Variable	Steady state	Single Glucose Perturbation
Trehalose cycle	Inactive. Its steady state flux in included in the G6P-sink reaction	Active.
Inosine salvage pathway	Inactive.	Active.
sumAXP (= ATP + ADP + AMP)	Changes in the total sum of ATP + ADP + AMP are considered by setting the initial concentrations of the adenosine nucleotides to the experimental concentration at the beginning of each stead state simulation.	The inosine salvage pathway acts as a sink of adenosine nucleotides.
Enzyme concentration	A ratio between the experimental activity at a given dilution rate and the value at $0.1h^{-1}$ is calculated and then multiplied to the V_{max}.	This ratio equals 1.
Sink reactions	A phenomenological expression is derived to make these reaction rates resemble experimental data.	The kinetics at 0.1 h^{-1} is used.
ATPase activity	ATPase is adjusted in a growth rate dependent manner, using GAM and NGAM.	The reaction constant is estimated to fit the data.
mitoATP	The growth rate-dependent mitochondrial activity is considered using the PYR sink reaction. This is implemented by changes in the reaction constant.	The reaction constant is estimated to fit the data.
mitoN-ADH	The growth rate-dependent mitochondrial activity is considered using the PYR sink reaction. This is implemented by changes in the reaction constant.	The reaction costant is estimated to fit the data.

References