

1 **Electronic Supplementary Information**

2 **Daily Vinegar Ingestion for Eight Weeks Improves Glucose Homeostasis and**
3 **Affects the Metabolome but does not Reduce Adiposity in Adults**

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8 **Figures**

9 **Page S-3: Figure S1.** Bar graphs of anthropometric variables related to weight loss or
10 visceral fat loss between pill (CON) and liquid (VIN) vinegar groups at baseline (pre) and
11 intervention (post): (A) BMI, (B) Weight, (C) Waist Circumference, (D) Body Fat, (E) VAT
12 (g), and (F) VAT (cm³). Error bars depict standard error of the mean. No significant within-
13 or between-group differences were observed.

14 **Page S-4: Figure S2.** Bar graphs of homeostatic measures between groups, across the
15 8-week intervention period: (A) Glucose, (B) Insulin, and (C) HOMA-IR. Error bars depict
16 standard error of the mean.

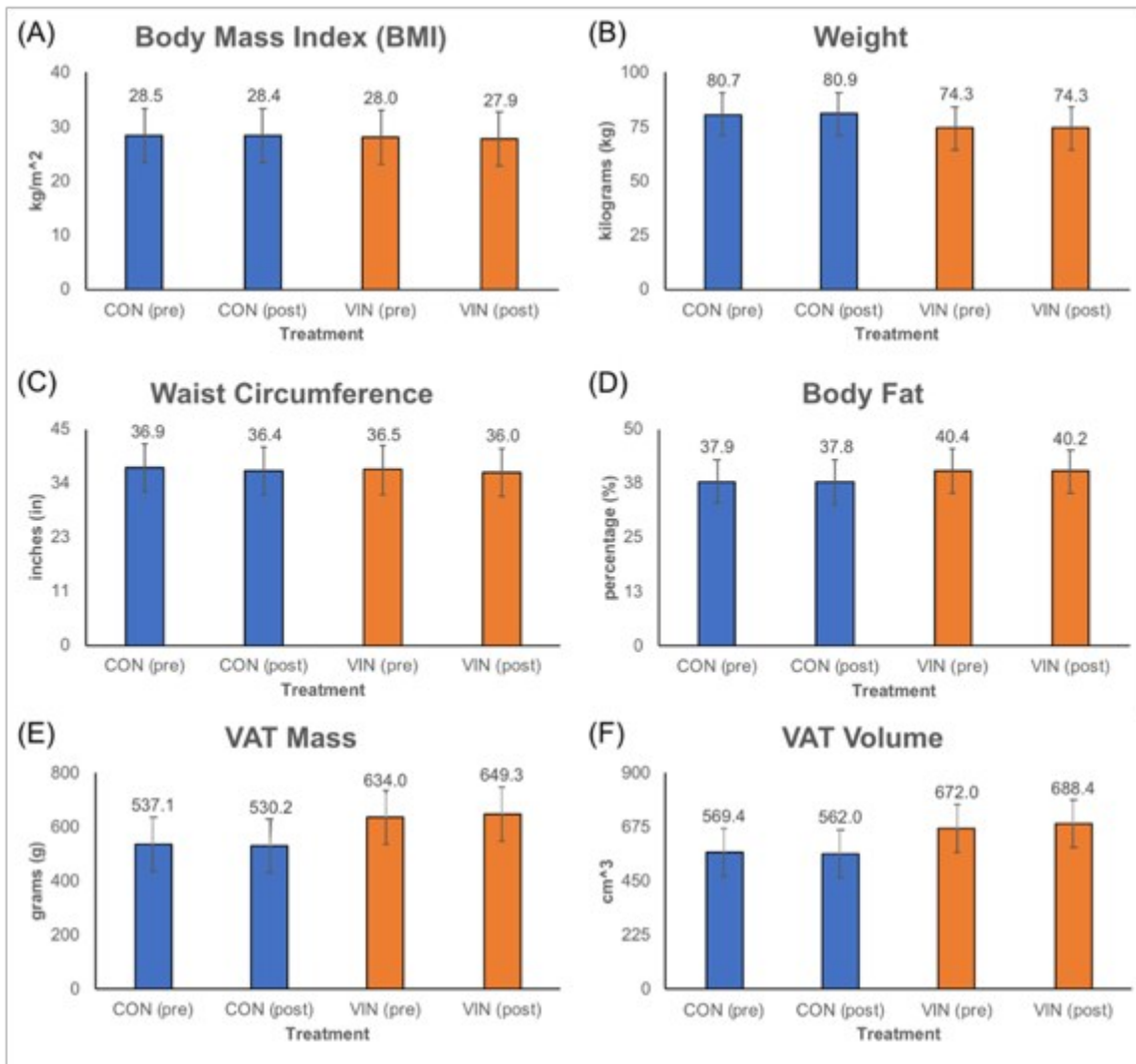
17 **Page S-5: Figure S3.** Relative effects (post/pre) of vinegar intake on levels of 8 monitored
18 SCFAs. [VIN = liquid vinegar, CON = pill vinegar].

19 **Page S-6: Figure S4.** Distribution of CV values of all reliably detected metabolites in the
20 study: (A) CV distribution in positive detection mode, and (B) CV distribution in negative
21 detection mode. QC CV range: 1.26%-14.47%, median CV: 4.97%, with ~92% of
22 metabolites having CV < 15%.

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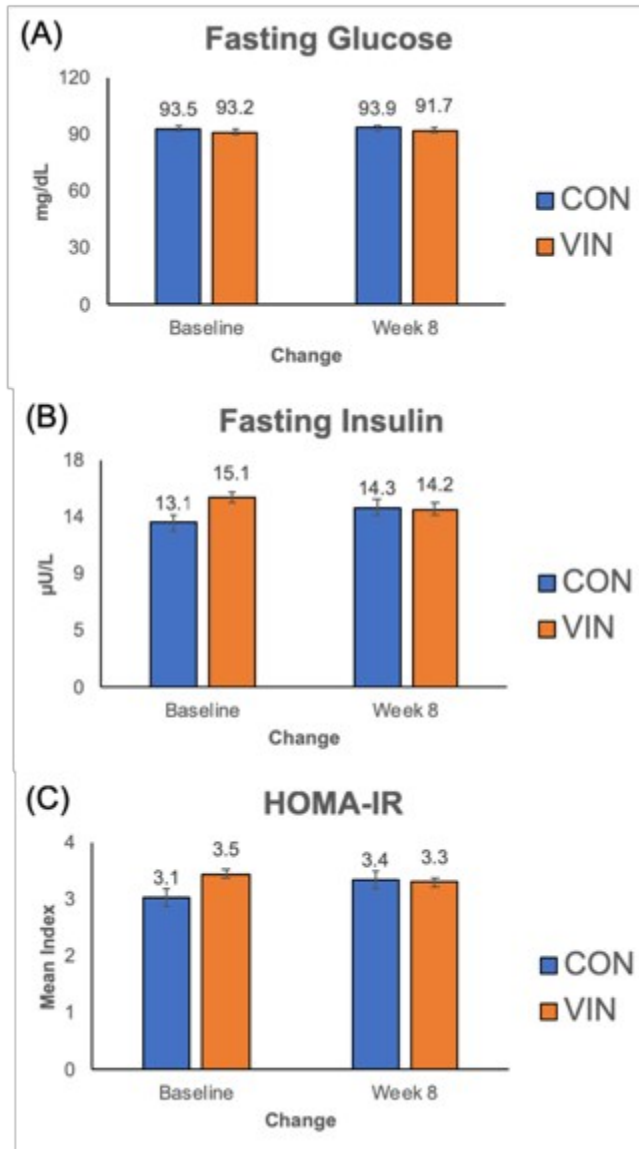
24 **Schemes**

25 **Page S-7: Scheme S1.** Flow diagram depicting process of metabolite selection for
26 subsequent model development and ROC analysis.



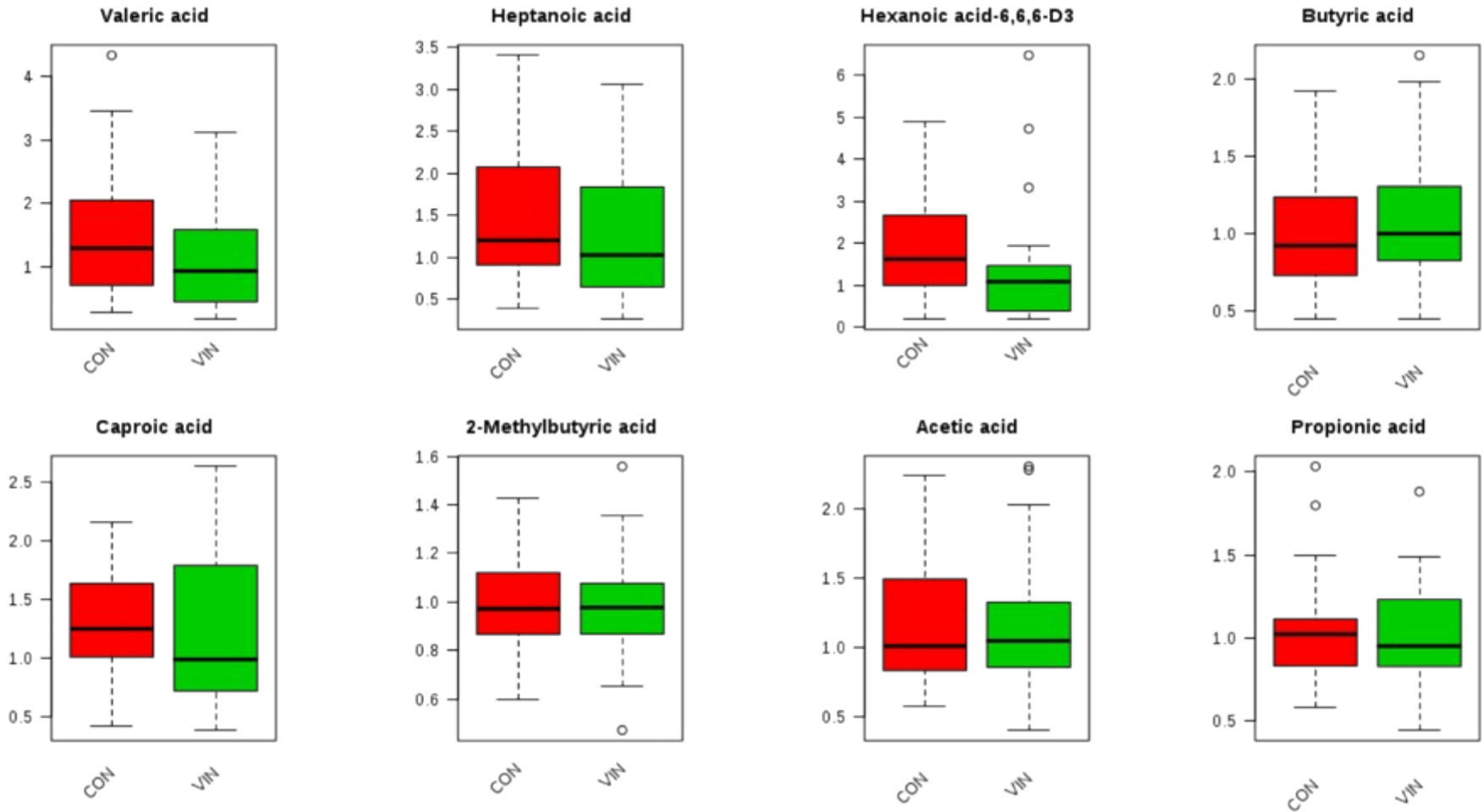
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28 **Figure S1.** Bar graphs of anthropometric variables related to weight loss or visceral fat
 29 loss between pill (CON) and liquid (VIN) vinegar groups at baseline (pre) and intervention
 30 (post): (A) BMI, (B) Weight, (C) Waist Circumference, (D) Body Fat, (E) VAT (g), and (F)
 31 VAT (cm³). Error bars depict standard error of the mean. No significant within- or between-
 32 group differences were observed.



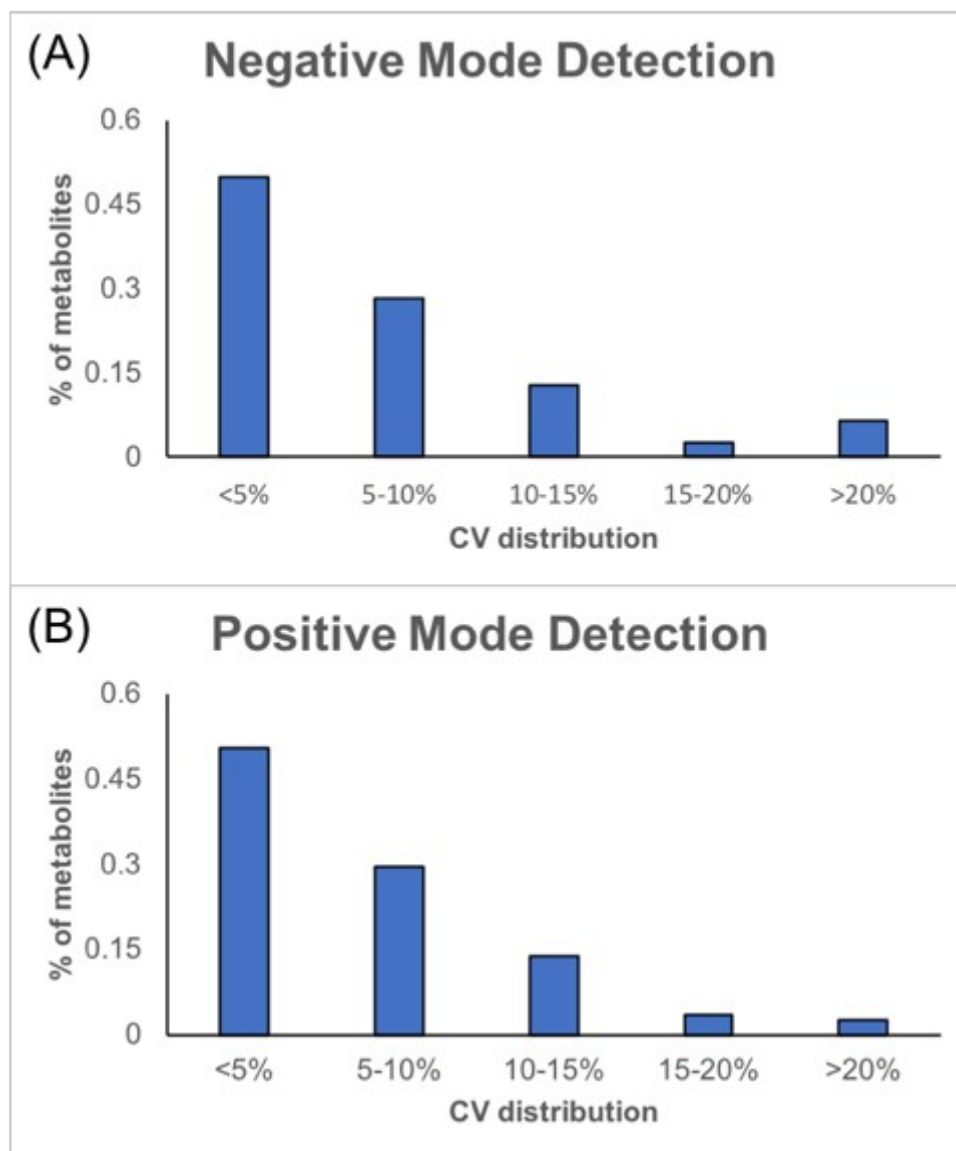
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34 **Figure S2:** Bar graphs of homeostatic measures between groups, across the 8-week
 35 intervention period: (A) Glucose, (B) Insulin, and (C) HOMA-IR. Error bars depict standard
 36 error of the mean.



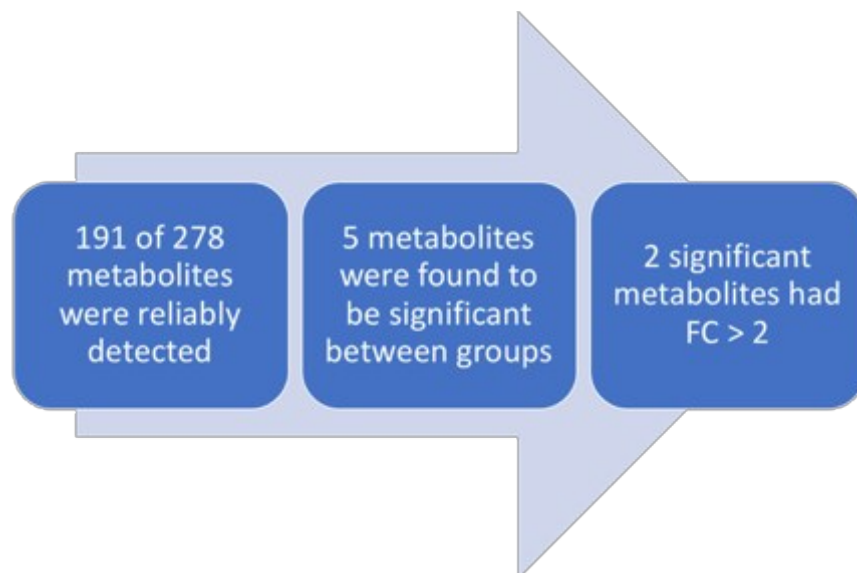
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38 **Figure S3.** Relative effects (post/pre) of vinegar intake on levels of 8 monitored SCFAs. [VIN = liquid vinegar, CON = pill vinegar].



40

41 **Figure S4.** Distribution of CV values of all reliably detected metabolites in the study: (A)
42 CV distribution in positive detection mode, and (B) CV distribution in negative detection
43 mode. QC CV range: 1.26%-14.47%, median CV: 4.97%, with ~92% of metabolites having
44 CV < 15%.



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46 **Scheme S1.** Flow diagram depicting process of metabolite selection for subsequent
47 model development and ROC analysis.