

Table S1: reactions in the toy model.

Reaction	Equation
R1	$M1_e \rightarrow M1_i + M2_i$
R2	$M2_e \rightarrow M1_i + M3_i$
R3	$M3_e \rightarrow M4_i$
R4	$M4_e \rightarrow M5_i$
R5	$M5_e \rightarrow M6_i$
R6	$M6_e + M7_e \rightarrow M7_i$
R7	$M8_e \rightarrow M8_i$
R8	$M9_e \rightarrow M8_i$
R9	$M1_i \rightarrow M9_1$
R10	$M2_i \rightarrow M10_e$
R11	$M7_i \rightarrow M8_i$
R12	$M8_i + M6_i \rightarrow M10_i$
R13	$M5_i \rightarrow M11_i$
R14	$M3_i + M9_i \rightarrow M12_i$
R15	$M4_i \rightarrow M5_i + M3_i$
Biomass	$M10_i + M11_i + M12_{12}$