

Supplementary

Figure S1

Metabolic systems map summarizing the shortest route that may explain the interactions among the 27 selected metabolites.

There is a clear interplay of several pathways involving: Androgen and estrogen biosynthesis and metabolism; Biopterin metabolism; Butanoate metabolism; C21-steroid hormone biosynthesis and metabolism; Fructose and mannose metabolism; Galactose metabolism; Glycine, serine, alanine and threonine metabolism; Methionine and cysteine metabolism; Pentose phosphate pathway; Tryptophan metabolism; Tyrosine metabolism; Urea cycle and metabolism of arginine, proline, glutamate, aspartate and asparagine; Valine, leucine and isoleucine degradation; Vitamin B3 (nicotinate and nicotinamide) metabolism; Vitamin B5 - CoA biosynthesis from pantothenate.

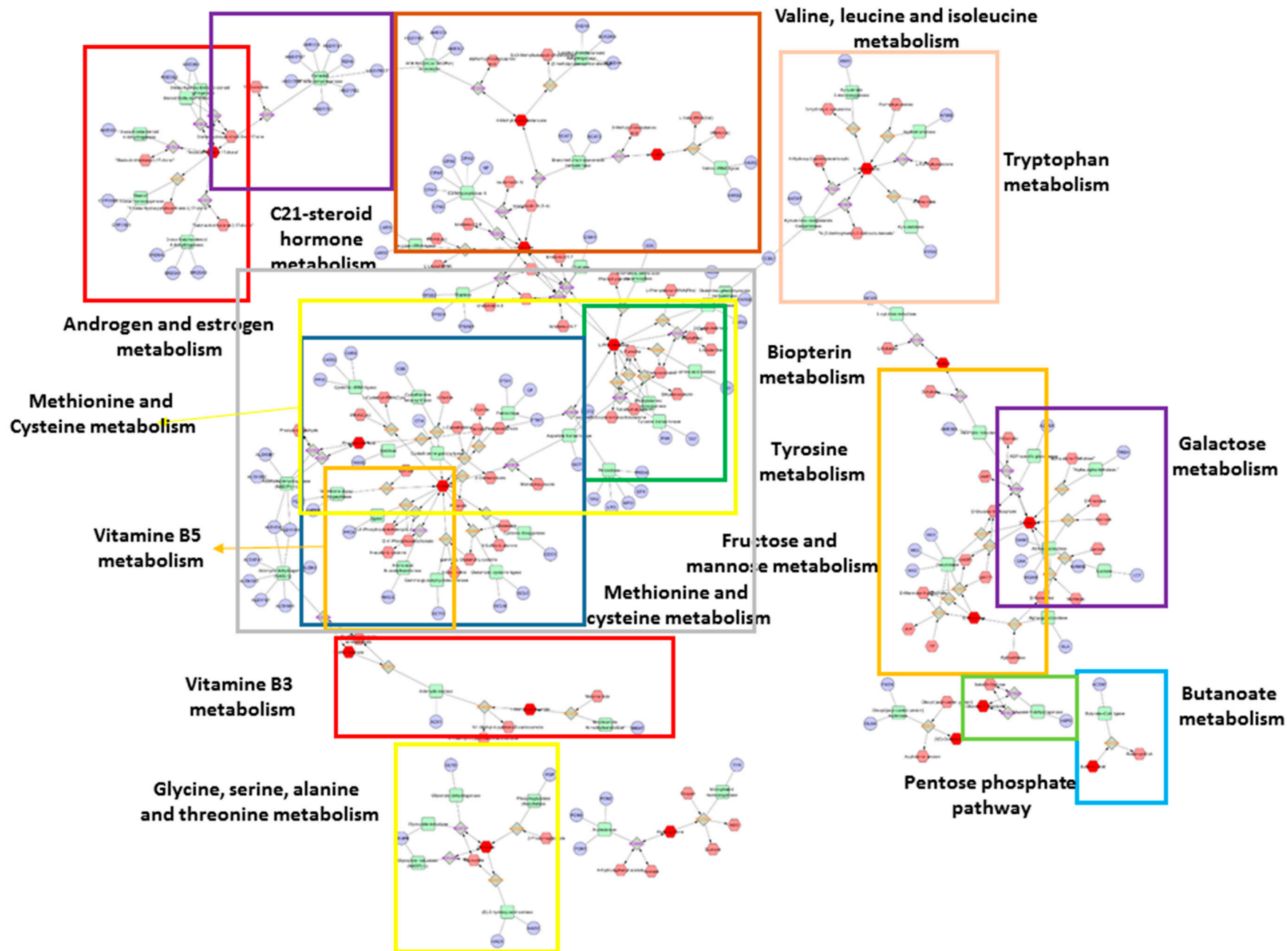


Table S1. Daily dietary nutrients assessment through 24 hrs recall

		NW	OB[NAFLD-]	OB[NAFLD+]
Energy intake	<i>Kcal/die</i>	1330,3±314,4	1568,4±295,6	1739,6±505,4*
Total carbohydrates	<i>g/die</i>	180,8±52,8	184,8±63,4	177,3±67,7
	<i>%</i>	50,6±8,2	43,8±7,1*	38,3±7,8*
Simple Sugars	<i>g/die</i>	21,2±4,2	43,3±27,3	41,2±17,7
	<i>%</i>	6,4±1,1	10,3±5,9	9,0±3,3
Total fats	<i>g/die</i>	50,1±17,3	70,7±12,8*	83,3±21,4*
	<i>%</i>	33,2±9,2	41,0±6,3*	43,7±6,0*
Saturated fats	<i>g/die</i>	8,9±5,8	17,7±7,3	18,4±6,4*
	<i>%</i>	11,7±6,0	10,3±3,7	9,9±3,2
Total fibers	<i>d/die</i>	9,0±4,1	10,8±3,2	11,3±5,4
Total proteins	<i>g/die</i>	50,7±13,3	57,8±11,3	78,4±35,8*
	<i>%</i>	15,0±3,6	15,3±4,2	18,1±4,7
Cholesterol	<i>mg/die</i>	152,9±124,9	159,8±82,6	267,0±186,6
Sodium	<i>mg/die</i>	726,3±505,2	1452,7±746,3	1781,1±955,7
Fructose	<i>mg/die</i>	6,9±4,2	9,9±4,7	19,7±17,0*§

Abbreviations: (NAFLD) non alcoholic fatty liver disease; (NW), normal weight/controls; (OB[NAFLD-]) obese without NAFLD; (OB[NAFLD+]) obese with NAFLD

Statistics: Values are expressed as means ± 1 standard deviation. * asterisk indicates a statistically significant difference (p<0.05) from the Control group (NW),

§ symbol indicates a statistically significant difference (p<0.05) from the obese without NAFLD (OB[NAFLD-]).