

## Supporting Information

### Sitting Interruption Modalities During Prolonged Sitting Acutely Improve Postprandial Metabolome in Crossover Pilot Trial Among Postmenopausal Women

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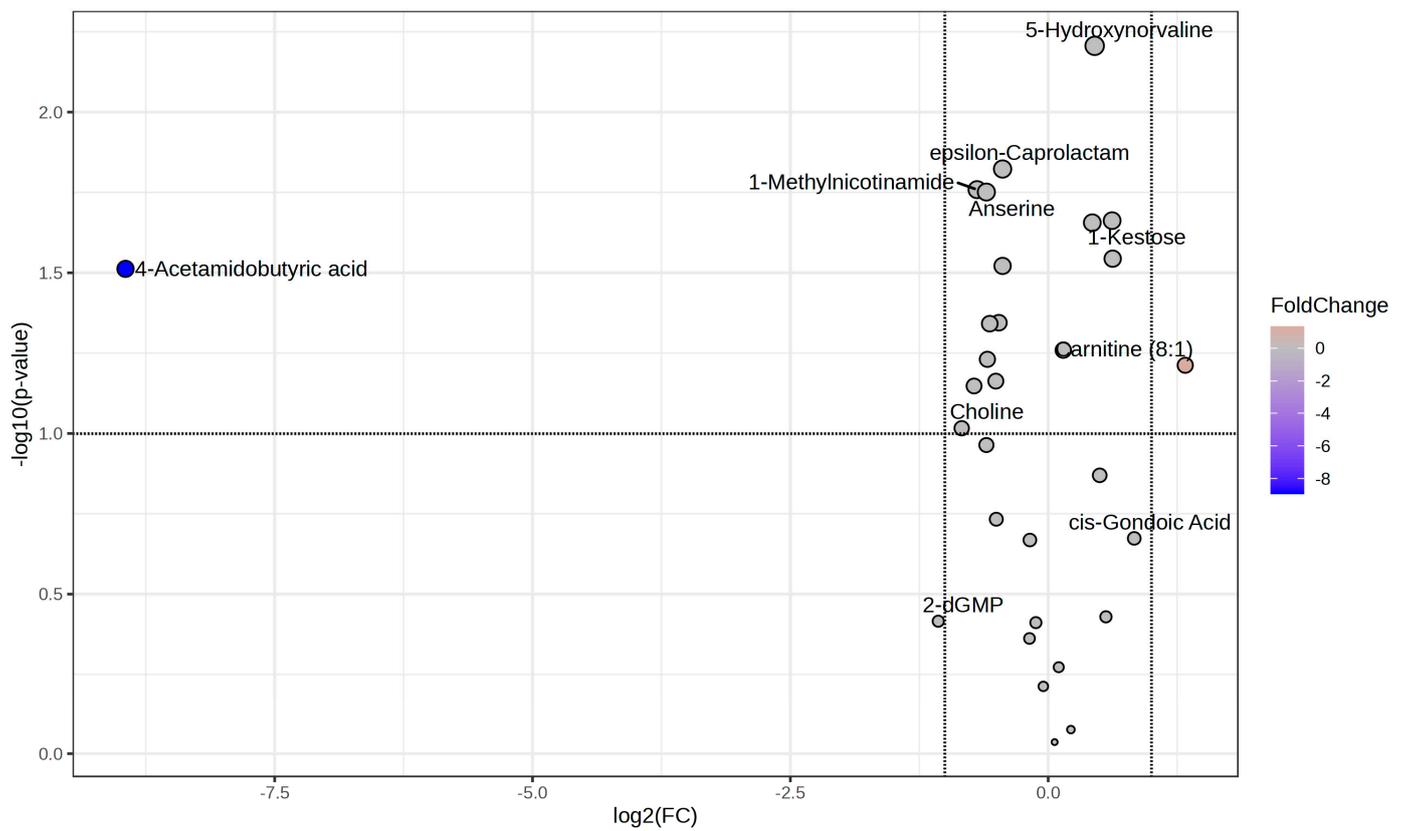
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**Table S1.** Significant Metabolites Resulting from Between-Condition Comparisons of Sitting Interruption Modalities

| <b>Table S1.</b> Fold Change and Paired Samples t-tests of Sitting Interruption Modalities |                        |                    |                      |
|--|------------------------|--------------------|----------------------|
| <b>Metabolites</b>   | <b>Sit-to-Stand v.</b> |                    | <b>Walk v. Stand</b> |
|  | <b>Walk</b>            | <b>Stand</b>       |                      |
| <i>Amino Acid Metabolism</i>   |                        |                    |                      |
| <b>4-Acetamidobutyric acid</b>   |                        | 0.046 (0.00, 0.03) |                      |
| <b>γ-Glutamylmethionine</b>  | 0.037 (0.97, 1.65)     | 0.033 (0.97, 1.52) |                      |
| <b>Maleimide</b>   |                        | 0.034 (0.80, 1.30) | 0.020 (0.77, 1.30)   |
| <b>Methionine sulfoxide</b>  |                        |                    | 0.028 (1.64, 1.51)   |
| <b>N-N-Dimethylarginine</b>  |                        |                    |                      |
| <b>N-ε-Acetyllysine</b>  | 0.040 (1.14, 1.48)     |                    |                      |
| <b>N-Methylisoleucine</b>  | 0.019 (0.92, 1.28)     |                    |                      |
| <i>Fat Metabolism</i>  |                        |                    |                      |
| <b>Carnitine (8:1)</b>   | 0.035 (1.73, 0.93)     |                    |                      |
| <b>Carnitine (8:2)</b>   | 0.035 (1.46, 1.07)     |                    |                      |
| <b>cis-Gondoic Acid</b>  |                        |                    | 0.049 (0.34, 0.44)   |
| <b>Isolinoleic Acid</b>  |                        | 0.048 (0.90, 1.39) |                      |
| <i>Sugar Metabolism</i>  |                        |                    |                      |
| <b>Guanidinosuccinate</b>  |                        | 0.028 (0.89, 1.21) |                      |
| <b>1-Kestose</b>   |                        | 0.006 (1.25, 0.52) |                      |
| <b>Malic Acid</b>  |                        |                    | 0.032 (0.90, 0.94)   |
| <b>Maltose</b>   |                        | 0.044 (1.39, 0.56) |                      |
| <b>1-Methylnicotinamide</b>  | 0.007 (0.87, 1.43)     | 0.021 (0.87, 1.29) |                      |
| <b>Raffinose</b>   |                        | 0.016 (1.28, 0.53) |                      |
| <i>Other Organic Compounds</i>   |                        |                    |                      |
| <b>ε-Caprolactam</b>   | 0.048 (0.83, 1.33)     |                    |                      |
| <b>Choline</b>   | 0.039 (0.87, 2.43)     |                    |                      |

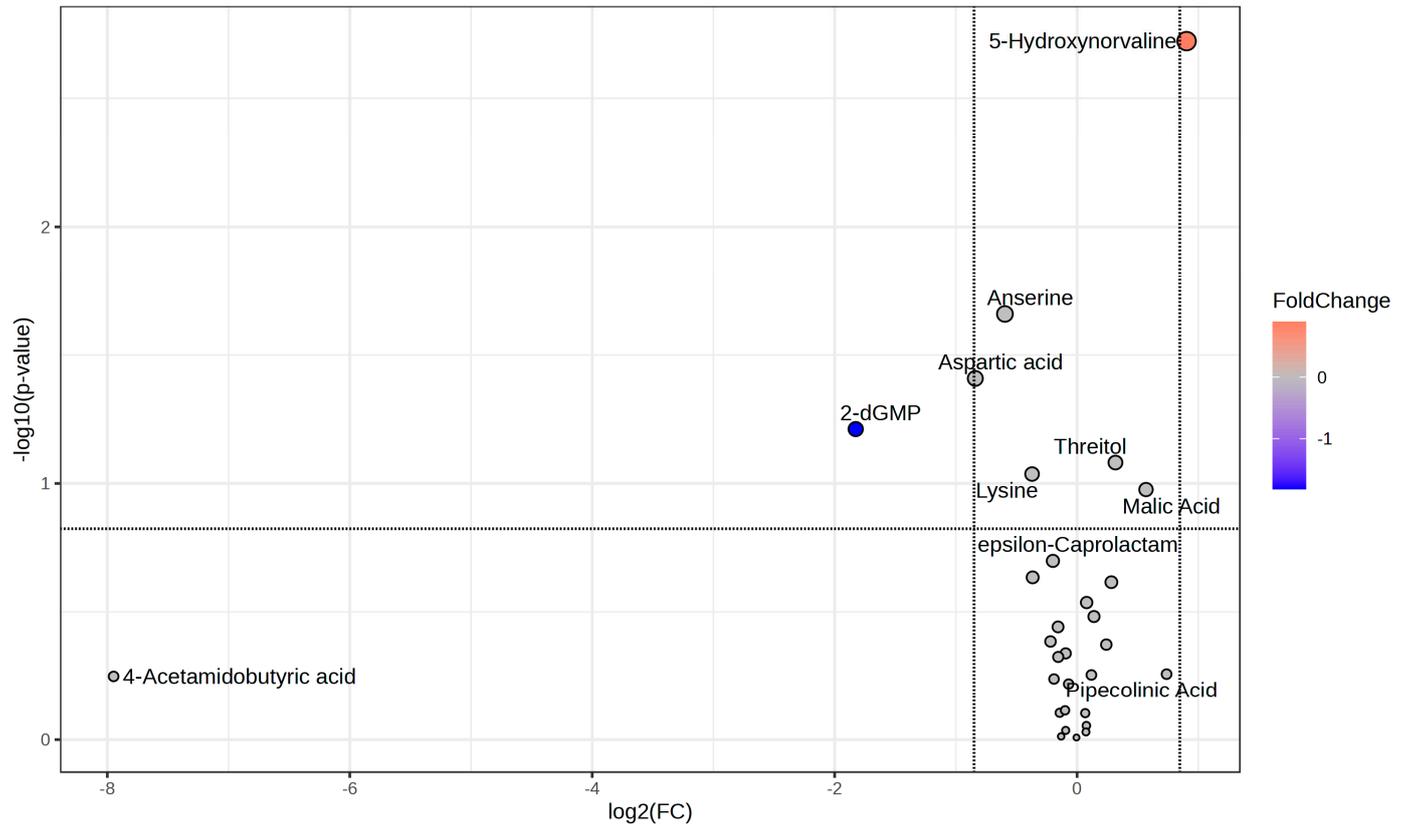
**Note.** *P*-Values were determined by paired sample t-tests and ratios in parentheses were calculated as Post/Pre condition. Values >1.0 were increased at end of condition. Ratios are listed in their respective order and *P*-Values were considered significant at <0.05. N = 10 for the Stand and Walk conditions; n = 9 for the STS condition.

Supplementary Figure S1:



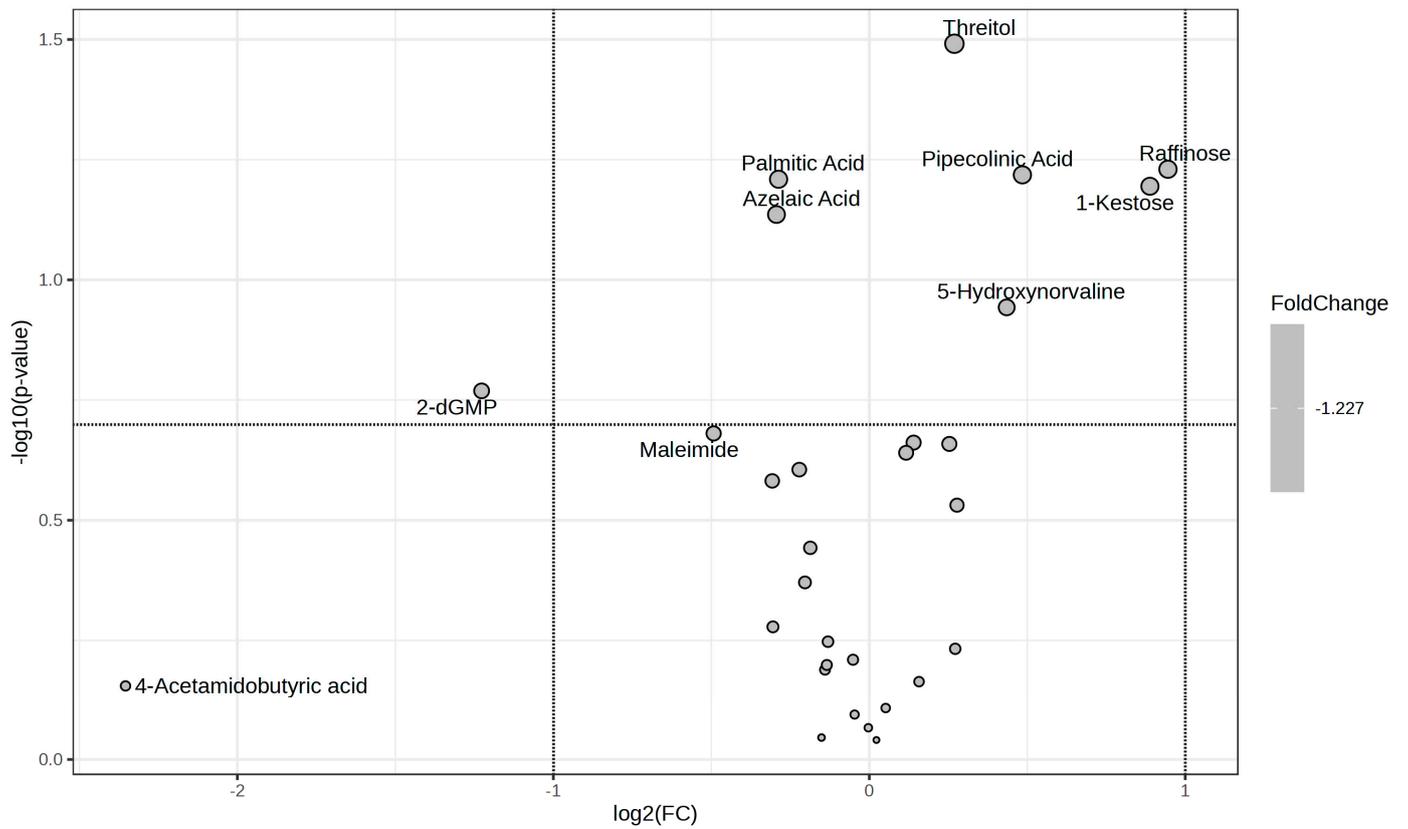
**Figure S1.** Volcano plot of STS and Control Conditions. Fold change calculated as STS / Control. N = 9.

Supplementary Figure S2:



**Figure S2.** Volcano plot of Stand and Control Conditions. Fold change calculated as Stand / Control. N = 10.

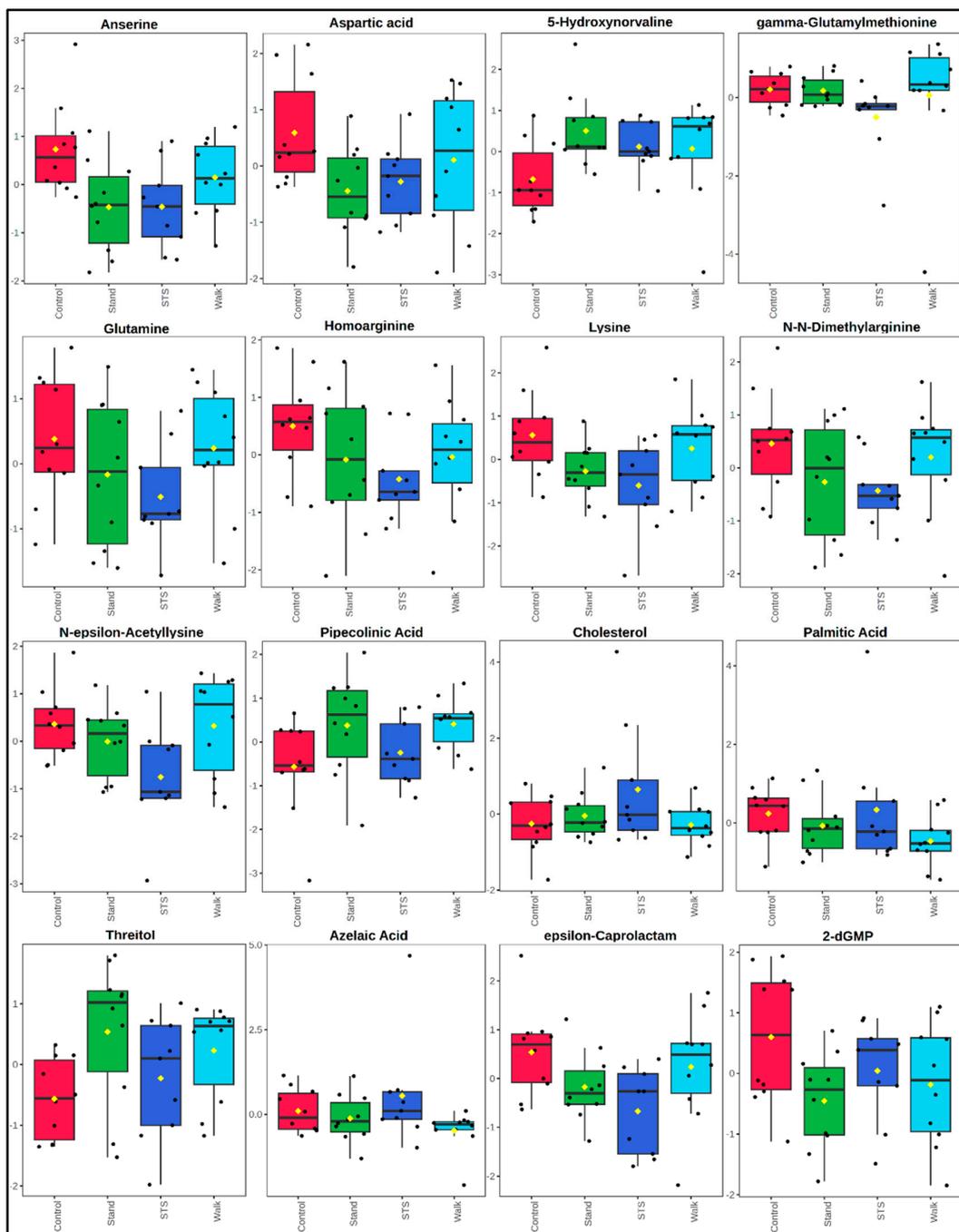
Supplementary Figure S3:



**Figure S3.** Volcano plot of Walk and Control Conditions. Fold change calculated as Walk / Control. N = 10.

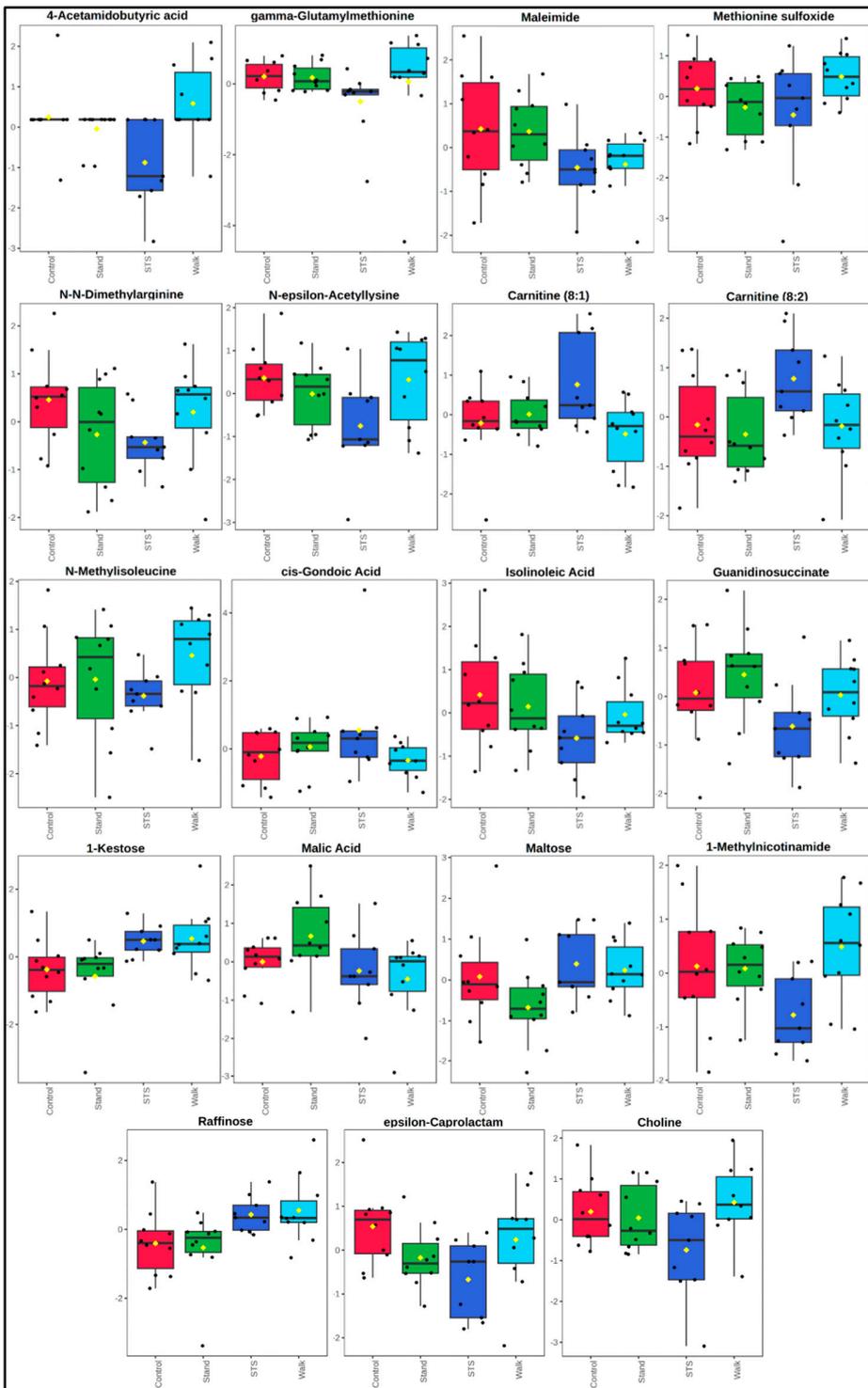


Supplementary Figure S5:



**Figure S5.** Box plots of all metabolites significantly different between sitting interruption modalities and the Control condition by Post/Pre condition ratio of relative abundance. N = 10 for the Control, Stand, and Walk conditions; n = 9 for the STS condition.

Supplementary Figure S6:



**Figure S6:** Box plots of all metabolites significantly different between sitting interruption modalities by Post/Pre condition ratio of relative abundance. N = 10 for the Control, Stand, and Walk conditions; n = 9 for the STS condition