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| **Number of microbes** | **Included reconstructed organisms** | **Assigned ID** |
| 0 | Human | GF |
| 1 | Human, *B. thetaiotaomicron* | HS/BT |
| 1 | Human, *F. prausnitzii* | HS/FP |
| 1 | Human, *E. coli* MG1655 | HS/EC |
| 1 | Human, *L. plantarum* | HS/LP |
| 1 | Human, *L. lactis* | HS/LL |
| 1 | Human, *S. thermophilus* | HS/ST |
| 1 | Human, *H. pylori* | HS/HP |
| 1 | Human, *K. pneumoniae* | HS/KP |
| 1 | Human, *S. enterica* subsp. *typhimurium* | HS/SE |
| 1 | Human, *E. coli* O157:H7 strain Sakai | HS/ECs |
| 1 | Human, *E. coli* O157:H7 strain EDL933 | HS/ECe |
| 2 | Human, *B. thetaiotaomicron*, *F. prausnitzii* | HS/BTFP |
| 2 | Human, *B. thetaiotaomicron*, *E. coli* MG1655 | HS/BTEC |
| 2 | Human, *B. thetaiotaomicron*, *L. plantarum* | HS/BTLP |
| 2 | Human, *B. thetaiotaomicron*, *S. thermophilus* | HS/BTST |
| 2 | Human, *F. prausnitzii*, *E. coli* MG1655 | HS/FPEC |
| 2 | Human, *F. prausnitzii*, *L. plantarum* | HS/FPLP |
| 2 | Human, *F. prausnitzii*, *S. thermophilus* | HS/FPST |
| 2 | Human, *E. coli* MG1655, *L. plantarum* | HS/ECLP |
| 2 | Human, *E. coli* MG1655, *S. thermophilus* | HS/ECST |
| 2 | Human, *L. plantarum*, *S. thermophilus* | HS/LPST |
| 5 | Human, *B. thetaiotaomicron*, *F. prausnitzii*, *E. coli* MG1655, *L. plantarum*, *S. thermophilus* | HS/5CM |
| 5 | Human, *H. pylori*, *K. pneumoniae*, *S. enterica* subsp. *typhimurium*, *E. coli* O157:H7 strain Sakai, *E. coli* O157:H7 strain EDL933 | HS/5PM |
| 11 | Human, *B. thetaiotaomicron*, *F. prausnitzii*, *E. coli* MG1655, *L. plantarum*, *L.lactis*, *S. thermophilus*, *H. pylori*, *K. pneumoniae*, *S. enterica* subsp. *typhimurium*, *E. coli* O157:H7 strain Sakai, *E. coli* O157:H7 strain EDL933 | HS/All |

In the model, IDs are Human:HS,

5CM: BT, FAEPRAA, b, lp, stu,

5PM: HP, KPN, STM, ECs, Z

HS/All: BT, FAEPRAA, b, lp, llmg, stu, HP, KPN, STM, ECs, Z

BT-

BTEC – BT, b

BTFP – BT, FAEPRAA

BTLP – BT lp

BTST – BT, stu

EC – b

ECe – Z

ECs – ECs

FP – FAEPRAA

FPEC – FAEPRAA, b

FPLP – FAEPRAA, lp

FPST – FAEPRAA, stu

HP - HP

KP – KPN

LL – llmg

LP – lp

LPEC – b, lp

LPST – lp, stu

ST – stu

STEC – b, stu

STy – STM

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| --- | --- |
| Species | Biomass composition |
| *BT* | '34.7965 BTh2o[c] + 0.25601 BTglu-L[c] + 0.50006 BTala-L[c] + 0.004668 BTACP[c] + 0.004668 BTcoa[c] + 0.004668 BTnadp[c] + 0.13425 BTtyr-L[c] + 0.004668 BTnad[c] + 0.004668 BTna1[c] + 40.1701 BTatp[c] + 0.004668 BTadocbl[c] + 0.23468 BTasp-L[c] + 0.2091 BTgtp[c] + 0.004668 BT10fthf[c] + 0.004668 BTthf[c] + 0.25601 BTgln-L[c] + 0.5958 BTgly[c] + 0.092623 BThis-L[c] + 0.43866 BTleu-L[c] + 0.24665 BTthr-L[c] + 0.004668 BTamet[c] + 0.004668 BTmql10[c] + 0.004668 BTmql11[c] + 0.004668 BTmql7[c] + 0.004668 BTmql8[c] + 0.004668 BTmql9[c] + 0.08898 BTcys-L[c] + 0.21543 BTpro-L[c] + 0.28828 BTarg-L[c] + 0.18056 BTphe-L[c] + 0.23468 BTasn-L[c] + 0.004668 BTbtn[c] + 0.14934 BTmet-L[c] + 0.004668 BTca2[c] + 0.12988 BTctp[c] + 0.010648 BTpg140[c] + 0.010648 BTclpn140[c] + 0.010648 BTpg160[c] + 0.010648 BTclpn160[c] + 0.010648 BTpg180[c] + 0.010648 BTclpn180[c] + 0.010648 BTclpnai15[c] + 0.010648 BTpgai17[c] + 0.010648 BTclpnai17[c] + 0.010648 BTclpni14[c] + 0.010648 BTclpni15[c] + 0.010648 BTclpni16[c] + 0.010648 BTpgi17[c] + 0.010648 BTclpni17[c] + 0.004668 BTcobalt2[c] + 0.004668 BTcps\_bt[e] + 0.004668 BTspmd[c] + 0.14027 BTutp[c] + 0.33355 BTlys-L[c] + 0.01945 BTlps\_bt[e] + 0.004668 BTpe\_cer1\_bt[e] + 0.004668 BTsphmyln\_bt[e] + 0.004668 BTfe2[c] + 0.004668 BTfe3[c] + 0.004668 BTfad[c] + 0.023503 BTdttp[c] + 0.2097 BTser-L[c] + 0.023503 BTdatp[c] + 0.004668 BTpheme[c] + 0.28255 BTile-L[c] + 0.004668 BTk[c] + 0.004668 BT5mthf[c] + 0.004668 BTmg2[c] + 0.004668 BTmn2[c] + 0.023503 BTdgtp[c] + 0.023503 BTdctp[c] + 0.004668 BTpydx5p[c] + 0.010648 BTpe160[c] + 0.010648 BTpg120[c] + 0.010648 BTpg181[c] + 0.092476 BTpeptido\_EC[c] + 0.092476 BTudcpdp[c] + 0.010648 BTpe120[c] + 0.010648 BTpe140[c] + 0.010648 BTpe180[c] + 0.010648 BTpe181[c] + 0.010648 BTpeai15[c] + 0.010648 BTpeai17[c] + 0.010648 BTpei14[c] + 0.010648 BTpei15[c] + 0.010648 BTpei16[c] + 0.010648 BTpei17[c] + 0.004668 BTribflv[c] + 0.004668 BTthmpp[c] + 0.055157 BTtrp-L[c] + 0.4116 BTval-L[c] + 0.004668 BTzn2[c] -> 40 BTh[c] + 39.9953 BTpi[c] + 40 BTadp[c] + 0.004668 BTapoACP[c] + 0.60238 BTppi[c] ' |
| FP | '34.7965 FPh2o[c] + 0.25601 FPglu-L[c] + 0.0056228 FPnadp[c] + 0.0056228 FPACP[c] + 0.0056228 FPcoa[c] + 0.0056228 FPnad[c] + 0.23468 FPasp-L[c] + 40.1701 FPatp[c] + 0.0056228 FPthmpp[c] + 0.0056228 FPfad[c] + 0.25601 FPgln-L[c] + 0.2091 FPgtp[c] + 0.0056228 FP10fthf[c] + 0.0056228 FPthf[c] + 0.50006 FPala-L[c] + 0.5958 FPgly[c] + 0.092623 FPhis-L[c] + 0.43866 FPleu-L[c] + 0.24665 FPthr-L[c] + 0.08898 FPcys-L[c] + 0.21543 FPpro-L[c] + 0.28827 FParg-L[c] + 0.181 FPphe-L[c] + 0.23468 FPasn-L[c] + 0.0056228 FPbtn[c] + 0.0056228 FPamet[c] + 0.14934 FPmet-L[c] + 0.0056228 FPpydx5p[c] + 0.18056 FPpg160[c] + 0.18056 FPpg181[c] + 0.0056228 FPfe2[c] + 0.0056228 FPcu2[c] + 0.092476 FPudcpdp[c] + 0.0056228 FP5mthf[c] + 0.014201 FPpg120[c] + 0.055157 FPtrp-L[c] + 0.33355 FPlys-L[c] + 0.014201 FPpg140[c] + 0.023503 FPdttp[c] + 0.0056228 FPcbl1[c] + 0.014201 FPclpn140[c] + 0.014201 FPclpn181[c] + 0.0056228 FPk[c] + 0.014201 FPpg180[c] + 0.12988 FPctp[c] + 0.092476 FPpeptido\_EC[c] + 0.2097 FPser-L[c] + 0.0056228 FPso4[c] + 0.0056228 FPmg2[c] + 0.0056228 FPcobalt2[c] + 0.014201 FPclpn180[c] + 0.023503 FPdatp[c] + 0.023503 FPdgtp[c] + 0.023503 FPdctp[c] + 0.0056228 FPcl[c] + 0.0056228 FPfe3[c] + 0.0056228 FPribflv[c] + 0.14027 FPutp[c] + 0.28255 FPile-L[c] + 0.13425 FPtyr-L[c] + 0.0056228 FPca2[c] + 0.4116 FPval-L[c] + 0.014201 FPclpn160[c] + 0.0056228 FPcps\_fp[e] -> 40 FPh[c] + 39.9944 FPpi[c] + 40 FPadp[c] + 0.0056228 FPapoACP[c] + 0.60238 FPppi[c] ' |
| *EC* | '59.9848 ECatp[c] + 54.6129 ECh2o[c] + 0.000335 ECnadph[c] + 0.000112 ECnadp[c] + 0.044164 ECpe160[c] + 0.03435 ECpe161[c] + 0.017704 ECpe181[c] + 0.010599 ECpg160[c] + 0.008244 ECpg161[c] + 0.004249 ECpg181[c] + 4.5e-05 ECnadh[c] + 0.001787 ECnad[c] + 0.000168 ECcoa[c] + 0.011279 ECnh4[c] + 0.25571 ECglu-L[c] + 0.000279 ECaccoa[c] + 0.20912 ECgtp[c] + 3.1e-05 ECmalcoa[c] + 0.000223 ECfad[c] + 0.000223 ECamet[c] + 0.000223 ECchor[c] + 0.25571 ECgln-L[c] + 0.000223 ECadocbl[c] + 0.23423 ECasp-L[c] + 0.03327 ECptrc[c] + 0.000223 EC10fthf[c] + 0.000223 ECthf[c] + 9.8e-05 ECsuccoa[c] + 0.49915 ECala-L[c] + 0.000223 ECpydx5p[c] + 0.000223 EC2dmmql8[c] + 0.000223 ECmql8[c] + 0.088988 ECcys-L[c] + 0.5953 ECgly[c] + 0.2148 ECpro-L[c] + 0.006767 ECfe2[c] + 0.000223 ECribflv[c] + 0.28742 ECarg-L[c] + 0.23423 ECasn-L[c] + 0.000223 ECq8h2[c] + 0.000223 ECgthrd[c] + 0.14934 ECmet-L[c] + 0.004512 ECca2[c] + 0.33345 EClys-L[c] + 0.002944 ECclpn160[p] + 0.00229 ECclpn161[p] + 0.00118 ECclpn181[p] + 0.004512 ECcl[c] + 0.003008 ECcobalt2[c] + 0.008151 ECcolipa[c] + 0.1401 ECutp[c] + 0.1298 ECctp[c] + 0.003008 ECcu2[c] + 0.024805 ECdatp[c] + 0.025612 ECdctp[c] + 0.20968 ECser-L[c] + 0.025612 ECdgtp[c] + 0.024805 ECdttp[c] + 0.006767 ECfe3[c] + 0.092056 EChis-L[c] + 0.28231 ECile-L[c] + 0.16919 ECk[c] + 0.43778 ECleu-L[c] + 0.007519 ECmg2[c] + 0.000223 ECmlthf[c] + 0.003008 ECmn2[c] + 0.003008 ECmobd[c] + 0.18002 ECphe-L[c] + 0.000223 ECpheme[c] + 0.000223 ECsheme[c] + 0.00376 ECso4[c] + 0.000223 ECthmpp[c] + 0.24651 ECthr-L[c] + 0.055234 ECtrp-L[c] + 0.13399 ECtyr-L[c] + 5.5e-05 ECudcpdp[c] + 0.41118 ECval-L[c] + 0.003008 ECzn2[c] + 0.000223 EC5mthf[c] + 0.000223 ECenter[c] + 0.15419 ECglycogen[c] + 0.000223 EChemeo[c] + 0.001345 ECmurein3p3p[p] + 0.000605 ECmurein3px4p[p] + 0.005381 ECmurein4p4p[p] + 0.005448 ECmurein4px4p[p] + 0.000673 ECmurein4px4px4p[p] + 0.006744 ECspmd[c] -> 59.81 ECadp[c] + 59.81 ECh[c] + 59.8062 ECpi[c] + 0.74983 ECppi[c] ' |
| *LP* | '0.002 LPnad[c] + 27.2 LPh2o[c] + 0.0002 LPcoa[c] + 27.2 LPatp[c] + 1e-05 LPthf[c] + 1e-05 LPbtn[c] + 0.000625 LPpg\_LPL[c] + 1.8e-05 LPclpn\_LPL[c] + 0.1294 LPCPS\_LPL2[c] + 0.00013 LPLTA\_LPL[c] + 0.000617 LPDNA\_LPL[c] + 0.01378 LPRTAglc[c] + 0.000164 LPlyspg\_LPL[c] + 1e-05 LPMGD[c] + 0.1462 LPPGlac2[c] + 0.0002 LPudcpdp[c] + 0.00243 LPPROT\_LPL\_v60[c] + 1e-06 LPpydx5p[c] + 0.002784 LPRNA\_LPL[c] + 1e-05 LPthmpp[c] -> 27.2 LPh[c] + 27.2 LPadp[c] + 27.2 LPpi[c] ' |
| *LL* | '0.002 LLnad[c] + 39.4 LLh2o[c] + 0.0002 LLcoa[c] + 39.4 LLatp[c] + 1e-05 LLthf[c] + 6.1e-05 LLpg\_LLA[c] + 0.000138 LLclpn\_LLA[c] + 0.0064 LLCPS\_LLA[c] + 9.6e-05 LLd12dg\_LLA[c] + 0.00074 LLDNA\_LLA[c] + 0.00015 LLLTAAlaGal\_LLA[c] + 1.3e-05 LLlyspg\_LLA[c] + 0.119 LLPG[c] + 0.0002 LLudcpdp[c] + 0.004201 LLPROT\_LLA\_v3[c] + 0.00329 LLRNA\_LLA[c] + 1e-05 LLthmpp[c] + 1.3e-05 LLm12dg\_LLA[c] -> 39.4 LLh[c] + 39.4 LLadp[c] + 39.4 LLpi[c] ' |
| *ST* | '0.0018 STnad[c] + 0.00018 STcoa[c] + 18.15 STatp[c] + 18.15 STh2o[c] + 1e-05 STthf[c] + 0.000107 STpg\_LLA[c] + 0.000241 STclpn\_LLA[c] + 0.24804 STCPS\_LLA[c] + 0.000172 STd12dg\_LLA[c] + 3.2e-05 STDNA\_STU[c] + 1e-05 STfad[c] + 0.000148 STLTAAlaGal\_LLA[c] + 2.4e-05 STlyspg\_LLA[c] + 0.12447 STPG[c] + 1.8e-05 STudcpdp[c] + 0.002332 STPROT\_STR[c] + 0.002674 STRNA\_LLA[c] + 1e-05 STthmpp[c] + 2.3e-05 STm12dg\_LLA[c] -> 18.15 STh[c] + 18.15 STadp[c] + 18.15 STpi[c] ' |
| *HP* | '0.05 HP5mthf[c] + 5e-05 HPaccoa[c] + 0.488 HPala-L[c] + 0.001 HPamp[c] + 0.281 HParg-L[c] + 0.229 HPasn-L[c] + 0.229 HPasp-L[c] + 45.7318 HPatp[c] + 6e-06 HPbtn[c] + 0.027907 HPclpn\_HP[c] + 6e-06 HPcoa[c] + 0.126 HPctp[c] + 0.087 HPcys-L[c] + 0.0247 HPdatp[c] + 0.0254 HPdctp[c] + 0.0254 HPdgtp[c] + 0.0247 HPdttp[c] + 1e-05 HPfad[c] + 0.25 HPgln-L[c] + 0.25 HPglu-L[c] + 0.582 HPgly[c] + 0.203 HPgtp[c] + 45.5608 HPh2o[c] + 0.09 HPhis-L[c] + 0.276 HPile-L[c] + 0.428 HPleu-L[c] + 0.0084 HPlps\_HP[c] + 0.326 HPlys-L[c] + 0.146 HPmet-L[c] + 6e-06 HPmqn6[c] + 0.00215 HPnad[c] + 5e-05 HPnadh[c] + 0.00013 HPnadp[c] + 0.0004 HPnadph[c] + 0.074894 HPpe\_HP[c] + 0.0276 HPpeptido\_EC[c] + 0.016354 HPpg\_HP[c] + 0.176 HPphe-L[c] + 6e-06 HPpheme[c] + 0.21 HPpro-L[c] + 0.003374 HPps\_HP[c] + 0.035 HPptrc[c] + 0.205 HPser-L[c] + 0.007 HPspmd[c] + 3e-06 HPsuccoa[c] + 6e-06 HPthm[c] + 0.241 HPthr-L[c] + 0.054 HPtrp-L[c] + 0.131 HPtyr-L[c] + 0.003 HPudpg[c] + 0.136 HPutp[c] + 0.402 HPval-L[c] -> 45.5608 HPadp[c] + 45.5608 HPh[c] + 45.5628 HPpi[c] + 0.7302 HPppi[c] ' |
| *KP* | '66.5191 KPh2o[c] + 71.785 KPatp[c] + 0.0408 KPttdca[c] + 0.01148 KPpe160[c] + 0.00364 KPpe161[c] + 0.00224 KPpe181[c] + 0.001185 KPpg160[c] + 0.000377 KPpg161[c] + 0.000215 KPpg181[c] + 0.304 KPglu-L[c] + 0.124 KPgtp[c] + 0.251 KPgln-L[c] + 0.31 KPasp-L[c] + 0.011 KPgam6p[c] + 0.007 KPadphep-LD[c] + 0.621 KPala-L[c] + 0.02952 KPpe160[p] + 0.001015 KPpg160[p] + 0.078 KPcys-L[c] + 0.539 KPgly[c] + 0.191 KPpro-L[c] + 0.095 KPmet-L[c] + 0.306 KParg-L[c] + 0.204 KPasn-L[c] + 0.0013 KPclpn160[p] + 0.0004 KPclpn161[p] + 0.0002 KPclpn181[p] + 0.117 KPctp[c] + 0.017 KPdatp[c] + 0.022 KPdctp[c] + 0.022 KPdgtp[c] + 0.142 KPdtdprmn[c] + 0.017 KPdttp[c] + 0.089 KPhis-L[c] + 0.199 KPile-L[c] + 0.005 KPkdo[c] + 0.383 KPleu-L[c] + 0.0204 KPlipidA[c] + 0.239 KPlys-L[c] + 0.053 KPman1p[c] + 0.011 KPmurein5px4p[p] + 0.00936 KPpe161[p] + 0.00576 KPpe181[p] + 0.000323 KPpg161[p] + 0.000185 KPpg181[p] + 0.211 KPphe-L[c] + 0.444 KPser-L[c] + 0.265 KPthr-L[c] + 0.066 KPtrp-L[c] + 0.066 KPtyr-L[c] + 0.003 KPudpg[c] + 0.076 KPudpgal[c] + 0.001 KPudpgalur[c] + 0.107 KPutp[c] + 0.319 KPval-L[c] -> 71.7 KPh[c] + 71.7 KPadp[c] + 71.7 KPpi[c] + 0.51169 KPppi[c] ' |
| *STy* | '53.3039 STyh2o[c] + 0.000188 STy12dgr2\_ST[p] + 59.9643 STyatp[c] + 0.001 STyamp[c] + 5e-05 STynadh[c] + 0.00215 STynad[c] + 0.0004 STynadph[c] + 0.00013 STynadp[c] + 1e-05 STyfad[c] + 0.25606 STyglu-L[c] + 6e-06 STycoa[c] + 5e-05 STyaccoa[c] + 0.18633 STygtp[c] + 0.20023 STygln-L[c] + 0.37401 STyasp-L[c] + 0.7484 STyala-L[c] + 0.035 STyptrc[c] + 3e-06 STysuccoa[c] + 1.499 STygly[c] + 0.067143 STyhis-L[c] + 0.20649 STyleu-L[c] + 0.34983 STythr-L[c] + 0.017197 STycys-L[c] + 0.25697 STypro-L[c] + 0.13081 STyarg-L[c] + 0.27269 STyasn-L[c] + 0.10473 STymet-L[c] + 0.3114 STylys-L[c] + 0.15455 STyutp[c] + 0.16689 STyctp[c] + 0.026137 STydatp[c] + 0.028567 STydctp[c] + 0.31722 STyser-L[c] + 0.003 STyudpg[c] + 0.000937 STycolipaOA[e] + 0.13874 STyphe-L[c] + 0.040246 STytyr-L[c] + 0.026137 STydttp[c] + 0.028567 STydgtp[c] + 0.087361 STyile-L[c] + 0.28458 STyval-L[c] + 0.087887 STytrp-L[c] + 0.027476 STyglycogen[c] + 0.007 STyspmd[c] + 0.05 STy5mthf[c] + 0.049404 STypeptido\_ST[p] + 1.4e-05 STyclpn2\_ST[p] + 0.00042 STypg2\_ST[p] + 0.001531 SType2\_ST[p] + 4e-06 STyps2\_ST[p] + 4e-06 STypa2\_ST[p] -> 59.81 STyadp[c] + 59.81 STypi[c] + 58.2669 STyh[c] + 0.77153 STyppi[c] ' |
| *ECs* | '0.004512 ECscl[c] + 59.9848 ECsatp[c] + 54.6129 ECsh2o[c] + 0.000335 ECsnadph[c] + 0.000112 ECsnadp[c] + 0.044164 ECspe160[c] + 0.03435 ECspe161[c] + 0.017704 ECspe181[c] + 0.010599 ECspg160[c] + 0.008244 ECspg161[c] + 0.004249 ECspg181[c] + 4.5e-05 ECsnadh[c] + 0.001787 ECsnad[c] + 0.000168 ECscoa[c] + 0.011279 ECsnh4[c] + 0.25571 ECsglu-L[c] + 0.000279 ECsaccoa[c] + 0.20912 ECsgtp[c] + 3.1e-05 ECsmalcoa[c] + 0.000223 ECsfad[c] + 0.000223 ECsamet[c] + 0.000223 ECschor[c] + 0.25571 ECsgln-L[c] + 0.000223 ECsadocbl[c] + 0.23423 ECsasp-L[c] + 0.03327 ECsptrc[c] + 0.000223 ECs10fthf[c] + 0.000223 ECsthf[c] + 9.8e-05 ECssuccoa[c] + 0.49915 ECsala-L[c] + 0.000223 ECspydx5p[c] + 0.000223 ECs2dmmql8[c] + 0.000223 ECsmql8[c] + 0.088988 ECscys-L[c] + 0.5953 ECsgly[c] + 0.2148 ECspro-L[c] + 0.006767 ECsfe2[c] + 0.000223 ECsribflv[c] + 0.28742 ECsarg-L[c] + 0.23423 ECsasn-L[c] + 0.000223 ECsq8h2[c] + 0.000223 ECsgthrd[c] + 0.14934 ECsmet-L[c] + 0.004512 ECsca2[c] + 0.33345 ECslys-L[c] + 0.002944 ECsclpn160[p] + 0.00229 ECsclpn161[p] + 0.00118 ECsclpn181[p] + 0.003008 ECscobalt2[c] + 0.008151 ECscolipa[c] + 0.1401 ECsutp[c] + 0.1298 ECsctp[c] + 0.003008 ECscu2[c] + 0.024805 ECsdatp[c] + 0.025612 ECsdctp[c] + 0.20968 ECsser-L[c] + 0.000223 ECs5mthf[c] + 0.025612 ECsdgtp[c] + 0.024805 ECsdttp[c] + 0.000223 ECsenter[c] + 0.006767 ECsfe3[c] + 0.15419 ECsglycogen[c] + 0.000223 ECshemeo[c] + 0.092056 ECshis-L[c] + 0.28231 ECsile-L[c] + 0.16919 ECsk[c] + 0.43778 ECsleu-L[c] + 0.007519 ECsmg2[c] + 0.000223 ECsmlthf[c] + 0.003008 ECsmn2[c] + 0.003008 ECsmobd[c] + 0.001345 ECsmurein3p3p[p] + 0.000605 ECsmurein3px4p[p] + 0.005381 ECsmurein4p4p[p] + 0.005448 ECsmurein4px4p[p] + 0.000673 ECsmurein4px4px4p[p] + 0.18002 ECsphe-L[c] + 0.000223 ECspheme[c] + 0.000223 ECssheme[c] + 0.00376 ECsso4[c] + 0.006744 ECsspmd[c] + 0.000223 ECsthmpp[c] + 0.24651 ECsthr-L[c] + 0.055234 ECstrp-L[c] + 0.13399 ECstyr-L[c] + 5.5e-05 ECsudcpdp[c] + 0.41118 ECsval-L[c] + 0.003008 ECszn2[c] -> 59.81 ECsadp[c] + 59.81 ECsh[c] + 59.8062 ECspi[c] + 0.74983 ECsppi[c] ' |
| *ECe* | '59.9848 ECeatp[c] + 54.6129 ECeh2o[c] + 0.000335 ECenadph[c] + 0.000112 ECenadp[c] + 0.044164 ECepe160[c] + 0.03435 ECepe161[c] + 0.017704 ECepe181[c] + 0.010599 ECepg160[c] + 0.008244 ECepg161[c] + 0.004249 ECepg181[c] + 4.5e-05 ECenadh[c] + 0.001787 ECenad[c] + 0.000168 ECecoa[c] + 0.011279 ECenh4[c] + 0.25571 ECeglu-L[c] + 0.000279 ECeaccoa[c] + 0.20912 ECegtp[c] + 3.1e-05 ECemalcoa[c] + 0.000223 ECefad[c] + 0.000223 ECeamet[c] + 0.000223 ECechor[c] + 0.25571 ECegln-L[c] + 0.000223 ECeadocbl[c] + 0.23423 ECeasp-L[c] + 0.03327 ECeptrc[c] + 0.000223 ECe10fthf[c] + 0.000223 ECethf[c] + 9.8e-05 ECesuccoa[c] + 0.49915 ECeala-L[c] + 0.000223 ECepydx5p[c] + 0.000223 ECe2dmmql8[c] + 0.000223 ECemql8[c] + 0.088988 ECecys-L[c] + 0.5953 ECegly[c] + 0.2148 ECepro-L[c] + 0.006767 ECefe2[c] + 0.000223 ECeribflv[c] + 0.28742 ECearg-L[c] + 0.23423 ECeasn-L[c] + 0.000223 ECeq8h2[c] + 0.000223 ECegthrd[c] + 0.14934 ECemet-L[c] + 0.004512 ECeca2[c] + 0.33345 ECelys-L[c] + 0.002944 ECeclpn160[p] + 0.00229 ECeclpn161[p] + 0.00118 ECeclpn181[p] + 0.004512 ECecl[c] + 0.003008 ECecobalt2[c] + 0.008151 ECecolipa[c] + 0.1401 ECeutp[c] + 0.1298 ECectp[c] + 0.003008 ECecu2[c] + 0.024805 ECedatp[c] + 0.025612 ECedctp[c] + 0.20968 ECeser-L[c] + 0.000223 ECe5mthf[c] + 0.025612 ECedgtp[c] + 0.024805 ECedttp[c] + 0.000223 ECeenter[c] + 0.006767 ECefe3[c] + 0.15419 ECeglycogen[c] + 0.000223 ECehemeo[c] + 0.092056 ECehis-L[c] + 0.28231 ECeile-L[c] + 0.16919 ECek[c] + 0.43778 ECeleu-L[c] + 0.007519 ECemg2[c] + 0.000223 ECemlthf[c] + 0.003008 ECemn2[c] + 0.003008 ECemobd[c] + 0.001345 ECemurein3p3p[p] + 0.000605 ECemurein3px4p[p] + 0.005381 ECemurein4p4p[p] + 0.005448 ECemurein4px4p[p] + 0.000673 ECemurein4px4px4p[p] + 0.18002 ECephe-L[c] + 0.000223 ECepheme[c] + 0.000223 ECesheme[c] + 0.00376 ECeso4[c] + 0.006744 ECespmd[c] + 0.000223 ECethmpp[c] + 0.24651 ECethr-L[c] + 0.055234 ECetrp-L[c] + 0.13399 ECetyr-L[c] + 5.5e-05 ECeudcpdp[c] + 0.41118 ECeval-L[c] + 0.003008 ECezn2[c] -> 59.81 ECeadp[c] + 59.81 ECeh[c] + 59.8062 ECepi[c] + 0.74983 ECeppi[c] ' |
| HS | '20.6508 HSh2o[c] + 20.7045 HSatp[c] + 0.54554 HSleu-L[c] + 0.38587 HSglu-L[c] + 0.35261 HSasp-L[c] + 0.50563 HSala-L[c] + 0.036117 HSgtp[c] + 0.27942 HSasn-L[c] + 0.046571 HScys-L[c] + 0.326 HSgln-L[c] + 0.53889 HSgly[c] + 0.39253 HSser-L[c] + 0.31269 HSthr-L[c] + 0.35926 HSarg-L[c] + 0.59211 HSlys-L[c] + 0.25947 HSphe-L[c] + 0.41248 HSpro-L[c] + 0.15302 HSmet-L[c] + 0.023315 HSpail\_hs[c] + 0.039036 HSctp[c] + 0.15446 HSpchol\_hs[c] + 0.055374 HSpe\_hs[c] + 0.020401 HSchsterol[c] + 0.002914 HSpglyc\_hs[c] + 0.011658 HSclpn\_hs[c] + 0.053446 HSutp[c] + 0.009898 HSdgtp[n] + 0.009442 HSdctp[n] + 0.013183 HSdatp[n] + 0.013091 HSdttp[n] + 0.27519 HSg6p[c] + 0.12641 HShis-L[c] + 0.15967 HStyr-L[c] + 0.28608 HSile-L[c] + 0.013306 HStrp-L[c] + 0.35261 HSval-L[c] + 0.005829 HSps\_hs[c] + 0.017486 HSsphmyln\_hs[c] -> 20.6508 HSadp[c] + 20.6508 HSh[c] + 20.6508 HSpi[c] ' |