

TABLE 1. *Motility of S. typhimurium at constant attractant levels*

Serine concentration (mM)	Velocity of bacteria in sample ($\mu\text{m sec}^{-1}$)	Overall average velocity ($\mu\text{m sec}^{-1}$)
0	27.4 ± 4.7	28.8
	29.9 ± 6.0	
	29.0 ± 4.6	
0.01	27.6 ± 4.7	27.2
	28.7 ± 3.5	
	25.2 ± 6.0	
1.0	30.2 ± 4.0	28.8
	29.0 ± 2.9	
	27.1 ± 6.0	

Procedure: each sample represents 15 bacterial trajectories taken from a single photograph. The trajectories each contained 10 successive images of a bacterium taken at $1/8$ -sec intervals. Three samples were examined for each set of conditions.