

Supporting Information

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

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

Table S1. Fold Change and Paired Samples t-tests of Sitting Interruption Modalities			
Metabolites	Sit-to-Stand v.		Walk v. Stand
	Walk	Stand	
Amino Acid Metabolism			
4-Acetamidobutyric acid		0.046 (0.00, 0.03)	0.020 (0.77, 1.30) 0.028 (1.64, 1.51)
γ-Glutamylmethionine	0.037 (0.97, 1.65)	0.033 (0.97, 1.52)	
Maleimide		0.034 (0.80, 1.30)	
Methionine sulfoxide			
N-N-Dimethylarginine			
N-ε-Acetyllysine	0.040 (1.14, 1.48)		
N-Methylisoleucine	0.019 (0.92, 1.28)		
Fat Metabolism			
Carnitine (8:1)	0.035 (1.73, 0.93)		0.049 (0.34, 0.44)
Carnitine (8:2)	0.035 (1.46, 1.07)		
cis-Gondoic Acid			
Isolinoleic Acid		0.048 (0.90, 1.39)	
Sugar Metabolism			
Guanidinosuccinate		0.028 (0.89, 1.21)	0.032 (0.90, 0.94)
1-Kestose		0.006 (1.25, 0.52)	
Malic Acid			
Maltose		0.044 (1.39, 0.56)	
1-Methylnicotinamide	0.007 (0.87, 1.43)	0.021 (0.87, 1.29)	
Raffinose		0.016 (1.28, 0.53)	
Other Organic Compounds			
ε-Caprolactam	0.048 (0.83, 1.33)		
Choline	0.039 (0.87, 2.43)		
Note. <i>P</i> -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 <i>P</i> -Values were considered significant at <0.05. N = 10 for the Stand and Walk conditions; n = 9 for the STS condition.			

Supplementary Figure S1:

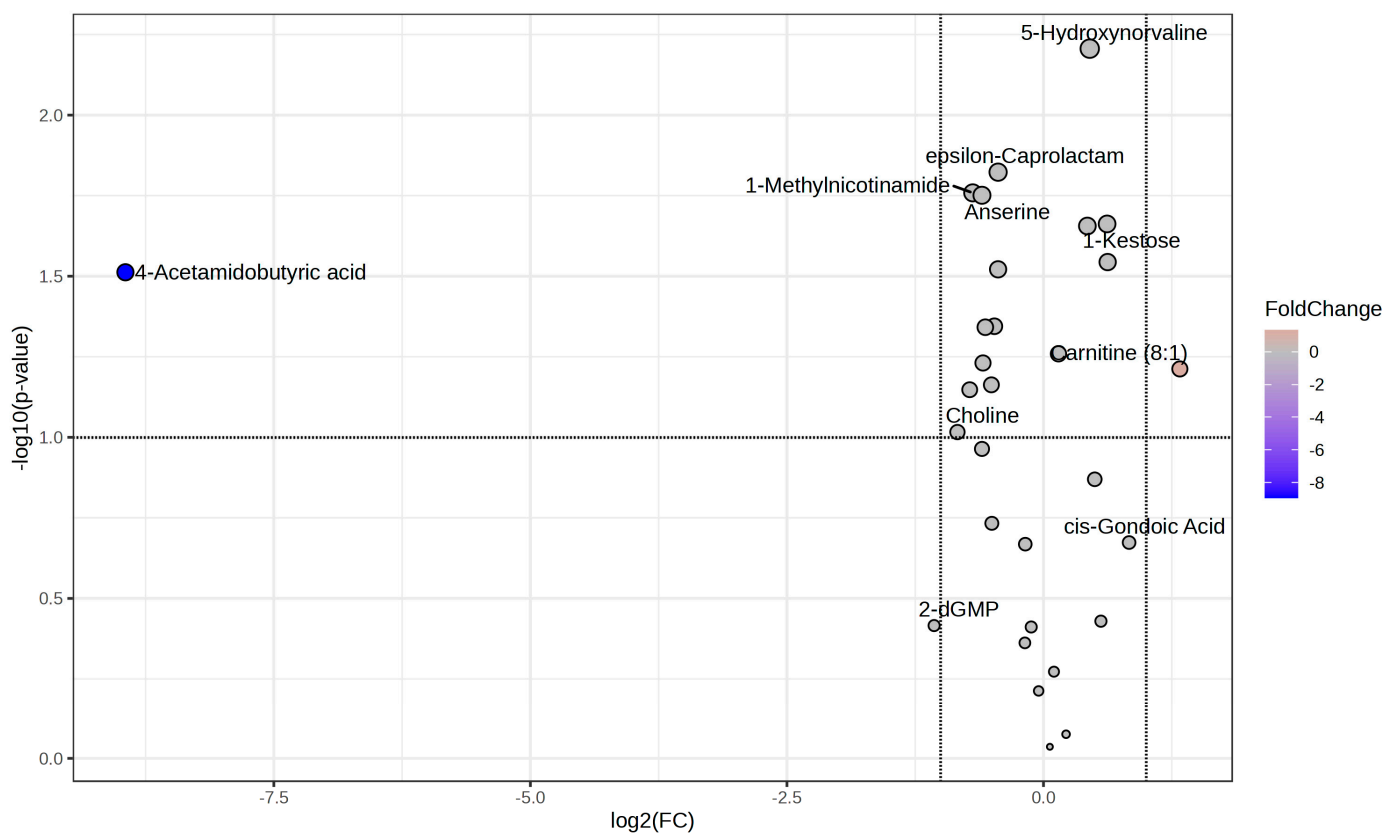


Figure S1. Volcano plot of STS and Control Conditions. Fold change calculated as STS / Control. N = 9.

Supplementary Figure S2:

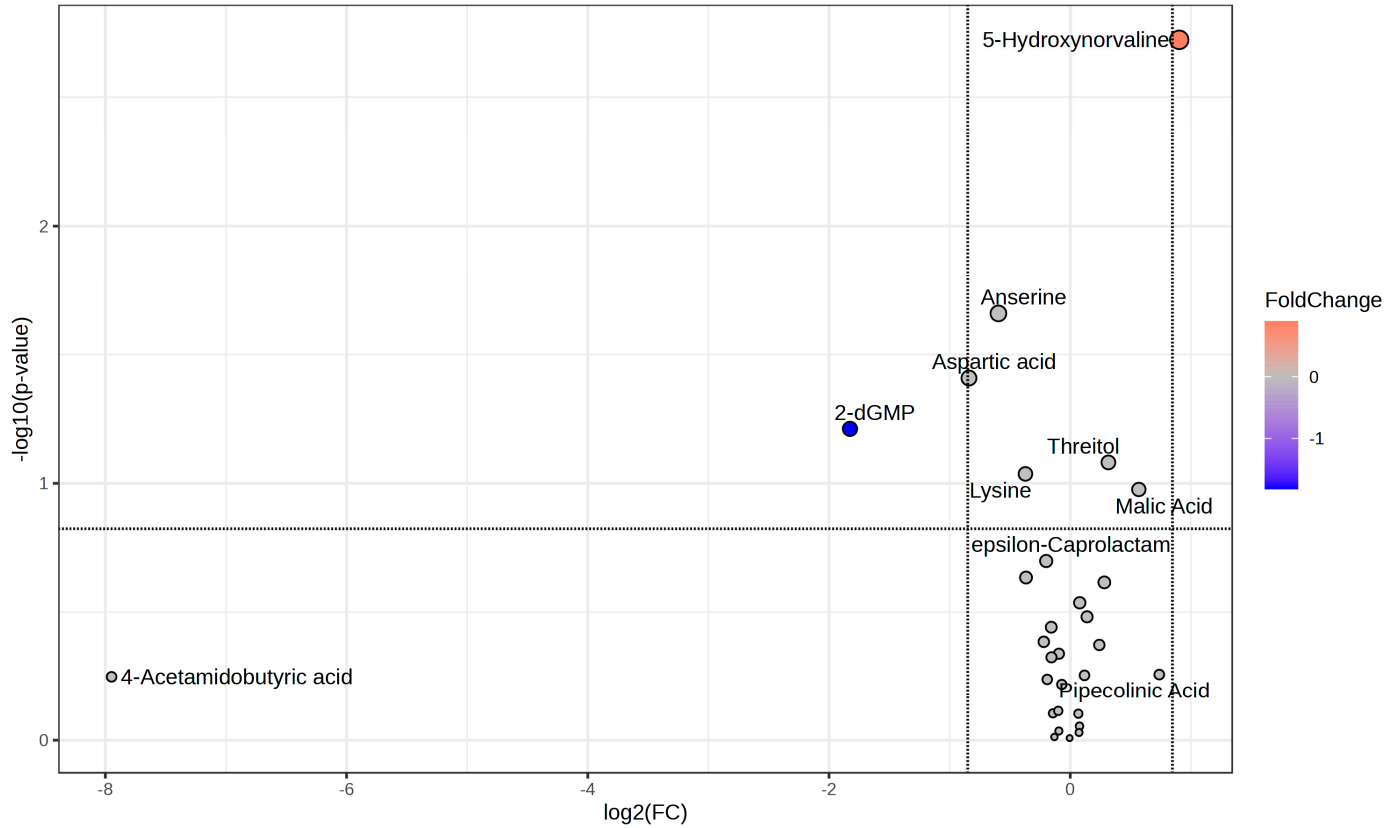


Figure S2. Volcano plot of Stand and Control Conditions. Fold change calculated as Stand / Control. N = 10.

Supplementary Figure S3:

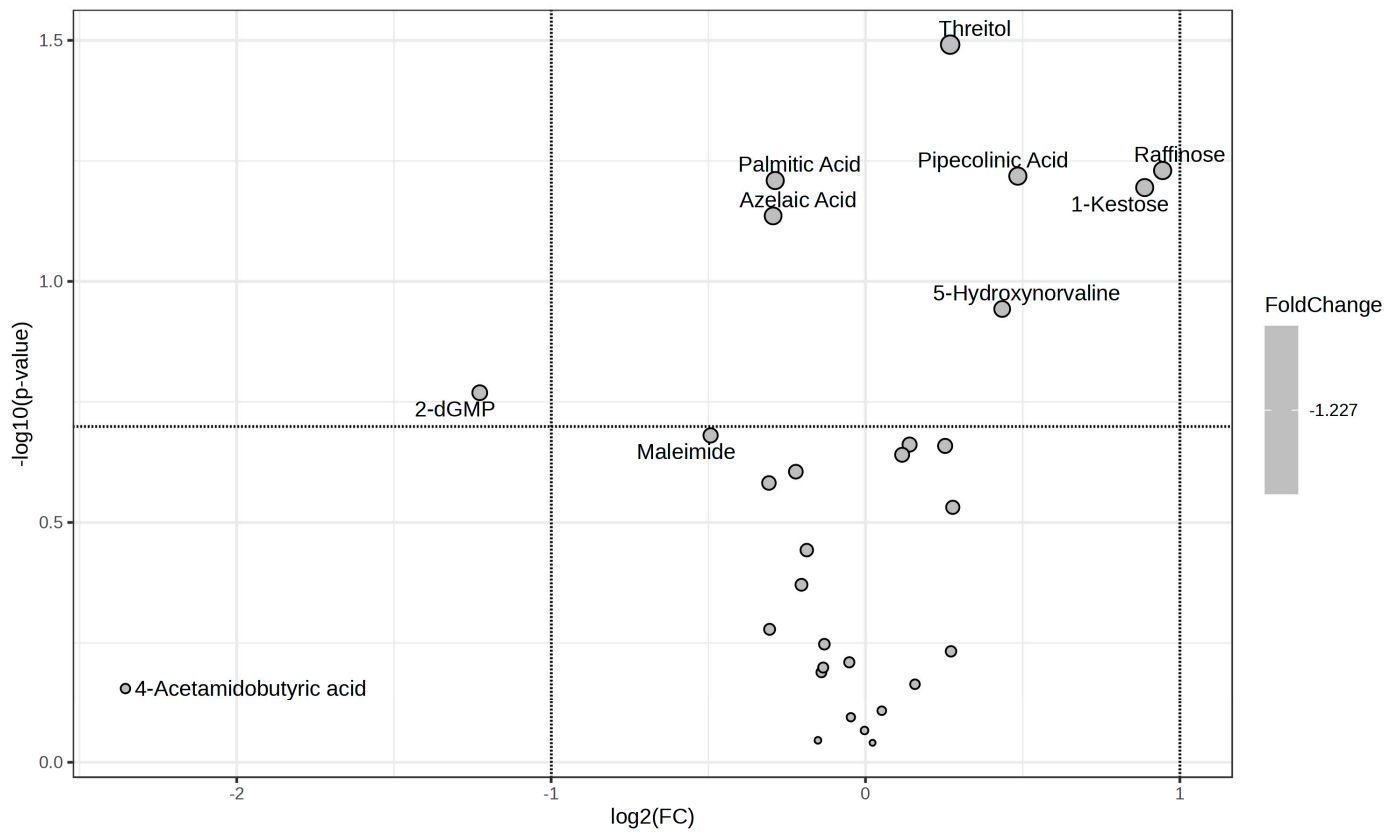


Figure S3. Volcano plot of Walk and Control Conditions. Fold change calculated as Walk / Control. N = 10.

Supplementary Figure S4

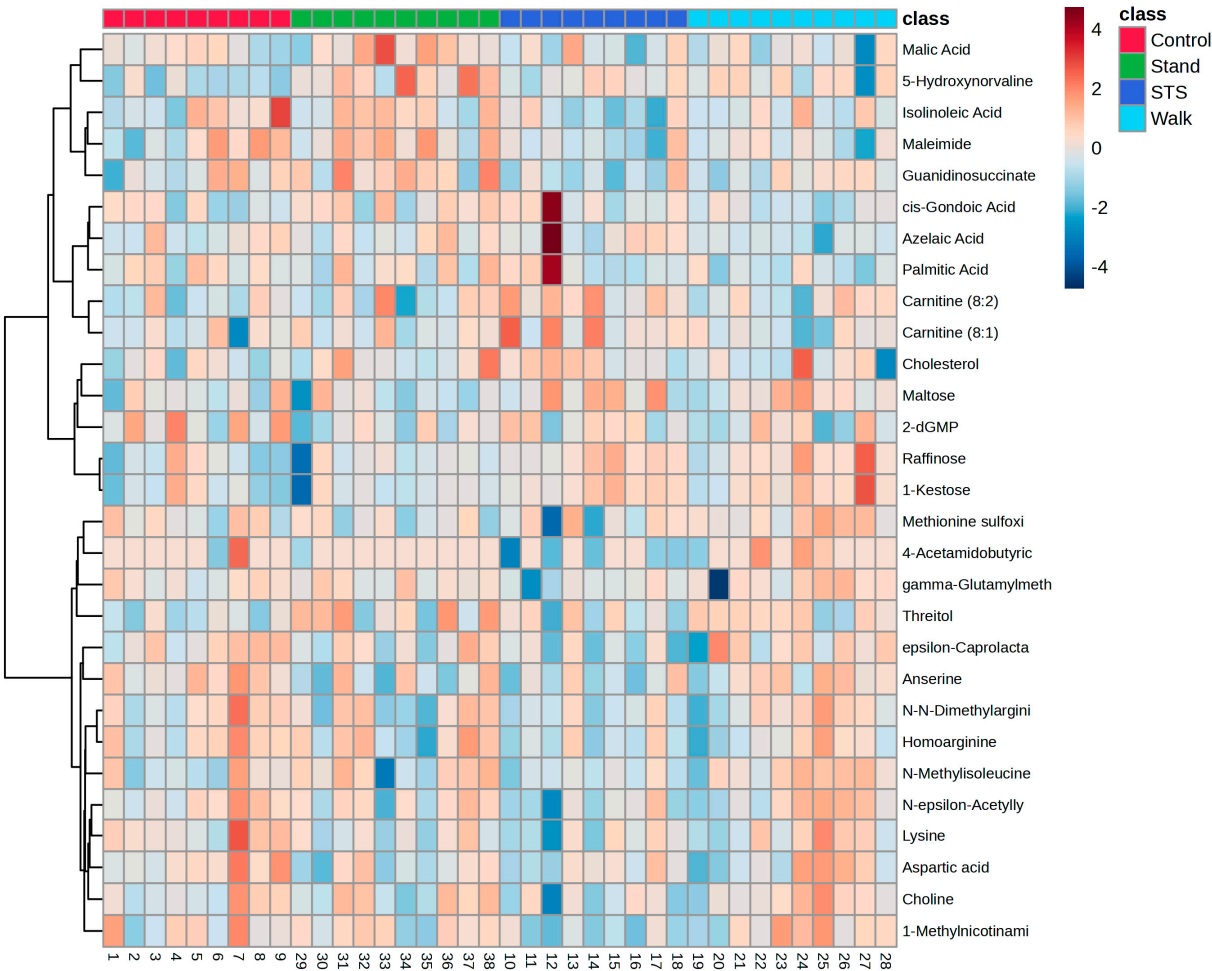


Figure S4. Heat Map of All Conditions and Samples. N = 10 for the Control, Stand, and Walk conditions; n = 9 for the STS condition.

Supplementary Figure S5:

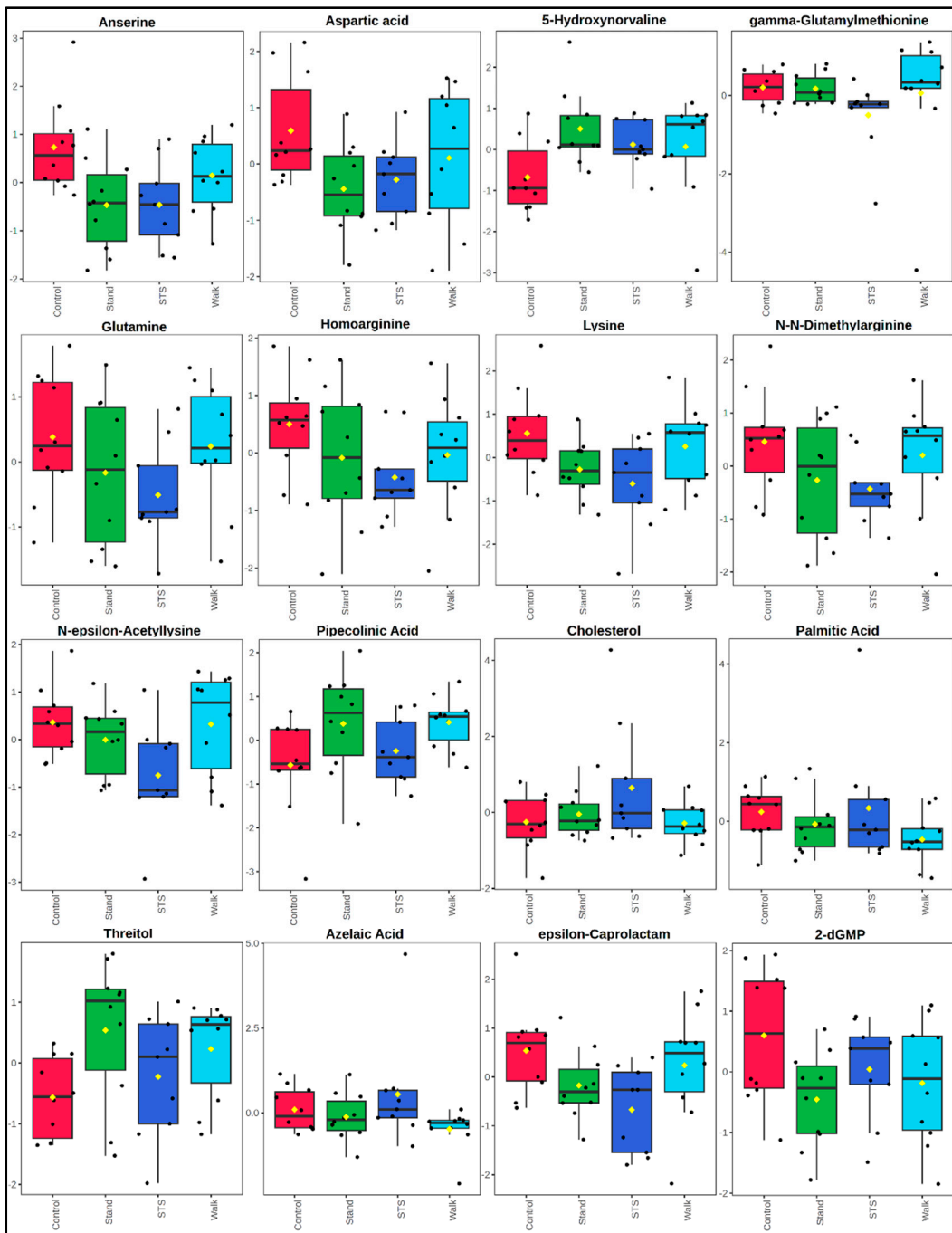


Figure S5. Box plots of all metabolites significantly different between sitting interruption modalities and the Control condition by Post/Pre condition ratio of relative abundance. N = 10 for the Control, Stand, and Walk conditions; n = 9 for the STS condition.

Supplementary Figure S6:

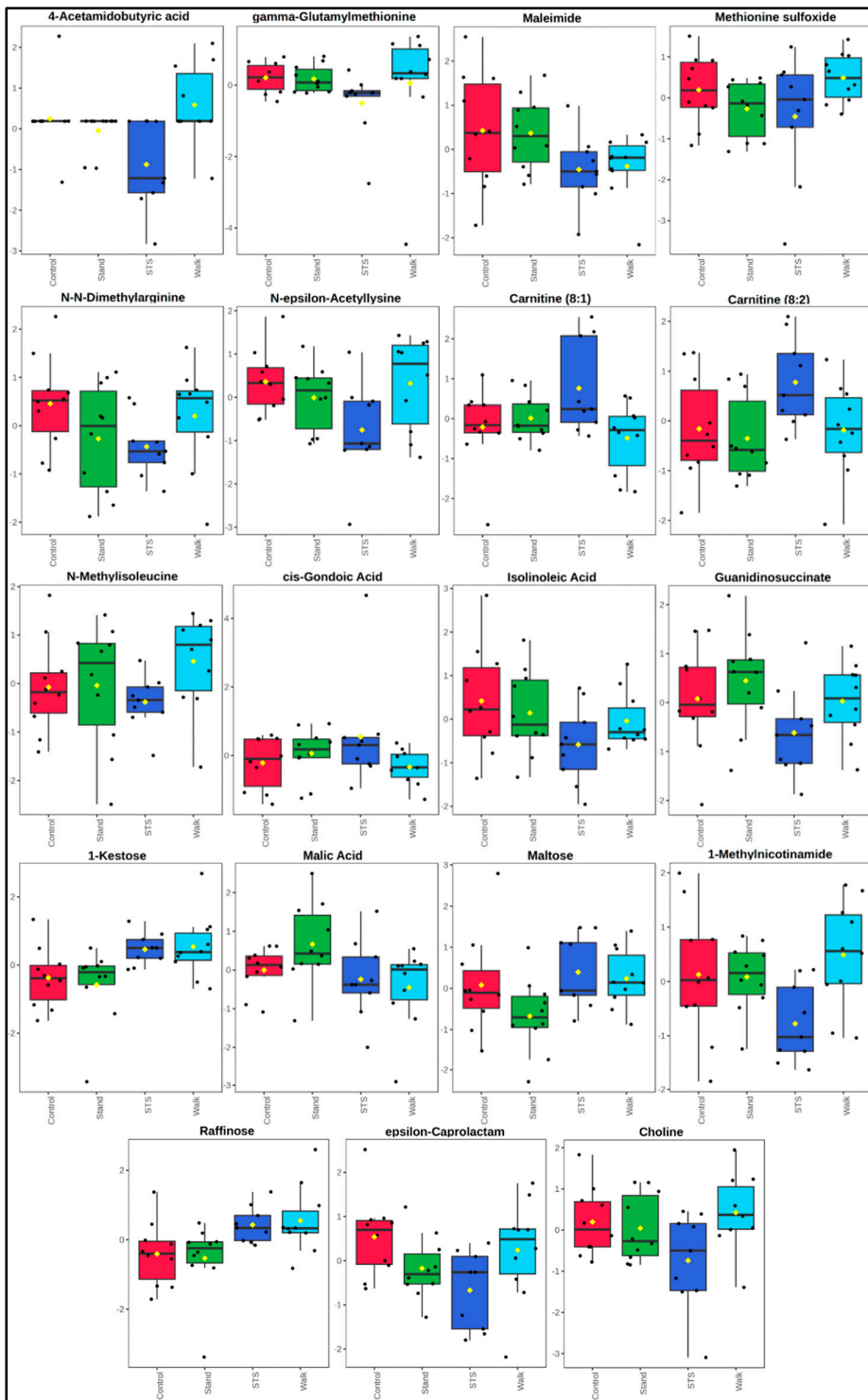


Figure S6: Box plots of all metabolites significantly different between sitting interruption modalities by Post/Pre condition ratio of relative abundance. N = 10 for the Control, Stand, and Walk conditions; n = 9 for the STS condition