



## Interfacial behavior of lipid nanocapsules spread on model membrane monolayers

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Résumé en anglais	<p>The lipid nanocapsules (LNCs) spread at the air-water interface (A/W) undergo destabilization and disaggregation leading to formation of a triglyceride (TG) surface film. The kinetics of reorganization and formation of TG surface film were followed by measuring either the change of surface pressure at constant area or the surface area at constant surface pressure. From the obtained experimental data were determined the effectiveness of TG spreading and the rate of LNC disaggregation at A/W interface covered with preformed model membrane monolayers of DPPC, Curosurf®, and mucus. Partial LNC stabilization due to their interaction with the model membrane monolayers was observed and characterized by atomic force microscopy (AFM). The obtained results demonstrated that the LNCs spread on mucus surface layer, which models the epithelial surface were more stable than if they were spread either on DPPC or Curosurf® surface layers, which emulate the alveolar surface.</p>
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