

CORRIGENDUM

Tischler, M. E., P. Hecht and J. R. Williamson, Effect of ammonia on mitochondrial and cytosolic NADH and NADPH systems in isolated rat liver cells (1977) FEBS Letters 76, 99–104.

The authors would like to make the following corrections to their article:

The isocitrate dehydrogenase equilibrium was incorrectly assumed to be pH-dependent.

page 101, column 2, equation 1 *should read*:

$$\frac{(\text{NADP/NADPH})_c}{(\text{NADP/NADPH})_m} = \frac{[\alpha\text{-Ketoglutarate}]_c}{[\alpha\text{-Ketoglutarate}]_m} \cdot \frac{[\text{Isocitrate}]_m}{[\text{Isocitrate}]_c} \cdot \frac{[\text{CO}_2]_c}{[\text{CO}_2]_m} \quad (1)$$

instead of:

$$\frac{(\text{NADP/NADPH})_c}{(\text{NADP/NADPH})_m} = \frac{[\alpha\text{-Ketoglutarate}]_c}{[\alpha\text{-Ketoglutarate}]_m} \cdot \frac{[\text{Isocitrate}]_m}{[\text{Isocitrate}]_c} \cdot \frac{[\text{H}^+]_c}{[\text{H}^+]_m} \cdot \frac{[\text{CO}_2]_c}{[\text{CO}_2]_m} \quad (1)$$

page 103, column 1, equation 5 *should read*:

$$\log \frac{(\text{NADP/NADPH})_c}{(\text{NADP/NADPH})_m} = \Delta\text{pH} \quad (5)$$

instead of:

$$\log \frac{(\text{NADP/NADPH})_c}{(\text{NADP/NADPH})_m} = 2 \Delta\text{pH} \quad (5)$$

page 102, Table 4, the mitochondrial free NADP/NADPH *should read*:

3.5

4.7

instead of:

1.4

1.9

the redox potential (mV) of mitochondrial NADP/NADPH
should read:

−425

−421

instead of:

−437

−433

the ΔE_h (mV) of $\frac{\text{NADP/NADPH}_c}{\text{NADP/NADPH}_m}$ *should read*:

−25

−26

instead of:

−37

−38

These results provide better agreement with the initial conclusions regarding the near-equilibrium of the isocitrate- α -ketoglutarate shuttle; $\Delta E_h = -25$ mV and $\Delta pH = -24.4$ mV.