

rest? The answer is almost certainly smell. Pheromones—or scent-signaling chemicals—are known to exist among animals, and while scientists have had a hard time unraveling the pheromonal system in humans, they have isolated a few of the compounds. One type, known as driver pheromones, appears to affect the endocrine systems of others. Since the endocrine system plays a critical role in the timing of menstruation, there is at least a strong circumstantial case that the two are linked. “It’s thought that there is a driver female who gives off something that changes the onset of menstruation in the other women,” says chemist Charles Wysocki of the Monell Chemical Senses Center in Philadelphia.

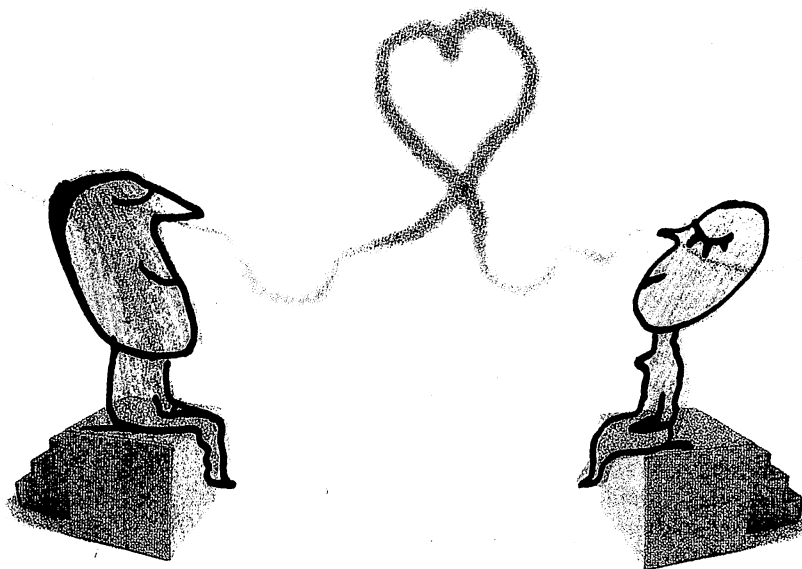
It’s not just women who respond to such olfactory cues. One surprising study published last October in the journal *Evolution and Human Behavior* showed that strippers who are ovulating average \$70 in tips per hour; those who are menstruating make \$35; those who are not ovulating or menstruating make \$50. Other studies suggest that men can react in more romantic ways to olfactory signals. In work conducted by Martie Haselton, an associate professor of psychology at UCLA, women report that when they’re ovulating, their partners are more loving and attentive and, significantly, more jealous of other men. “The men are picking up on something in their partner’s behavior that tells them to do more mate-guarding,” Haselton says.

Scent not only tells males which females are primed to conceive, but it also lets both sexes narrow their choices of potential partners. Among the constellation of genes that control the immune system are those known as the major histocompatibility complex (MHC), which influence tissue rejection. Conceive a child with a person whose MHC is too similar to your own, and the risk increases that the womb will expel the fetus. Find a partner with sufficiently different MHC, and you’re likelier to carry a baby to term.

Studies show that laboratory mice can smell too-similar MHC in the urine of other mice and will avoid mating with those

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ILLUSTRATIONS BY SERGE BLOCH



The Lure of Smell

Like all other animals, we respond to olfactory cues. The menstrual cycles of women living together often synchronize, something that is probably governed by scent. In the same way, men seem able to detect when women are ovulating—and thus are most fertile—and will behave more solicitously toward them during those times. Men and women respond to the scent of each other’s MHC, part of the genetic makeup of the immune system and something that helps determine whether a fetus they might conceive will be carried to term.

individuals. In later work conducted at the University of Bern in Switzerland, human females were asked to smell T-shirts worn by anonymous males and then pick which ones appealed to them. Time and again, they chose the ones worn by men with a safely different MHC. And if the smell of MHC isn’t a deal maker or breaker, the taste is. Saliva also contains the compound, a fact that Haselton believes may partly explain the custom of kissing, particularly those protracted sessions that stop short of intercourse. “Kissing,” she says simply, “might be a taste test.”

Precise as the MHC-detection system is, it can be confounded. One thing that throws us off the scent is the birth-control pill. Women who are on the Pill—which chemically simulates pregnancy—tend to choose wrong in the T-shirt test. When they discontinue the daily hormone dose, the protective smell mechanism kicks back in. “A colleague of mine wonders if the Pill may contribute to divorce,” says Wysocki. “Women pick a husband when they’re on birth control, then quit to have a baby and realize they’ve made a mistake.”

Less surprising than the importance

of the way a partner smells is the way that partner looks and sounds. Humans are suckers for an attractive face and a sexy shape. Men see ample breasts and broad hips as indicators of a woman’s ability to bear and nurse children—though most don’t think about such matters so lucidly. Women see a broad chest and shoulders as a sign of someone who can clobber a steady supply of meat and keep lions away from the cave. And while a hairy chest and a full beard have fallen out of favor in the waxed and buffed 21st century, they are historically—if unconsciously—seen as signs of healthy testosterone flow that gives rise to both fertility and strength.

A deep voice, also testosterone driven, can have similarly seductive power. Psychology professor David Feinberg of McMaster University in Ontario studied Tanzania’s Hadza tribesmen, one of the world’s last hunter-gatherer communities, and found that the richer and lower a man’s voice, the more children he had. Researchers at the University of Albany recently conducted related research in which they had a sample group of 149 volunteers listen to recordings of men’s and women’s