Corrigendum: The Energy Homeostasis Principle: Neuronal Energy Regulation Drives Local Network Dynamics Generating Behavior

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A Corrigendum on

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Unfortunately, the first equation in our published article was missing the terms dividing the difference in Gibbs Free Energy (Equation 1). We deemed relevant to correct the equation to prevent any potential misunderstanding, and apologize for any inconvenience it may have caused.

In particular, the first equation should have been written as follow:

$$\frac{rate\,(X \rightarrow Y)}{rate\,(Y \rightarrow X)} = e^{-\frac{G(Y)-G(X)}{RT}} \tag{1}$$

where R is Gas constant, and T the absolute temperature (Cannon and Baker, 2017). This equation describes the relation between the mean rates of any pair of reversible processes (from X to Y, and from Y to X) and the difference in Gibbs Free Energy between the states. Note that by definition the Gibbs Free Energy assumes Temperature to be constant.

The subsequent arguments presented in our article remain unaffected by this correction, as by talking about Gibbs Free Energy we were already assuming Temperature to be constant.

The authors apologize for this error and state that this does not change the analyzed variables or scientific conclusions of the article in any way.

REFERENCES

Cannon, W. R., and Baker, S. E. (2017). Non-steady state mass action dynamics without rate constants: dynamics of coupled reactions using chemical potentials. *Phys. Biol.* 14:055003. doi: 10.1088/1478-3975/aa7d80