# Scents and sensibility

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Popular scientific summary of Independent Project in Biology 2014 Biology Education Center, Uppsala University

Do you have a vison of who you want to end up with? Most of us find certain personal and physical traits more attractive than others. Your idea of a perfect partner might, for example, be someone that is tall, has blue eyes and likes to travel, but in reality we often fall for someone who doesn't match the qualities we claim to like. You might meet someone that seems perfect on paper but doesn't attract you at all while someone you didn't expect to fall for is the one stealing your heart. Studies show that the choice of partner may not be entirely up to us and that our perception of a person is greatly influenced by subconscious smells that we find either attractive or not.

### A partner's smell

People are deeply affected by their partner's smell and it is common for people to bury their noses in their partner's hair or smell their T-shirts just because they can't get enough of it. But what is it that makes us attracted to certain people and not others? Currently the most credible theory is that we find a well-matching partner with the use of smell. This was shown by Claus Wedekind, a professor at the University of Lausanne in Switzerland, by performing a test where women smelled the t-shirts of different men and rated them on attractiveness. It was shown that the women preferred the smell of T-shirts worn by men who were immunologically dissimilar to them. The difference was in the composition of the major histocompatibility complex, also known as MHC, which codes for proteins that help the immune system recognize pathogens. The smell women found pleasant reminded them of their past and current partners, which suggests that the MHC composition does indeed affect dating decisions.

That the women would make choices based on MHC makes sense from an evolutionary point of view, as offspring from parents with a dissimilar MHC would be more resistant to a broader spectrum of diseases. This doesn't mean, however, that women prefer someone who has a MHC completely different from theirs. As a matter of a fact studies have shown that women aren't attracted to smells of men with no MHC genes in common with them. It is thought that this might be a way to protect yourself from a partner that is to similar or dissimilar and find a middle range that would provide the best offspring. There are theories stating that women are more sensitive than men when it comes to these smells. This would make sense considering that female mammals often make a greater time and energy sacrifice when it comes to bearing and taking care of offspring and could be an explanation to why women are picky in their choice of partner.

# Can the pill ruin your relationship?

Women generally prefer a partner whose MHC genes are different from theirs but Wedekind and his co-workers did, however, notice one exception to this rule. For some reason women on birth-control pills preferred the scent of men with MHC profiles similar to theirs, the opposite of the pill-free participants. This could reflect the pills' mechanism of fooling the body into thinking it's pregnant by preventing the ovaries from releasing an egg. Pregnancy seems to

activate a preference for kin, which is genetically similar to us and likely to serve as protectors. Women on the pill often report a deficit in sex drive which could also be explained by its pregnancy-mimicking function. A tendency to favor people with similar MHC genes could result in choosing a biological mismatching partner and possibly hamper a pill users' relationship in the long term as the woman might find herself less attracted to her partner once she goes off birth control.

## Smell and sexuality

Another interesting observation is that our perception of attractive smells seems to differ on the basis of not only sex but also sexuality. Professor Ivanka Savic, from the Royal Institute of Technology in Sweden, has shown that the brain of homosexual men and women reacts differently to smells than the brain of heterosexual counterparts. Her studies were done by having the subject smell a derivate of the male sexual molecule testosterone and the female equivalent estrogen while scanning their brains by MRI. The results show that the brain of homosexual men reacts in a similar way to the brain of heterosexual women in that the testosterone activates areas that are connected with sexual arousal and estrogen activates areas that are connected with handling regular smells. Although not as clearly, tests also showed that the brain of homosexual women reacted in a similar way to the brain of heterosexual men. That our awareness of smells seems to differ based on sexuality is another aspect supporting the view of smell as an important factor in partner choice

### Follow your nose

Even though smell seems to have an impact on our subconscious attraction to certain people it is important to understand that it is just a small part of what makes us choice someone as a partner. Personality and a big number of other traits are of course also important and once a person is in love their perception of smell is so intertwined with their emotional reaction that their partner could smell like garbage and it would still be appealing to them. However, it's interesting to note that smells play a bigger role than previously assumed. When in doubt the old saying "Follow your nose" could be a good rule to abide by. Unless you're on the pill of course; in that case you might want to be careful.

### For more information

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