



## Correction to: Selective galactose culture condition reveals distinct metabolic signatures in pyruvate dehydrogenase and complex I deficient human skin fibroblasts

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**Correction to: Metabolomics (2019) 15:32**  
<https://doi.org/10.1007/s11306-019-1497-2>

The original version of this article contained an error in Table 2. The text in the second header line should read “GAL supernatant” and “GAL Medium” instead of “GLC supernatant” and “GLC Medium”. The corrected Table 2 is given below. The original article has been corrected.

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Damian Hertig and Andrea Felser: shared first author.

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Peter Vermathen and Jean-Marc Nuoffer: shared last author.

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The original article can be found online at <https://doi.org/10.1007/s11306-019-1497-2>.

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**Table 2** Complete list from integrated buckets of <sup>1</sup>H HR-MAS NMR resonances of extracellular metabolites (in arbitrary units) in culture supernatant of Ctrl, PDH, and CI deficient fibroblasts under GLC or GAL culture condition

GLC supernatant	GLC medium	Ctrl mean	± SD	PDH mean	± SD	CI mean	± SD
Nicotinamide	0.6	0.6	± 0.2	0.7	± 0.1	0.6	± 0.2
Folic acid? Formic acid?	0.3	0.8	± 0.1	0.8	± 0.2	0.6	± 0.2
Uridine + cytidine	1.5	3.1	± 0.3	3.0	± 0.2	3.1	± 0.2
Uracil	1.7	1.8	± 0.9	1.5	± 0.4	1.2	± 0.6
Phenylalanine	9.6	12.6	± 0.6	12.5	± 0.6	12.8	± 0.5
Tyrosine	16.6	17.3	± 0.6	16.8	± 0.9	17.4	± 0.6
Glycerophosphocholine	0.6	3.0	± 0.5	3.6	± 0.4	3.4	± 0.3
Inositol	10.8	12.0	± 0.5	11.6	± 0.7	12.1	± 0.6
Aspartate	6.0	6.7	± 0.4	6.5	± 0.2	6.6	± 0.2
Glutamine	17.4	14.4	± 3.5	12.8	± 1.6	14.2	± 3.8
Glutamate, pyruvic acid	23.7	17.4	± 2.6	16.8	± 2.2	17.0	± 3.4
Alanine	17.2	20.4	± 1.9	19.4	± 1.0	19.9	± 1.9
Lactate	6.3	80.1	± 16.7	80.2	± 23.2	71.3	± 5.9
Isoleucine	20.6	20.3	± 0.8	19.8	± 1.3	21.0	± 0.8
Valine	20.6	20.3	± 0.8	19.7	± 1.1	21.0	± 0.9
Leucine	37.4	34.4	± 1.7	33.4	± 2.1	35.4	± 2.0
Glucose	31.3	25.9	± 2.0	24.6	± 3.7	26.2	± 2.5
GAL supernatant	GAL medium	Ctrl mean	± SD	PDH mean	± SD	CI mean	± SD
Nicotinamide	0.7	0.6	± 0.1	0.5	± 0.1	0.5	± 0.2
Folic acid? formic acid?	0.1	1.0	± 0.1	1.0	± 0.3	0.8	± 0.1
Uridine + cytidine	1.2	3.2	± 0.5	3.3	± 0.3	3.1	± 0.4
Uracil	0.0	2.2	± 1.1	2.0	± 0.5	1.9	± 0.6
Phenylalanine	9.7	13.0	± 0.8	12.6	± 1.0	12.8	± 0.9
Tyrosine	16.9	17.7	± 0.8	17.0	± 1.2	17.3	± 0.9
Glycerophosphocholine	0.1	3.1	± 0.6	3.7	± 0.4	3.4	± 0.6
Inositol	13.0	13.5	± 0.7	12.6	± 0.9	13.1	± 1.0
Aspartate	6.6	6.9	± 0.5	6.4	± 0.4	6.5	± 0.5
Glutamine	18.3	13.8	± 4.0	11.8	± 2.0	13.7	± 4.0
Glutamate, pyruvic acid	25.7	15.3	± 3.9	15.7	± 3.3	15.2	± 3.8
Alanine	18.4	19.4	± 2.1	18.7	± 1.2	19.0	± 1.8
Lactate	6.9	23.5	± 9.0	28.4	± 5.7	24.6	± 9.7
Isoleucine	22.0	21.1	± 1.1	20.1	± 1.8	20.9	± 1.2
Valine	21.7	21.1	± 1.1	20.2	± 1.7	21.1	± 1.2
Leucine	39.8	36.1	± 2.0	33.9	± 2.9	35.6	± 1.7
Galactose	50.8	52.1	± 2.9	49.5	± 4.4	50.1	± 3.5

Statistical significance between groups was calculated by two-way ANOVA followed by Benjamini and Hochberg posttest

“?” Metabolite identification needs further confirmation

Ctrl control, PDH pyruvate dehydrogenase, CI complex I

\*p<0.01, Ctrl versus PDH or CI in each culture condition

#p<0.01, GLC versus GAL for Ctrl, PDH or CI