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CORRECTION

Correction: Reducing gravity takes the bounce out of running (doi:10.1242/jeb.162024)

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There were two errors published in *J. Exp. Biol.* (2018) **221**, jeb162024 (doi:10.1242/jeb.162024).

First, a single coefficient A was used to denote what should have been three separate proportionality constants. Three distinct uses of A were:

A_1: $E_{freq}=A(g/V)^k$, used in Eqn 1, with units of J s^k,

A_2: $E_{freq}=Af^k$, used in the list of symbols and in the caption to Fig. 4, also with units of J s^k,

A_3: $V=A\sqrt{g}$, used in Appendix 2, and in Eqns 3 and A15, with units of $\sqrt{m}$.

For impulsive running, $A_2=2^kA_1$. By setting k=2, taking the derivative of Eqn 1 with respect to V and setting to zero, we can solve for A_3 in terms of A_1, and find $A_3=(2A_1/m)^{1/4}$, for A_1 at k=2.

Second, a missing exponent in the code generating Fig. 4 led to improperly scaled axes. Although each axis should be down-scaled, the relative shape of the curves is unchanged in the corrected figure (see below). The optimal take-off velocities in the corrected figure correspond approximately to those of the best fit in Fig. 2B for each level of gravity.

The premise and conclusions of the paper are unchanged. The authors would like to thank the reader who brought these errors to their attention.

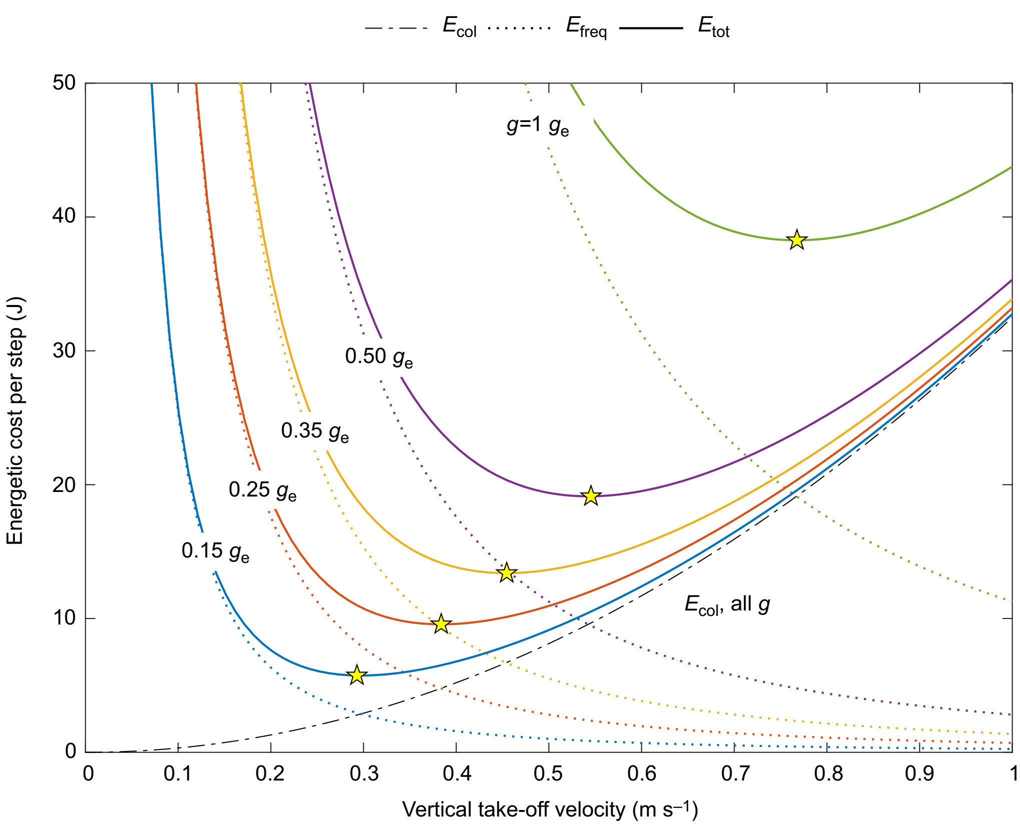

Fig. 4. The energetic costs according to the model are plotted as a function of vertical take-off velocity (V) for the five levels of gravity tested. The hypothetical subject has a mass of 65 kg and a frequency-based proportionality constant (A_2 in $E_{freq}=A_2f^2$) derived from the best fit in Fig. 2B. Labels of gravity levels (g) are placed over the colours they represent. The collisional cost curve ($E_{col}=mV^2/2$, black dot-dashed line) does not change with gravity, whereas the frequency-based energetic cost curve (E_{freq}, dotted lines) is sensitive to gravity, leading to an effect on total energy per step (E_{tot}, solid lines). In lower gravity, a runner can stay in the air longer for a given take-off velocity, so the associated frequency-based cost goes down. However, the cost of collisions at that same velocity is unchanged, because it depends only on the velocity itself. The relaxation of frequency-based cost allows the runner to settle on a lower optimal take-off velocity (yellow stars) with both a lower frequency-based and collisional cost, compared with higher gravity.

The authors apologise for any inconvenience this may have caused.