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COVER: Palmitate rapidly increases the saturated lipid content of the endoplasmic reticulum (ER), leading to compromised ER morphology and integrity. CHO cells under basal conditions have normal tubular cisternae and perinuclear ER. However, as shown here by electron microscopy, after incubation for 5 h with a lipotoxic concentration of palmitate, the ER is dramatically distended. (See Borradaile et al., p. 2726.)

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