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Title: Selective diffusion of glucose, maltose, and raffinose through calcium alginate membranes characterized by a mass fraction of guluronate

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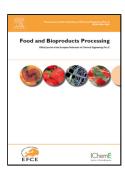
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The mass fraction of guluronate blocks (F_{GG}) was a key factor

to attain preferential permeation of glucose. Mass transfer Effective diffusion Low F_{GG} Membrane coefficient flux Glucose **G**lucose HIGHER $D_G > D_M > D_R$ Maltose High F_{GG} Membrane Glucose preferentially Raffinose **G**lucose diffused. **LOWER** $D_G >> D_M >> D_R$ G Maltose Raffinose G

 D_G , D_M , and D_R were effective diffusion coefficient of glucose, maltose, and raffinose, respectively.

Graphical Abstract

Kashima and Imai (2016)

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