# pH-sensitive calcium release in triads from frog skeletal muscle. Rapid filtration studies

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Triad vesicles from frog skeletal muscle exhibited calcium-induced calcium release highly sensitive to extravesicular pH; calcium induced release at pH > 7.4 but not at pH 6.8. In contrast, triads isolated from rabbit skeletal muscle exhibited significant calcium-induced calcium release at pH 6.8. At pH 7.4, there was no stimulation of calcium release in triads from frog at pCa 7, maximum stimulation at pCa 5, and complete inhibition at pCa 3. Addition of ATP at pCa 5, pH 6.8, induced calcium release with the same high rate constants in both preparations. In triads from frog, ATP-induced calcium release at pCa 5 had the same kinetics at pH 6.8 and 7.4, whereas ATP-induced calcium release at pCa > 8, pH 6.8, was partial, with a decrease in the amounts released but not in rate constants. In contrast, triads from rabbit displayed the opposite behavior, with a decrease in rate constants but not in the amounts of calcium released at pCa > 8, pH 6.8. In triads from frog ATP-induced calcium