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| **Supplemental Table 2.** Metabolites with statistically significance between control diet consumers at 4 weeks and baseline. | | | | |
| Super Pathway | Metabolic Pathway | Metabolite | *p*-value | Fold Change  (4 Weeks/ Baseline) |
| Amino Acid | Glycine, Serine and Threonine Metabolism | betaine | 0.0017 | 17.18↑ |
| Alanine and Aspartate Metabolism | N-acetylasparagine | 0.0498 | 2.37↑ |
| N-propionylalanine | 0.0062 | 1.05↑ |
| Lysine Metabolism | 2-aminoadipate | 0.0331 | 0.74↓ |
| Phenylalanine and Tyrosine Metabolism | 3-hydroxyphenylacetate | 0.002 | 2.43↑ |
| Tryptophan Metabolism | tryptamine | 0.0032 | 1.2↑ |
| Methionine, Cysteine, SAM and Taurine Metabolism | homocysteine | 0.003 | 1.67↑ |
| Carbohydrate | Pentose Metabolism | ribonate | 0.0159 | 22.89↑ |
| xylonate | 0.0029 | 12.63↑ |
| ribose | 0.0261 | 1.38↑ |
| Advanced Glycation End-product | N6-carboxymethyllysine | 0.0076 | 1.14↑ |
| Lipid | Medium Chain Fatty Acid | laurate (12:0) | 0.0175 | 8.15↑ |
| Long Chain Fatty Acid | myristate (14:0) | 0.0186 | 3.43↑ |
| cis-vaccenate (18:1n7) | 0.0335 | 1.99↑ |
| Polyunsaturated Fatty Acid (n3 and n6) | docosahexaenoate (DHA; 22:6n3) | 0.0099 | 21.69↑ |
| arachidonate (20:4n6) | 0.0128 | 9.64↑ |
| docosadienoate (22:2n6) | 0.0414 | 4.83↑ |
| docosatrienoate (22:3n3) | 0.0094 | 3.96↑ |
| linoleate (18:2n6) | 0.0499 | 1.58↑ |
| Fatty Acid, Monohydroxy | 3-hydroxysebacate | 0.0242 | 3.2↑ |
| Monoacylglycerol | 1-myristoylglycerol (1-monomyristin) | 0.0384 | 2.54↑ |
| Sphingolipid Metabolism | N-acetylsphingosine | 0.0159 | 1.87↑ |
| Steroid | 5alpha-androstan-3alpha,17beta-diol disulfate | 0.0453 | 3.24↑ |
| Secondary Bile Acid Metabolism | 7,12-diketolithocholate | 0.0251 | 0.24↓ |
| Nucleotide | Purine Metabolism, (Hypo)Xanthine/Inosine containing | hypoxanthine | 0.0258 | 1.91↑ |
| Xenobiotics | Benzoate Metabolism | 3-hydroxybenzoate | 0.0112 | 2.96↑ |
| 3-(2-hydroxyphenyl)propionate | 0.0005 | 2.99↑ |
| Xanthine Metabolism | 7-methylxanthine | 0.0202 | 2.25↑ |
| 1-methylxanthine | 0.0466 | 1.9↑ |
| 7-methylurate | 0.0275 | 0.94↓ |
| 1-methylurate | 0.0151 | 0.73↓ |
| Food Component/Plant | luteolin | 0.0299 | 25.11↑ |
| apigenin | 0.0001 | 21.86↑ |
| enterolactone | 0.0278 | 2.0↑ |
| indolin-2-one | 0.0013 | 0.8↓ |
| 2-piperidinone | 0.019 | 0.71↓ |
| sitostanol | 0.006 | 0.59↓ |
| abscisate | 0.0138 | 0.31↓ |
| Drug | salicylate | 0.0179 | 1.83↑ |
| loperamide | 0.0324 | 0.65↓ |
| diphenhydramine | 0.0429 | 0.62↓ |
| Note:  ↑ designates metabolites with significantly (p ≤ 0.05) higher expression in tumor tissue when compared with adjacent, colonic mucosa (metabolite ratio of ≥ 1.00)  ↓ designates metabolites with significant (p ≤ 0.05) increases in adjacent, colonic mucosa when compared with tumor tissue (metabolite ratio of < 1.00)  \*Indicates the metabolite has been identified with level 2 confidence of identification according to Sumner et al. 2013 | | | | |