

Table S1. Subgroup analyses for effects of anthocyanins and main anthocyanin in the test foods on TG

Subgroup	Anthocyanin groups	n	MD [95% CI]	I ²	p			
					Heterogeneity ^a	Within-group ^b	Intra-group ^c	
1. Main anthocyanin to total anthocyanin content								
≥ 50%	Cyanidin-based	3	-0.02 [-0.36, 0.33]	13	0.32	0.93		
	Delphinidin-based	7	-0.16 [-0.32, 0.01]	0	0.46	0.06		
	Subtotal	10	-0.13 [-0.27, 0.02]	0	0.47	0.09	0.46	
	< 50%	Delphinidin-based	2	-0.55 [-1.08, -0.02]	80	0.02	0.04	
		Malvidin-based	2	-0.13 [-0.36, 0.10]	0	0.50	0.26	
		Subtotal	5	-0.33 [-0.56, -0.10]	54	0.07	0.005	0.36
2. Anthocyanin dosage								
≥ 160 mg	Delphinidin-based	5	-0.17 [-0.39, 0.05]	18	0.30	0.12		
	Malvidin-based	2	-0.13 [-0.36, 0.10]	0	0.50	0.26		
	Subtotal	8	-0.18 [-0.31, -0.04]	0	0.59	0.01	0.92	
	< 160 mg	Cyanidin-based	3	0.13 [-0.25, 0.51]	0	0.63	0.52	
		Delphinidin-based	4	-0.32 [-0.64, -0.00]	64	0.04	0.05	
		Subtotal	7	-0.21 [-0.48, 0.06]	58	0.03	0.13	0.08
3. Types of anthocyanin source								
Purified anthocyanins	Delphinidin-based	6	-0.15 [-0.34, 0.04]	10	0.35	0.11		
	Subtotal	6	-0.15 [-0.34, 0.04]	10	0.35	0.11	-	
	Extract	Cyanidin-based	4	-0.02 [-0.31, 0.27]	0	0.51	0.88	
		Delphinidin-based	3	-0.41 [-0.78, -0.04]	69	0.04	0.03	
		Subtotal	8	-0.22 [-0.42, -0.02]	53	0.04	0.03	0.26
	4. Target population							
Prediabetes and/or type 2 diabetes	Delphinidin-based	2	-0.19 [-0.67, 0.30]	73	0.05	0.45		
	Subtotal	3	-0.23 [-0.56, 0.10]	47	0.15	0.17	0.72	
	Dyslipidemia	Delphinidin-based	5	-0.27 [-0.55, 0.00]	58	0.05	0.05	
		Subtotal	5	-0.27 [-0.55, 0.00]	58	0.05	0.05	-
	Metabolic syndrome	Cyanidin-based	2	-0.20 [-0.60, 0.19]	0	0.81	0.31	
		Subtotal	2	-0.20 [-0.60, 0.19]	0	0.81	0.31	-
Overweight or obesity	Cyanidin-based	2	0.18 [-0.24, 0.60]	0	0.44	0.40		
	Subtotal	3	0.08 [-0.24, 0.41]	0	0.58	0.62	0.48	
5. Baseline TG								
> 1.7 mmol/L	Cyanidin-based	2	-0.17 [-0.88, 0.55]	0	0.83	0.65		

	Delphinidin-based	8	-0.25 [-0.44, -0.07]	49	0.06	0.008	
	Subtotal	11	-0.27 [-0.42, -0.11]	28	0.18	0.0007	0.94
	Cyanidin-based	2	0.00 [-0.46, 0.47]	53	0.15	0.98	
	Subtotal	4	-0.06 [-0.24, 0.12]	0	0.50	0.51	0.92
6. Baseline BMI							
≥ 25.0 kg/m ²	Cyanidin-based	4	-0.02 [-0.31, 0.27]	0	0.51	0.88	
	Delphinidin-based	3	-0.39 [-0.92, 0.15]	68	0.04	0.16	
	Subtotal	8	-0.23 [-0.50, 0.04]	43	0.09	0.1	0.410
< 25.0 kg/m ²	Delphinidin-based	5	-0.13 [-0.36, 0.10]	28	0.24	0.27	
	Subtotal	6	-0.14 [-0.30, 0.03]	13	0.33	0.1	0.870

The probabilities are based on the Cochran's Q-test (a), test for overall effect of each anthocyanin group (b), and test for subgroup differences (c). If there was the data about subgroup numbers being one or less, analysis limited to that subgroup was omitted.

BMI, body mass index; CI, confidence interval; MD, mean difference; n, sample size; TG, triglyceride.