

# Review of: "Survival of *Campylobacter jejuni* in Amoebae enhances subsequent invasion of mammalian cells"

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In this study, Fauzy Nasher and Brenda W. Wren revealed survival of *Campylobacter jejuni* in amoebae indicates high invasion into mammalian cells. This experimental design is very interesting for me.

However, I would make the following points:

1. I understood the several amoebae enhances *Campylobacter*-invasion into mammalian cells. However, there is a possibility, high-invasive *Campylobacter* was selected in amoebae. I would like to mention about specificity amoebae-enhances *Campylobacter* invasion into mammalian cells. The authors should check not only amoebae but also mammalian cells with isolated *Campylobacter* from mammalian cells (such as Caco-2, T-84 cells).

Amoebae→Caco-2:invasion ↑ ,

Caco-2→Caco-2 ?

T-84→Caco2 ?

1. What kind of amoebae compartment enhances *Campylobacter* invasion? I think, it is difficult to identify the amoebae factor. However, to increase significance and/or specificity of amoebae-induces virulence in *Campylobacter*, the authors should estimate potency of amoebae factors.
2. *Campylobacter* internalized into host cells with several factors including CadF or JlpA. How about expression levels of invasion-associated gene in amoebae isolated *Campylobacter*.
3. In Figure 4, authors estimated virulence of *Campylobacter* in *Galleria Mellonella*. I agree the aim of this experiment, but there is no difference between amoebae isolated *Campylobacter* and control *Campylobacter*. To investigate *Campylobacter* virulence, IL-8 gene expression or production is more kind for the authors. Because, there are so much reference about IL-8 production in *Campylobacter*-infection.