

# **Aphrodisiacs through the Ages: The Discrepancy Between Lovers' Aspirations and Their Desires**

## **Three Millenia of Search and Experimentation**

*A Historical Review Especially Researched for the  
Enlightenment and Entertainment of the Participants of the  
Amazon 2000 Boat Cruise, Organized by Dr. Heinz Gruber*

**by**

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This is the monstrosity in love, lady - that the will is infinite  
and the execution confined; that the desire is boundless  
and the act a slave to limit.

**William Shakespeare** (1564 -1616)  
*Troilus and Cressida*, act 3, scene 2.

## Introduction

Thou treacherous, base deserter of my flame,  
False to my passion, fatal to my fame,  
Through what mistaken magic dost thou prove  
So true to lewdness, so untrue to love?

**John Wilmot**, Second Earl of Rochester (1647 - 1680)

Love and its many forms of physical expressions are core human drivers. This is evidenced by the history, arts, and folklore of every human group, which invariably possess a great deal of myth and facts regarding the feeling of love and about those conditions believed to enhance or inhibit the attainment of the physical expressions of love.

Men, and women, have long aspired the possibility of increasing their sexual capability or arousing, by a variety of means, the sexual desires of sexual partners. Oral tradition and written texts relate a truly bewildering variety of concoctions made of an even more perplexing diversity of sources.

Throughout the ages almost every culture has used various natural substances, usually herbal in origin, to put some zip into their love lives or in an attempt to cure the impotent. Methods for overcoming loss of libido and impotence have been the object of considerable experimentation. An authority can be found for almost every folk belief about the sexually stimulating qualities of certain foods and natural extracts from plants and animals and hundreds of quack medicines and devices have been devoted to stimulating the sexual drive.

Little is known concerning the physiological mechanisms involved in the supposedly aphrodisiac action of certain foods and drugs, but both, since the ancient past, have been associated in people's minds with the increased capacity for love. Though the physiological effects may be doubtful, the ultimate effect in terms of one's feeling of love is probably a potent incentive for the repetition of the experience and for those conditions believed to have produced the experience.

Aphrodisiacs! The word itself can send a tingle of anticipation down your spine. The types of preparation employed as aphrodisiacs ranged from the useless, except perhaps for their psychological effects, to the extremely dangerous, some being toxic enough to cause damage and even death. Before we turn to examine the use of aphrodisiacs a few words about the origin of the word – and for that we travel three millenia back in time...

The word "aphrodisiac" stems from Aphrodite, goddess of love and beauty, also called Cytherea. The great epic poet Homer who lived circa 850 B.C., author of two great

works of Western literature, the *Iliad* and the *Odyssey*, so did write of Aphrodite in his *Hymns*:

"Muse, tell me the deeds of golden Aphrodite the Cyprian, who stirs up sweet passion in the gods and subdues the tribes of mortal men and birds that fly in air and all the many creatures that the dry land rears, and all the sea: all these love the deeds of rich-crowned Cytherea...Even the heart of Zeus, who delights in thunder, is led astray by her; though he is greatest of all and has the lot of highest majesty, she beguiles even his wise heart when so ever she pleases, and mates him with mortal women, unknown to Hera, his sister and his wife".

Aphrodisiacs are any of various forms of stimulation thought to arouse sexual excitement. Aphrodisiacs may be classified in two classes: *psychophysiological* (visual, tactile, olfactory, aural) and *internal* (stemming from food, alcoholic drinks, drugs, the mythical "love potions", and pharmaceuticals).

This review will describe six categories of aphrodisiacs:

- **Scents and Perfumes**
- **Foods**
- **Animal Parts**
- **Plants and Botanical Preparations**
- **Drugs**
- **Pharmaceuticals**

Of the *psychophysiological* aphrodisiacs, **scents and perfumes** occupy a prominent role and we will initiate our review by them. Although visual, tactile, and aural stimuli have important role in sexual stimulation they were considered to be outside the scope of this review and will not be discussed. Also seducing small talk might perhaps be the most efficient aphrodisiac excluded from this overview.

**Internal** aphrodisiacs are the largest and most important group. Despite long-standing literary and popular interest in internal aphrodisiacs, few scientific studies of them have been made. Research in the past was often limited to occasional tests of drugs or hormones for the cure of male impotence and most writings on the subject up to very recent years are little more than unscientific compilations of traditional or folkloric material. Most unfortunately, with the exception of certain drugs and other psychotropic substances such as alcohol or marijuana, which may lead to sexual excitation through disinhibition, modern medical science recognizes a very limited number of aphrodisiacs.

**Foods**, natural products such as **animal parts**, **plants**, and **botanical preparations** form the oldest and very large categories of this class of aphrodisiacs. **Drugs**, of natural or synthetic origin, for millenia have also been used by humankind. However, it was the

systematic scientific research in the fields of physiology and pharmacology that led to the development of potent and effective **pharmaceuticals**, of which Viagra is the most recent and celebrated.

There is great expectation that new drugs, more specific and devoid of secondary effects, will be developed in the near future. Will this accomplishment realize the great dream of humankind – a real aphrodisiac? The answer may lie in the comment of the great English author and lexicographer Samuel Johnson (1709 – 1784):

“The natural flights of the human mind are not from pleasure to pleasure, but from hope to hope”.

## Scents and Perfumes

I counted two and seventy stenches,  
All well defined, and several stinks!

**Samuel Taylor Coleridge** (1772 - 1834)  
English poet and critic in *Cologne*,  
referring to the city of Cologne.

Small, volatile organic molecules are of extreme importance among many animals for the transmission of information on sexual availability to members of the opposite sex. Such molecules are called pheromones, after a Greek word meaning "to transfer excitement".

As examples of pheromones among animals, female butterflies of the genus *Bombyx* release a chemical called bombycol - as little as 100 molecules is sufficient to evoke a sexual response from a *Bombyx* male. For comparison consider that one million molecules of botulinus toxin, the most toxic substance known, is required to kill a mouse.

Some flowers fool insects by using pheromones. The orchid *Ophrys insectifera* releases a mixture of chemicals which attracts male hymenoptera insects of the genus *Argogorytes*. Because of the odour the males believe the orchid flowers are females of their own species, and they try to copulate and pollen grains of the orchid attach to them. The next time they try to copulate with an orchid flower, the pollen grains are transferred and they succeed in pollinating the flower even if not in impregnating a female of their own species.

### ***Pheromones among humans?***

The human body secretes several compounds with strong scent, as well as compounds which can be transformed by bacteria into chemicals with a strong and lingering odor. Just think about how bloodhounds can follow human scents left just by a person passing by an area.

Humans have glands at the base of the hair follicles, especially in the armpits and in the genital region, which produce chemicals, the odor of which might affect members of the opposite sex. The chemicals are spread over the hair surface and then very efficiently dissipated. Volatile aliphatic acids occur in the normal vaginal secretions of many primates, including humans. Their strong odor (e.g., butyric acid with its smell

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of rancid butter) have been shown to stimulate male monkeys to increased sexual activity.

Many steroidal hormones and related chemicals have a noticeable odor, including chemicals called androstenones. In one experiment, some seats in a theater were sprayed with one androstenone. The study showed that women among the audience showed a statistically significant preference for those sprayed seats. In another trial, men and women subjects had to choose the most attractive women from a collection of photographs. It turned out that when a subject could smell an androstenone at the same time as he or she regarded a certain photo, it increased the probability that the lady on the photo would be selected.

One interesting phenomenon in this context is the "women's dormitory syndrome", a condition in which women living closely together after a while begin to synchronize their menstrual cycles. This has been attributed to the effect of a pheromone present in the underarm sweat of women.

Sweat, tobacco, and horse smell are traditionally considered masculine odors - an old American custom, was for the man to keep a handkerchief in his armpit while dancing. After the dance he would present it to his partner. Supposedly the anticipated effect was that of an aphrodisiac. Probably many times the lady was literally stunned by the odor...Maybe the arrival of easily available soap has changed the perception of human pheromones?

As one can easily imagine, there is great commercial interest in studying human pheromones and there are already two compounds isolated from female and male sweat respectively being marketed as perfumes with real activity as sexual pheromones. The price tags are, however, almost prohibitive and their effects unproven.

## ***Perfumes***

Man has probably always used various odorous preparations to increase his or her attractiveness to the opposite sex. Perfume bottles made to hold scent have been discovered in ancient sites. The earliest example is Egyptian and dates to around 1000 B.C.

The Egyptians used scents lavishly, especially in religious rites; as a result, when they invented glass, it was largely used for perfume vessels. The fashion for perfume spread to Greece, where containers, most often terra-cotta or glass, were made in a variety of shapes and forms such as birds, animals, and human heads. The Romans, who thought perfumes were aphrodisiacs, used not only molded glass bottles but also blown glass, after its invention at the end of the 1st century B.C. by Syrian glassmakers. The Romans used perfumes lavishly, including perfumes based on civet and ambergris. The former is derived from the secretion of the civet-cat, and the latter from the sperm whale. Ambergris is more a carrier of scents than a perfume of its own.

Is it possible that this actually is an attempt to mimic "human pheromones" or is it just to create an atmosphere of positive associations? One of the most popular perfume

smells, that of musk, has been shown to resemble closely the smell of testosterone, the male sex hormone.

### ***Musk***

Musk is obtained from the musk pod, a preputial gland in a pouch, or sac, under the skin of the abdomen of the male musk deer. Fresh musk is semiliquid but dries to a grainy powder. It is used in the highest grades of perfume because of its ability to remain in evidence for long periods of time and ability to act as a fixative. In India and parts of the Far East, aphrodisiac, stimulant, and antispasmodic effects have been attributed to musk.

The odorous principle of musk is muscone or 3-methylcyclopentadecanone. Muscone and other compounds that produce musk odor have been synthesized and used in perfumes.

### ***Other Scents***

Even the smell of food can act as an aphrodisiac. Studying response to various smells by measuring changes in penile blood flow have found that certain foods outperformed perfumes. The food highest on the rating list included cinnamon buns, roast meat, and cheese pizza. Less surprisingly so, chocolate, vanilla, strawberry and peppermint showed a positive response. In some cases the average increase of penile blood flow was forty percent over basal values, although no evidence of actual sexual excitation was demonstrated.

## Food as Aphrodisiac

One cannot think well, love well, sleep well, if one has not dined well.

**Virginia Woolf** (1882–1941)

British novelist in *A Room of One's Own*

Of the various foods to which aphrodisiac powers are traditionally attributed, fish, vegetables, and spices have been the most popular throughout recorded history. None of these foods, however, have any identified chemical agents that could effect a direct physiological reaction, and it must be concluded that the reputation of various supposedly erotic foods is based not upon fact but upon folklore.

In most cases, foods of an uncommon variety are somehow associated with sex. Eggs and caviar (fish eggs), for example; or foods which suggest or resemble sex organs (asparagus, celery, onions, carrots, clams, oysters, and so forth).

Man's universal attribution of libidinous effects to certain foods originated in the ancient belief in the therapeutic efficacy of signatures: if an object resembled the genitalia, it possessed, so it was reasoned, sexual powers – thus, for instance, the legendary aphrodisiac powers of ginseng root and powdered rhinoceros horn.

### **Oysters**

When Aphrodite the Greek goddess of love, sprang forth from the sea on a shell and promptly gave birth to Eros, a working aphrodisiac was born. Already during the time of the Roman Empire oysters enjoyed a randy reputation, which increased over the ages and during the so-called Golden Century in the Netherlands (the 17th century) oysters were the symbol, the very incarnation of an aphrodisiac.

It has been recommended that oysters should be eaten *au naturel*, best served simply with crushed ice and seaweed. Some recommend a topping of sea urchin roe, which is also considered to be aphrodisiac, and caviar to amplify the effects. Casanova is said to have been a firm believer in oysters, eating 50 of them raw every morning in the bath together with the lady he fancied at that moment.

Is this reputation based on physiological facts? Well, oysters are low in fat and high in minerals, and thus a quite healthy food. Phosphorus, iodine and zinc can do a lot of good, especially zinc, which is said to increase both sperm and testosterone production as well as the secretion of a vaginal lubricant.



On the other hand... According to Norman Lewis a group of male pearl-divers on the island of Kamaran (off the Arabian coast) get most of their nourishment from oysters - and have very low sex drives. Go figure it out...

### ***The Onion***

Onions have, almost since prehistoric time, been attributed aphrodisiacal properties. They are mentioned in many classic Hindu texts on the art of making love and they were the most used aphrodisiac in ancient Greece, and they are frequently included as an ingredient in Roman and Arab recipes.

During Pharaonic times, celibate Egyptian priests were prohibited to eat onions because of the potential effects. Much later on, in France, newlyweds were served onion soup on the morning after their wedding night to restore their libido.

The poet Ovid, who lived from 43 B.C.-A.D. 17, and known for his explorations of love, in his *Ars Amatoria*, book 2, suggests: "Let white onions be taken that are sent from the Pelagian city of Alcahous."

Also the epigrammatist Martial in the first century recommended: "If your wife is old and your member is exhausted, eat onions in plenty."

In general, the Romans seldom used onions alone, and usually only after cooking. Thus Apicus, in *De re coquinaria*, includes onions cooked in water and mixed with pine seeds.

In the famous *The Perfumed Garden*, a sixteenth century Arabian erotic manual written by Sheik al-Nefzawi, a testimony to onions is thus registered: "The member of Abou-el-Heiloukh has remained erect for thirty days without a break because he did eat onions."

The same source suggests an even more powerful preparation: pounded onion juice mixed with purified honey. But be careful the sheik warns (or promises?) it should never be used for three consecutive days except by old and cold-tempered men.

### ***Truffles***

Truffles were also well known to the Romans as a powerful aphrodisiac. Pliny speculates about the origin of truffles and assumes they might be the result of a thunderbolt. The Book VII of Apicus *De re coquinaria*, mainly deals with delicacies believed to have aphrodisiacal properties, and includes six ways of preparing truffles. Most highly rated were the Libyan truffles, but also truffles from Cyrene and Thracia were much appreciated.

However, with the fall of the Roman Empire the magic properties of truffles fell into oblivion and were rediscovered only in the late eighteenth century. This time the interest focussed on the French truffles, *Tuber melanosporum*, and the erotic powers attributed to it were remarkable. Brillat-Savarin, in his *Physiologie du goût*, published

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in 1825, one year before his death at the age of 71 years, devotes six pages to the erotic properties of truffles. He provides an example of how a lady narrowly escaped being seduced by a guest she had fed a hen stuffed with truffles

### ***The Asparagus***

The shape of asparagus, *Asparagus officinalis*, which belongs to the lily family (Liliaceae), is supposed to indicate its potential as an aphrodisiac. It was cultivated by the Greeks and according to Arab sources, the asparagus should first be boiled in water, then briefly fried in fat and sprinkled with condiments to provide a powerful aphrodisiac. A certain caution, however, might be advisable. Quensel, in 1809, stated that asparagus turn men on but women off.

### ***Celery***

Celery, *Apium graveolens*, has a long history of use as an aphrodisiac. Several cultivated varieties exist, including Pascal celery, cultivated for the stalks, and celery root, grown for the root. The stalks can be eaten raw, but also be boiled or braised as well, whereas the root is best peeled, julienned and blanched.

Celery is a very popular folk aphrodisiac in Poland and the Czech Republic. Cooked root celery slices are commercially available in jars, at least in Germany, and can be used in the same way. The Swedish cookbook author Hagdahl, in his *Cooking as Science and Art* published in 1879, mentions that celery contributes to a stimulation of the digestion, but is also sexually and that these effects can be reduced by boiling. It is not a food for everybody.

But most celebrated as an aphrodisiac are the celery seeds. Crush them and use the to spice bread or an oil-vinegar salad dressing or, even better, fresh oysters!

### ***Carrots***

There is an old Ukrainian belief that carrot will increase the sexual capacity of a man. There is old Ukrainian saying: "If your husband is old and weak you must have him to drink juice from two big carrots and one celery"

### ***The Coco-de mer***

This is the most indecent fruit in the world. The nut of *Lodoicea maldivica*, commonly known as coco-de-mer, is not only visually stimulating by its close resemblance to a certain part of the female body, but also acts as an aphrodisiac when consumed. It is the largest fruit in the plant world, reaching a weight of 10-20 kgs, quite a weight for the part in question. Even if commonly called a "double coconut", it is not a coconut but grows on a fan-leaf palm tree that does not bear until they are more than 100 years old; furthermore they are confined to two out of the twelve islands of the Seychelles. The annual production is limited to a few thousand nuts.

It is said that even regular coconuts might be useful. The 14th century Arab geographer Ibn-Battuta spent some time mainly living on fish and fresh coconuts. "I myself had four legitimate wives apart from the concubines" he wrote.

### **Pine Nuts**

Pine nuts are said to have such qualities that perhaps they should be X-rated. Pine seeds appear to have a reputation as an aphrodisiac all around the Mediterranean as well as in the East. Galen, a Greek physician of the second century A.D., indicates a mixture of pine seeds, honey and almonds. He recommends to drink a glassful of thick honey and eat twenty almonds and one hundred pine nuts before going to bed, for three consecutive nights, this might produce desirable effects.

A group of illuminated medieval manuscripts best described as health handbooks preaches the virtues of pine cones "to stimulate the libido". As a danger, though, the manuscripts warn that "worms hatch in their bark", which should not be a problem as long as only the pine nuts themselves were used.

There are several varieties of pine nut. The most common pine nuts, at least in Europe, are seeds of the Italian Stone Pinenut, *Pinus pinea*, and the Swiss Stone Pine, *Pinus cembra*. In the U.S., seeds of the Mexican Nut Pine, *Pinus cembroides*, are also marketed. The most effective pinenuts come, however, from Chilgoza or Noosa Pine, *Pinus gerardiana*. This pine grows in the northwestern Himalayan Mountains from Afghanistan to Tibet at elevations between 2000 and 4000 meters above sea level. The Chilgoza pinenuts are a staple food for the inhabitants of Kunawar, a region known for its birthrate.

### **Other Nuts**

Early Indian writings suggested multiple uses of the **betel nut**. The betel nut is the seed of *Areca catechu*, a single-trunked palm tree which can reach a height of 15-30 meter and which is widely diffused among the tropical islands of the southwestern Pacific and adjacent shores. The reddish-yellow "nuts", which are not true nuts but berries, contain a small kernel. A slice of the nut is taken, sprinkled with finely ground lime and any suitable spices, and wrapped in a leaf of the betel pepper (*Piper betle*). This small package is then chewed. Not only would it induce love but also expel wind, kill germs and subdue bad body odor. Not a bad combination in Calcutta.

Already the latin name of the **walnut** genus, *Juglans*, indicates its properties: literally the name means the glans of Jupiter. The origin of the name might be the ancient Roman use of walnut in fertility rites. This included the practice of throwing walnuts instead of rice in marriage ceremonies. Walnut preparations have also occasionally been used in France and Italy to increase the desire.

**Ginkgo** or Maiden-hair tree has a nut that is said to have remarkable properties.

### **Quince**

Quince, *Cydonia oblongata*, has long been cultivated in the entire Mediterranean area. The fruit is mentioned by the Greek physician Theophrastos 300 B.C., and is believed to have been the golden apples of the Hesperides. Some even say quince was the apple which lured Eve.

Due to its colour, fragrance and many seeds the fruit was dedicated by the Greeks to Aphrodite and by the Romans to Venus, the goddess of love, and a symbol for beauty, love, fertility and a happy marriage and the eating of a Quince pear at weddings is said to be preparative of sweet and delightful days between the married persons.

### **Grapes**

The Greek god Dionysus was not only the god of wine but also the god of fertility and procreation. Naturally, even unfermented grapes were ascribed stimulating properties.

### **Quail**

A small, short-tailed game birds resembling partridges but generally smaller and less robust. In spring the hen lays about 12 roundish eggs, which the male may help incubate. Their eggs are highly praised as an aphrodisiac and you will find them in most restaurants in Brazil.

### **The Piranha**

Any of several species of carnivorous fishes of the genus *Serrasalmus*, renowned for their voracity and reputed ferocity. They are abundant in the rivers of eastern and central South America. Potentially one of the most dangerous species, *S. nattereri* attains a maximum length of about 60 cm (2 feet), but most species are smaller. They are attracted to the scent of blood and can reduce even a large animal to a skeleton in a short time.

In Brazil, a soup made with piranha is supposed to have invigorating properties and help restore flagging stamina. Must catch some.

### **Candied Violets**

This mildly exotic recipe is contained in the "Honeymoon Cookbook", which the Swedish Kooperativa Förbundet distributed to all newlyweds during the 1930's.

## Animal Parts

When Love's delirium haunts the glowing mind,  
Limping Decorum lingers far behind.

**Lord Byron** (1788 - 1824), English poet

A truly astounding number of preparations made with animal parts of little or no nutritious value have been used as aphrodisiacs. Lust and hope together led to a degree of gullibility and foolishness that Demosthenes (circa 384-322 B.C.) most properly resumed as:

“A man is his own easiest dupe, for what he wishes to be true he generally believes to be true...”

### **Animal Genitalia**

Organotherapy was already during the Roman times a popular way of trying to treat sexual problems. This form of sexual therapy is based on the belief that the consumption of a healthy animal organ might cure illnesses in the corresponding human organ – another case of similarity in action. Thus, the Romans ate all kinds of animal genitalia, including penises, wombs and testes, from animals ranging from monkeys to cocks. Apicius in his "*De re coquinaria*" includes several recipes for stuffed womb of pig and cow, used mainly as dishes to increase fertility.

The use of deer genitals as an aphrodisiac also dates back to antiquity. Hippocrates of Cos (2400 B.C.) recommends the penis, an organ which, according to Dioscorides, also can be used as an antidote against snake bites. Preparations of deer penis were included in several pharmacopedias as late as the 18th century, e.g., in the Swedish *Pharmacopoea Wirtenbergensis*, published in 1750, it is recommended "*Cervi Priapus*" against poisoning, bladder stones, and blood in the urine but also it suggests that it is a praised aphrodisiac. Deer testicles, "*Testiculi cervi*", were less popular, but nevertheless included in the famous *Pharmacologia* by Dale, published in 1696, as an aphrodisiac.

More interesting by its far-fetched association, an indirect use of animal genitalia is suggested in "The Perfumed Garden": Boil an ass's penis together with onions and a large quantity of corn. Feed this dish to fowls, which you eat afterwards. This will increase the size and capacity of a man's penis.

Even today there is a thriving market for animal genitalia. According to the March 1995 issue of "Animal People" one Canadian company delivered 50,000 seal

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carcasses to China during 1994 - the genitals alone fetched more than US\$100, while the pelt, meat and oil of a seal went for US\$20.

To this day testicles, generally from bulls, lambs, and pigs, are widely consumed in many countries and in some regions of the United States calf testicles are known as "prairie oysters" or "Rocky Mountain oysters", unambiguously indicating its aphrodisiacal connotation. One celebration that has turned more than a few heads is the annual Testicle Festival at the Rock Creek Lodge outside of Clinton, Montana (USA). The Testicle Festival has grown from 300 folks over a decade ago to over 8,200 guests from across the country. In the 1999 festival over 4,500 pounds of carefully prepared, beer-marinated, breaded, deep-fried bull testicles were served.

An unrelated fact that we found while researching the interesting subject of testicular consumption is that the avocado name, not considered an aphrodisiac mind you, comes from the Central American native Nahuatl language word *ahuacatl*, meaning "testicle", apparently referring to the avocado's shape.

### **Antlers**

Probably because of the similarity with an erect penis, horns and antlers have long been used as aphrodisiacs, especially in Eastern Asia. Reindeer shed their antlers annually and collected shredded reindeer antlers are imported for aphrodisiacal purposes in Japan from Canada, Finland, Norway and Sweden. Since fresh antlers are supposed to be even more powerful, but removal of live antlers from the animals is forbidden in Scandinavia even live reindeers have been imported to provide the best possible aphrodisiac quality.

The Tibet Red Deer, *Cervus elaphus wallichii*, has long been listed as nearly extinct by the World Conservation Union. The reason for the earlier believed extermination, and the reason why these animals still are threatened, is that they are coveted for their velvety antlers, which are highly prized as an aphrodisiac.

### **Rhinoceros Horns**

Powdered rhinoceros horns are regarded as a panacea in Eastern Asia, effective against anything from nosebleeds and headaches to diphtheria and food poisoning. In addition, they are widely believed to increase the male sexual capacity, including the capacity for erection. It should be noted, however, that the original rhino aphrodisiac was the dried penis and not the horn.

Widespread poaching of rhinos, including for the sake of the horn, has led to the inclusion in the list of endangered species of all five rhino species existing today (3 in Asia, 2 in Africa). The use of rhino horns for medical purposes was declared illegal by the State Council of the People's Republic of China on 29 May 1993. However, some trade appears to continue, as the rhino horn is highly prized. In 1990 a kilogram of horns of Asian origin were sold for US\$21,000 in Thailand and for US\$54,000 in Taiwan.

A rhino's horn is not attached to the skull and is thus not a true horn. It is a growth from the skin of densely compressed dermal fibres, made up of keratin. This is the same material that is found in hair and nails. Consequently, consumption of powdered nail clippings would be expected to provide the same results as rhino's horn!

### ***Tiger Parts***

Tiger parts - skulls, bones, whiskers, sinews, and blood - had long been used by Asian peoples, especially the Chinese, in medicines and potions used to treat rheumatism, rat bites, and various diseases; in the restoration of energy; and as aphrodisiacs. In East Asia many tiger parts are considered as powerful aphrodisiacs, including bones, fat, liver and even penis. A bowl of tiger penis soup can fetch US\$350 in Taiwan and South Korea and will have a marvelous effect. Amazingly tiger have very short intercourse – if the desired effect is just to mimic the tiger...you will be able to make love for a full 15 seconds!

Lac of consistency in utilization is also common - tiger whiskers are used as an aphrodisiac in Indonesia, but in Malaysia the same preparation is regarded as a strong poison!

Until tiger hunting was banned, these body parts were never in short supply. In the late 1980s, however, stockpiles were becoming exhausted, and evidence that tigers were still being killed began to accumulate. At the same time, reports of poaching were multiplying, and the underground trade in tiger parts flourished as the dwindling supplies pushed prices ever higher. There were occasional highly publicized seizures and destruction of the confiscated parts, but little effort was really being put forth to stop the smugglers, and the potions are found in Chinese apothecaries in several nations.

### ***Snake Blood***

In parts of Eastern Asia snake blood is highly praised and used to boost a flagging male libido. The precise snake species does not really matter as long as it is truly poisonous, but cobras appear to be favored.

The best effects are obtained from perfectly fresh blood. In Malaysia, special parlors exist where live snakes are served. The snake tail is pierced and the customer sucks blood from it for a few minutes to invigorate his capacity for love-making. In Saigon cobra blood is usually served mixed with hard liquor. No information is available on how often the same snake can be reused.

### ***Bat Blood***

In Viet-Nam bat blood is supposed to be equally effective. Bats are killed the bats in front of you, bled dry and the blood served as a drink and the cooked bled bat can be later eaten as a dish.

### **Ambergris**

Ambergris is a product arising from some whales, which occasionally can be found on ocean beaches. It is extremely expensive and used for perfume production. According to Arabic folklore it is also an aphrodisiac, a claim that might have substance. Dr. S.A. Taha and coworkers have published a scientific paper in which they report that ambrein, a main constituent of ambergris, in male rats produced "recurrent episodes of penile erection, a dose-dependent, vigorous and repetitive increase in intromissions and an increased "anogenital investigatory behavior". This is Arabic science at its best!

### **Chan Su**

Chan Su is a traditional Chinese medication used, inter alia, as a topical anesthetic. It is prepared from the dried skin of the toad *Bufo bufo gargarizans* and contains bufadienolides and bufotenine, very toxic cardiac steroids. During the last few years it has been sold in New York City as a purported aphrodisiac under names such as "Stone" and "Rock Hard".

At least four fatalities have been reported during 1993-95 as a result of ingestion of this preparation, the deaths being caused by cardiac dysrhythmias.

### **Bile and Gallstones**

According to Pliny (23-79 A.D.), the gall of a boar would stimulate to coitus and in Sheik al-Nefzawi's "The Perfumed Garden", it is suggested that rubbing the penis and the vulva with the bile of a jackal will make those parts vigorous. Even gallstones are in some Asian countries believed to be an aphrodisiac and can have a market value of up to US\$15,000 a kilogram (US\$550 an ounce).

### **Lizards**

Lizards were highly esteemed both by Arabs and southern Europeans. The easiest way was to dry the lizard, pulverize it and take the powder together with a sweet white wine. The lizard could also be a main constituent of a more elaborate dish. One lizard of the genus *Sticus*, occurring on some Mediterranean islands and in northern Africa, was widely popular as an aphrodisiac during the 18th century, even in such remote countries as Sweden.

Today, lizards are readily found in markets of Central America and highly praised as a sure restorative of dwindling male power.



### **Leeches**

A preparation made of leeches is a reputed remedy to increase the size of the male member. They are put in a bottle, which is kept enclosed in the warmth of a dunghill until the leeches die and rot becoming a homogenous and fetid mass. The disgusting stuff is used as a liniment, for repeatedly anointing the proper part. To your health!

### **Shark Fin**

In Hong Kong certain shark species can fetch up to US\$150 apiece because of the demand for shark fins as an aphrodisiac. The fins are removed, dried for two days and cooked into shark fin soup.

### **Cantaris**

Any of the insect family Meloidae (order Coleoptera). These beetles secrete an irritating substance, cantharidin, which is collected mainly from *Mylabris* and the European species *Lytta vesicatoria*, commonly called Spanish fly - with long, slender, leathery bodies covered by metallic green or blue wing covers.

In the past, when inducing blisters was a common remedy for many ailments, cantharidin was commonly used for this purpose. It was also a major ingredient in so-called love potions and “bonbons catharideés” immortalized in the writing of the Marquis de Sade, byname of Donatien-Alphonse-François, Comte de Sade (1740 – 1814), French nobleman whose perverse sexual preferences and erotic writings gave rise to the term sadism.

Cantharin when ingested is eliminated in the urine and produces a marked irritation of the urinary tract, specially the bladder and the urethra. Due to the variation in the amount of the active substance present in natural extracts its effects can be difficult to control and serious urinary tract lesions and even death have been reported.

## Plants and Botanical Preparations

The desire to take medicine is perhaps the greatest feature which distinguishes man from animals.

**Sir William Osler** (1849–1919)  
Canadian physician.

The use of plants and plant preparations as aphrodisiacs, in many cases, was based on an ancient belief in the therapeutic efficacy of likeness, the Doctrine of Similarities (*similia similibus curantur*), of still widespread acceptance in homeopathy. Thus, if a plant resembled the genitalia, it possessed, so it was reasoned, sexual characteristics and powers. Some examples of this are the mandrake and the asparagus.

In some cases the use was based on a misinterpretation of the name of the plant in another language. The plant *Levisticum paludapifolium* was called *Ligysticon* by Dioscorides because of its Ligurian origin. Galen modified the name to *Libysticon*, which later was transformed into the German names Liebesstückel, Liebstock, etc. The prefix Lieb-, i.e., love, then gave rise to its use as an aphrodisiac! The main aphrodisiacal usage was to prepare a scented bath. Another German name for the plant, Badekraut, refers to this use. Furthermore, in Dutch the plant is also called manskracht, male power.

Other plants were used because of real or believed effects due to their contents of active chemical substances. In this review we will examine those in detail.

### **Yohimbe**

Yohimbine is the major active constituent of the bark of yohimbe, *Corynanthe yohimbe* of the Rubiaceae family, a tree growing in tropical West Africa (Nigeria) and Cameroon. Yohimbe has long been used by the local population for its perceived high sexual potency. The same alkaloid also occurs in the South American tree White Quebracho, *Aspidosperma quebracho-blanco*.

Yohimbine has had an extensive use in veterinary medicine, e.g. for treatment of impotent breeding stallions. In both animal and man it produces a complex pattern of responses, such as anti-diuresis and central excitation, including elevation of blood pressure and heart rate, increased motor activity and irritability. Sweating, nausea and vomiting are also common after parenteral administration in man.

### **Muirapuama or Potency Wood**

*Ptychopetalum uncinatum*, a traditional Brazilian Aphrodisiac is a bush occurring in the northern and northeastern parts of Brazil. The white flowers have a jasmine-like pungent and aromatic smell. The active constituents are contained in the bark from which a concentrated water extract or a dilute herbal tea can be prepared. A daily dose of muira puama would correspond to the order of magnitude of one gramme of bark. It is alleged to be effective against a multitude of symptoms. M. Penna in his *Notas sobre Plantas Brasileiras* (1930) includes treatment of disorders of the nervous system, impotency, and gastrointestinal and circulatory astenia. D. Schwontkowski in *Herbs of the Amazon* (1993) mentions not only impotence but frigidity, menstrual cramps and premenstrual syndrome.

### **Guaraná**

The *Paullinia cupana* is a woody, climbing plant, native to the Amazon Basin. It has a smooth, erect stem (no wonder); clusters of short-stalked flowers; and fruit about the size of a grape and usually containing one seed shaped like a tiny horse chestnut.

The seeds are roasted and used to make a stimulant drink popular in South America, which has a bitter, astringent taste and a faint, coffee-like odor. Its caffeine content is about three times greater than an equivalent amount of coffee; the astringent action is caused by tannin. It also yields saponin (a carbohydrate), starch, gum, several volatile oils, and an acrid green fixed oil. It is supposed to operate wonders, rejuvenate the old and support the young.

### **Other Brazilian Aphrodisiac Plants**

Three other plants have frequently been used in Brazilian folk medicine as aphrodisiacs: **Catuaba** (*Juniperus brasiliensis*), **cajueiro** (*Anacardium occidentale*) and **koribo** (*Tanaecium nocturnum*). The main uses of the first plant are said to be for male impotency, for extreme fatigue and as a general tonic. Cajueiro is used as a general tonic for the body, also having aphrodisiacal effects. An additional use of koribo, besides as an aphrodisiac, is to treat diarrhea. Not a bad choice in a tropical climate and not always clean environment – nothing is positively less interesting than sex with diarrhea...

### **Kava Kava**

Obtained from the shrub *Piper methysticum*, which is native to the Polynesian Islands, it has been used by the Islanders as a religious and visionary herb and aphrodisiac for most of their history. Since none of the active ingredients of Kava Kava are water soluble, the natives pre-chew the roots and then blend this saliva/root mixture with coconut milk. The resulting liquid is then fermented to produce a potent beverage that was used for important rituals. The effect of the drink is to relax spinal activity, producing an euphoric state of relaxation but without

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impairing mental activity. Some subjects also experience a tingling feeling in the genitalia, producing all the ingredients for an interesting sexual experience.

### **Fennel**

*Foeniculum vulgare*, was cultivated in ancient Egypt. The "besbes seeds" mentioned in Papyrus Ebers (from 1600 B.C.) are believed to be fennel seeds. The Greeks also regarded fennel as a potent sexual stimulant and during the Dionysius festivities crowns of fennel leaves were worn, and leaves and seeds were used as aphrodisiacs. Fennel soup is still today reputed in some Mediterranean regions to stimulate desire.

### **Mandrake**

Any of the six plant species belonging to the genus *Mandragora* (family Solanaceae) that are native to the Mediterranean region and the Himalayas. The best-known species, *M. officinarum*, has a short stem bearing a tuft of ovate flowers, with a thick, fleshy root that is often forked. The mandrake has long been known for its poisonous properties. In ancient times it was used as a narcotic and an aphrodisiac, and it was also believed to have certain magical powers.

Its forked root, seemingly resembling the human form, was thought to be in the power of dark earth spirits. It was believed that the mandrake could be safely uprooted only in the moonlight, after appropriate prayer and ritual, by a black dog attached to the plant by a cord. Human hands were not to come in contact with the plant. In medieval times it was thought that as the mandrake was pulled from the ground it uttered a shriek that killed or drove mad those who did not block their ears against it.

### **Periwinkle**

Any of several shrubby, trailing, evergreen plants of the genus *Vinca*, especially *Vinca minor*, having glossy, dark green, opposite leaves and flowers with a blue, funnel-shaped corolla also called *myrtle*. Oil prepared from the flowers of *Vinca major* is believed to increase the sexual capacity of man. It can either be consumed or applied externally. A traditional periwinkle recipe to increase sexual desire to be used by men only is as follows: cover 20 grams of the fresh, blossoming plant with 250 ml of vodka or whisky and let the mixture simmer, covered, for at least 30 minutes. Take 8 drops of the filtered potion twice a day for four days, then make a two-day-break after which you can continue taking the potion for another four days.

### **Golden Root**

The roots of *Rhodiola rosea* have been known as a powerful stimulant for centuries and were a favoured ingredient in many folk love potions. The legendary Ukrainian prince Danila Galitsky (XIII century) who had a considerable reputation for

remarkable amorous feats used to say that he took strength from the golden root of the Karpatian mountains. The major use of the golden root is in the form of an alcoholic drink made of fresh roots mixed with 40% alcohol (e.g. vodka) and are kept in dark place for at least one week. If you are not in a hurry it is better to let the extraction continue for a few weeks. It is supposed to produce remarkable effects both in men and women!

### **Common Rue**

The South Europe Common Rue or Herb-of- Grace, *Ruta graveolens* is the most popular female aphrodisiac. There are numerous folk rhymes and songs about its ability to charm men. A must of love potions. women drank a decoction of the plant to become loved and wanted. According to folk legends, witches used to bring teenage boys to fields where the *Ruta* was blossoming. The strong scent made the boys became possessed by "witch desires", whereupon they lost their virginity.

## Drugs

Nobody saves America by sniffing cocaine,  
Jiggling yr knees blankeyed in the rain,  
When it snows in yr nose you catch cold in yr brain.

**Allen Ginsberg** (1926 - 1997), U.S. poet

For thousands of years, native societies have utilized plants containing hallucinogenic substances. An example in our hemisphere is the sacred peyote mushrooms of Mexico, called "God's flesh" by the Aztecs. During the 19th century, the Mescalero Apaches of the southwestern United States practiced a peyote rite that was adopted by many of the Plains tribes.

Psychedelic drugs have the unusual ability to evoke at least one kind of a mystical-religious experience, and positive change in religious feeling is a common finding in studies of the use of these drugs. Many argue that the drugs appear to enhance personal security from which may spring self-trust and trust of others and this may be the psychological soil for reliance in God. In the words of Aldous Huxley (*The Doors of Perception*): "When, for whatever reason, men and women fail to transcend themselves by means of worship, good works, and spiritual exercise, they are apt to resort to religion's chemical surrogates."

Also drugs may be associated with the enhancement of aesthetic experience. Such experience is regarded by many as a noble pursuit of human beings and although there is no general agreement on either the nature or the substance of aesthetics, certain kinds of experience have been highly valued for their aesthetic quality.

To Schopenhauer (*The World as Will and Representation*), contemplation was the one requisite of aesthetic experience; a kind of contemplation that enables one to become so absorbed in the quality of what is being presented to the senses that the "Will" becomes still and all needs of the body silent. William James (*The Varieties of Religious Experience*) observed at the turn of the century that "Our normal waking consciousness, rational consciousness as we call it, is but one special type of consciousness, whilst all about it, parted from it by the filmiest of screens, there lie potential forms of consciousness entirely different."

Drugs reportedly foster this kind of experience – the Nirvana of peace and rapturous pleasure - and are so used by many today. For Nietzsche (*Birth of Tragedy*), man is able to lose his futile individuality in the mystic ecstasy of universal life under the Dionysiac spell of music, rhythm, and dance. The American Indians with their peyote and modern jazz musicians with their marijuana have discovered this kind of Dionysian ecstasy without formal knowledge of aesthetics.

Some people deliberately seek this “other” state of consciousness through the use of drugs; others come upon them by accident while on drugs. Only certain people ever have such a consciousness-expanding (psychedelic) experience in its fullest meaning, and the question of its value to the individual probably is entirely subjective. For many people, the search for the psychedelic experience is less a noble aim and more the simple need of a psychic jolt or lift. Although people go to great lengths to produce order and stability in their lives, they also go to great lengths to disrupt their sense of equanimity, sometimes briefly, sometimes for extended periods of time. It has been asserted that there are moments in everyone's life when uncertainty and a lack of structure are a source of threat and discomfort, and moments when things are so structured and certain that unexpectedness can be a welcome relief.

Whatever the reason, people everywhere and throughout history have deliberately disrupted their own consciousness, the functioning of their own ego. Alcohol is and has been a favorite tool for this purpose. With the rediscovery of some old drugs and the discovery of some new ones, there is a wide variety of means for achieving those goals.

Many individuals face situations, for one reason or another, they cannot cope successfully, and in the pressure of which they cannot function effectively. Either the stresses are greater than usual or the individual's adaptive abilities are less than sufficient. In either instance, there are a variety of drugs that have been used to provide psychological support. This is not an ideal solution, but it does enable large numbers of persons to face problems that they might not have otherwise been able to face. Some situations or stresses are beyond the control of the individual, and some individuals simply find themselves far more human and productive with drugs than without drugs. An enormous amount of drug support goes on by way of such familiar home remedies as the aspirin bottle, the luncheon cocktail, and the customary evening drink without anyone calling it that.

Many chemical agents affect the brain in such manner. Examples are alcohol, the analgesic (pain-killing) opiates, the hypnotics - all classified as central-nervous system depressants. Certain other drugs, such as strychnine, nicotine, picrotoxin, caffeine, cocaine, and the amphetamines, stimulate the nervous system. In this review we will limit our discussion to three groups of drugs of common use as sexual stimulants:

- **Alcohol**
- **Cannabis**
- **Hallucinogenic Drugs**

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## Alcohol

"*Sine Ceres et Bacchus friget Venus*" (without *Ceres* [=food] and *Bacchus* [=wine] Venus will freeze, i.e., without food and wine no love) wrote Terence, the great Roman comic dramatist, (195 B.C – 159 B.C.). The use of alcoholic beverages to stimulate the libido is of ancient origin.

Indeed, a moderate quantity of alcohol will reduce anxiety and release inhibitions, especially for inhibited persons, but the sedative effects soon will be dominating. Also noted, however, is the fact that excessive use seriously hampers any attempt at love-making, as duly noted Shakespeare - in *Macbeth*, the porter say that: "It provokes and it unprovokes; it provokes the desire, but it takes away the performance".

More than half a gram of pure alcohol per kilo bodyweight should be avoided by anyone wanting to retain full amorous capabilities. At a bodyweight of 75 kg this corresponds to half a bottle of wine before an event. But, fortunately, individual tolerance varies widely.

Although considered only an psychoactive drug, alcohol may also have physiological effects - a 1994 study published in the British scientific journal *Nature* claimed that intake of alcohol would raise the testosterone level of women. Normally, women produce about on tenth the amount men do and additional small amounts can dramatically increase the libido. For women who lack sexual interest and desire, the treatment can be life-changing.

Some alcoholic beverages are believed to be especially potent. **Absinthe** was extensively used at the end of the last century as an aphrodisiac by many European, especially French, artists and intellectuals. The driving force behind this Bohemian absinthe cult was the French poet Paul Verlaine (1844 - 1896). Absinthe is an alcoholic extract of wormwood, *Artemisia absinthium*, a plant rich in neurotoxic compounds. Habitual use can be devastating and result in blindness and nerve injuries. Absinthe was prohibited in France in 1915 and is banned in most European countries because of its toxicity and habit-forming properties.

One could have expected that **beer**, being a nourishing drink with an alcohol contents low enough to make it easy to avoid overconsumption, quickly would have gained a solid reputation as an aphrodisiac, but alas! The only exception appears to be stout, which is seen as an aphrodisiac in some countries. Some special beers have a restricted local reputation for increasing the libido - the Belgian whitebeer *Hoegaarden*, served with a slice of lemon is supposed to cool your exterior and heat your interior!

Several **liqueurs** developed in old monasteries have been attributed aphrodisiac effects. These liqueurs include chartreuse (especially the green variety) and benedictine. I have not yet been able to figure out why monks should be so interested in aphrodisiacal liqueurs. In Guadalajara in Mexico a liqueur is produced from the allegedly aphrodisiacal plant *Turnera diffusa* under the name "Creme de Damiana. The liqueur is supposed to increase libido and counteract impotence.



Sometimes a variety of a beverage has powers not ascribed to a similar product - **white portwine** is held to be a far more powerful aphrodisiac than could be explained by its alcohol contents alone, especially when consumed together with strawberries, preferably of the wild variety. In contrast, red portwine appears to act as any ordinary alcoholic beverage.

Suitably spiced, **wine** can be a potent aphrodisiac. Red Burgundy wine, mixed with ginger, cinnamon, cloves, vanilla and sugar is known as Hippocrates aphrodisiac, and was recommended by the French author Rabelais in *Gargantua and Pantagruel*. During the 17<sup>th</sup> century **Aqua Mirabilis** was used as strengthening tonic but also as an aphrodisiac. It was prepared by letting finely ground cinnamon, galingale root, ginger, nutmeg, rosemary, and thyme steep in claret for one week, then straining the wine. A suitable dose would be 1/4 bottle (180 ml) a day. On the basis of this observation it is reasonable to assume that also **glögg** or **glühwein** would have similar properties.

### ***Cannabis (Marijuana)***

The active ingredient, tetrahydrocannabinol (THC), is present in all parts of both the male and female plants but is most concentrated in the resin (cannabin) in the flowering tops of the female. A more powerful form of the drug, hashish, is made by collecting and drying this resin.

Mentioned in a Chinese herbal dating from 2700 BC, the drug has long been used as a sedative or analgesic. The effects of marijuana vary, depending upon the strength and amount used, the setting in which it is taken, and the experience of the user. Psychological effects tend to be predominant; the user commonly experiences a mild euphoria. Alterations in vision and judgment result in distortions of time and space. Acute intoxication may occasionally induce visual hallucinations, anxiety, depression, extreme variability of mood, paranoid reactions, and psychoses lasting from four to six hours. Physical effects include reddening of the eyes, dryness of the mouth and throat, moderate increase in the rapidity of the heartbeat, tightness of the chest (if the drug is smoked), drowsiness, unsteadiness, and muscular incoordination. Chronic use does not establish physical dependence, nor, upon withdrawal, does the regular user suffer extreme physical discomfort such as that associated with narcotics, but its use may be psychologically habituating.

The worldwide use of marijuana and hashish as intoxicants has raised various medical and social questions; many of these have been under continuing scientific investigation, especially since the mid-1960s, when THC was first isolated and produced synthetically.

In the late 1980s researchers discovered a receptor for THC and THC-related chemicals in the brains of certain mammals, including humans. This finding indicated that the brain naturally produces a THC-like substance that may perform some of the same functions that THC does. Such a substance subsequently was found and named anandamide, from "ananda," the Sanskrit word for bliss.

### ***Hallucinogenic drugs***

Hallucinogenic substances such as *mescaline* and *LSD* (lysergic acid diethylamine) are said by many to induce a feeling of lovingness. But what the drug user regards as love and what persons around him regard as love in terms of the customary visible signs and proofs often do not coincide. Even so, it is plausible that the dissipation of tensions, the blurring of the sense of competition, the subsidence of hostility and overt acts of aggression - all have their concomitant effect on the balance between the positive and negative forces within the individual, and, if nothing else, the ability of drugs to remove some of the hindrances to loving is valued by the user.

## Pharmaceuticals

Dreams come true; without that possibility,  
nature would not incite us to have them.

**John Updike** (b. 1932), U.S. author and critic

By now the reader must be quite convinced that practically all the so-called aphrodisiacs used by mankind since time immemorial, have been not more than worthless nostrums. Enter the Brave New World of modern pharmacology and synthetic organic chemistry! Practically all of present day pharmaceuticals that have a recognized physiological effect on the libido and sexuality were unknown to science until the middle of the 20th century. With the discovery of reserpine and chlorpromazine, used in the treatment of some of the major forms of mental illness, especially the schizophrenias, neuropharmacology of behavior became the fast growing field of euphoria-producing, mood-elevating, or antidepressant drugs was rapidly developed.

Several important early studies in physiology were directed toward understanding the site and mode of action of some of these agents. Such studies have proved indispensable to the understanding of basic physiology, and drugs continue to be a powerful research tool of the physiologist. The ability of drugs to alter mental processes and behavior affords the scientist the unique opportunity to manipulate mental states or behavior in a controlled fashion.

The old search for drugs that could act as sexual adjuvants finally became a reality. A number of chemicals, synthetic or isolated from plants, were found to be active and are hereby discussed. The first five were the precursors of sildenafil (Viagra), the first truly active pharmaceutical for oral use:

- ***Alkyl nitrites***
- ***Anafranil***
- ***Chlorophenylalanine***
- ***Anti-Parkinson drugs***
- ***Papaverine***
- ***Sildenafil***

### ***Alkyl nitrites***

Volatile alkyl nitrites have been used during the last decades for "recreational purposes", including to intensify the sexual experience. The alkyl nitrites are normally distributed in glass ampules, which are opened/broken and the contents are inhaled ("popping" and "snorting"). However, because of the route of administration it is very difficult to control the dose and to ascertain that no dangerous quantities are inhaled.

The first alkyl nitrite to be used in this way was amyl nitrite, originally made available as a coronary vasodilator and antidote to hydrogen cyanide poisoning. When this became a prescription drug in the United States, various homologues and isomers began to appear in the market for "recreational purposes" as legal substitutes. Among the substitutes were n-butyl nitrite, iso-butyl nitrite, iso-amyl nitrite, sec-butyl nitrite and n-propyl nitrite. Their use has been associated with methemoglobinemia, hemolysis, and cardiac arrest.

### ***p-Chlorophenylalanine***

High levels of serotonin (5-hydroxytryptamine) are believed to lower or inhibit human sexual activity. Thus, a chemical inhibiting serotonin production might be expected to have a potential as an aphrodisiac.

The amino acid p-chlorophenylalanine (PCPA) is a known serotonin inhibitor, and it was shown that PCPA has a sexual stimulating effect upon normally sluggish male rats. It still not clear how it affects human.

### ***Anafranil***

"Unusual" side effects of clomipramine (Anafranil) have been described in a small number of patients while this antidepressant drug. Around five per cent of clomipramine users report the side effect, though for most people the drug inhibits the ability to reach orgasm.

### ***Anti-Parkinson Drugs***

A side effect of many anti-Parkinson drugs, including L-Dopa is to increase the sexual interest, mainly by restoring the interest to earlier higher levels.

### ***Papaverine***

This is a short-lived vasodilator pharmaceutical that is capable of producing erection when injected directly in the *corpora cavernosa* a procedure that must be done immediately before the intended action and fraught with a number of complications.

## **Sildenafil**

Nitric oxide, NO, was discovered to be a mediator of nerve impulses only eight years ago. It is now known to be a key substance in the process that leads to erection in males. However, since it is a gas, which only acts at a very specific level and location, it has turned out to be extremely difficult to use it for amorous purposes.

Pharmacologically, sildenafil inhibits an enzyme called cyclic GMP-specific phosphodiesterase. By preventing the breakdown of GMP it will promote the availability of nitric oxide, NO, a signal substance that causes relaxation of the smooth muscle in the penis and subsequent erection. Sildenafil is the first of a God-sent family of drugs that soon should reach the market and is produced by Pfizer as *Viagra*.

Interestingly, *Viagra* was originally tested as a heart drug with miserable results. During the testing phase "interesting" side effects were noted that indicated that the drug could be potentially useful as a male aphrodisiac. After further investigation that confirmed its value, it was released in the U.S. on 27 March 1998, a date that will live in the annals of history, and within two months over one million prescriptions were issued in the U.S. alone.

The first few months saw a tremendous demand for the drug – one out of three men are affected by a number of conditions grouped generically under ED, acronym for erectile dysfunction...even restaurants began serving dishes prepared with the drug - a French restaurant serving a *Viagra* sauce to eager couples had to stop offering this dish under pressure from health authorities.

Sildenafil works by inhibiting an unhelpful enzyme system, which prevents erection when a male is subjected to sexual stimuli. Taken one to two hours beforehand it will, for most males facilitate action if the right circumstances arise. The drug has shown great promise in clinical tests. In one study of 351 impotent men a success rate of 89 % was achieved for those receiving an oral dose of 50 milligrams. However, it should be emphasised that it is not sufficient just to take the pill to get an enduring erection; a combination with some kind of erotic stimulus is required.

There are side effects, including, e.g. headaches (yes, male headaches) in about 10 % of the cases. Deaths have occurred with its use, however, no direct relationship has been proven – most cases were individuals with advanced heart disease taking a number of other medications who should not be doing any strenuous efforts. The most worrying side effect appears to be "blue vision", reported in a limited number of cases.

Although primarily considered a drug to help men reports indicate that the same drug also will increase the lust of women for making love.

## Closing Words

Intercourse with a woman is sometimes a satisfactory substitute for masturbation.  
But it takes a lot of imagination to make it work.

**Karl Kraus** (1874 - 1936), Austrian satirist  
*Die Fackel*, no. 229 (Vienna, 2 July 1907).

After millenia of expectations, search, and experimentation are we finally reaching the Holy Graal of Aphrodisia? Are the advances of pharmacology, physiology, and synthetic chemistry going to finally produce the long sought solution?

Are we going to risk health complications by the manipulation of our body chemistry? One must remember the wise words of Sir Samuel Garth (1661-1719), English physician and poet, in his poem *The Dispensary*:

“Some fell by laudanum, and some by steel,  
and death in ambush lay in every pill.”

We finish this review with the wise words of Seneca (4.B.C. – 65 A.D.), Roman philosopher, statesman, orator, and tragedian:

“I will show you a philter without potions without herbs,  
without any witch's incantation - if you wish to be loved, love.”