We study traveling pulses on a lattice and in a continuum where all pairs of particles interact, contributing to the potential energy. The interaction may be positive or negative, depending on the particular pair but overall is positive in a certain sense. For such an interaction kernel $J$ with unit integral (or sum), the operator $\frac{1}{\varepsilon^2}[J * u - u]$, with * continuous or discrete convolution, shares some common features with the second derivative operator in space, especially when $\varepsilon$ is small, and so the equation $u_{tt} - \frac{1}{\varepsilon^2}[J * u - u] + f(u) = 0$ may be compared with the nonlinear Klein Gordon equation $u_{tt} - u_{xx} + f(u) = 0$. If $f$ is such that the Klein-Gordon equation has supersonic traveling pulses, we examine whether the same is true of the nonlocal version, for both the continuum and lattice versions. (Received September 27, 2005)