

Supplementary information

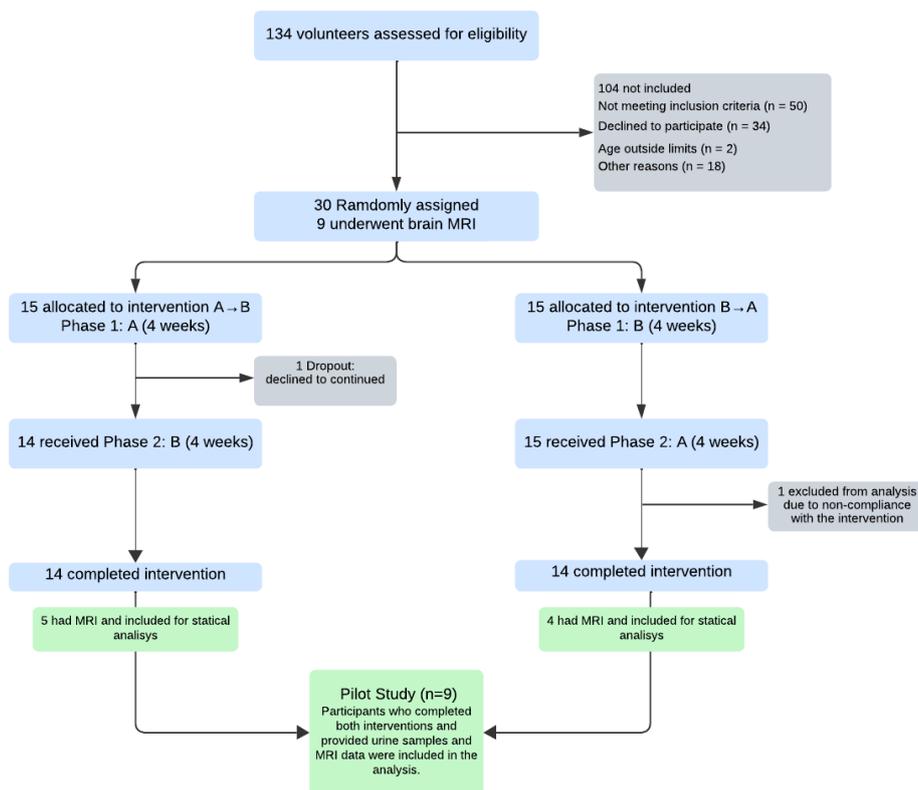


Figure S1. Participant flow in the HEVOOC trial.

Table S1. Model Results for Occipital Connectivity and Urinary HT-Glucuronide Following EVOO Intervention

Occipital functional connectivity

Model	β (95% CI)	p-value
Model 1 [†]	0.17 (0.004, 0.34)	0.045
Model 2 [‡]	0.20 (0.03, 0.37)	0.016

Urinary log HT-glucuronide

Model	β (95% CI)	p-value
Model 1 [†]	1.21 (0.10, 2.32)	0.033
Model 2 [‡]	1.24 (0.13, 2.35)	0.028

β coefficients were estimated using linear mixed-effects models with participant included as a random effect.

[†] Model 1 adjusted for intervention period and the corresponding baseline value of the outcome.

[‡] Model 2 additionally adjusted for baseline energy intake, baseline Mediterranean diet adherence, and baseline moderate-to-vigorous physical activity (MVPA).

Table S2. Association between changes in occipital connectivity and changes in urinary log HT-glucuronide

Model	β (95% CI)	p-value
Model 1 [†]	3.13 (-0.11, 6.37)	0.058
Model 2 [‡]	3.35 (-0.02, 6.72)	0.052

β corresponds to the association between change in occipital functional connectivity and change in urinary log HT-glucuronide.

[†] Model 1 adjusted for period.

[‡] Model 2 additionally adjusted for baseline energy intake, baseline Mediterranean diet adherence, and baseline moderate-to-vigorous physical activity (MVPA).