

As Napoleon famously wrote to Josephine in 1800 on his way back to Paris from battle: "Home in three days. Don't wash." Hardly the most eloquent prose for a love letter, but Napoleon wasn't alone in his preference for more-visceral odours. At the time, freshening up for a date meant simply changing one's undershirt—immersion in water was thought to cause the plague—and the smell of stale sweat was considered an aphrodisiac. It's a sharp contrast to modern grooming rituals, where most of us adhere to a daily regimen of bathing, deodorizing and all-around fretting about the possibility of offending someone with a funky aroma or telltale dampness under the armpits. Battling B.O. has become big

DRY SPELL

The newest ways to beat B.O. are nothing to sniff at. But is stopping sweat safe—or even necessary? TEXT: MICHELLE VILLET

business: In Canada and the United States, annual spending on antiperspirants and deodorants is in the billions of dollars, and costly treatments like Botox—injected into the sweat glands to stop perspiration altogether for several months—are becoming increasingly popular. But a brave few (like Julia Roberts, who declared on *Oprah* earlier this year that she doesn't use deodorant) are bucking the trend, citing health and environmental concerns as their reason for going *au naturel*—or, at least, using "safe" alternatives. Now, we're at the crossroads of a grooming dilemma: Is perspiring (or not) something to sweat about?

"Perspiration occurs for the purpose of temperature regulation," says Dr. Peter Vignjevic, a dermatologist based in Hamilton, Ont. Although our bodies' thermostats are set at a toasty 37°C, we sweat to cool down—or, in some cases, when we're faced with stressful situations, which trigger the sympathetic nervous system to increase the production of fluid. Other factors include certain medications, medical conditions and even hormonal changes. (Recent gossip blogs have documented Madonna's sweat-soaked appearance as evidence of menopausal hot flashes.) But sweat itself doesn't smell, says Vignjevic. "It consists of water, small amounts of sodium chloride and other minerals," he explains. Blame the stench on bacteria. There are two types of sweat glands: eccrine glands (which are found all over the body, but mostly in the palms and the soles of the feet, and simply release wetness) and apocrine glands (which are concentrated anywhere there is

hair, such as the scalp, chest, arms and legs). Starting at puberty, the apocrine glands kick into high gear, releasing fatty proteins and lipids that smell bad when they get broken down by bacteria. "The armpits only contain one percent of our sweat glands," says Dr. Penny Kendall-Reed, a naturopathic doctor in Toronto, "but because that area doesn't evaporate well, it's a warm, sticky, moist environment, which bacteria love."

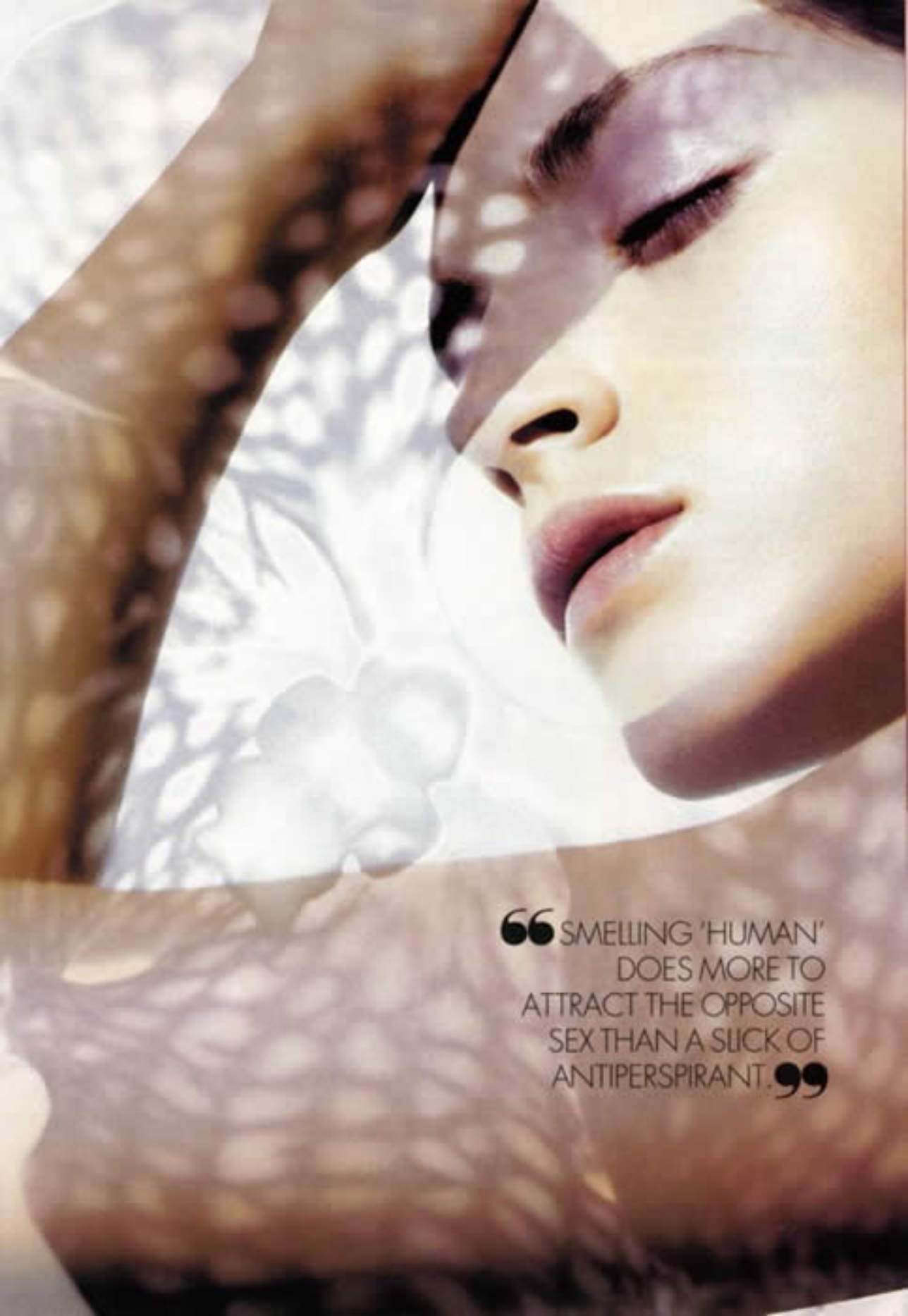
Both deodorants (which mask odour) and antiperspirants (which reduce sweating) have been around for years, but what's new are the clinical-strength versions of the latter, which manufacturers claim are the strongest formulas you can buy without a doctor's prescription. Secret Clinical

Strength and Degree Clinical contain 20 percent of an aluminum compound (the maximum amount of the active ingredient allowed in an over-the-counter product) that reduces the flow of perspiration. They're also meant to be applied at night for maximum effectiveness to take advantage of the body's natural temperature changes: While resting, the ingredients effectively plug the sweat glands and form a layer of extra protection that will

even endure a shower. Dr. Vince Bertucci, a dermatologist in Toronto and consultant for Secret, says that they're a boon for people who experience excessive perspiration. "For years, there have been few treatment options," he says. "Doctors would prescribe Drysol [an over-the-counter product], which is good but irritating on the skin. Other people with this problem wouldn't see a doctor or felt that they had to hide. We needed other options."

But even if these extra-strength products were originally intended to help people who sweat excessively (those who suffer from a medical condition called hyperhidrosis, which affects just two percent of the population), they aren't the only ones who are using them. "We found that about 18 percent of the population classify themselves as having a problem with sweating," says Mike Thomas, head of deodorant research and development for Procter & Gamble, the makers of Secret. "For many people, it might not actually be necessary to use these products, but I don't see a problem if they do." Joanna Crudele, director of research and development for Unilever, the makers of Degree, agrees: "Anyone who doesn't want to be held back by perspiration or odour will benefit from them."

Kendall-Reed isn't so sure. She says that stopping perspiration in the armpits isn't a problem in terms of letting our skin excrete toxins (they can exit through our waste matter, lungs and other sweat glands, which is why the death-by-gold-paint scene in *Goldfinger* was so far-fetched); it's the aluminum content that she finds >



“SMELLING ‘HUMAN’
DOES MORE TO
ATTRACT THE OPPOSITE
SEX THAN A SLICK OF
ANTIPERSPIRANT.”

worrisome, even though Health Canada issues no such warning. "There's a clear-cut link between aluminum and Alzheimer's disease," she says. "Aluminum can also mimic estrogen and increase your risk of breast cancer. What isn't clear is whether the absorption of aluminum through antiperspirants is a direct cause. Even though the studies are conflicting, if I connect all the dots, I say yes."

Jay Gooch, associate director of external relations for Procter & Gamble's personal beauty care division, has heard these fears and, while sympathetic, has found little evidence to support them.

"The form of aluminum we use doesn't get into your body through the skin," he says. "Nobody has been able to find any relationship whatsoever [between antiperspirant use and Alzheimer's or breast cancer]." He alludes to rising cancer rates—along with a growing green movement—as the reason these allegations can be compelling. "People wonder if stopping sweat is really a natural thing," he says, "and anyone involved with someone who has breast cancer always speculates on why it happened. Without being a scientist, it's hard for the average consumer to know what to believe and what not to believe."

Still, there are options for those who want to avoid this controversial ingredient. "If you had a safer alternative, why *wouldn't* you use it?" says Kendall-Reed, who recommends an aluminum-free antiperspirant by Adidas to her patients. (So-called "natural" deodorants often aren't effective, she says, and many contain alum, which is another term for aluminum.) More-serious cases can find relief from treatments like those offered by Dr. Stephen Mulholland, a Toronto

plastic surgeon: Botox injections will halt perspiration for up to 10 months (at a cost of \$2,000 per session), while subdermal laser tightening—which involves disabling the sweat glands by passing a fibre optic laser in the armpits under local anaesthesia—will last for up to two years (at about \$2,500 per session). Although there are no permanent solutions on the horizon, Mulholland says that we may soon see a needle-free Botox treatment. "It will probably be in a roll-on form designed for sweat control, with Botox penetrating topically through a carrier product,"

he says. Other sweat stoppers on the market include a kit available online called Drionic (which claims to wick away moisture using an electrical current) and the newly launched Underarm Overhaul treatment (which includes the steam cleaning and waxing of the armpits prior to Botox injections) available at Shizuka in New York.

Are these simply convenient services for an age-old problem or far-fetched treatments for a culture obsessed with eradicating body odour? Katherine Ashenburg, author of *The Dirt on Clean: An Unsanitized History*, likens our aversion to perspiration to a disorder. She studied attitudes to cleanliness across 28 centuries and found that the smell of sweat was considered normal until quite recently, when soap makers began marketing their wares through a technique called "whisper-speak." "They started this worry—the fear that you will offend without knowing it," she says. A credulous and terrified population began to believe these advertising messages for soaps and deodorants. "Now, we're supposed to smell as if we're not from this earth—like a mango▷



Clockwise, from top: Secret Clinical Strength in Powder Protection (\$9.49); Degree Clinical for Women in Shower Clean (\$10); Biotherm Deo Douceur Antiperspirant Roll-On (\$19); Kiehl's Superbly Efficient Anti-Perspirant & Deodorant Cream (\$13.50); Dr.Hauschka Deodorant Floral (\$24.95); Weleda Sage Deodorant (\$15); Tom's of Maine Natural Sensitive Care Aluminum-Free Deodorant Stick in Bay-Lime (\$5.69); Adidas Absorbent-Deo with Cotton Tech for Women (\$4). For details, see Shopping Guide.

ADVERTISING
STANDARDS CANADA

www.adstandards.com

ALMAY

www.almay.com

AVEENO

www.aveeno.ca

AVÈNE

www.esu-thermale-avene.com

BIRKS

www.birks.com

BUFFALO JEANS

www.buffalojeans.com

BURBERRY

www.burberry.com

CALVIN KLEIN

www.calvinklein.com

CANADIAN LIVING

www.canadianliving.com

CHANTELLE

www.chantelle.com

CITIZEN WATCH

www.citizenwatch.com

CLARINS

www.clarins.com

CLINIQUE

www.clinique.ca

COVERGIRL

www.covergirl.ca

DIOR

www.dior.com

DOLCE & GABBANA

www.dolcegabbana.com

ESCADA

www.escada-fragrances.com

ESTÉE LAUDER

www.esteelauder.com

FERIA

www.feria.ca

FORD

www.ford.ca

FYSH UK

www.fyshuk.com

GARNIER

www.garnier.ca

GEOX

www.geox.com

GIVENCHY

www.parfumsgivenchy.com

GUCCI

www.gucci.com

HERBAL ESSENCES

www.herbalessences.com

HYDRASENSE

www.hydrasense.com

INTIMODE

www.im.ca

JAMIESON

www.jamiesonvitamins.com

JERGENS

www.jergens.ca

JOHN FRIEDA

www.johnfrieda.ca

LA COUPE

www.lacoupe.com

LACOSTE

www.lacoste.com

LANCÔME

www.lancome.ca

L'ORÉAL PARIS

www.lorealparis.ca

L'ORÉAL PROFESSIONNEL

www.lorealprofessionnel.com

MARCELLE

www.marcelle.com

MAYBELLINE

www.maybellinenewyork.ca

MERCEDES-BENZ

www.mercedes-benz.ca

METROPOLITAN HOTELS

www.metropolitan.com

MOUNT CASHMERE

www.mountcashmere.com

NEOSTRATA

www.neostrata.ca

NEW NORDIC

www.newnordic.ca

NINA RICCI

www.ninaricci.com

OLAY

www.olay.ca

P&G AQUACURRENT

www.aquacurrentscience.com

PANTENE

www.pantene.ca

PAPERMATE

www.papermats.com

PRADA

www.prada.com

RALPH LAUREN

www.ralphlauren.com

REVLON

www.revlon.com

RIMMEL

www.rimmellondon.com

ROLEX

www.rolex.com

ROYAL BANK

www.rbc.com

SCOPE

www.pg.ca

SEBASTIAN PROFESSIONAL

www.sebastianprofessional.com

SECRET

www.secret.com

SONY

www.sonymstyle.ca

STYLE AT HOME SHOW

www.styleathomeshow.com

SUBARU

www.subaru.ca

SWATCH

www.swatch.com

TAG HEUER

www.tagheuer.com

TAMPAX

www.tampaxcanada.ca

THE BAY

www.thebay.com

THE BODY SHOP

www.thebodyshop.ca

TIFFANY & CO.

www.tiffany.com

TOUS

www.tous.com

TRANSAT HOLIDAYS

www.transatholidays.com

TWINRIX

www.twinrix.ca

VEET

www.veet.ca

VENUS

www.gillettevenus.com

VERSACE

www.versace.com

WILLOW BREAST CANCER

SUPPORT

www.willow.org

WINNERS

www.winners.ca

WONDERBRA

www.wonderbra.ca

YSL

www.ysl.com

PIT STOP

Combat excessive perspiration with these tips:

- **AIR OUT.** "One of the biggest reasons that sweat smells is because it can't evaporate from under your arms," says Dr. Penny Kendall-Freed, a naturopathic doctor in Toronto. "A few times a day, flap your arms up and down to aerate." ● **CHOOSE NATURAL FABRICS.** "Cotton is best," says Alessia Marciano, a fashion stylist and co-host of the TV show *Look-A-Like*. "And avoid anything grey because it will show every drop of sweat. Black is your safest bet." ● **AVOID SPICY FOODS.** "Certain spices—such as cumin—as well as raw garlic and onion definitely create body odour," says Dr. Zeynep Uraz, a naturopathic doctor and part-time faculty member at the Canadian College of Naturopathic Medicine in Toronto. "But drinking a lot of water may help dilute their potency." ● **USE SHIELDS.** For serious sweat stopping, Marciano tells her clients to use sweat shields—adhesive pads designed to attach to the armpits of your shirt. "Back in the day, we used to use maxi-pads," she says.

or a cookie," she says. "It makes you nervous to smell like a human being."

However, evidence suggests that smelling "human" does more to attract the opposite sex than a slick of antiperspirant. According to studies at the Monell Chemical Senses Center in Philadelphia, sweat contains odourless pheromones that play a critical role in the mate-selection process. "It helps females predict the genotype of a male who is [biologically] different at some optimal level so that any offspring they might have will possess stronger immune systems," says researcher Dr. Charles Wysocki. "Odour artist" Sissel Tolaas, a consultant for International Flavors & Fragrances, takes the idea of hidden messages in sweat to an extreme: In 2006, she held an exhibit at the Massachusetts Institute of Technology that showcased nine synthetic scents—all based on swabs collected from males in a state of fear. Reactions varied: Some people found certain subjects' odours pleasurable, while others couldn't stand to be in the same room.

Clearly, there's much about sweat (and smell) that we still don't know, although few of us—even Ashenburg—seem ready to return to 19th-century standards of cleanliness. Wysocki says it's unnecessary: The biological cues hard-wired into perspiration are still present—no matter how much deodorizing we do. But if you do choose to cast aside your underarm protection, take comfort in Ashenburg's remedy: "I'm not working up a sweat, so I don't need to shower every day," she says. "I just wash my armpits—and I've had no decrease in dinner-party invitations." □