

Some Aphrodisiacs Stimulate More Than Just The Imagination (But Probably Not The Ones You Expect)

By Michael Castleman

What do ginseng, chocolate, oysters, coffee, alcohol, powdered rhinoceros tusk, a ground up Mediterranean beetle, and the bark of a certain West African tree all have in common? They are just a few of the many items people have used through the ages to set off sexual fireworks. For almost as long, scientists have dismissed all these traditional aphrodisiacs as sexually worthless—and sometimes dangerous.

But old beliefs die hard when they promise to add extra zing to lovemaking. The rhinoceros has been hunted almost to extinction in part because its powdered horn reputedly boosts virility. (It doesn't.) And Spanish fly, a drug made by pulverizing the Mediterranean *Cantharis* beetle, is no libido-booster, but it can be poisonous.

Until the 1980s, scientists insisted that nothing ingested, inhaled, or injected could possibly have the effect promised in that old rock song, "Love Potion #9," whose narrator recalls that after downing the herbal brew, he "started kissing everything in sight." The sad fact is that there are many more ways to kill sexual interest than enhance it (see sidebar: The Sex Killers).

Nonetheless, belief in aphrodisiacs runs deep. It's embedded in the very terms we use to describe sexual attraction. Why do people fall head over heels for each other? *Chemistry*. Recent research shows that those love-sick chemists of yore were on to something. Science has still not identified anything that charms reluctant objects of desire into ripping their clothes off. But a surprising number of herbs, drugs, and foods have physiological effects that just might make reluctant paramours more receptive to erotic invitations. In addition, if we define "aphrodisiac" broadly to include anything that adds extra excitement to lovemaking, then the possibilities become as boundless as the erotic imagination.

How Aphrodisiacs of Yore Gained Their Sexy Reputations

Three reasons account for belief in most traditional aphrodisiacs: ancient myths, medieval medical theory, and traditional herbal medicine.

The mythological genesis of some purported sex boosters takes us back to the origin of the term “aphrodisiac.” It comes from Aphrodite, Greek goddess of beauty and love. In Greek mythology, when Uranus, the first ruler of the heavens, was killed in a battle among the gods, his flesh fell into the sea, and Aphrodite was created from it. Ever since the love goddess’ mythological nativity, products of the sea have been considered sex stimulants, especially oysters, whose soft fleshy moistness bears some fanciful resemblance to the vagina. (It turns out that oysters boost men’s reproductive capabilities—read on.)

Resemblances such as oysters and the vagina lie at the heart of the medical philosophy that dominated the Middle Ages. Known as the Doctrine of Signatures, the idea was that same God who had cursed humanity with illness had also blessed his children with natural cures that announced their utility by their appearance, or “signature.” Plants with heart-shaped leaves were prescribed for heart disease. Yellow flowers were used to treat jaundice. Walnuts, whose shells suggest the brain, were prescribed for headache, etc. Using the same logic, plants with phallic parts—for example, carrots and bananas—were considered virility boosters, according to George Armelagos, Ph.D., a professor of anthropology at Emory University in Atlanta and author of *Consuming Passions: The Anthropology of Eating*, while anything soft and moist—oysters and ripe, juicy fruits—were linked to the vulva/vagina and were considered women’s aphrodisiacs. Echoes of the Doctrine of Signatures remain to this day. An attractive woman may be called a peach, and breasts are sometimes called melons.

The Doctrine of Signatures held sway from China to Kenya. It partly explains why Asians have revered ginseng root for centuries as a male aphrodisiac. Some ginseng roots are shaped like little people, with body-like centers and branches that resemble arms and legs—and sometimes central protuberances that look rather penile. In Africa, rhinoceros horns looked phallic enough to spur a belief that they were sex stimulants. The horns of other animals, deer and reindeer, gained similar aphrodisiac reputations—and gave us a term for feeling sex-starved, “horny.”

Finally, the Doctrine of Signatures extended to taste. “Hot” spices, particularly peppers and ginger, were believed to promote the heat of lust.

Beyond the Doctrine of Signatures, in traditional herbal medicine, plants containing stimulant compounds gained reputation as sex stimulants. In the Middle East, before Arab caliphs visited their harems, they sipped coffee, which contains the potent stimulant, caffeine. Montezuma and Casanova fortified themselves for sex by drinking hot chocolate, which also contains caffeine. Ginseng has no caffeine, but it contains other stimulants (ginsenosides) that enhance work performance and were generalized to include performance of a more intimate nature.

In addition, many herbs and other things with action on the genitourinary system gained reputations as aphrodisiacs, particularly Spanish fly, a powerful urinary irritant, and diuretics, among them: sarsaparilla and saw palmetto. And down through the ages, several other herbs have clung tenaciously to aphrodisiac reputations, for example, the West African yohimbe tree, wild yam, and damiana, whose scientific name is *Turnera aphrodisiaca*.

Despite traditional aphrodisiacs' amorous reputations, until recently, scientists dismissed them all as quaint frauds whose powers had less to do with sex than suggestion. Sexual enjoyment involves the mind as much as the body, so anything people *believe* is arousing *becomes* arousing.

The Viagra Effect

With all due respect to the power of suggestion, over the past few decades—and especially since 1998—scientists have discovered that it was a mistake to scoff at traditional aphrodisiacs. Nineteen-ninety-eight was important because that was the year Pfizer's erection drug, Viagra, took the world by storm. The hoopla surrounding Viagra's release spotlighted the *result* of arousal in men, and suddenly arousal itself, previously unmentioned outside of sex-research journals, shone in the reflected glow.

Pfizer believed that Viagra was more than simply a chemical way to increased blood flow into the penis. The company felt strongly that the drug was also a libido-booster. If that were true, it might do as much for women as men. And why not? Viagra coaxes extra blood into the genitals of *both* men and women. In men, this aids erection. Viagra is not an aphrodisiac in the traditional sense. It has no direct effect on men's libidos. All it does is make erection more likely. But most of the time, when men experience erection, they also feel turned on. Pfizer researchers theorized that increased genital blood engorgement should also increase women's sexual desire, arousal, and responsiveness. The company spent tens of millions of

dollars trying to prove that Viagra was just what the doctor ordered for low libido and arousal problems in women.

But that effort failed. While a few studies showed that Viagra enhanced desire in women, most showed no benefit. In 2004, after eight years of research involving 3,000 women, Pfizer gave up on the drug as a female aphrodisiac.

Ironically, the drug that flopped as a women's libido-enhancer spurred many women to look for solutions to low desire. "Among my patients," says Mary Lake Polan, M.D., chair of the department of obstetrics and gynecology at Stanford University, "lack of desire is quite common. Since the publicity around Viagra brought the issue into the open, women have become more interested in addressing it."

Men too. Many tried Viagra thinking it would aid arousal. But it didn't. All it did was make erection more likely. This shown men—many for the first time—that arousal was distinct from erection.

Supplements for Better Sex?

No wonder that since Viagra, health food store shelves have become crowded with supplements that promise sexual fireworks. Of course, the search for sexual enhancement is nothing new. But scientists now take traditional aphrodisiacs more seriously, especially purported sex-enhancing herbs. "Unfortunately," says Mark Blumenthal, executive director of the American Botanical Council, the nation's leading nonprofit devoted to education about herbs, "the claims often go far beyond the research. Not much is known about many of these herbs. But quite often, scientists find that folkloric claims have some truth." While the traditional aphrodisiacs don't unleash unbridled lust, the latest research shows that several stimulate more than just the imagination.

Coffee

If your honey's thoughts turn to dreamland as yours turn to dallying, a cup of coffee just might keep your lover awake long enough to make the most of the evening. "Coffee is a powerful central nervous system stimulant," says Chris Kilham, an ethnobotanist at the University of Massachusetts, Amherst, and author of *Hot Plants: Nature's Proven Sex Boosters for Men and Women*. "It excites nerves all over the body, including the ones involved in sex."

But caffeine does more than simply keep the Sandman at bay. In one study, University of Michigan researchers surveyed 744 married couples, age 60 or older,

and discovered that women who were daily coffee drinkers were more likely to call themselves sexually active—62 percent versus just 38 percent of the women who abstained from coffee. In addition, coffee was a boon to erection. Fifty-nine percent of non-coffee-drinking men reported erectile dysfunction (ED). Among coffee drinkers, the figure was only 36 percent. “Caffeine is a powerful central nervous system stimulant,” Blumenthal explains. “When people get a caffeine buzz, some feel a sexual buzz as well.”

Dose and Safety: Most coffee drinkers consume one to two cups a day, and become tolerant to their accustomed intake. To get an extra buzz they may feel aphrodisiac, you have to consume a bit more than usual. Meanwhile, coffee causes insomnia, jitters, and irritability. It has also been accused of contributing to heart disease and cancer. But the largest, most authoritative studies show that one to two cups a day do not increase risk of heart disease or cancer.

Cocoa and Chocolate

Cocoa and chocolate contain caffeine but considerably less than coffee. However, they stimulate the release of endorphins in the brain. “Endorphins,” explains Hank Wuh, M.D., author of *Sexual Fitness*, “are pleasure messengers that signal feelings of well-being and happiness—and may help you become more receptive to sex.”

Chocolate also contains L-arginine, an amino acid involved in sexual responsiveness (see ArginMax below).

Finally, chocolate contains phenylethylamine (PEA), the “molecule of love,” according to the late sexual pharmacology authority Theresa Crenshaw, M.D., author of *The Alchemy of Love and Lust*. PEA is a natural form of amphetamine. It’s also a natural antidepressant. Both love and lust increase blood levels of PEA, but after a heartbreak, PEA levels plummet. Chocolate contains high levels of PEA, which may explain why the broken-hearted sometimes binge on chocolate. It may be a way to raise their PEA levels. “Cocoa and chocolate are not great sex enhancers,” Kilham explains, “But they recreate the brain chemistry of being in love. And if being in love makes you feel more sexual, then cocoa and chocolate might do that.”

Critics contend that chocolate’s PEA is metabolized so quickly that it couldn’t have much sexual effect. Perhaps, but giving chocolates has become a worldwide courtship ritual. Maybe it’s the silky texture and creamy taste. Or maybe it’s the PEA. The artificial sweetener, NutraSweet (aspartame), also increases blood levels of PEA. Maybe lovers should forget the champagne, which contains alcohol, a

depressant that dampens sexual function, and instead, toast one another with diet soda containing NutraSweet.

Dose and Safety: My wife swears there's no such thing as too much chocolate. However, chocolate contains caffeine (see Coffee). And (sorry, honey) chocolate may also cause heartburn, migraine headaches, and allergic reactions.

Damiana

The ancient Mayans used this herb as a sex-booster. One species' scientific name includes *aphrodisiaca*. With a name like that, you'd think this herb would have attracted considerable research interest. Oddly, only one study has investigated its sexual effects. Italian researchers showed that damiana "improves the copulatory performance of sexually sluggish or impotent rats. These results seem to support damiana's folk reputation as a sex stimulant." Wuh says damiana is a mild stimulant that can cause tingling in the genitals, sensations that can be experienced as sexual.

Or maybe not. One animal study isn't much, and a pharmacological analysis of this plant concluded: "No substantive data are available to support its aphrodisiac effects." Kilham agrees: "As far as I can tell, sexual claims for damiana are baseless."

Dose and Safety: The typical dose is 3 to 4 g of powdered leaf in tablets or capsules, taken twice a day. No significant adverse effects have been reported. "At this point," Blumenthal says, "about all we can say about damiana is that it's safe."

Ginkgo

Ginkgo has no historical reputation as an aphrodisiac, but since the 1980s, many studies have shown that it improves blood flow through the brain, slowing the progression of Alzheimer's disease. Ginkgo also boosts blood flow into the genitals.

At the University of California, San Francisco (UCSF), researchers gave ginkgo (240 mg/day) to 63 men and women suffering sexual side effects from antidepressants: libido loss, erectile dysfunction, loss of vaginal lubrication, and problems with orgasm. After two years, the herb helped 76 percent of the men, and 91 percent of the women. There was no placebo group, however, placebos usually benefit around one-third of those who use them. The response rate in this study was twice that, suggesting real benefit. On the other hand, in two other studies, ginkgo provided no benefit for antidepressant-induced sex problems. But those studies were comparatively brief—just a month or two. Apparently, it takes longer

for ginkgo's sexual benefits to appear. "There's no question that ginkgo opens blood vessels and improves blood flow," Blumenthal says, "so it's certainly plausible that it would improve blood flow into the genitals."

Dose and Safety: Participants in the UCSF study took 60 mg of ginkgo extract four times a day or 120 mg twice a day. Possible side effects include: stomach upset, headache, jitters, rashes, dizziness, and heart palpitations.

Ginseng

For centuries, Asians have considered ginseng a tonic, meaning that it subtly strengthens the entire body. It's only a short step from this claim to sex enhancement. Recent research suggests that ginseng increases the body's production of nitric oxide, a compound essential to blood flow into the genitals.

Korean researchers gave 45 men with erection problems either a placebo or ginseng (900 mg three times a day). After eight weeks, the ginseng group experienced significant erection improvement. Another Korean study came up with similar results. "I'm persuaded that ginseng helps with erection problems," Blumenthal says.

Colorado physician Linda B. White, M.D., coauthor (with Steven Foster) of *The Herbal Drugstore*, adds that ginseng "enhances overall physical vitality. As vitality increases, people often feel more interested in sex." "Ginseng provides an unquestionable boost for libido and men's erections," Kilham says. "The problem is, people often don't take enough for long enough. You have to use what that Korean study used, around 900 mg three times a day for a few months."

Dose and Safety: Try the dose used in the Korean study—900 mg three times a day. There are few reports of significant problems, however, possible side effects include: caffeine-like stimulation, jitters, and lower blood sugar (which is good for people with diabetes). Ginseng also has anticoagulant action. You may notice increased bruising. If bleeding becomes a problem, stop using it.

Maca

When the Spanish conquered Peru, the fertility of their horses and livestock declined high in the Andes. The Incas showed them the cure, this Andean ground cover. The Spanish were impressed and maca's local reputation as a fertility-enhancer became generalized to include libido enhancement.

Turns out the Incas were right about maca's effect on fertility. In a recent animal study, Peruvian researchers showed that maca does, indeed, prevent altitude-induced decreases in sperm count.

Maca also appears to be a sex stimulant. Chinese researchers treated male rats with either a placebo or the herb for 22 days, then placed each one with sexually receptive females. Subsequently, the females' vaginas were examined for sperm. Compared with females mated with control rats, those mated with maca-treated animals were more than twice as likely to contain sperm, demonstrating greater sexual activity in the maca-treated animals. "You give maca to animals," Kilman explains, "and they copulate like there's no tomorrow."

Maca might also be a sex-booster in humans. In the one trial to date, Peruvian researchers gave men a daily placebo or maca (1500 or 3000 mg). After eight weeks, the men who took the herb reported greater sexual desire. "Maca has a long history of historical use as a food," Blumenthal explains, "so I'm persuaded that it's safe. As for its sexual effects, the jury is still out." Only one human trial has been conducted and one study can never be considered definitive. But Kilham believes in maca: "Personally, I think it's one of the two or three best sex-enhancing plants on the planet. But you have to use a lot of it to get an effect, on the order of 500 mg/day. Peruvian doctors routinely give it to men who complain of erection problems."

Dose and Safety: The best dose remains unclear. In the clinical trial, the men took 1500 or 3000 mg. Other sources suggest up to 6000 mg a day. No one really knows. No significant side effects have been reported, but this herb has not been well researched.

Muira puama.

Known as "potency wood," this Amazon shrub is a traditional aphrodisiac. French researchers surveyed the sexuality of 202 healthy women complaining of low libido, then gave them a combination of muira puama and ginkgo. Two-thirds reported improved sexual function: greater libido, more frequent intercourse, increased likelihood of orgasm, more intense orgasms, and greater sexual satisfaction. "The research is scant," Blumenthal says, "but often, when a plant gets a name like 'potency wood,' there's something to the claim."

Dose and Safety: The typical dose is 1 to 2 ml of muira puama extract in water two to three times a day. No serious side effects have been reported, but this herb has not been well researched.

Saw palmetto

This small palm tree native to the Southeast U.S. was recommended by early American folk healers as a diuretic, breast enlarger, and a treatment for benign prostate enlargement, a common problem among men over 50. Recent research shows that this herb won't boost anyone's bra size, but it is a mild diuretic, and several double-blind studies show that saw palmetto extract does, in fact, help treat prostate enlargement. In one study, 305 men with typical enlarged-prostate symptoms—urinary difficulty and several nightly wake-ups to urinate—were given saw palmetto extract (320 mg/day). After 90 days, 88 percent of them reported significant improvement in urine flow and quality of life. However, this herb's effect, if any, on libido remain to be determined.

Dose and Safety: Try the dose that helps treat prostate enlargement, 320 mg/day. There are no reports of significant side effects.

Tribulus Terrestris

In India, this herb is an age-old treatment for sex problems. It contains protodioscine, a compound the body converts into the male sex hormone dehydroepiandrosterone. Tribulus also increases production of nitric oxide, a compound that increases blood flow into the genitals. To date, no human trials have investigated its sexual effects. But in two animal studies, the herb increased erection firmness and sexual frequency of male rats. The researchers concluded: "Tribulus appears to possess aphrodisiac activity," at least in rats. "Animal studies don't always translate into human effects," Blumenthal explains. "We need human trials. But tribulus increases nitric oxide, so I wouldn't be surprised if it improves sexual function."

Dose and Safety: The typical dose ranges from 250 to 750 mg a day. No serious side effects have been reported, but this herb has not been well researched.

Yohimbe

For centuries, the bark of the West African yohimbe tree was reputed to restore faltering erections. Scientists laughed—until the 1980s, when several studies showed that a chemical in the bark, yohimbine, increases blood flow into the penis. More recent studies have confirmed yohimbine's benefits. Years before Viagra, the Food and Drug Administration (FDA) approved yohimbine as a prescription treatment for erection problems under the brand names Yocon and Aphrodyne.

Yohimbine may also boost women's sexual arousal. University of Texas researchers gave 25 women complaining of arousal difficulties either a placebo or a combination of yohimbine and L-arginine (see ArginMax). The women then

viewed erotic videos. Compared with those taking the placebo, the women who took the herb combination product reported greater sexual arousal.

Dose and Safety: Sexual benefits have been produced using 6 mg to 18 mg. Possible side effects include: increased heart rate and blood pressure, nervousness, irritability, headache, dizziness, tremor, and flushing.

NOTE: Yohimbine drugs are available by prescription only, however, many yohimbine preparations are available over the counter (OTC) at health food stores and supplement shops. Unfortunately, according to a 1995 analysis by FDA chemists, many OTC products contain only trace amounts of yohimbine. The FDA analyzed 26 over-the-counter yohimbine products. The yohimbine content of yohimbe bark is 7,089 parts per million (ppm). Concentrations found in the tested products ranged from less than 0.1 ppm to 489 ppm, probably not enough to have much sexual effect. If you're interested in using yohimbine for a sexual boost, ask your doctor for a prescription.

Foods with Possible Sex-Enhancing Action

Oysters

Scientists dismissed at oysters' reputation as a sex-booster until nutritionists discovered that they are "exceptionally rich" in the essential trace mineral, zinc. Zinc is intimately related to male sexual health. Men with zinc-deficient diets are at high risk for infertility, prostate problems, and loss of libido. University of Rochester researchers have restored sperm counts in infertile men using zinc supplements. The mineral's effect, if any, on sexual desire has not been researched. But processed foods are often low in zinc. In addition to oysters, whole grains and fresh fruits and vegetables contain this mineral. It can't hurt to eat more of them.

Wild Yam

This tuber's sexual reputation springs from its traditional use in Latin America as a treatment for gynecological ailments. It turns out that wild yam is a potent source of diosgenin, a chemical resembling female sex hormones, which was used in the manufacture of the first birth control pills. Many herbalists tout wild yam salves for vaginal dryness, which makes intercourse uncomfortable for many women of all ages, particularly those who are postmenopausal.

Does wild yam have any effect on sexual desire? That remains to be investigated. But if it helps relieve vaginal dryness, it might make intercourse more enjoyable for women, which might spur some desire.

Wild Oats

Many ranchers swear that horses fed wild oats become friskier and more libidinous. When humans behave that way, we say they're "sowing their wild oats." The research is scant, but many herbalists recommend wild oats, often in combination with ginseng and yohimbe, to boost libido.

In addition, oat bran is well known for its ability to reduce artery-clogging cholesterol. If oat products help improve blood flow into the heart, they just might do the same for blood flow into the genitals, which might enhance erection.

Commercial Combination Products

Experiment with individual aphrodisiac herbs if you like, you might prefer commercial products that combine some or many of these herbs. Dozens have come-hither names and line health food store and supplement shop shelves. But the mere presence of potentially aphrodisiac herbs is no guarantee of benefit. The dose may be too low. To date only three combination products have any studies to back them up:

ArginMax

ArginMax for Women is a multivitamin that also contains ginseng, ginkgo, damiana, and L-arginine, an amino acid involved in the synthesis of nitric oxide, which plays a key role in sexual responsiveness. Several studies (but not all) have shown that L-arginine increases blood flow into the genitals. Stanford researchers gave a placebo or ArginMax for Women daily to 77 women with various sex problems. After two months, the ArginMax group reported significant increases in libido, frequency of lovemaking, and sexual satisfaction. ArginMax caused no significant side effects.

ArginMax for Men is similar, except that instead of damiana, it contains zinc. University of Hawaii researchers gave either a placebo or ArginMax to 21 men with erection problems. A month later, 89 percent reported improvement.

Dr. Polan, who conducted the study of ArginMax for Women, says she was "surprised" by her findings. "I didn't expect it to work, let alone as well as it did." She is quick to point out that ArginMax is not an aphrodisiac in the popular sense of the term—something that quickly throws libido into overdrive. It takes several weeks to experience benefit, and not everyone does. "ArginMax studies have had small numbers of subjects," she explains, "so I'm not ready to get up on a soapbox and declare these products sure cures for male or female sexual dysfunction. On the other hand, ArginMax is safe. It costs only about a dollar a day. Mainstream

medicine has no good treatments for female sexual dysfunction. And many men can't take Viagra because of medical problems. My attitude is: If you have desire or arousal problems, why not try ArginMax? It just might help."

Dose and Safety: Follow package directions. Ginseng has anticoagulant action. You may notice increased bruising. If bleeding becomes a problem, stop using ArginMax and consult your physician. ArginMax is not estrogenic, so it can be used by women who cannot take estrogen.

Zestra

Developed by a research pharmacist, Zestra is a genital lotion for women that increases blood flow into the clitoris and vulva. Its ingredients include: borage seed oil, evening primrose oil, angelica root, and coleus extract. Borage and evening primrose oil are rich in gamma-linolenic acid, which increases the skin's synthesis of prostaglandin E1, which improves blood flow and nerve conduction. Angelica root and coleus also improve blood flow.

In the one small study published to date, 20 women used either a placebo or Zestra, and kept diaries documenting their reactions. Zestra significantly increased their arousal, genital sensation, sexual pleasure, and orgasm. "I've recommended Zestra to many patients," says Chicago area gynecologist Elizabeth Baron-Kuhn, M.D. "In my experience, it works. It helps women have more enjoyable sex."

Dose and Safety. The recommended dose is a fingerful massaged into the vulva five minutes before intercourse. The effect lasts about 45 minutes. Some women experience a mild burning sensation. Zestra is not easy to find in stores. To obtain it, call 1-877-4-ZESTRA or visit www.zestra-women.com

Xzite

This is the only sex supplement whose active ingredients are Chinese herbs. Creator Barry Heck, M.D., a research physician in Los Angeles, says he relied on translated Chinese medical documents to screen 300 Chinese herbs, and selected the three most frequently recommended for women's sexual problems: chrysanthemum, lovage, and spiny panax (a cousin of ginseng). Heck says these herbs increase synthesis of nitric oxide, which increases blood flow into women's genitals. Efreem Korngold, O.M.D., a practitioner of Chinese medicine in San Francisco, confirms that the three herbs in Xzite "could improve libido and genital sensitivity." In a study at UCLA, 48 women took Xzite or a placebo daily for two weeks. Those taking Xzite reported increased vaginal lubrication, sexual desire, clitoral sensitivity, and frequency of orgasm.

Dose and Safety: 1 capsule daily (500 mg). Headache and abdominal distress are possible. Xzite is available from drugstore.com and elsewhere on the Internet. Korngold says Xzite's ingredients are safe at the recommended dose.

Two Surprise Aphrodisiacs: Exercise and Weight Loss

Want more sexual heat? Then work up a sweat. One indisputable aphrodisiac is exercise. James White, Ph.D., a professor emeritus of physical education at the University of California at San Diego, recruited 95 healthy but sedentary men, average age 47, into one of two exercise programs. One engaged in low-intensity, 60-minute walks four times a week. The other participated in an hour of aerobics. After nine months, both groups reported increased sexual desire and pleasure, but the aerobics group reported the greatest increase in fun in the sack. Exercise leads to fitness, and fitness, says Fair Oaks, California, sex therapist Louanne Weston, Ph.D., boosts self-esteem: "You feel healthier and more attractive, and you project that, so you look more alluring to prospective lovers."

The same goes for weight loss. It's amazing that Weight Watchers and Jenny Craig have not picked up on the this, but shedding extra pounds often boosts interest in sex. Ronette Kolotkin, Ph.D., a psychologist at the Duke University Diet and Fitness Center, noticed that people who lost weight at her Center often remarked that they felt more sexual. Curious, she surveyed 70 male program participants, aged 18 to 65, before and after weight loss of eight to 30 pounds. "After losing weight," she says, "they all reported more sexual desire." Excess weight makes most people feel less desirable, and more anxious about being seen naked. In other words, fat causes stress, and stress interferes with desire. Carrying extra weight also requires a good deal of energy. Dropping pounds frees that energy for use in more pleasurable erotic ways.

Appeal to All Five Senses

Mention "aphrodisiacs," and most people think only of herbs or drugs. But that view is as limited as the missionary position. The most neglected ingredient of great sex is the context. When lovemaking becomes routine, the stimulating physical setting is usually the first thing to go. Instead of a deep-pile carpet by a roaring fire in a ski chalet with a magnificent view, it's a dark bedroom on musty sheets when you're both exhausted. For ordinary sex to become great sex, the setting is crucial. Appeal to your senses. Arouse all five of them.

Sight: Candles, Lingerie, and Videos.

One reason so many people are in the dark about great sex is that they make love with the lights off. Try candles. They illuminate lovemaking with a shimmering, romantic glow.

Speaking of getting and eyeful, when you receive a gift, opening the wrapping is half the fun. The same goes for sex. Dressing up in sensual outfits—then slowly undressing each other—turns ordinary lovemaking into a gift-wrapped surprise. “Unfortunately,” says Amy Levinson, of the My Pleasure collection of sensual enhancements (mypleasure.com), “most men think that sexy clothing means sheer teddies and skimpy underwear. Not many women have bodies that look good in those items, and even if they do, skimpy lingerie just doesn’t appeal to some women. Instead of feeling sexy, they feel self-conscious and turned off.”

Levinson says that visual sexiness has less to do with what’s revealed all at once than with *what’s hidden and then slowly revealed*. “In my experience, most women feel sexier in full-coverage silk or satin gowns that allow their charms to be revealed slowly, inch by arousing inch.”

The glow from a TV screen can also spice up sex, especially if the program you watch features couples enthusiastically coupling. Many sex therapists recommend X-rated videos as visual aphrodisiacs. Most men need little convincing. But many women consider traditional male-oriented pornography demeaning.

Some years ago, one former porn starlet, Candida Royalle, launched Femme Productions to produce X-video designed to appeal to women. Femme videos feature plenty of hardcore action, but the characters also have loving relationships and some emotional complexity.

According to two studies, Royalle’s videos do, indeed, turn on women. Donald Mosher, Ph.D., a professor of psychology at the University of Connecticut in Storrs, and Paula MacIan showed 395 college students (200 men, 195 women) one of six X-rated programs—three traditional porn videos, and three by Femme. Most men said they found both sets of videos equally arousing. However, the women clearly preferred the Femme programs. Compared with women who watched traditional porn, those who viewed the Femme videos reported considerably more arousal and subsequent intercourse.

In a similar study at the University of Amsterdam in the Netherlands, Ellen Laan and colleagues surveyed 47 women undergraduates’ reactions to traditional pornography and Femme videos. But this study delved deeper, as it were, into the

participants' sexuality. In addition to filling out a survey, the women were also fitted with tampon-like devices that measured vaginal engorgement, an indication of sexual arousal. In the survey arm of the study, the women greatly preferred the Femme programs, calling them much more arousing. Unexpectedly, however, both types of x-videos elicited similar vaginal reactions, suggesting that women's feelings of sexual arousal are more subjective than objective.

Femme videos can be ordered from candidaroyalle.com.

Sound: Music

Nothing complements the sound of heavy breathing better than your favorite tunes. And if your bedroom walls are thin, cranking up the volume can mask love's little noises, and help you feel more comfortable whooping it up.

Touch: Bath or Shower and Massage

"Every square inch of the body is a sensual playground," sex therapist Weston says. "It's sad that so many lovers, especially men, explore only a few corners."

To discover the sensuality of the whole body, try a hot bath or shower together using a fragrant herbal soap. Bathing is a wonderfully arousing prelude to lovemaking. The warmth relaxes muscles made tense by the daily grind. And soaping and drying each other slowly can be marvelous turn-ons. For extra enjoyment, dry off with warm towels. Before you get into the water, drape your towels over a radiator or pop them into the dryer, so they'll be warm when you use them.

Sharing massages is another way to get literally in touch with a lover. Massage is an intimate conversation without words. Simply pour some massage lotion on your hands, and stroke your honey's hands, arms, legs, feet—and everything else. Many herbal massage lotions are available at bath, body, and aromatherapy shops.

Taste: Fine Food.

If you doubt that food can enhance sex, rent the video of *Nine and A Half Weeks*, (with Mickey Rourke and Kim Basinger) and fast-forward to the refrigerator scene. Fine food—and the conversation that goes along with it—can be a wonderful form of foreplay that makes what happens after dessert taste even more delicious. Just go easy on the alcohol (see sidebar: "Beware the Sex Killers).

Smell: Scent-ual Aromatherapy and Pheromones

What's the aroma of lust? According to Alan Hirsch, M.D., neurologic director of the Smell and Taste Research Foundation in Chicago, it's the familiar spice,

cinnamon. Hirsch fitted male medical students' penises with gauges that detected erection, and then exposed them to dozens of fragrances. The only one that got a rise was the smell of hot cinnamon buns. But other aromas may also add sensuality to sex. Try scented candles on your night table, or a bouquet of flowers, or a fragrant herbal potpourri, or a new perfume.

Or try pheromones. the odorless scent of sexual attraction. Odd as this may sound, the key to a new love affair—or heating up the one you're involved in—might be right under your nose, or actually just inside it. That's the location of the little-known, sixth human sense organ, the vomeronasal organ (VNO). The VNO detects virtually odorless chemicals called pheromones. Scientists have known for decades that animals have organs very similar to the VNO. They have also known that animals release pheromones during mating season to signal their sexual availability. But until twenty years ago, anatomists believed that humans did not possess a VNO and did not produce pheromones. Now we know differently.

Back in the 1980s, a research team led by David Berliner, M.D., at the time, an anatomist at the University of Utah, discovered the tiny VNO in pits of the nasal passageways of every person they examined. If people had VNOs, then they had to produce pheromones.

Many animals release pheromones from glands in areas that corresponds to the human armpit. Berliner's team looked there and isolated human pheromones from underarm secretions. In a series of studies, they discovered that heterosexuals respond only to human pheromones released by the opposite sex, while homosexuals respond to those of the same sex. How do they respond? Not sexually. Pheromones are not aphrodisiacs. But under the influence of pheromones people become friendlier, more vivacious, and more attractive. And with these qualities comes a greater likelihood that a social connection might lead to something more.

Pheromones are not a hot area of research. But a few intriguing studies have been performed:

- British researchers showed 32 young women photographs of men's faces and asked them to rate their attractiveness. While viewing the photos, some of the women were also exposed without their knowledge to human male pheromones. The women exposed to the pheromones rated the men significantly more attractive.

- San Francisco State University researchers took these findings into the bedroom. They asked 36 heterosexual women, average age 27, to record their social connections with men for several weeks, everything from dating to intercourse. Then the scientists gave the women a vial of either a placebo or a laboratory synthesized female pheromone, and asked them to add it to cologne and use it daily. After six weeks, the pheromone group recorded significantly more social connections with men: conversations, more dates, more kissing, more sleeping in the same bed, and more intercourse.

Pheromones work the same way for men. Researchers at the Athena Institute for Women's Wellness in Chester Springs, Pennsylvania added a placebo or male pheromones to cologne worn by 38 heterosexual men, aged 26 to 42. Like the women, the men who used the pheromones proved more attractive and reported social interactions with women, more dates, more kissing, more sleeping in the same bed, and more intercourse.

Pheromones work for people of all ages. Harvard researchers asked 44 postmenopausal women, average age 57, to use either a placebo perfume or one laced with human female pheromones. Again, the pheromone group reported significantly more interest from men, more affection from them and more lovemaking.

People produce pheromones in extremely tiny quantities, so the chemical cannot be harvested the way, say, sperm can be. All pheromone products use laboratory-synthesized pheromones, either male or female. Some commercial pheromone products claims to be mixtures of male and female chemicals that work on both sexes. However, all the research to date has used either female pheromones (which attract men) or male pheromones (which attract women).

Pheromones are not fragrant. In fact, they are virtually odorless. So don't be surprised when you rub them into your skin and smell nothing. Despite the lack of scent, their tiny molecules get into the VNO and make the gender you're interested in feel more sociable toward you.

Pheromones also go a long way. You don't have to use much to send the scent signal you want to broadcast.

Many companies market what they claim to be pheromone products. Unfortunately, consumers have no way to knowing if the products they buy contain pheromones. The San Francisco State researchers used a product called Realm, which costs about \$70 from world-breakthroughs.com/pheromones.htm.

Aroused By Intimacy

Okay, so you've got a roaring fire in the hearth, soft music, scented candles, a pot of ginseng tea, and a plate oysters ringed by Chocolate Kisses. Now what? Your author wholeheartedly recommends the boardgame, "An Enchanted Evening." It's a delightfully sensual aphrodisiac-in-a-box.

"An Enchanted Evening" began in 1979 as a kiss-and-make-up offering from then-37-year-old Barbara Jonas of Scottsdale, Arizona, to her husband, Michael. They had a wonderfully erotic interlude playing the original version, and friends encouraged them to refine the game and market it commercially. Today, "An Enchanted Evening" is one of the nation's best-selling adult board games. (It's available at game stores nationwide, lingerie shops, and department store lingerie departments, or timefortwo.com.)

"An Enchanted Evening" begins with each player writing a secret wish for later that evening. The first one around the board, wins his or her wish. Then you roll dice and draw game cards. Some are "talk" cards that ask open-ended questions designed to celebrate your relationship, for example: "You have lunch with a long-lost friend who asks, 'What attracted you to your spouse?' What did?" Others are "touch" cards with deliciously ambiguous directions, for example: "Kiss your spouse in a place that's soft and warm."

"An Enchanted Evening" made a believer out of Marty Klein, Ph.D., a Palo Alto, California, sex therapist, "When I first heard about it, I felt totally cynical. My wife and I had tried several so-called erotic games over the years, and I'd spent most of the time coming up with ways to improve them. But I thoroughly enjoyed 'An Enchanted Evening.' It encourages the kind of playful touch and supportive communication most couples stop sharing after a while. And it shows a profound understanding of how intimacy and sexual desire go hand in hand."

They do, indeed. Take it from your author, "An Enchanted Evening" is one game no one ever finishes. The intimacy it enhances becomes an irresistible aphrodisiac within a half-dozen moves. Which just goes to show that the world's greatest sex-stimulant is that crazy, wonderful emotion called love. Without love's special magic, sexual enhancements fall flat. But for couples who share that intimate, chemical bond, aphrodisiacs, defined broadly, can transform lovemaking from "eh" to ecstatic.

Beware The Sex Killers

If you want to rev up your sex life, first make sure you don't shut it down. A surprisingly large number of everyday items are bad news in bed.

Alcohol

In *Macbeth*, Shakespeare wrote that the substance used worldwide to coax reluctant lovers into bed “provokes the desire, but takes away the performance.” Truer words were never penned. If people of average weight drink more than two beers, cocktails, or glasses of wine in an hour, alcohol becomes a powerful central nervous system depressant. It interferes with erection in men, and impairs sexual responsiveness in women. Drink too much, and all you'll do in the prone position is pass out.

Smoking

One herb is hell on sex: tobacco. Smoking narrows the blood vessels, impairing blood flow into the penis in men, and causing an increased risk of erection impairment. In women, the same mechanism limits blood flow into the vaginal wall, decreasing vaginal lubrication.

Tranquilizers, Sedatives, and Narcotics

There's a good reason why these drugs are called “downers.” That's what they do to sexual desire. Valium, Xanax, codeine, and synthetic narcotics (pain medications) depress libido.

Antidepressants

Antidepressants usually work—but at a price. All except one (see sidebar: “Wellbutrin”) carry a considerable risk of sexual side effects: loss of desire and difficulty reaching orgasm in both sexes, erection impairment in men, and lubrication problems in women. Currently, the most popular antidepressants are the selective serotonin reuptake inhibitors (SSRIs): Prozac, Zoloft, Paxil, and a few others. According to Jamie Grimes, M.D., chief of outpatient psychiatry at the Walter Reed Army Medical Center in Washington, D.C., SSRIs cause sex problems in more than half of those who use them.

If you take an antidepressant, what can you do to preserve sexual function? Ask your physician about switching to Wellbutrin. It's as effective as Prozac, but significantly less likely to cause sexual side effects including loss of libido.

Other Drugs

An enormous number of prescription and over-the-counter medications can cause sexual impairment—even the antihistamines people take for allergies and cold symptoms. If a drug label says, “May cause drowsiness,” it can impair sexual desire or performance.” Unfortunately, few physicians mention the possible sexual side effects of the drugs they prescribe, for example Prozac or high blood pressure medication. Ask your doctor and pharmacist about the possibility of sexual side effects whenever you get a prescription.

High-Fat, High-Cholesterol, Meat-Centered Diet

Researchers at the University of South Carolina School of Medicine in Columbia tested the cholesterol levels of 3,250 men, aged 25 to 83, then asked them to complete questionnaires that explored sexual issues. Compared with the men whose total cholesterol was below 180 milligrams per deciliter of blood (mg/dl), those with levels above 240 were almost twice as likely to report erection problems. Cholesterol levels relate directly to consumption of dietary fat and cholesterol, primarily in meats and whole-milk dairy products. Ironically, many Americans consider meat a “virility food.” In fact, it’s the opposite. Men who want sex without erection problems should cut down on or eliminate red meat and eat virility-preserving salads instead.

The Truth About Testosterone in Men and Androgens in Women

Everyone knows that testosterone is the primary male sex hormone. It’s only a short leap to the notion that extra testosterone might give men a sexual boost. It does—but *only if you’re deficient*. The vast majority of men are not.

“Testosterone,” says sexual medicine expert Theresa Crenshaw, M.D., author of *The Alchemy of Love and Lust*, “has been one of the most abused, misused, and overprescribed medications for male sexual dysfunction in medical history.” She compares the hormone to oil in a car: If you have enough, adding more doesn’t make your car run better. In fact, it may cause problems. Extra unnecessary testosterone throws the body’s hormonal circuitry out of whack, and may increase irritability, aggression, blood pressure, hair loss, and risk of prostate cancer.

But like a car low on oil, supplemental testosterone for men who are truly deficient can restore sexual functioning. The normal range for total testosterone (both “free” and “bound”) is 250 to 1,200 ng/dl (nanograms per deciliter of blood), with free testosterone normally ranging from 1.0 to 5.0 ng/dl. Dr. Crenshaw recommends testosterone replacement only if total testosterone falls below 250, with the free hormone at 1.5 or less. Supplemental testosterone may be administered in several

ways. Injection produces the greatest increase in blood level with the fewest side effects.ⁱ

Testosterone is not for men only. The ovaries also produce male sex hormones (androgens), though women have much lower blood levels than men. Androgens are responsible for female libido.

But at menopause, along with the drop in estrogen, women's androgen production also declines. Several studies have shown that women with low sexual desire who have documented androgen deficiencies feel more libidinous. Years ago, high-dose androgen supplements caused acne and masculinizing side effects such as facial hair growth. Today's lower doses are less likely to cause these problems. Side effects are even less likely with topical androgen creams.

Women with low or no desire who are interested in androgens should first ask their physicians to test their levels. If a few tests consistently show low androgen, then supplementation might help restore lost libido.

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