

Table S1. Contributions and representation qualities for each polyphenol consumed above 20 mg/d on the first two axes.

| Polyphenol (mg/d) | Contribution | | QRL | |
|--------------------------|---------------------|---------------|---------------|---------------|
| | Axis 1 | Axis 2 | Axis 1 | Axis 2 |
| Hesperetin | 7 | 235 | 7 | 242 |
| Quercetin 3–O–rutinoside | 945 | 35 | 945 | 980 |
| 1–Caffeoylquinic acid | 931 | 60 | 931 | 991 |
| 1,3–Dicafeoylquinic acid | 931 | 60 | 931 | 991 |
| 1,4–Dicafeoylquinic acid | 931 | 60 | 931 | 991 |
| 3,4–Dicafeoylquinic acid | 968 | 28 | 968 | 996 |
| 3–Caffeoylquinic acid | 803 | 112 | 803 | 915 |
| 4,5–Dicafeoylquinic acid | 931 | 60 | 931 | 991 |
| 4–Caffeoylquinic acid | 748 | 133 | 748 | 881 |
| 5–Caffeoylquinic acid | 849 | 98 | 849 | 947 |
| Caffeic acid | 26 | 703 | 26 | 729 |
| Ferulic acid | 20 | 224 | 20 | 244 |
| Lariciresinol | 54 | 357 | 54 | 411 |

Note. The axes establish the HJ-Biplot reference system and represent latent factorial variables obtained from linear combinations of the initially observed variables. QLR = Quality of representation.

Table S2. Contributions and representation qualities for each polyphenol consumed from 5 to 20 mg/d on the first two axes.

| Polyphenol (mg/d) | Contribution | | QLR | |
|----------------------------------|--------------|--------|--------|--------|
| | Axis 1 | Axis 2 | Axis 1 | Axis 2 |
| Malvidin 3-O-glucoside | 275 | 116 | 275 | 391 |
| (-)-Epicatechin | 621 | 15 | 621 | 636 |
| (-)-Epigallocatechin | 691 | 146 | 691 | 837 |
| (-)-Epigallocatechin 3-O-gallate | 687 | 147 | 687 | 834 |
| (-)-Epicatechin 3-O-gallate | 731 | 126 | 731 | 857 |
| (+)-Catechin | 655 | 67 | 655 | 722 |
| (+)-Gallocatechin | 689 | 146 | 689 | 835 |
| Procyanidin dimer B2 | 321 | 54 | 321 | 375 |
| Eriodyctiol | 75 | 2 | 75 | 77 |
| Naringenin | 0 | 80 | 0 | 80 |
| Quercetin | 632 | 68 | 632 | 700 |
| 5-O-Galloylquinic acid | 687 | 148 | 687 | 835 |
| Ellagic acid | 90 | 57 | 90 | 147 |
| Syringic acid | 63 | 77 | 63 | 140 |
| Disuccinoylquinic acid | 10 | 484 | 10 | 494 |
| 3-Feruloylquinic acid | 0 | 656 | 0 | 656 |
| 4-Feruloylquinic acid | 33 | 743 | 33 | 776 |
| 5-Feruloylquinic acid | 38 | 734 | 38 | 772 |
| Caffeoyl-glucose | 10 | 484 | 10 | 494 |
| o-Coumaric acid | 69 | 122 | 69 | 191 |
| p-Coumaric acid | 145 | 281 | 145 | 426 |
| Trans-ferulic acid | 13 | 2 | 13 | 15 |
| Pinoresinol | 79 | 175 | 79 | 254 |

Note. The axes establish the HJ-Biplot reference system and represent latent factorial variables obtained from linear combinations of the initially observed variables. QLR = Quality of representation.

Table S3. Contributions and representation qualities for each executive/attentional score on the first two axes.

| Scores | Contribution | | QLR | |
|---|--------------|--------|--------|--------|
| | Axis 1 | Axis 2 | Axis 1 | Axis 2 |
| WCST: Trials administered | 783 | 69 | 783 | 852 |
| WCST: Correct responses | 81 | 536 | 81 | 617 |
| WCST: % Total errors | 953 | 18 | 953 | 971 |
| WCST: % Perseverative responses | 118 | 257 | 118 | 375 |
| WCST: % Perseverative errors | 28 | 194 | 28 | 222 |
| WCST: % Non-perseverative errors | 804 | 113 | 804 | 917 |
| WCST: Conceptual level responses | 548 | 269 | 548 | 817 |
| WCST: % Conceptual level responses | 952 | 10 | 952 | 962 |
| WCST: Categories achieved | 900 | 29 | 900 | 929 |
| WCST: Global score | 927 | 5 | 927 | 932 |
| WCST: Trials to complete first category | 220 | 132 | 220 | 352 |
| WCST: Failure to maintain set | 122 | 117 | 122 | 239 |
| WCST: Learning to learn | 505 | 3 | 505 | 508 |
| SCWT: Word | 75 | 254 | 75 | 329 |
| SCWT: Color | 68 | 233 | 68 | 301 |
| SCWT: Word-color | 220 | 347 | 220 | 567 |
| SCWT: Interference | 38 | 208 | 38 | 246 |
| FVT: Phonological, Letter Excluded A | 124 | 113 | 124 | 237 |

Note. The axes establish the HJ-Biplot reference system and represent latent factorial variables obtained from linear combinations of the initially observed variables. QLR = Quality of representation; WCST = Wisconsin Card Sorting Test; SCWT = Stroop Color Word Test; FVT = Verbal Fluency Task.

Table S4. Contributions and representation qualities for each memory score on the first two axes.

| Score | Contribution | | QLR | |
|-------------------------------------|--------------|--------|--------|--------|
| | Axis 1 | Axis 2 | Axis 1 | Axis 2 |
| RAVLT: Trial A1 | 480 | 1 | 480 | 481 |
| RAVLT: Trial A5 | 565 | 152 | 565 | 717 |
| RAVLT: Σ A1–A5 | 932 | 13 | 932 | 945 |
| RAVLT: Interference (trial B) | 398 | 15 | 398 | 413 |
| RAVLT: Post-interference (trial A6) | 647 | 40 | 647 | 687 |
| RAVLT: Delayed recall (trial A7) | 703 | 161 | 703 | 864 |
| RAVLT: Recognition (trial A8) | 337 | 107 | 337 | 444 |
| RAVLT: Errors of repetitions | 58 | 0 | 58 | 58 |
| RAVLT: Intrusion errors | 84 | 34 | 84 | 118 |
| RAVLT: Corrected total learning | 109 | 185 | 109 | 294 |
| RAVLT: Learning | 227 | 37 | 227 | 264 |
| RAVLT: Forgetting | 14 | 885 | 14 | 899 |
| RAVLT: % of forgetting | 1 | 903 | 1 | 904 |
| RAVLT: Forgetting speed | 16 | 125 | 16 | 141 |
| RAVLT: Retention | 28 | 134 | 28 | 162 |
| RAVLT: Evocation | 121 | 38 | 121 | 159 |
| RAVLT: Primacy | 630 | 42 | 630 | 672 |
| RAVLT: Recency | 645 | 30 | 645 | 675 |
| RAVLT: Total hit rate | 928 | 15 | 928 | 943 |
| RAVLT: Primacy hit rate | 633 | 43 | 633 | 676 |
| RAVLT: Middle hit rate | 731 | 0 | 731 | 731 |
| RAVLT: Recency hit rate | 627 | 27 | 627 | 654 |
| RAVLT: Memory Efficiency Index | 82 | 528 | 82 | 610 |
| RAVLT: Proactive interference | 0 | 17 | 0 | 17 |
| RAVLT: Retroactive interference | 36 | 411 | 36 | 447 |
| VFT: Phonological, Letter P | 198 | 20 | 198 | 218 |
| VFT: Phonological, Letter F | 145 | 42 | 145 | 187 |
| VFT: Semantic, Animals | 347 | 19 | 347 | 366 |

Note. The axes establish the HJ-Biplot reference system and represent latent factorial variables obtained from linear combinations of the initially observed variables. QLR = Quality of representation; RAVLT = Rey Auditory Verbal Learning Test; VFT = Verbal Fluency Task.

Table S5. Human milk lipids according to extraction time, gestational age at delivery, breastfeeding frequency, and dietary macronutrients.

| | TAG (g/L) | | Chol (g/L) | | OTAG (OD/g) | | PO (OD/mg) | | NPO (OD/mg) | |
|-------------------------------|-----------|----------|------------|----------|-------------|----------|------------|----------|-------------|----------|
| | F | <i>p</i> | F | <i>p</i> | F | <i>p</i> | F | <i>p</i> | F | <i>p</i> |
| Milk extraction time | 0.61 | 0.5470 | 0.67 | 0.5168 | 0.16 | 0.8519 | 0.93 | 0.4023 | 1.96 | 0.1508 |
| Gestational age at delivery | 1.86 | 0.1780 | 0.13 | 0.7151 | 0.38 | 0.5384 | 0.54 | 0.4651 | 0.31 | 0.5796 |
| Fat quality index | 0.16 | 0.6879 | 0.19 | 0.6632 | 0.07 | 0.7970 | 0.73 | 0.3962 | 0.01 | 0.9115 |
| Protein to carbohydrate ratio | 0.00 | 0.9934 | 3.02 | 0.0883 | 3.53 | 0.0658 | 0.19 | 0.6644 | 2.41 | 0.1264 |
| Breastfeeding frequency | 0.08 | 0.7831 | 0.16 | 0.6945 | 0.04 | 0.8458 | 0.00 | 0.9782 | 1.96 | 0.1678 |

Note. TAG = triacylglycerols, Chol = cholesterol; OTAG = oxidized triacylglycerols; PO = polar oxysterols; NPO = non-polar oxysterols. F = F-value of ANCOVA.