Dating sites use DNA to find your perfect match

By Darren Quick 22:56 November 18, 2009 PST



Finding that special someone isn't as easy as it used to be so online dating sites are enlisting the help of our DNA

If you're looking for love online you can forget listing your hobbies and favorite books. Dating sites can now find your perfect match based on DNA. Numerous studies have revealed that chemistry, in particular body odor, plays a big part in the art of attraction, but such physical chemistry is usually impossible to identify when searching for partners online. Dating sites such as ScientificMatch and sense2love.com say they can bring chemical attraction back into the mix to increase the chances of finding someone genetically compatible with your DNA.

The online services are based on the theory that people are attracted to partners who have different immune systems than their own. It is believed that this is a function of evolution with babies bred from parents with different immune systems having a wider variety of immune system genes, and therefore, more robust immune systems. For this reason the sites limit their DNA analysis to the genes of the immune system to make its matches.

These genes, known as HLA (human leukocyte antigen) genes (also sometimes referred to as MHC for major histocompatibility complex) control how the immune system recognizes and fights off viruses, fungi and bacteria and is also the portion of the genome doctors look at when looking for compatible organ donors. Studies have indicated that people with different MHC genes will actually smell better to you than people whose MHC genes are similar to your own.

Aside from a more attractive odor and healthier children, ScientificMatch says that finding a partner with a different immune system will also lead to a more satisfying sex life, less cheating in the relationship, a higher rate of fertility and, if you're a woman, a higher rate of orgasms. The site backs up their claims with a list of peer-reviewed articles published in scientific journals.

The site also claims the system should work for gay and straight couples, but it won't work for women who are taking birth control pills. This is because such birth control effectively tricks the female body into thinking it is pregnant and studies have shown that pregnant women are more attracted to those with similar immune systems. The evolutionary theory is that, in the wild, pregnant females couldn't count on their babies' fathers to stick around and help raise their young so women were drawn to a more reliable support system such as their immediate family.

People not raised by their natural parents very early in life – from birth to the age of weaning – will also have to look elsewhere for the matchmaking. Studies on mice have shown that newborn mice removed from their parents within 16 hours of birth and placed with and nursed by their adoptive parents selected partners based their mating preferences not on their immune system genes, but on those of the parents who raised them.

Although the science can be compelling, ScientificMatch admits that physical chemistry alone is not enough to guarantee a successful relationship, or even attraction. For this reason the site doesn't rely solely on DNA analysis to find matches, but also makes use of those online dating standards or personality profiles and personal preferences when looking for matches.

The Gattaca-esque matchmaking does come at a price though with a lifetime membership to ScientificMatch setting the unlucky in love back around US\$2000. Upon signing up you'll receive a DNA collection kit in the mail, which includes a pack of sterilized cotton swabs. After rubbing the inside of your mouth with the swabs you send them back in a pre-addressed envelope with a customer number being the only link to your identity.

To address privacy concerns ScientificMatch stresses that nobody within ever knows your name and your customer number at the same time. The computer system, which generates the matches, is the only thing that ever links the two together and the DNA sample is destroyed after it has been analyzed.

After the analysis, which takes around two weeks, ScientificMatch will present you with your matches and let you choose which ones interest you the most. You're then free to get in touch and hopefully hit things off and arrange to meet.

sense2love is relaunching soon so no pricing is available for their service as yet, but it has partnered with Swiss company GenePartner.com, so the pricing of the two is likely to be similar. Instead of analyzing DNA and providing a list of potential partners, the GnerePartner system is designed to determine the level of genetic compatibility of a person you are already interested in. A single GenePartner test to check your compatibility with another person costs US\$99 and the company is also forming partnerships with both traditional matchmakers and new online dating sites.