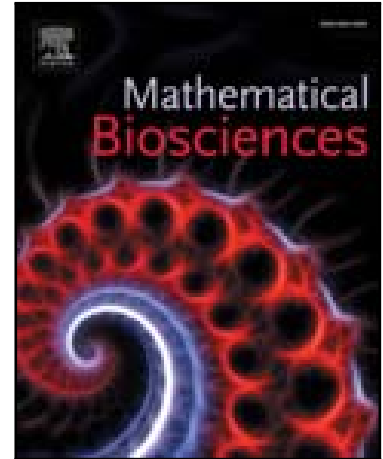


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Understanding Start-up Problems in Yeast Glycolysis

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Highlights

- We present an exhaustive steady state analysis for a core model of yeast glycolysis
- The model contains both ATP and NADH householding
- We new insight into the existence of bistability between regularly functioning glycolysis and so-called imbalanced states
- We explain why upper glycolytic enzymes are generally present, even in the absence of glucose, but why lower glycolysis may be deactivated.
- We show how fructose-1,6-biphosphate may act as flux sensor on metabolic time scales.

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