

Supplementary Information

Application of Factorial Design for Optimization of the Synthesis of Lactulose Obtained from Whey Permeate

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Table S1. Mathematic equation, regression coefficients of the applied response to the response surface methodology, main and interaction effects, calculated for the 3² factorial design shown in Table 1, and the response studied

Response	Equation						R ²
Lactulose	$20.25 + 1.60 x_1 + 19.25 x_2 + 0.16 x_1^2 - 11.59 x_2^2 + 1.19 x_1x_2 - 0.37x_1^2x_2^2$						0.9994
Significant effect							
Response	x ₁ (L)	x ₁ (Q)	x ₂ (L)	x ₂ (Q)	x ₁ (L) by x ₂ (L)	x ₁ (Q) by x ₂ (Q)	
Lactulose	3.1983	0.3158	38.4967	-23.1717	2.3700	-0.7375	

R²: determination coefficient; x₁: time; x₂: isomerization; L: linear term; Q: quadratic term.