**Supplementary table 2.** Fecal metabolites identified by untargeted metabolomics that were significantly altered by SRE. Compound type, direction of change compared to healthy controls (HC), as well as the time points in which changes were statistically significant are indicated, as well as overall p-values and adjusted p-values (FDR).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Compound name | Compound type | Change in relation to HC | Time points significantly different from HC | p-value | FDR |
| alanine | amino acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| asparagine | amino acid | increased | Baseline | 0.001 | 0.006 |
| aspartic acid | amino acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| cysteine | amino acid | increased | Baseline | 0.009 | 0.029 |
| cystine | amino acid | increased | Baseline | 0.001 | 0.003 |
| glutamic acid | amino acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| glycine | amino acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| isoleucine | amino acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| leucine | amino acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| lysine | amino acid | increased | 3 weeks, 8 weeks | 0.012 | 0.037 |
| methionine | amino acid | increased | Baseline, 3 weeks, 8 weeks, Long Term | 0.000 | 0.000 |
| phenylalanine | amino acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.002 |
| proline | amino acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| serine | amino acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| threonine | amino acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| tryptophan | amino acid | increased | Baseline, 3 weeks, 8 weeks, Long Term | 0.000 | 0.001 |
| valine | amino acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| catechol | benzenediol | decreased |  | 0.012 | 0.036 |
| dehydroabietic acid | carboxylic acid | increased | Baseline | 0.001 | 0.005 |
| fucose | deoxy sugar | increased | Baseline, 3 weeks, 8 weeks | 0.003 | 0.013 |
| oxoproline | derivative from amino acid | increased | Baseline, 3 weeks, 8 weeks, Long Term | 0.000 | 0.000 |
| 4-hydroxybenzoate | derivative of benzoic acid | decreased | Baseline, 3 weeks, 8 weeks, Long Term | 0.000 | 0.000 |
| malic acid | dicarboxylic acid | increased | Baseline | 0.005 | 0.018 |
| oxamic acid | dicarboxylic acid monoamide | increased | Baseline | 0.005 | 0.019 |
| glycyl tyrosine | dipeptide | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| glycyl-proline | dipeptide | increased | Baseline | 0.012 | 0.037 |
| homocystine | dipeptide | increased | Baseline | 0.018 | 0.048 |
| isomaltose | disaccharide | increased | Baseline | 0.010 | 0.033 |
| maltose | disaccharide | increased | 3 weeks, 8 weeks, Long Term | 0.001 | 0.006 |
| 3,4-dihydroxyphenyl-acetic acid | dopamine metabolite | decreased | 8 weeks | 0.016 | 0.043 |
| galacturonic acid | galactose metabolite | increased | Baseline, 3 weeks, Long Term | 0.000 | 0.001 |
| glycerol-3-galactoside | galactose metabolite | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| N-acetyl-D-galactosamine | galactose metabolite | increased | Baseline, 3 weeks, 8 weeks | 0.003 | 0.012 |
| glucose | glucose | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.002 |
| 6-deoxyglucose | glucose metabolite | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.002 |
| gluconic acid | glucose metabolite | increased | Baseline | 0.012 | 0.036 |
| myo-inositol | glucose metabolite | increased | Baseline | 0.000 | 0.001 |
| ribose | glucose metabolite | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.002 |
| glyceric acid | glycerol metabolite | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.003 |
| urocanic acid | histidine metabolite | increased | Baseline, 3 weeks, 8 weeks | 0.002 | 0.010 |
| 2-hydroxyglutaric acid | hydroxy acid | increased | Baseline | 0.014 | 0.040 |
| sinapinic acid | hydroxycinnamic acids | decreased | 8 weeks | 0.009 | 0.031 |
| indole-3-lactate | indole | decreased | 3 weeks, 8 weeks, Long Term | 0.000 | 0.002 |
| inositol-4-monophosphate | inositol phosphate | increased | Baseline | 0.005 | 0.019 |
| 2-ketoisocaproic acid | leucine metabolite | increased | Baseline, 3 weeks | 0.000 | 0.001 |
| aminomalonate | metabolism of amino acids | increased | Baseline | 0.000 | 0.002 |
| 2-methylglyceric acid NIST | metabolite of propionic acid | increased | Baseline | 0.006 | 0.020 |
| isothreonic acid | metabolite vitamin C | increased | Baseline | 0.005 | 0.019 |
| threonic acid | metabolite vitamin C | increased | Baseline, Long Term | 0.003 | 0.014 |
| 1-monostearin | monoglyceride | increased | Baseline, 3 weeks, Long Term | 0.000 | 0.001 |
| fructose | monosaccharide | increased | Baseline, 8 weeks | 0.000 | 0.003 |
| N-acetyl-D- mannosamine | monosaccharide | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| tagatose | monosaccharide | increased | Baseline | 0.006 | 0.022 |
| xylulose NIST | monosaccharide | increased | Baseline, 3 weeks, 8 weeks | 0.003 | 0.011 |
| 5,6-dihydrouracil | nucleic acid metabolite | increased | Baseline, Long Term | 0.007 | 0.022 |
| adenine | nucleobase | increased | Baseline | 0.016 | 0.043 |
| pseudo uridine | nucleoside isomer | increased | 3 weeks, 8 weeks | 0.004 | 0.017 |
| arachidonic acid | omega 6 fatty acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.002 |
| phosphate | organophosphate | increased | Baseline, 8 weeks | 0.000 | 0.000 |
| methionine sulfoxide | oxidized amino acid | increased | Baseline | 0.003 | 0.013 |
| 3,4-dihydroxyhydro-cinnamic acid NIST | phytochemical | decreased | Baseline, 8 weeks | 0.013 | 0.037 |
| glycerol | polyol | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| pinitol | polyol | increased | Baseline | 0.000 | 0.003 |
| xanthine | purine | increased | Baseline, 3 weeks, 8 weeks, Long Term | 0.000 | 0.000 |
| hypoxanthine | purine derivative | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.000 |
| uric acid | purine metabolite | increased | 8 weeks | 0.013 | 0.037 |
| pentitol | ribose metabolite | increased | Baseline, Long Term | 0.004 | 0.017 |
| arachidic acid | saturated fatty acid | increased | Baseline, 3 weeks | 0.002 | 0.009 |
| caprylic acid | saturated fatty acid | increased | Baseline, 3 weeks | 0.001 | 0.006 |
| isoheptadecanoic acid NIST | saturated fatty acid | increased | Baseline, 8 weeks | 0.006 | 0.022 |
| lauric acid | saturated fatty acid | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.001 |
| lignoceric acid | saturated fatty acid | increased | Baseline | 0.001 | 0.005 |
| myristic acid | saturated fatty acid | increased | 3 weeks | 0.019 | 0.050 |
| palmitic acid | saturated fatty acid | increased | Baseline | 0.018 | 0.048 |
| stearic acid | saturated fatty acid | increased | Baseline, 3 weeks | 0.000 | 0.001 |
| ethanolamine | serine metabolite | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.001 |
| ribonic acid | sugar acid | increased | Baseline, 3 weeks, Long Term | 0.001 | 0.006 |
| hexitol | sugar alcohol | increased | Baseline | 0.013 | 0.038 |
| lyxitol | sugar alcohol | increased | Baseline, 8 weeks | 0.004 | 0.015 |
| 3-(4-hydroxyphenyl) propionic acid | tyrosine metabolite | decreased | Baseline | 0.013 | 0.037 |
| tyramine | tyrosine metabolite | increased | Baseline | 0.002 | 0.009 |
| 3-ureidopropionate | uracil metabolite | increased | Baseline, 3 weeks, 8 weeks | 0.000 | 0.002 |
| hexuronic acid | uronic acid | increased | Baseline, 3 weeks, Long Term | 0.000 | 0.000 |
| nicotinic acid | vitamin B3 | increased | 3 weeks, 8 weeks | 0.002 | 0.008 |
| tocopherol delta- NIST | vitamin E | increased | 3 weeks, 8 weeks | 0.012 | 0.036 |
| tocopherol gamma- | vitamin E | increased | 3 weeks, 8 weeks, Long Term | 0.000 | 0.002 |
| glucoheptulose |  | increased | Baseline | 0.001 | 0.006 |