	$119.4 \pm 1.2$
Cyanidin 3,5-diglucoside	-	-	$332.8 \pm 96.6$	$562.7 \pm 116.8$	$745.2 \pm 187.1$	$468.3 \pm 0.8$
Pelargonidin 3,5-diglucoside + Delphinidin 3,5-diglucoside	-	-	-	$202.5 \pm 46.6$	$211.3 \pm 39.5$	$153.4 \pm 1.8$
Cyanidin 3-glucoside	-	-	$636.7 \pm 206.8$	$692.4 \pm 127.5$	$800.4 \pm 169.4$	$484.2 \pm 4.2$
Pelargonidin 3-glucoside	-	-	$90.6 \pm 20.1$	$104.9 \pm 7.9$	$125.8 \pm 17.8$	$95.6 \pm 0.6$
Total anthocyanidins			$1,060.1 \pm 259.5$	$1,683.4 \pm 333.0$	$2,036.4 \pm 345.2$	$1,320.9 \pm 7.2$

a) Arils concentrations was calculated as sum of 30% of the concentration of the residue obtained after juice extraction (press-cake) and 70% of the concentration of the pressed arils juice

b) Juice concentration (pressed arils and commercial) was calculated as sum of juice and pellet