**Table S2 The difference in metabolites between the SD group and JS group.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | VIP | p\_value | FDR | Type |
| Palatinose | 1.33  | 0.00  | 0.02  | up |
| D-galactose | 1.33  | 0.00  | 0.05  | up |
| Hexanoic acid | 1.33  | 0.00  | 0.02  | up |
| α-linolenic acid | 1.32  | 0.00  | 0.07  | down |
| D-(+)-trehalose | 1.32  | 0.01  | 0.08  | up |
| 1,3-dioxolane-2-methanol | 1.31  | 0.01  | 0.08  | up |
| D-(+)-talofuranose | 1.31  | 0.01  | 0.10  | up |
| Sulfurous acid | 1.30  | 0.01  | 0.10  | up |
| Malic acid | 1.28  | 0.00  | 0.07  | down |
| Tromethamine | 1.28  | 0.02  | 0.15  | up |
| Butanedioic acid | 1.28  | 0.02  | 0.15  | down |
| 3 hydroxy-2,3-didehydrosebacic acid | 1.26  | 0.03  | 0.15  | down |
| Methyl galactoside | 1.26  | 0.01  | 0.08  | up |
| Glyceryl-glycoside | 1.26  | 0.02  | 0.15  | down |
| Decanoic acid | 1.26  | 0.03  | 0.15  | down |
| 4-aminobutanoic acid | 1.25  | 0.03  | 0.15  | down |
| 2-butenedioic acid | 1.24  | 0.03  | 0.15  | down |
| L-proline | 1.24  | 0.03  | 0.15  | up |
| 2,6-bis(tert-butyl)phenol | 1.24  | 0.01  | 0.10  | down |
| 5-dodecenoic acid | 1.23  | 0.04  | 0.15  | down |
| Propanedioic acid | 1.23  | 0.04  | 0.15  | down |
| D-arabinose | 1.23  | 0.04  | 0.15  | down |
| Palmitic acid | 1.22  | 0.04  | 0.15  | down |
| Glycerol monostearate | 1.22  | 0.05  | 0.15  | down |
| Putrescine | 1.22  | 0.04  | 0.15  | down |
| Tyrosine | 1.22  | 0.05  | 0.15  | down |
| β-gentiobiose | 1.21  | 0.03  | 0.15  | up |
| L-methionine | 1.21  | 0.04  | 0.15  | down |
| β-D-glucopyranose | 1.20  | 0.04  | 0.15  | down |
| L-isoleucine | 1.19  | 0.03  | 0.15  | down |
| DL-phenylalanine | 1.18  | 0.03  | 0.15  | down |