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*Francisella tularensis* is a highly infectious bacterium that causes the disease, tularemia. Humans acquire tularemia through inhalation, oropharyngeal exposure, or tick bites. A unique feature of *F. tularensis* during infection is its ability to invade erythrocytes. Recent evidence indicated that residing within an erythrocyte enhances the ability of *F. tularensis* to colonize ticks. Further results indicated that residing within erythrocytes protects *F. tularensis* from the low pH environment associated with the gut cells of a feeding tick. Iron has previously been shown to be utilized by *F. tularensis* to protect against killing by reactive oxygen species. We hypothesized that *F. tularensis* was obtaining iron from erythrocytes. This iron was being utilized by *F. tularensis* for protection against the oxidative stress associated with a low pH environment, such as that found in the gut cells of a tick. We first sought to determine whether *F. tularensis* was capable of acquiring iron from erythrocytes. Our results indicated that *F. tularensis* bacteria incubated with red blood cells contained significantly more iron than those incubated in media alone. This suggested that *F. tularensis* bacteria were capable of acquiring iron from these host cells. Investigations are ongoing that will assess whether additional iron is responsible for protecting the *F. tularensis* bacteria from the low pH environment of the tick gut cells.