

Table S6 Parameter used to simulate the upshift of the extracellular glucose concentration.

Parameter	Aerobic glucose-limited chemostat ($D = 0.1 \text{ h}^{-1}$)	
Enzyme kinetics		
$V_{max,glc}$	160	$\text{mM} \cdot \text{min}^{-1}$
$K_{m,glc,GLC}$	1	mM
$V_{max,hk}$	213	$\text{mM} \cdot \text{min}^{-1}$
$K_{i,hk,T6P}$	0.04	mM
$V_{max,pgi}$	787	$\text{mM} \cdot \text{min}^{-1}$
$V_{max,ptk}$	213	$\text{mM} \cdot \text{min}^{-1}$
$V_{max,ald}$	310	$\text{mM} \cdot \text{min}^{-1}$
$V_{max,gapdh}^*$	1300	$\text{mM} \cdot \text{min}^{-1}$
$V_{max,gapdh}$	853	$\text{mM} \cdot \text{min}^{-1}$
$K_{m,gapdh,GAP}$	0.21	mM; Taken from [1]
$K_{m,gapdh,NAD}$	2.8	mM
$K_{m,gapdh,NADH}$	0.06	mM; Taken from [1]
$K_{m,gapdh,BPG}$	0.036	mM
$K_{eq,gapdh}$	0.0056	Taken from [1]
$V_{max,pgk}$	2512	$\text{mM} \cdot \text{min}^{-1}$
$V_{max,gpm}$	856	$\text{mM} \cdot \text{min}^{-1}$
$V_{max,eno}$	357	$\text{mM} \cdot \text{min}^{-1}$
$V_{max,pyk}$	820	$\text{mM} \cdot \text{min}^{-1}$
$V_{max,pdc}$	395	$\text{mM} \cdot \text{min}^{-1}$
$V_{max,adh}$	932	$\text{mM} \cdot \text{min}^{-1}$
Regulators		
ATP	3	mM
ADP	1	mM
AMP	0.3	mM
F26BP	0.014	mM
T6P	0.2	mM

References

1. Teusink B, Passarge J, Reijenga CA, Esgalhado E, van der Weijden CC, et al. (2000) Can yeast glycolysis be understood in terms of in vitro kinetics of the constituent enzymes? Testing biochemistry. Eur J Biochem 267: 5313-5329.