

Figure S1: Effects of 12 h and 36 h fasting on glucose levels during IVGTT ($n = 10$ in each cohort); * $p < 0.05$. (A) in non-obese cohort; (B) in obese-cohort; (C) in type 2 diabetes cohort.

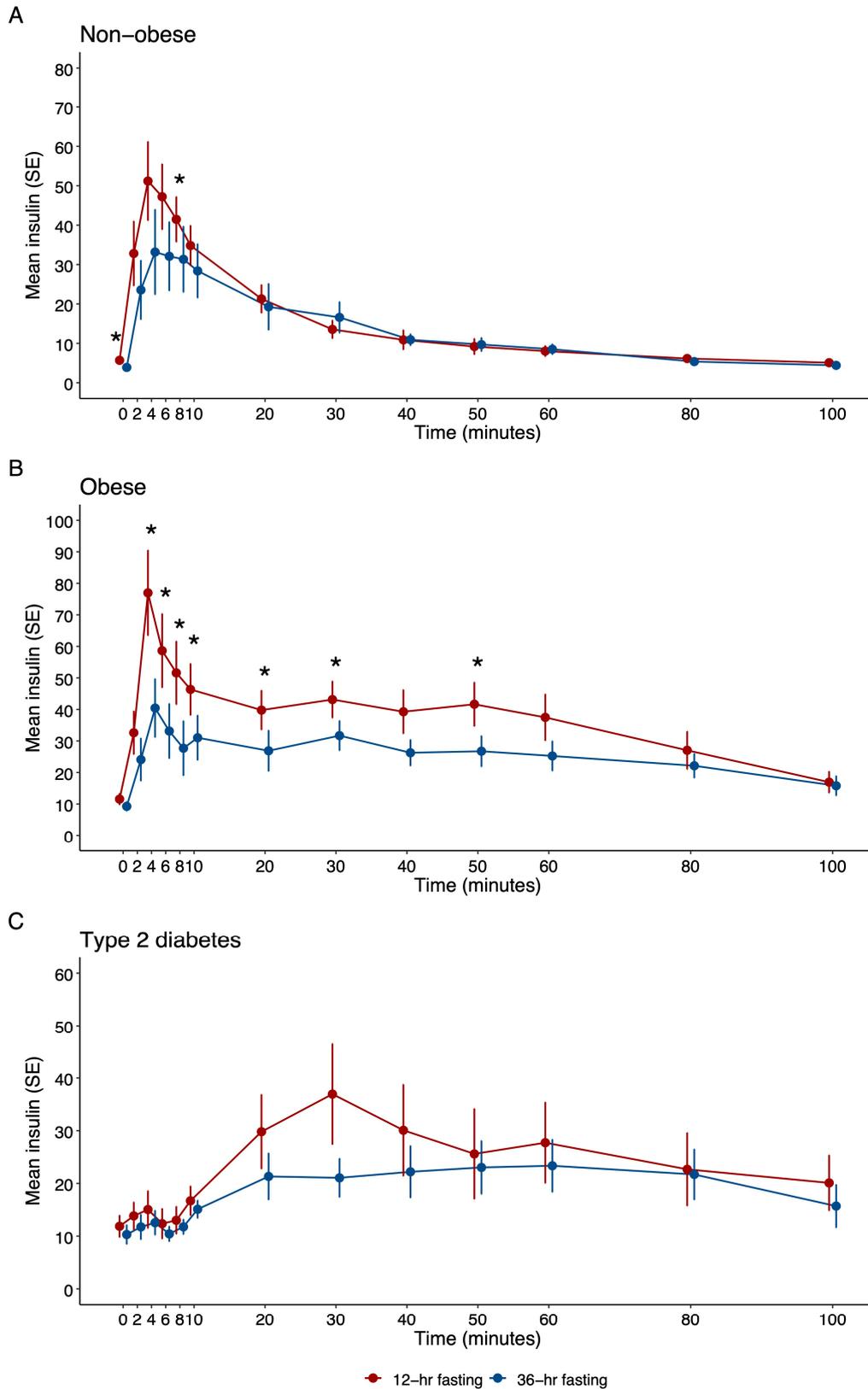


Figure S2: Effects of 12 h and 36 h fasting on insulin levels during IVGTT ($n = 10$ in each cohort); * $p < 0.05$. (A) in non-obese cohort; (B) in obese-cohort; (C) in type 2 diabetes cohort.

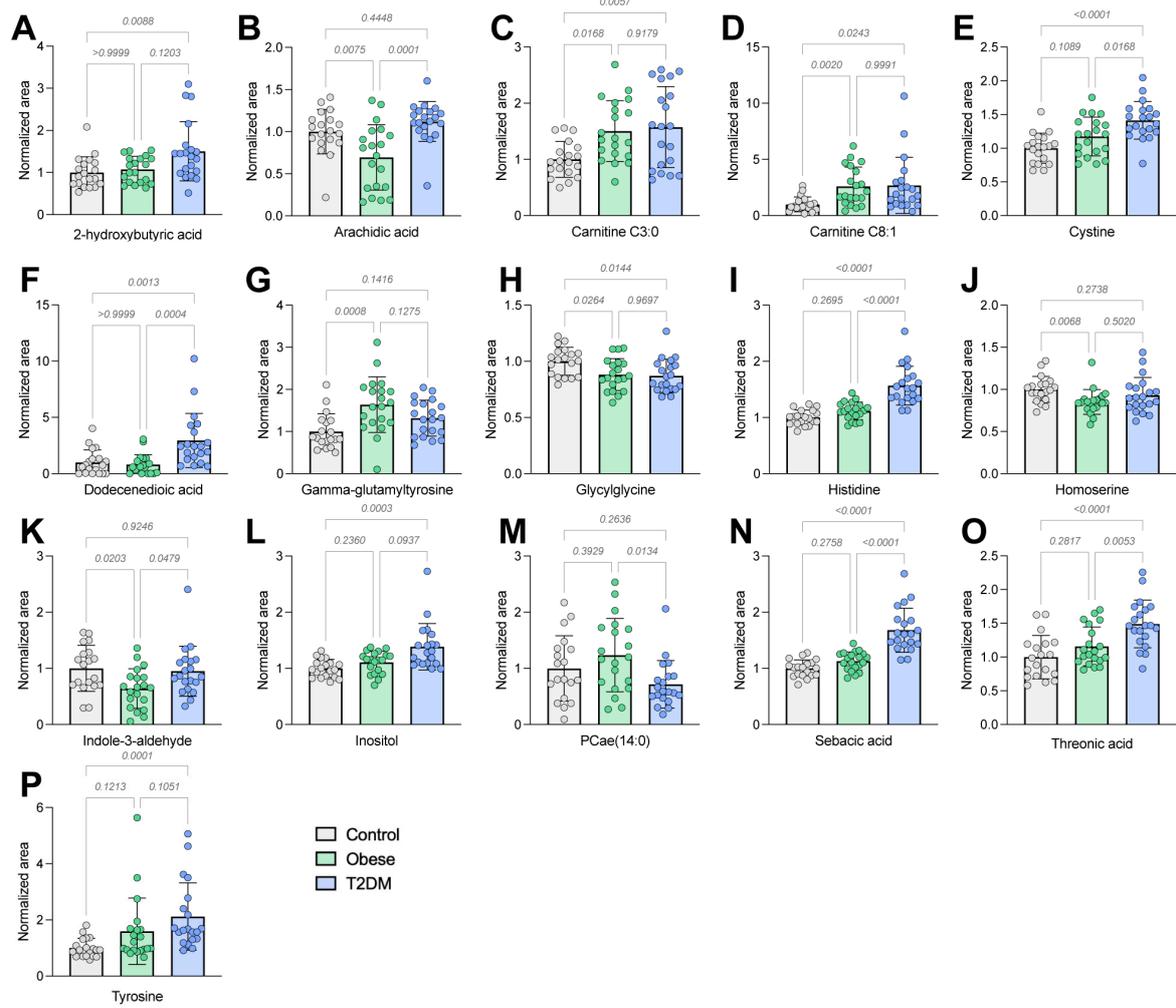


Figure S4: Significantly different metabolites in the 12 h metabolomes, normalized to the mean of the control group. Related to Figure 2. (A–P) respective metabolite investigated is listed on x-axis.

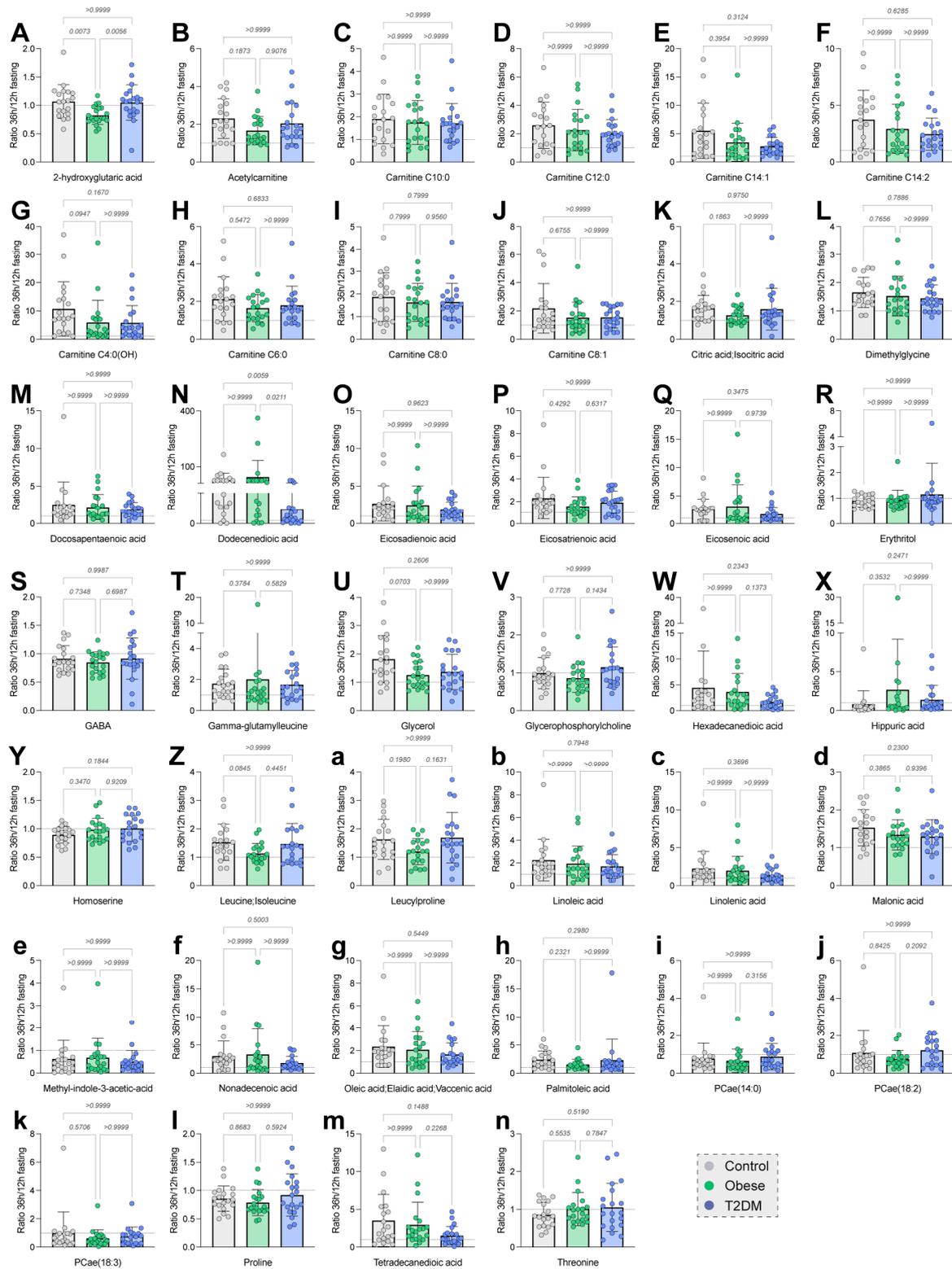


Figure S5: Fasting-responsive metabolites, as identified in Figure 3A, depicted as ratios. Related to Figure 3. (A–Z and a–n) respective metabolite investigated is listed on x-axis .

References

1. Matthews DR, Hosker JP, Rudenski AS, Naylor BA, Treacher DF, Turner RC. Homeostasis model assessment: insulin resistance and beta-cell function from fasting plasma glucose and insulin concentrations in man. *Diabetologia*. 1985;28(7):412-419.
2. Chen H, Sullivan G, Yue LQ, Katz A, Quon MJ. QUICKI is a useful index of insulin sensitivity in subjects with hypertension. *American journal of physiology Endocrinology and metabolism*. 2003;284(4):E804-812.
3. Matsuda M, DeFronzo RA. Insulin sensitivity indices obtained from oral glucose tolerance testing: comparison with the euglycemic insulin clamp. *Diabetes Care*. 1999;22(9):1462-1470.
4. Stumvoll M, Van Haeften T, Fritsche A, Gerich J. Oral glucose tolerance test indexes for insulin sensitivity and secretion based on various availabilities of sampling times. *Diabetes Care*. 2001;24(4):796-797.
5. Seltzer HS, Allen EW, Herron AL, Jr., Brennan MT. Insulin secretion in response to glycemic stimulus: relation of delayed initial release to carbohydrate intolerance in mild diabetes mellitus. *J Clin Invest*. 1967;46(3):323-335.