

| Study or Subgroup | Experimental | | | Control | | | Weight | Mean Difference IV, Random, 95% CI | Year |
|---|--------------|------|-------|---------|------|-------|--------|---------------------------------------|------|
| | Mean | SD | Total | Mean | SD | Total | | | |
| 2.1.1 dried form (capsule, powder, tablets) | | | | | | | | | |
| Lee 2008 | -0.4 | 0.39 | 15 | 0.3 | 0.39 | 15 | 11.3% | -0.70 [-0.98, -0.42] | 2008 |
| Hormoznejad 2020 | -0.04 | 1.17 | 20 | -0.22 | 0.74 | 21 | 4.4% | 0.18 [-0.42, 0.78] | 2020 |
| Shirazi 2021 | -0.54 | 1.65 | 46 | -0.13 | 0.32 | 48 | 6.0% | -0.41 [-0.90, 0.08] | 2021 |
| Flanagan 2022 | -0.2 | 1.15 | 29 | -0.1 | 1.05 | 31 | 4.9% | -0.10 [-0.66, 0.46] | 2022 |
| Heiss 2022 | -0.13 | 0.51 | 22 | 0.01 | 1.69 | 22 | 3.1% | -0.14 [-0.88, 0.60] | 2022 |
| Subtotal (95% CI) | | | 132 | | | 137 | 29.7% | -0.30 [-0.64, 0.05] | |

Heterogeneity: $\tau^2 = 0.09$; $\chi^2 = 9.47$, $df = 4$ ($P = 0.05$); $I^2 = 58\%$

Test for overall effect: $Z = 1.70$ ($P = 0.09$)

2.1.2 juice form

| | | | | | | | | | |
|--------------------------|-------|------|------------|-------|------|------------|--------------|----------------------------|------|
| Duthie 2006 | -0.01 | 0.65 | 11 | -0.03 | 0.75 | 9 | 4.1% | 0.02 [-0.60, 0.64] | 2006 |
| Basu 2011 | -0.14 | 0.85 | 15 | 0.13 | 0.81 | 16 | 4.6% | -0.27 [-0.86, 0.32] | 2011 |
| Dohadwala 2011 | -0.05 | 1.02 | 22 | 0 | 1.07 | 22 | 4.2% | -0.05 [-0.67, 0.57] | 2011 |
| Flammer 2013 | 0.1 | 0.16 | 32 | 0.14 | 0.18 | 37 | 18.7% | -0.04 [-0.12, 0.04] | 2013 |
| Novotny 2015 | 0.08 | 0.61 | 29 | 0 | 0.73 | 27 | 8.9% | 0.08 [-0.27, 0.43] | 2015 |
| Javid 2017 | -0.01 | 1.07 | 9 | -0.2 | 0.83 | 12 | 2.5% | 0.19 [-0.65, 1.03] | 2017 |
| Paquette 2017 | -0.1 | 0.81 | 20 | 0.08 | 0.97 | 21 | 5.1% | -0.18 [-0.73, 0.37] | 2017 |
| Richter 2021 | -0.03 | 0.85 | 40 | -0.03 | 0.85 | 40 | 8.4% | 0.00 [-0.37, 0.37] | 2021 |
| Rahn 2023 | -0.01 | 0.24 | 18 | -0.04 | 0.39 | 18 | 13.8% | 0.03 [-0.18, 0.24] | 2023 |
| Subtotal (95% CI) | | | 196 | | | 202 | 70.3% | -0.03 [-0.10, 0.04] | |

Heterogeneity: $\tau^2 = 0.00$; $\chi^2 = 1.99$, $df = 8$ ($P = 0.98$); $I^2 = 0\%$

Test for overall effect: $Z = 0.83$ ($P = 0.40$)

Total (95% CI) **328** **339** **100.0%** **-0.12 [-0.26, 0.02]**

Heterogeneity: $\tau^2 = 0.03$; $\chi^2 = 25.43$, $df = 13$ ($P = 0.02$); $I^2 = 49\%$

Test for overall effect: $Z = 1.64$ ($P = 0.10$)

Test for subgroup differences: $\chi^2 = 2.24$, $df = 1$ ($P = 0.13$), $I^2 = 55.4\%$

