CORRECTION

Low-Temperature ^{2}H NMR Spectroscopy of Phospholipid Bilayers Containing Docosahexaenoyl (22:6ω3) Chains, by Judith A. Barry, Theodore P. Trouard, Amir Salmon, and Michael F. Brown*, Volume 30, Number 34, August 27, 1991, pages 8386–8394.

There are some misprints and minor errors of interpretation by the authors which are in need of clarification. First, the empirical method of comparing the ^{2}H NMR data is an approximation that extrapolates the results to the midpoint temperature, T_M, of the order–disorder phase transition. It does not eliminate the intrinsic effects of differences in thermal energy due to inequivalent absolute temperatures. This is unlike expressing the equation of state of the system in terms of reduced variables. The values of the reduced temperatures in the text should be dimensionless, not in degrees Celsius (°C). The paper of Serrallach et al. (1983) cited in the text relates to 1,3-dipalmitoyl-*sn*-glycero-2-phosphocholine, and comparison to ^{2}H NMR results for 1,2-diperdeuteriopalmitoyl-*sn*-glycero-3-phosphocholine is unwarranted in the absence of additional information. The section under Discussion entitled Effects of Docosahexaenoic Acid on the Phase Transition Temperature assumes in the low-temperature state the saturated chain is all-trans, whereas the 22:6 chain is in an angle-iron configuration. In addition, there are a number of misprints which, though not substantive in nature, may be confusing to readers. In eq 2 the angle θ denotes the orientation of the *static* electric field gradient symmetry axis (parallel to the C–^{2}H bond) with regard to the main magnetic field direction, whereas in eq 4 it is the orientation of the *residual* electric field gradient symmetry axis (parallel to the bilayer normal). Following eq 3 we indicate relative frequencies of the ^{2}H NMR spectral transitions, with values of $(\nu_Q^{\pm})_\perp \approx \mp 63$ kHz and $(\nu_Q^{\pm})_\parallel \approx \pm 126$ kHz, rather than the quadrupolar splittings $\Delta\nu_Q$. The same is true following eq 5, in which the transition frequencies are $(\nu_Q^{\pm})_\perp \approx \pm 31$ kHz and $(\nu_Q^{\pm})_\parallel \approx \mp 63$ kHz. For consistency in notation, eq 8 should appear as

$$M_1 = \frac{\pi}{\sqrt{3}} \frac{e^2qQ}{h} \langle |S_{CD}| \rangle \tag{8}$$

Finally, the corrected Taylor series expansion in eq 13 should read

$$M_1(T) = M_1(T^*) + \left(\frac{\partial M_1}{\partial T}\right)(T - T^*) + \frac{1}{2!}\left(\frac{\partial^2 M_1}{\partial T^2}\right)(T - T^*)^2 + \dots \tag{13}$$

All other results and interpretations remain unaffected.

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