

Figure S1: Comparison between the model results and experimental data

Panel A-C: model compared to the data of the experiment with palmitoyl carnitine as substrate. Error bars on the experimental data represent SEM (n=4 for the flux data, n=8 for the acyl carnitine concentrations). The reported experimental flux is 2/3 of the oxygen consumption flux averaged from 1.5 to 8 min. The modeled flux equals the production fluxes of NADH plus FADH₂ divided by 2 (one O₂ oxidizes 2 NADH or FADH₂), averaged over the same time interval.

Panel D-G: Comparison of the flux dynamics over time between model and experiment with either palmitoyl-CoA or palmitoyl carnitine as substrate for isolated rat-liver mitochondria. Dashed lines in the graphs from the experiment represent SEM (n=4).

