

CORRECTION

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Correction: Mesoporous silica nanoparticle-encapsulated *Bifidobacterium* attenuates brain A β burden and improves olfactory dysfunction of APP/PS1 mice by nasal delivery

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Following publication of the original article [1], the authors identified an error in Fig. 2 a and fig. 2c. This is to correct the images of Fig. 2a Bi + 10 $\mu\text{g}/\text{mL}$ MSNs,

Fig. 2c Bi + 40 $\mu\text{g}/\text{mL}$ MSNs, and Fig. 2c MSNs-Bi + SIF 120 min.

The similar images of Fig. 2a Bi + 10 $\mu\text{g}/\text{mL}$ MSNs, Fig. 2a Bi + 40 $\mu\text{g}/\text{mL}$ MSNs, and Fig. 2c MSNs-Bi + SIF 120 min are caused by the change in image order when the images are transferred from the mobile phone to the computer. The correct figures are given below.

The original article can be found online at <https://doi.org/10.1186/s12951-022-01642-z>.

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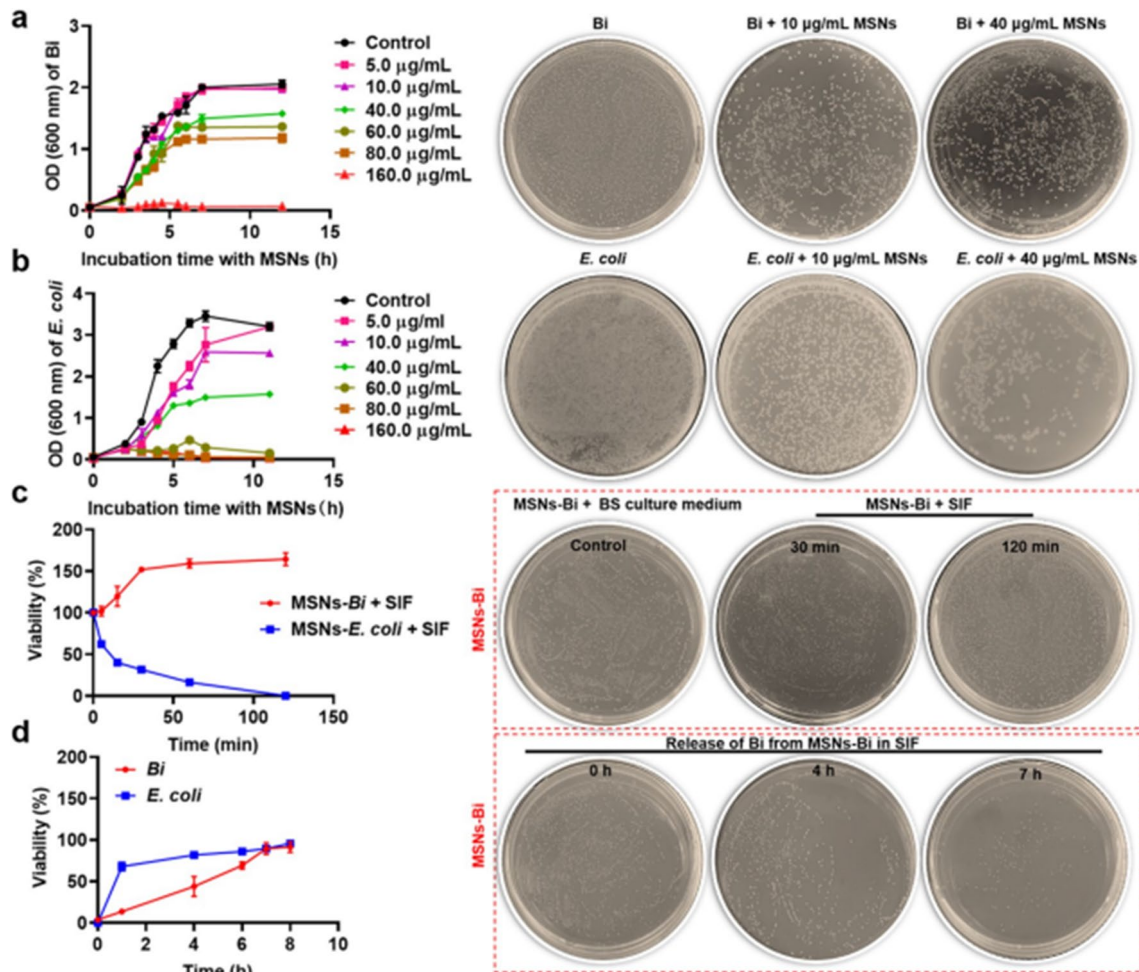
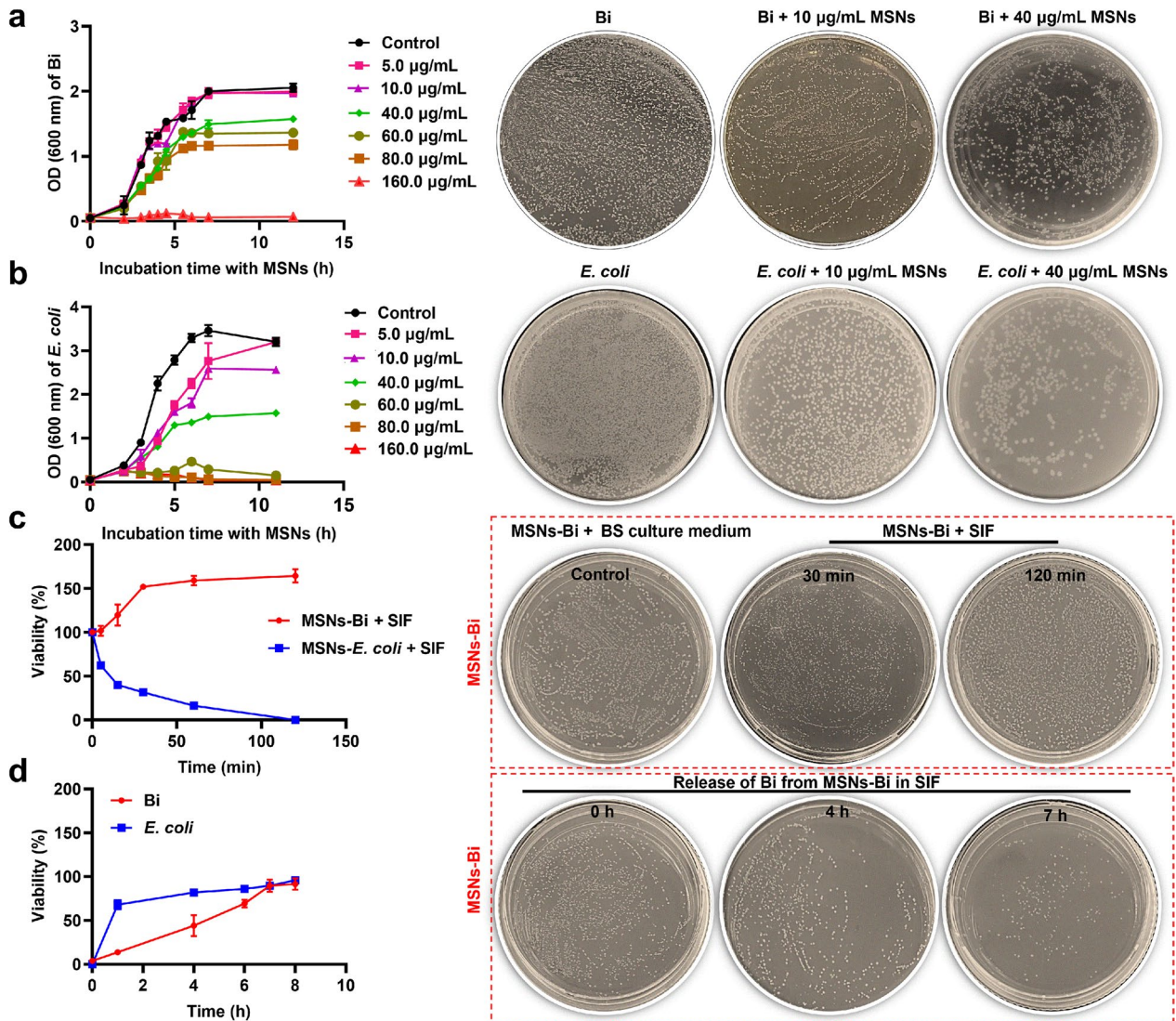
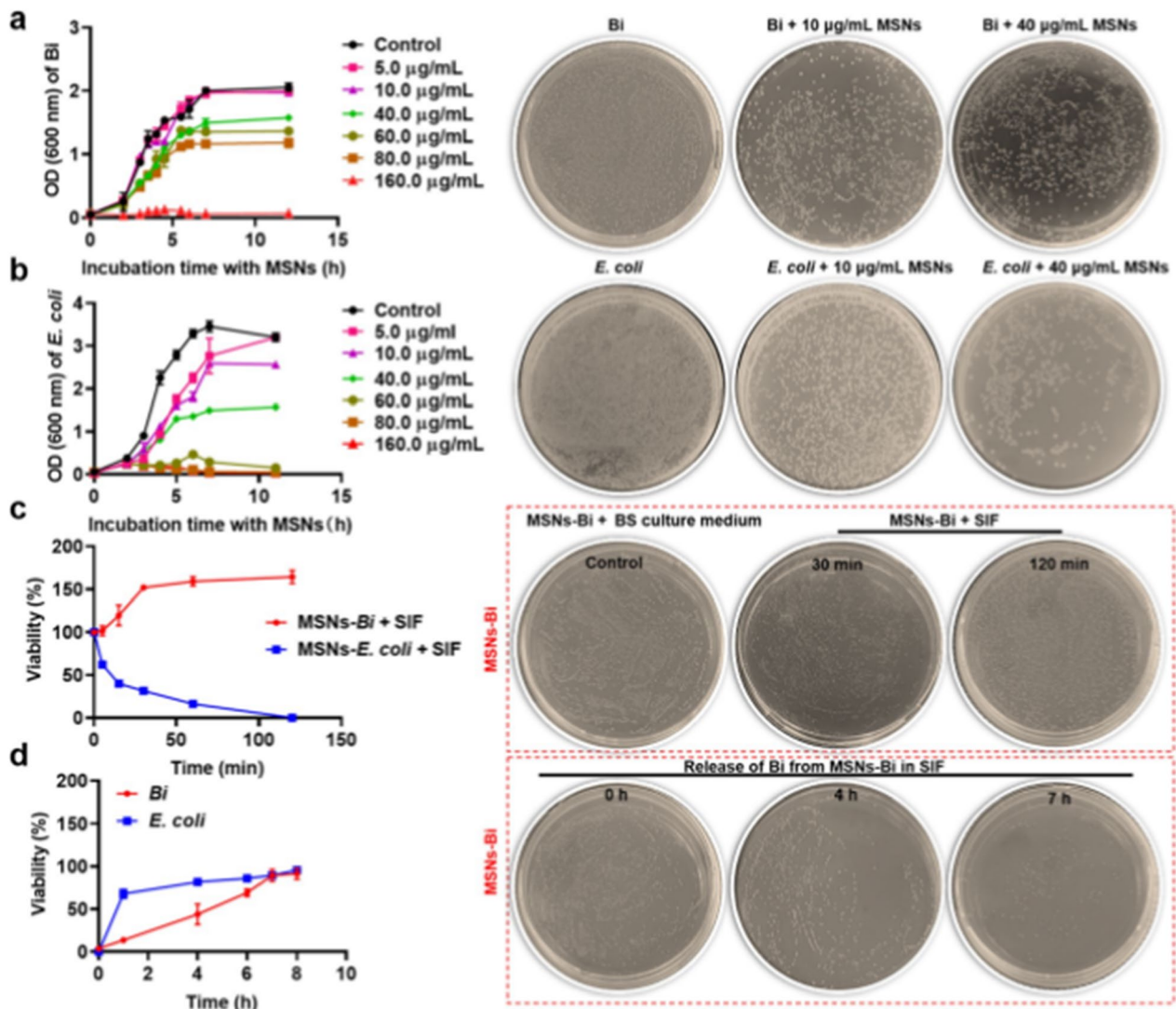


Fig. 2 Effects of MSNs on the growth of *Bifidobacterium*. Changes in bacterial growth of **a** *Bifidobacterium* and **b** *Escherichia coli* (*E. coli*) in the presence of different MSN concentrations. **c** Viability of encapsulated *Bifidobacterium* and *E. coli* during exposure to simulated intestinal fluid (SIF) with bile salts. **d** Release of *Bifidobacterium* and *E. coli* from MSNs encapsulation in SIF at 37 °C. Viability represents the percentage of bacteria surviving relative to the initial population. Data are presented as mean \pm SD, n = 3

Corrected Fig. 2a



Incorrect Fig. 2a



The original article [1] has been corrected.

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Reference

1. Liu N, Yang C, Liang X, Cao K, Xie J, Luo Q, Luo H. Mesoporous silica nanoparticle-encapsulated Bifidobacterium attenuates brain A β burden and improves olfactory dysfunction of APP/PS1 mice by nasal delivery. *J Nanobiotechnol*. 2022;20:439. <https://doi.org/10.1186/s12951-022-01642-z>.

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