

CORRIGENDUM

Synphilin-1 alters metabolic homeostasis in a novel
Drosophila obesity model

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International Journal of Obesity (2012) 36, 1592; doi:10.1038/ijo.2012.187**Correction to:** *International Journal of Obesity* (2012) 36, 1529–1536; doi:10.1038/ijo.2012.111; published online 17 July 2012

The authors wish to apologize for the inadvertent omission of the following two references, and to correct the below passages of text that these references relate to. The corrected article appears in this issue and the html and online PDF versions have also been amended.

In the 'Materials and methods' section on page 2, the paragraph under the subheading 'Buoyancy-based density assay (floating assay)' should be replaced with:

Floating assays were performed as previously described²³ with a slight modification based on the principle that the fatter larvae float better in a higher density solution. Briefly, 10–30 larvae in each experimental group at wandering stage were put in 10 ml of 9% sucrose (Fisher Scientific), PBS solution. Larvae were placed in the sucrose solution, gently mixed and, at a 3 minutes time point, the larvae floating at the surface of solution were counted. The percentage of larvae that were floating was calculated. The experiments were repeated at least three times.

In the 'Results' section on page 3, the first paragraph under the subheading 'SP1 increased fat storage in transgenic flies' should be replaced with:

TAG and glycogen are the major intracellular forms of stored energy in flies.^{17,18} In adult flies, expression of human SP1 in dopaminergic neurons significantly increased TAG content (Figures 2a and b) but did not alter glycogen content (Figure 2c). To further assess whether expression of SP1 in

dopaminergic neurons increased fat deposit in the development stage, we employed a floating assay to indirectly detect body fat content in *Drosophila* larvae at the wandering stage. The principle of this assay is that larvae with higher fat content float better in 9% sucrose solution than do the lean ones, similar to the previously described assay.²³ When larvae were in a 9% sucrose/PBS solution, 94% of the non-transgenic larvae sank to the bottom of vials. In contrast, about 71% of the ddc-GAL4;UAS-SP1 larvae floated at the surface of the solution (Figure 3).

In the 'Discussion' section on page 6, sentences 9–11 in the second paragraph should be replaced with:

The fly fat body plays a critical role in *Drosophila* metabolism and expresses more than 7000 genes (<http://www.Flyatlas.org/>) that regulate metabolic homeostasis as described.³⁴ The fat body is the equivalent of mammalian adipose and acts like mammalian liver in the regulation of energy balance and the detoxification of xenobiotics.^{17,18}

References added:

23. Reis T, Van Gilst MR, Hariharan IK. A buoyancy-based screen of *Drosophila* larvae for fat-storage mutants reveals a role for *Sir2* in coupling fat storage to nutrient availability. *PLoS Genet* 2010; 6: e1001206. doi:10.1371/journal.pgen.1001206.

34. Kühnlein RP. Energy homeostasis regulation in *Drosophila*: a lipocentric perspective. In: Meyerhof W, Beisiegel U, Joost HG (eds). *Sensory and Metabolic Control of Energy Balance*. Springer Berlin Heidelberg: Berlin, Germany, 2010, pp 159–173. doi:10.1007/978-3-642-14426-4_13.