

Supporting Information

Effects of Carotenoids on Lipid Bilayers

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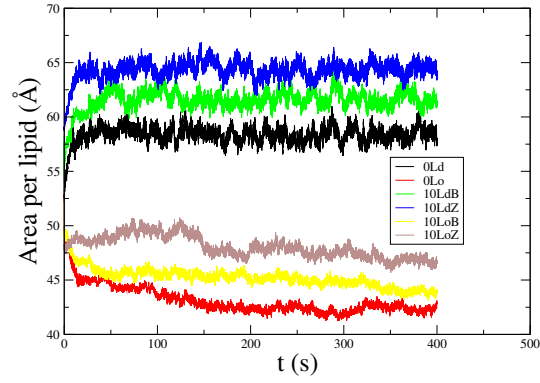


Fig. S 1: The area per lipid versus time for each system. LD systems converge in the first 10-20 ns, whereas LO systems take 150 ns to converge.

Table S1. The Composition of the Systems Studied

system	% carotenoid	CHOL:DSPC:POPC ratio
0Lo	0%	1:2:1
10LoC	10% BCR	1:2:1
10LoZ	10% ZEA	1:2:1
0Ld	0%	1:1:8
10LdC	10% BCR	1:1:8
10LdZ	10% ZEA	1:1:8

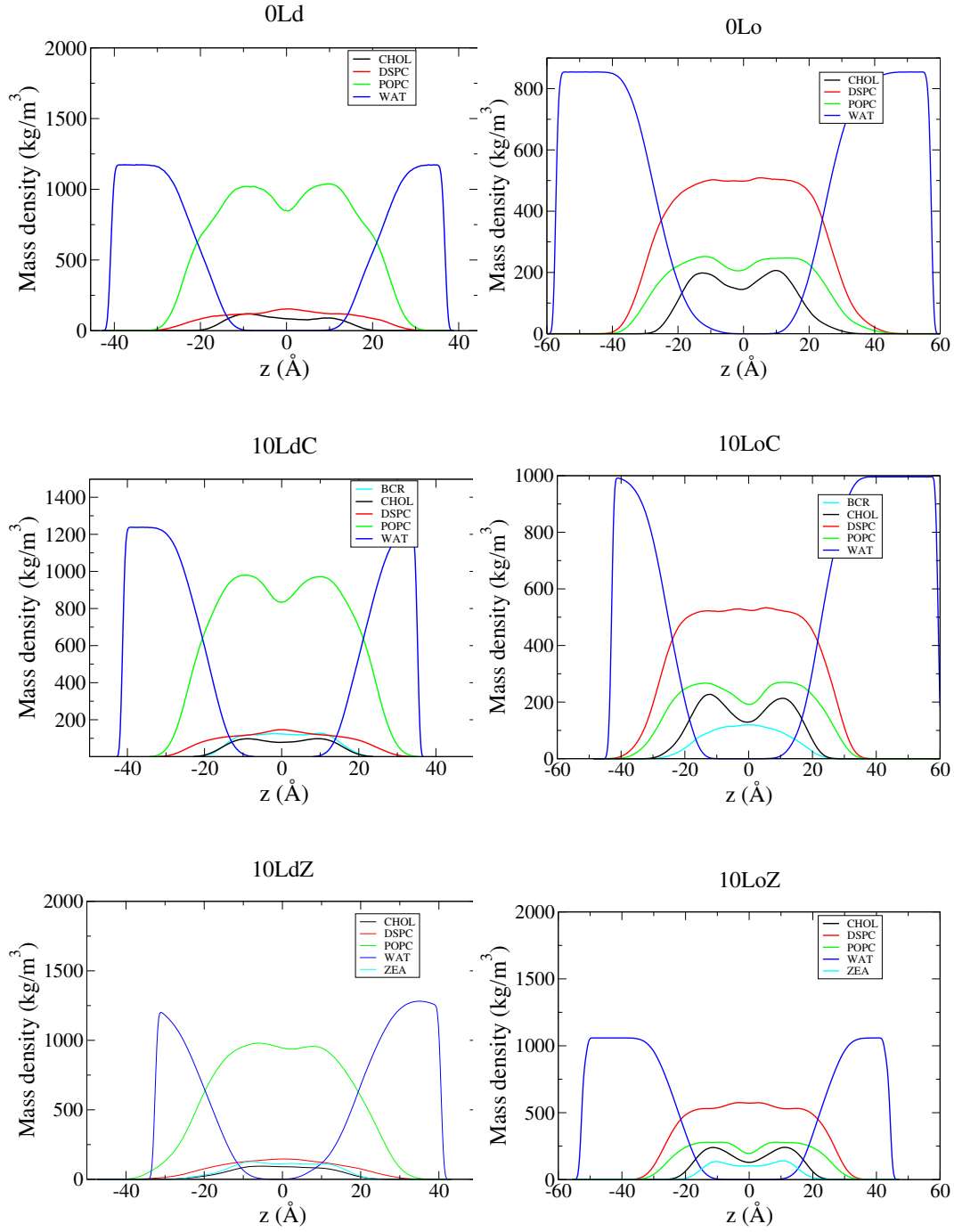


Fig. S 2: The z-densities for all components of all systems. The coloring system used here is: cholesterol = black, DSPC = red, POPC = green, water = blue.

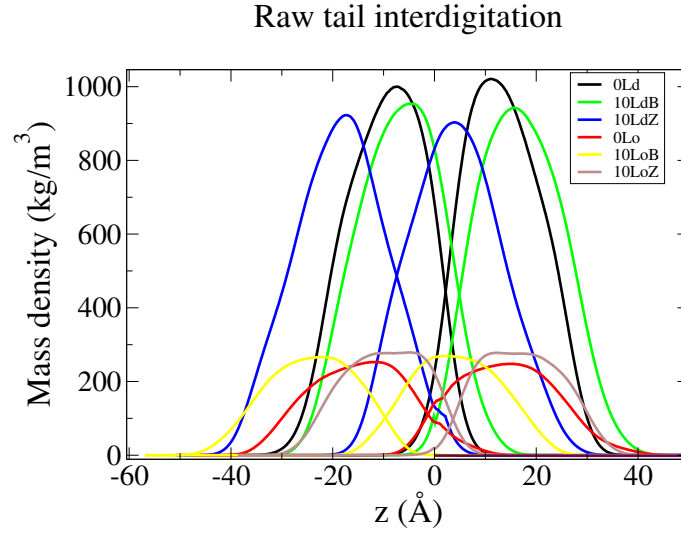


Fig. S 3: The z -densities of the lipid tails of all systems. Total interdigitation was calculated by computing the area under the curve for the overlapping region of opposing leaflets in the bilayer. Here, two curves of same color reflect the two leaflets of that system. The total area under the curve for each system is: 0Ld = 2264.48, 10LdC = 2948.68, 10LdZ = 4908.25, 0Lo = 922.07, 10LoC = 613.94, 10LoZ = 419.49.