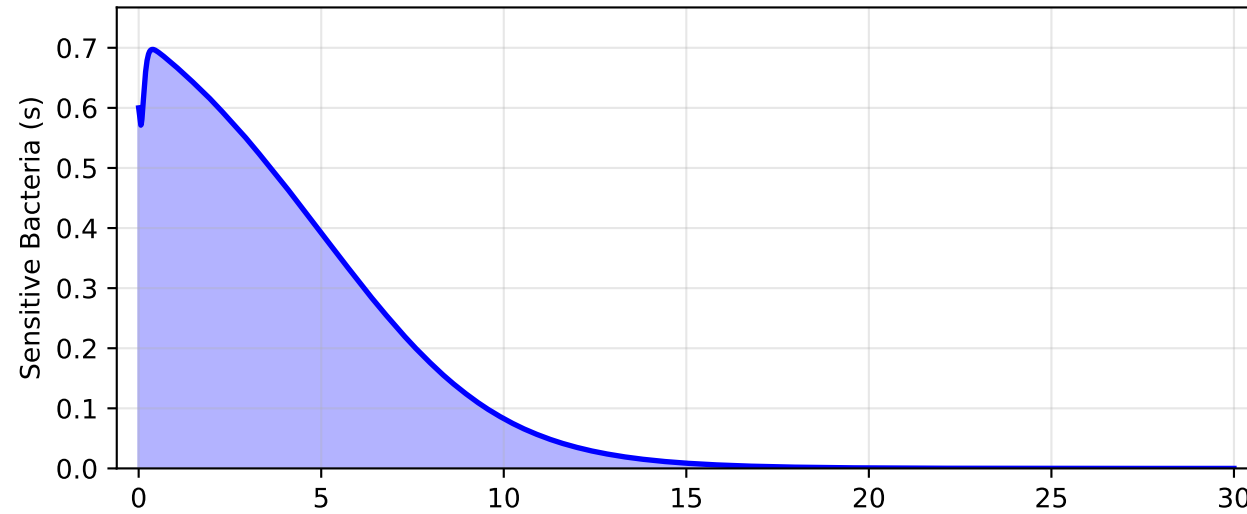


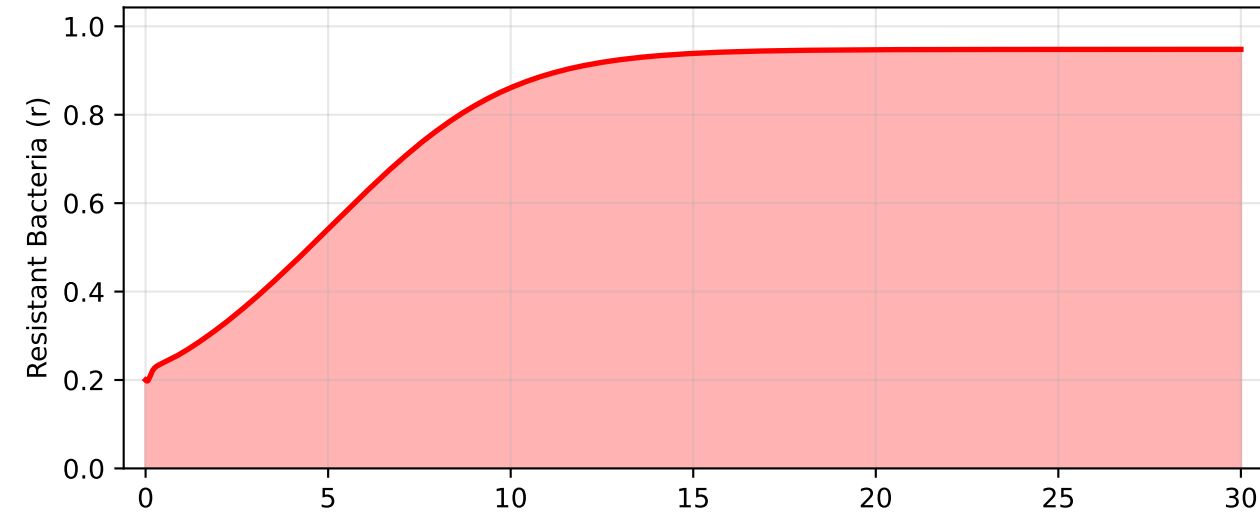
### Scenario 3: Coexistence

Final  $R_s = 13.142$ , Final  $R_r = 19.648$

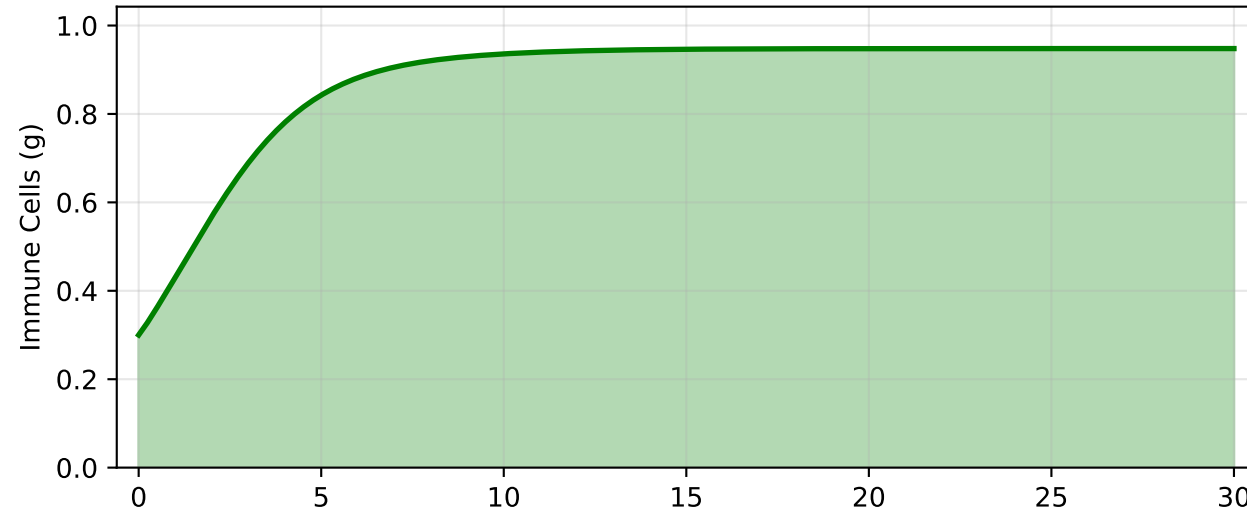
Sensitive Bacteria Dynamics



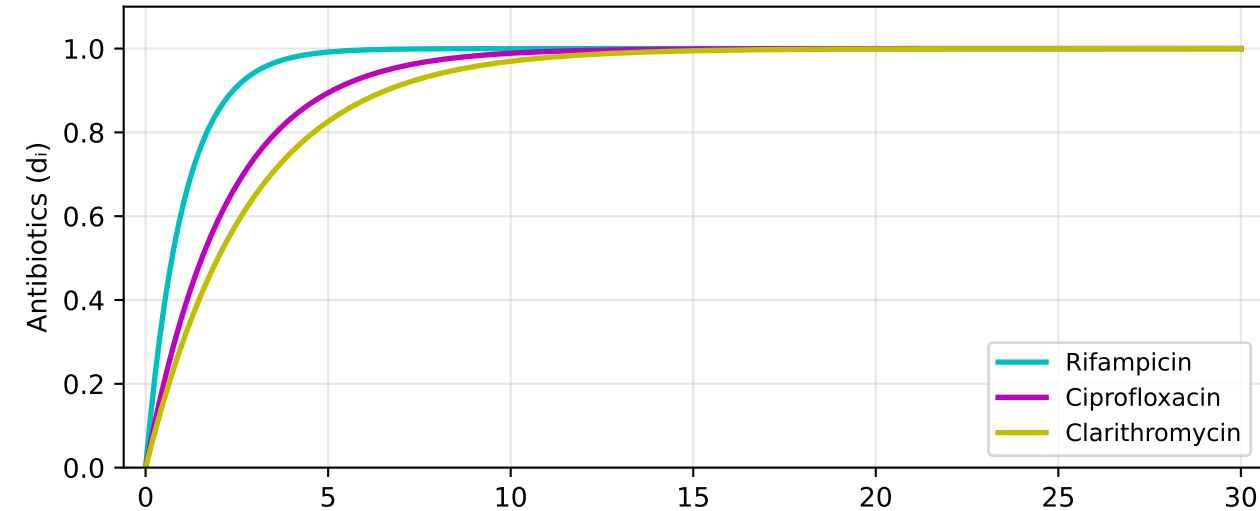
Resistant Bacteria Dynamics



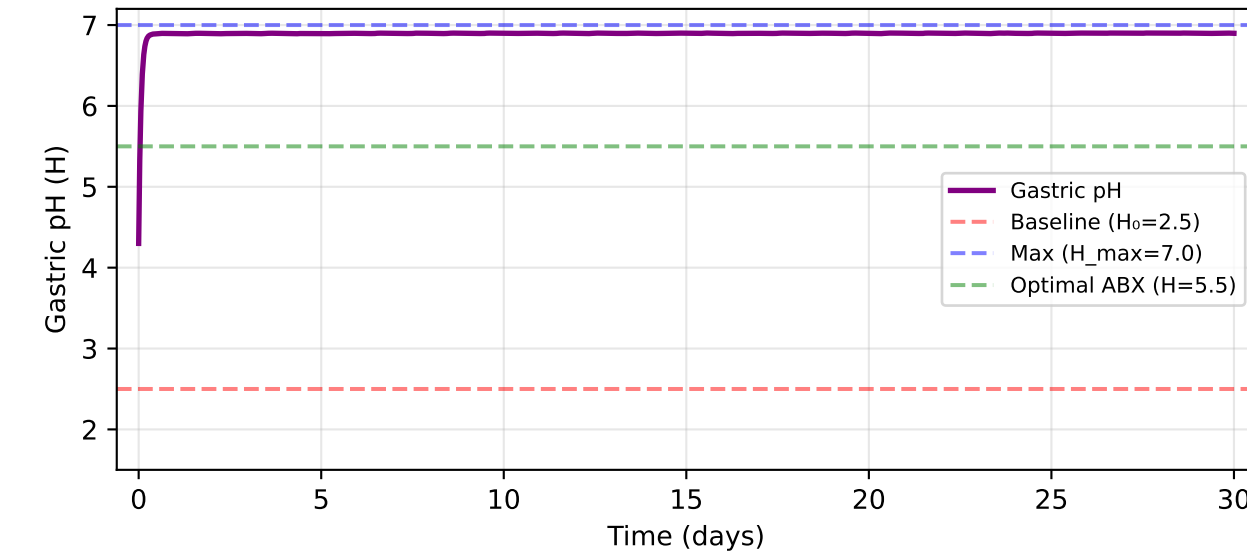
Immune Response Dynamics



Antibiotic Concentrations



Gastric pH Dynamics



Dietary Perturbation

