



Malaria: Mosquito Host

Mosquitos are usually vegetarian, preferring to drink fruit juices, nectar, and honeydew. Only a pregnant mosquito will bite humans seeking nutrients from blood to nourish her developing eggs. If she drinks blood from someone infected with malaria, she too becomes infected with the disease. The tiny drop of blood filling the insects stomach is teeming with malaria parasites. The parasite form that is deadly inside humans cannot survive in a mosquito's stomach and is slowly digested with the rest of her blood meal. However, back in the human host, a few of the parasites turned into a different type of cell. One that is sexual, but remains dormant. Malaria sex is triggered when the warm blood begins to cool inside the mosquito's stomach. The female form of the parasite matures into an egg; the male form takes a while longer to mature into sperm. This sperm is from an earlier feed. The fertilized cell can glide and begins to explore its new environment. It migrates to the outer lining of the mosquito's stomach before transforming into a cyst. Each cyst produces thousands of thin tiny parasites, which seek out and infest the mosquito's salivary glands. The next time this mosquito bites a victim, the malaria parasite will ride in with her saliva and infect another human. This year, 10% of people on Earth will be struck down with malaria. Most people who die from the disease are pregnant women and children under the age of five.