HXT adjustment. Vmax or Km

The activity of the glucose transporter could be adjusted in a dilution rate dependent manner. In line with (Diderich et~al,~1999), where changes were observed in isoenzyme concentrations, these changes were made in the V_{max} of the glucose transporter reaction. Nonetheless, changes in isoenzymes do also alter the affinity constants (Bosdriesz et~al,~2018; Maier et~al,~2002; Reifenberger et~al,~1997). Fig 1 shows how indeed, the observed changes in the hexose transporter activity could also be due to changes in V_{max} as well as K_m .

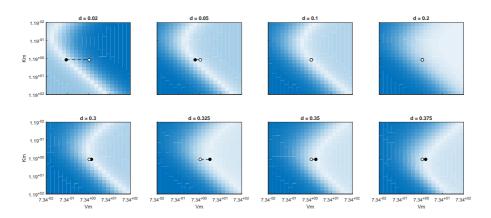


FIGURE 1 HXT activity changes can be explained by both changes in the V_{max} as well as K_m . Lighter colors show the regions with low error and high agreement between simulations and experimental data. Darker regions show higher error. Each plot shows a dilution rate data point. The Y-axis shows the K_m (in mM), and the X-axis the V_{max} (in mM s⁻¹).

References

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