Supporting Information. Chang, F.-H., and B. J. Cardinale. Intra-guild predation (IGP) can increase or decrease prey density depending on the strength of IGP. Ecology.

Appendix S2

In this appendix, we demonstrate that conclusions still hold when the attack rate (c_2) and assimilation efficiency (e_2) of Blepharisma on bacteria are set to be different from that of Colpidium. To do so, we generated model predictions from the Type II model with parameter values in Table 1 but altered the value of c_2 and e_2 of Blepharisma on bacteria. Specifically, we decreased and increased c_2 and e_2 by 15% one at a time. We then overlaid the model predictions (solid lines) on the empirical results (solid dots) in Appendix S2: Figure S1. In Appendix S2: Figure S1, we show that altering the value of these two parameters does not qualitatively change the model predictions that intra-guild predation first decreases and then increases the density of basal resources (top figure of each panel). The model predictions of the density of IG prey and predator also qualitatively match the empirical results (bottom two figures of each panel). Consequently, we argue that the value of attack rate (c_2) and assimilation efficiency (e_2) of Blepharisma on bacteria can differ from that of Colpidium but such difference should not qualitatively change our conclusion.

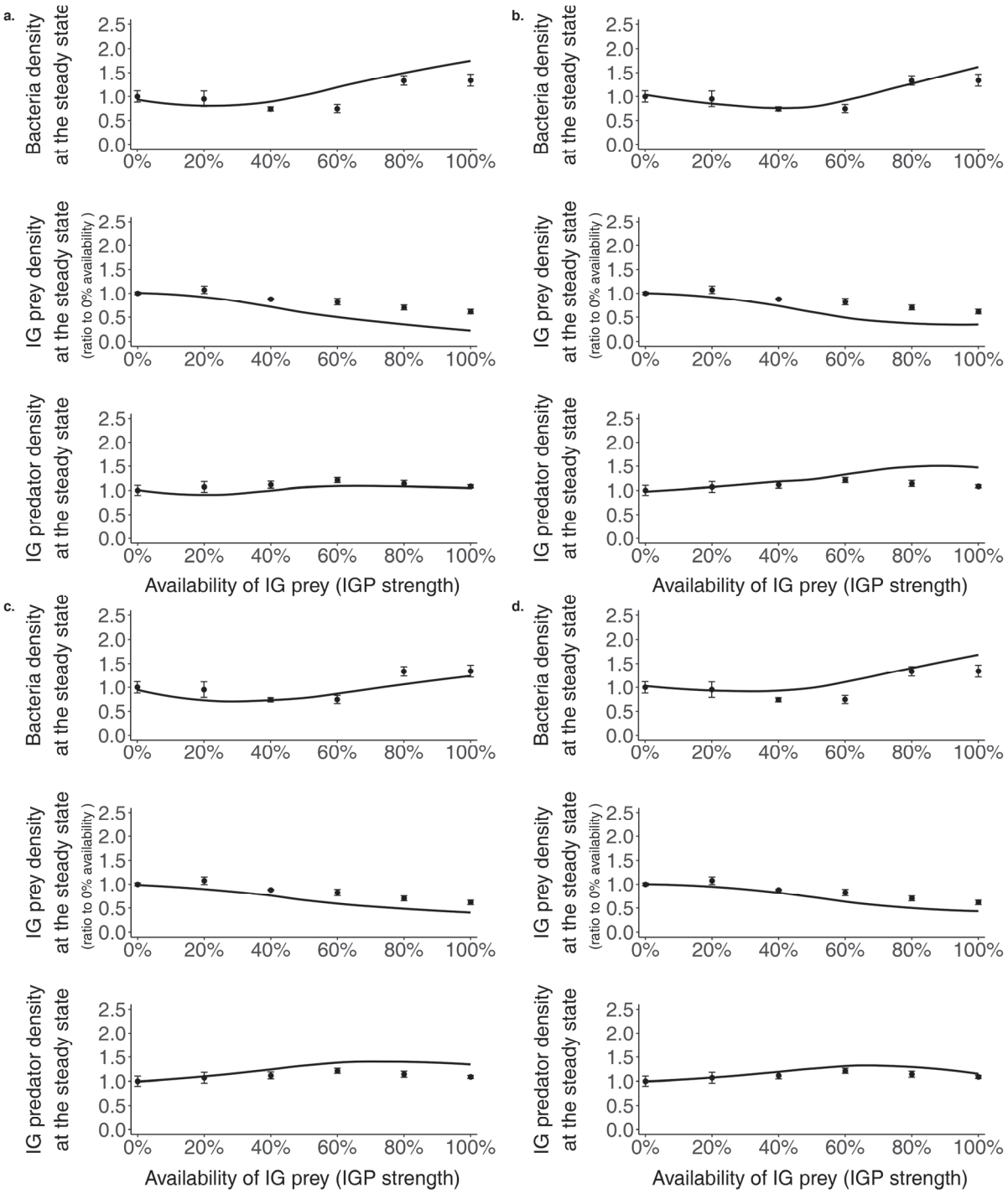

Figure S1. Model predictions (solid lines) overlaid on empirical results (solid dots) when decreasing and increasing c2 and e2 by 15%. The error bars represent the standard error of the mean. Panel a. and b. are from decreasing and increasing c2 and panel c. and d. are from decreasing and increasing e2. In each panel, the top, middle and bottom figure represents the mean population density of bacteria, IG prey and IG predator.