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Gene protecting  
against malaria makes  
people of African  
descent more  
susceptible to HIV  
Blogspot

## **Africans Are More Susceptible to HIV Infection**

### *Genetic variation found responsible for 11 percent of Africa's HIV infected people*

The same genetic variation that offered African people better protection against malaria seems to be responsible for an increase of nearly 40 percent in the chances of contracting the HIV virus, while in infected individuals the respective genes appear to increase their lifespan by almost two years, according to a study carried out by Professor Robin Weiss of the University of College London Infection and Immunity. Data collected by US researchers over a period of 25 years regarding a couple thousand American citizens with different ethnicities revealed that this factor appears only in people of African descent. The respective gene is responsible for the encoding of a protein known as Duffy Antigen Receptor for Chemokines, whose variation determines the lack of DARC in the red blood cells of people of African origins. "The big message here is that something that protected against malaria in the past is now leaving the host more susceptible to HIV. In sub-Saharan Africa, the vast majority of people do not express DARC on their red blood cells and previous research has shown that this variation seems to have evolved to protect against a particular form of malaria. However, this protective effect actually leaves those with the variation more susceptible to HIV," Professor Weiss said. "It turns out that having this variation is a double-edged sword. The finding is another valuable piece in the puzzle of HIV-AIDS genetics," says Professor Sunil K. Ahuja of the University of Texas Health Science Center, the lead author of the study. According to estimations, today more than 25 million people living in Africa are infected with the HIV virus, and more than 90 percent of all Africans have this genetic variation, which accounts for 11 percent of the total number of infected people. Since sexual behavior does not appear to explain why this region of the globe has such a high concentration of HIV infected people, the authors of the study believe that genetic factors could be held responsible for the infection levels around the world.