

Chapter 1 — Sexual Anatomy and Physiology

from the 1938 edition of *Living a Sane Sex Life* (a.k.a. *The Sex Life Before and After Marriage*)

by

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Sources for Chapter 1, in the order in which they first appear

- (1) Millard S. **Everett**, Ph.D., *The Hygiene of Marriage: A Detailed Consideration of Sex and Marriage* (New York: The Vanguard Press, 1932)
- (2) William J. **Fielding**, *Sex and the Love-Life* (New York: Dodd, Mead & Company, 1927)
- (3) Th. H. **Van de Velde**, M.D., *Ideal Marriage: Its Physiology and Technique*, translated by Stella Browne (New York: Random House, 1926)
- (4) Helena **Wright**, M.B., B.S., *The Sex Factor in Marriage: A Book for Those Who Are About to Be Married* (New York: The Vanguard Press, 1937)
- (5) Havelock **Ellis**, *Psychology of Sex: A Manual for Students* (New York: Emerson Books, Inc., 1933, 1938)

Key

- (a) **Green** indicates where a source author (other than Sadler) first appears, or where he/she reappears.
- (b) **Magenta** indicates an earlier Sadler book.
- (c) **Yellow** highlights most parallelisms.
- (d) **Tan** highlights parallelisms not occurring on the same row, or parallelisms separated by yellowed parallelisms.
- (e) An underlined word or words indicates where the source and Sadler pointedly differ from each other.

- (f) **Pink** indicates passages where the Sadlers specifically share their own experiences, opinions, advice, etc.
- (g) **Light blue** indicates passages which strongly resemble something in the Urantia Book, or which allude to the Urantia phenomenon.
- (h) **Red** indicates either an obvious error on the Sadlers' part, brought about, in some cases, by miscopying or misinterpreting their source, or an obvious inconsistency brought about by the Sadlers' use of an earlier Sadler text.
- (i) **Gold** highlights key words or themes which will be discussed in the analysis of the chapter.

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I — SEXUAL ANATOMY AND PHYSIOLOGY

[Compare Everett 21.]

1:0.1 PERHAPS the frank talk and detailed description of the male and female sexual organs contained in this, the opening chapter of this volume, may be something of a shock to those who are not familiar with the terminology, but if the authors are to speak plainly concerning things sexual, and the time has come to do this, the reader must be made familiar with the names of the various parts of the male and female sexual mechanisms.

1:0.2 An adequate understanding of sexual anatomy and physiology and familiarity with the anatomical and physiological terms, enable us to discuss sex scientifically and by so doing to avoid the offensive terms of common parlance and the obscene language of the street. The wisdom of our somewhat exhaustive discussion of sexual anatomy and physiology will be made clear as the reader peruses the succeeding chapters.

1. SEXUAL ANATOMY AND PHYSIOLOGY OF THE MALE

II: THE ANATOMY AND
PHYSIOLOGY OF SEX (Everett 30)

THE MALE GENITAL ORGANS (Everett 30)

[contd] Man's external genital organs consist of the *penis* and the *testicles*.

1:1.1 The external genital organs of the male are the *penis* and the *testicles*.

SOURCE

The testicles are a pair of oval-shaped bodies suspended in a sac of thin muscular tissue called the *scrotum*.

The left testicle usually hangs a little lower than the right one.

At the end of the penis is a loose skin called the *foreskin*, or *prepuce*. The part of the penis beneath the foreskin is called the *glans penis* (Ev 30).

III: MAN'S SEXUAL NATURE (Fielding 47)

ANATOMY AND PHYSIOLOGY OF THE MALE ORGANS (Fielding 49)

There are glands on or near the inside ridge of the *glans penis*, the secretion of which,

when proper cleanliness is not observed, tends to accumulate and become offensive, and may cause irritation or even inflammation.

Boys and young men in particular should be informed of the importance of frequently bathing these parts, and if one has a long or tight foreskin, or *prepuce*, special attention is desirable (F 50).

When [the prepuce] is too long or very tight, causing the annoyance described in the preceding paragraph, a slight surgical operation, called *circumcision*, should be resorted to (F 50).

1: LIVING A SANE SEX LIFE

The latter are two oval-shaped bodies which are suspended in a thin, muscular-tissue sac known as the *scrotum*.

Ordinarily the left testicle hangs down a little farther than the right.

1:1.2 The head of the penis is covered with a loose skin, called the foreskin, or *prepuce*.

Glands located on the inner ridge underneath the foreskin produce a secretion

called smegma.

This accumulates and sometimes is offensive and irritating.

The foreskin should be drawn back and the area beneath it cleansed when one takes a bath.

If the foreskin is too tight to permit this, it should be removed by *circumcision*.

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE MALE GENITAL ORGANS (Everett 30)

The function of the testicles is to produce **two secretions**.

One of these fluids, the seminal secretion, contains the **spermatozoa** (singular, **spermatozoon**), or the sperm cells, that unite with the **ova** (singular, **ovum**), the egg cells of the female, to form **new life**.

These spermatozoa are about **one five-hundredth** of an inch in length, including both head and tail.

The head, or main part, of the spermatozoon is only **one-tenth** as long as the head and tail combined, or about **one five-thousandth** of an inch long.

A spermatozoon, therefore, can be **seen** only through a powerful microscope.

In one ejaculation or discharge of semen there are about **two hundred million** of these minute organisms.

[And as in every coitus ... *between 200 and 500 million spermatozoa are flung forward into the vagina*—myriads must perish for each one that survives (Van de Velde 129).]

Each one of them has the power of locomotion, through a **swishing movement of the tail**, like an eel.

Spermatozoa can move about **seven inches per hour** in a test-tube.

1:1.3 The testicles secrete **two fluids**.

One contains the **spermatozoa** (singular, **spermatozoon**), the sperm cells that unite with the **ova** (singular, **ovum**) of the female to produce a **new life**.

A spermatozoon measures about **one five-hundredth** of an inch in length,

its head being only **one-fifteenth** as long as the head and tail combined, about **seventy-five-hundredths** of an inch.

It is so small that it can only be **seen** through a powerful microscope.

Each ejaculation, or discharge, of semen contains between **two and five million** of these minute organisms.

1:1.4 These infinitesimal bodies move by a **swishing movement of their tails**, like tadpoles.

If not interfered with, a spermatozoon can move about **seven inches an hour**,

SOURCE

The rate of progress is probably less as they pass through the *uterus (womb)* of the female into the *tubes* down which the ova come. The motion of the cilia, or *minute hairs*, in these tubes stimulates them to move up in search of an ovum.

[These sperms move forwards at a rate of speed which, under the microscope, appears about 3 mm. a minute.... Probably their extreme rapidity is slightly diminished by the *capillary current*. At least, it is assumed that they only advance 1 to 1½ mm. every three minutes ... (Van de Velde 128).]

Spermatozoa, like fish at certain seasons, instinctively swim against the current (Ev 30-31).

[contd] The fluid containing the spermatozoa passes from the testicles by involuntary muscular contractions through the *vas deferens* (plural, *vasa deferentia*).

The vas deferens is a tube going up around the bladder on each side of the body, making a loop, and coming down in back of the bladder to its base.

At this point each vas becomes slightly enlarged.

[It seems to me most likely that the main storage of semen takes place in the *reservoirs*, and that when these are over-full the vesicles act as safety-valves and extra containers (Van de Velde 133).] [See V 132 and 1:1.15.]

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but against the *capillary current*, or waving motion of *minute hairs*, in the *uterus (womb)* and the Fallopian *tubes* of the female,

their movement is slowed down to only about one inch an hour.

Strange to say, spermatozoa, like salmon at the spawning season, always swim against the current.

Their ability to do this enables them to move up through the uterus into the tubes, there to fertilize any ovum that may have been carried down from the ovaries.

1:1.5 The spermatozoic fluid is forced up from the testicles through the *vas deferens* by unconscious muscular contractions.

A vas deferens goes up on each side of the bladder, makes a loop, and comes down behind to its base.

At this point the vas enlarges slightly,

thereby forming a *reservoir* for the semen.

SOURCE

Adjacent to this part of the vas and connected with it is a seminal vesicle, lying between the base of the bladder and rectum.

The seminal vesicle serves as a reservoir, and also contributes a yellowish, sticky substance of its own to the seminal fluid.

The combined secretion of the testicle and the seminal vesicle flows on each side into an *ejaculatory duct*. The two ejaculatory ducts come together, forming a crest, or junction, at the prostatic urethra, or upper part of the *urethra*, into which they empty.

The prostate gland, which surrounds the *urethra*, secretes an alkaline fluid which empties into the urethra at the crest, where the two ejaculatory ducts converge.

[The *prostate gland* is shaped like a horse-chestnut, and surrounds the *posterior urethra*, so that its longer section lies behind, but a small portion before, the urinary duct ([Van de Velde 130](#)).]

The alkaline secretion helps to preserve and stimulate the spermatozoa, as they thrive in a mild alkaline solution but perish in a strong acid solution.

The prostate gland also produces a chemical substance called *spermin* which gives the seminal discharge its characteristic odor and is believed by some authorities to produce part of the tonic effect which the sexual act has upon woman (Ev 31).

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Beside these reservoirs and connected with them are the *seminal vesicles*, which lie between the base of the bladder and rectum.

These vesicles are additional seminal reservoirs and also secrete a yellowish, sticky substance which is added to the seminal fluid.

This combined secretion of the testicles and seminal vesicles flows on each side into two *ejaculatory ducts*, one on each side, which unite, forming a junction at the prostatic urethra, into which they empty.

1:1.6 The *prostate gland* surrounds the *posterior urethra* and secretes an alkaline fluid which empties into the urethra where the two ejaculatory ducts meet.

This secretion helps to preserve and stimulate the spermatozoa, for they thrive in an alkaline but are destroyed by a strong acid solution.

The *spermin* secreted by the prostate gland is responsible for the characteristic odor of the seminal discharge and is thought by some authorities to produce, in part at least, the tonic effect which the sexual act has upon the woman.

VII: ANATOMY AND PHYSIOLOGY OF THE MALE SEXUAL ORGANS (Van de Velde 115)

Poehl's researches proved also that spermin, when introduced into the bodily organism, accelerated metabolism and generally quickened vital energy. And this explains in itself the tonic effect of coitus on women, for it is beyond question that the seminal fluid is partially absorbed by the tissues of the female organs (V 139).

Moreover, chemically pure combinations of spermin can exhale the unmistakable seminal odour, even in extremely weak solutions. This circumstance enables us to understand its transmission to the breath of some women after coitus (V 139).

This powerful muscular apparatus [of the prostate gland] is able, during its spasmodic contractions or convulsions at the moment of sexual congress, to squeeze and force the secretions it contains into the urethra (V 131).

And simultaneously it becomes impossible for the urine to pass with and mix into the sperms (V 135).

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE MALE GENITAL ORGANS (Everett 30)

The secretions which come from the testicles, containing the spermatozoa, the secretions of the seminal vesicles, and those of the prostate gland combine to form the final product, or *semen* (Ev 31-32).

Its partial absorption by the tissues of the female organs

is proved by the fact that its odor appears on the breath of some women after coitus.

The muscles around the prostate gland squeeze its contents into the urethra

and simultaneously shut off the bladder so that no urine will pass.

1:1.7 The prostate-gland secretions and the fluids originating in the ejaculatory ducts together form the semen,

VII: ANATOMY AND PHYSIOLOGY
OF THE MALE SEXUAL ORGANS
(Van de Velde 115)

Prostate secretions form a large proportion of the *ejaculate*, or discharge, and, as we have seen, their alkalinity preserves the spermatozoa and stimulates their mobility (V 131).

[Contrast V 134-35.]

II: THE ANATOMY AND
PHYSIOLOGY OF SEX (Everett 30)

THE MALE GENITAL ORGANS (Everett 30)

[contd from 1:1.6] Along the urethra are numerous glands, called the *glands of Littré*,

which secrete a transparent, alkaline, slippery fluid, which makes the sexual act easier and prevents irritation of the penis.

[*Endnote*: There is also a pair of small glands, called Cowper's glands, which empty into the upper part of the urethra, and either have the function of lubricating the urethra after urination or through the alkalinity of their secretions protect the spermatozoa during their passage along the urethra (Ev 236).]

The preparatory nature of the secretion of these glands is seen from the fact that they are sensitive to the stimulation of mental imagery.

the prostatic fluid making the bulk of it.

The thorough mixture of these two fluids is accomplished by the narrowing of the ejaculatory ducts as they reach the urethra, so that their contents are sprayed with great force into the fluid from the prostate gland.

1:1.8 Cowper's glands also pour their contents into the urethra.

They secrete a transparent, alkaline, slippery fluid which lessens friction and prevents irritation of the penis during coitus.

That this is a preparatory secretion is proved by the fact that these glands are most sensitive to the stimulation of the imagination.

SOURCE

Even highly romantic thoughts that contain no trace of desire for physical sexual relations may cause these glands to function.

This is quite normal and in no sense injurious (Ev 31).

III: MAN'S SEXUAL NATURE (Fielding 47)

ANATOMY AND PHYSIOLOGY OF THE MALE ORGANS (Fielding 49)

Cowper's Glands. ... The occasional appearance of this sticky secretion, under sexual excitement, has often caused young men to worry over the occurrence when they have not known its significance. They may have been led to believe they were losing a vital fluid, as **quacks** allege in their lurid and misleading advertisements. They may be told they are subject to **"spermatorrhea"** (involuntary discharge of semen). It should therefore be emphasized that this preliminary secretion from the Cowper's glands is a natural phenomenon during sexual excitement, and is not a sign of debility or disease (F 52-53).

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE MALE GENITAL ORGANS (Everett 30)

We must remember, however, that there is also another secretion produced by the testicles. This is called an *internal secretion*, since it does not leave the body. It consists of a hormone which enters the blood and is carried all through the body.

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Even highly romantic thoughts that are entirely free from the desire for physical sexual contact, sometimes cause these glands to function.

This is a perfectly normal reaction.

Quacks have many times taken advantage of the ignorance of men, both young and old, by telling them that the secretion of Cowper's glands is a bona fide disease—they call it **"spermatorrhea"**—

which will result in sexual impotence, inability to engage in sexual relations, unless the remedies recommended are applied immediately. This is the rankest type of fraud.

1:1.9 The testicles produce still another fluid, **internal secretion**, which contains hormones that enter the blood and are carried to every part of the body.

SOURCE

It is a very important secretion, for it lends vitality to the body as well as produces the *secondary sexual characteristics* in the male—

hair on the face and external genital organs, broad shoulders, narrow hips, change in voice to a lower pitch, and possibly certain mental qualities that distinguish men from women (Ev 32).

The internal secretion also exerts an influence upon the nervous system, producing sexual desire (Ev 32).

V: MENTAL HYGIENE OF SEX (Everett 63)

THE SEXUAL INSTINCT (Everett 67)

[Compare Ev 68.]

Contrary to popular opinion, human beings do not possess a highly specific *sexual instinct* that guides them infallibly to normal expression of the impulse. Of course, when the stimulation of the genital organs through *physical contact* has reached a certain point, there is a series of *reflexes which occur* that are *highly specific* and partly *involuntary* (Ev 67).

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This important secretion gives vitality to the individual and also produces, at least in part, the *secondary sexual characteristics* of the male:

hair on the face, broad shoulders, narrow hips, change in voice to a lower pitch, and possibly certain mental qualities that distinguish men from women.

1:1.10 This internal secretion also acts on the nervous system, arousing sexual desire.

While it is impossible to determine to what degree such desire is instinctive and how much is due to social influences, it is certain that the male reaction is essentially a motor or actively tactile impulse—a tendency to pay attention to, and seek contact with, a human body of a more delicate type.

The *reflexes which occur* after complete *bodily contact* has been secured are *very definite*, although some of them are *involuntary*.

1:1.11 It has been found that in its early stages the *sexual instinct* is more vague than is generally supposed,

SOURCE

The external stimulus, on the other hand, is highly dependent upon environment and is shaped by **social forces** and various accidents of experience into something relatively specific and different from group to group and from individual to individual.

The external stimulus can be almost any type of person. If one has been reared among fair-skinned, thin-lipped, straight-haired people, such a type will constitute **one's ideal of beauty** (Ev 68).

ABNORMALITIES IN THE EXTERNAL STIMULUS (Everett 73)

Chumming is a well-known feature of adolescence. The **friendships** of this age are often so intensely emotional that there is no doubt about their being sexual. They occur at a time when association with the opposite sex is not yet a part of the pattern which the group expects the young person to follow.

Boys and girls may not even be conscious of the **sexual nature of their friendships** (Ev 74).

In all these years that boys and girls are kept apart, their sexual impulses, **daily growing stronger**, must have some sort of expression, and therefore they seize upon whatever object is at hand, which means that very intense friendships are formed within the same sex (Ev 76).

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its definiteness being largely due to **social suggestions** or to circumstances connected with the individual's early development;

one's adult sense of physical beauty is very largely determined by the type of people with whom one has grown up or by the type which is popularly regarded as beautiful.

The indefinite character of the sex impulse is further proved by the tendency of both humans and some animals to be sexually attracted at puberty to one of the same sex if they are isolated from the opposite sex.

The segregation of boys from girls often results in **friendships** which approach close to the romantic stage,

even though the individuals involved have no idea that there is a **sexual element in their relationship**.

1:1.12 The increase in the secretion of the testicles which occurs from year to year exerts a **steadily growing pressure** on the nervous system for some outlet for the seminal fluid.

SOURCE

[I have seen many a drifting adolescent cured of inordinate day-dreaming by keeping a diary (William S. Sadler, M.D., *Piloting Modern Youth* [1931] 16.)]

[See Ev 73.]

[No harm results from these early blind gropings of sex unless a young person develops a fixation upon some stage, which is not shaken off in adult life and which makes sexual adaptation difficult (Ev 73).]

[contd from four rows up] There are, of course, forces at work which usually succeed ultimately in carrying one beyond this stage into heterosexual interests, such as the custom of picking out a “sweetheart” even in childhood, the social pressure in the latter ‘teens in the direction of keeping company with the opposite sex, and later the social prestige surrounding marriage.

Some persons, however, tend to form strong fixations, or are inclined to be shy or socially inadequate and accordingly take the easier path of companionship within their sex rather than undergo the strain of breaking across the barriers which exist between the sexes (Ev 76).

[Compare Ev 76.]

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This results in early adolescence in inordinate daydreaming

and even in an abnormal interest in one’s own body,

all of this being the blind groping of the sexual instinct for expression.

These early tendencies normally develop into a romantic desire for the company of the opposite sex.

The future happiness of the young man depends on his eventual abandonment of such incomplete forms of sexual expression as he may have discovered.

1:1.13 A well-formed habit of obtaining almost all sexual satisfaction in solitude or of confining his associations to his own sex,

is quite certain to develop an attitude toward sexual relations which will be hard to break when the time arrives for marriage.

SOURCE

Since there was nothing in the moral code for adolescents which referred to homosexuality, it was quite possible for a girl or boy to feel that a state of sexual purity had been achieved, whereas it was perhaps the beginning of sexual abnormality (Ev 75-76).

ABNORMALITIES IN THE SEXUAL RESPONSE (Everett 78)

A last abnormality of the sex response which is so common as to be regarded as normal in a social sense is *auto-erotism* or *masturbation*, formerly referred to as self-abuse.

It consists of a short-cutting of the series of sex responses so that instead of the stimulation of the sexual organs being achieved through the various steps leading up to intimate contact with another person, the stimulation is produced by the person upon himself or herself directly, usually with the hand (Ev 79).

Formerly it was customary to frighten children from the habit of masturbation by telling them direful tales about how it would wreck their health, cause feeble-mindedness and produce a nervous break-down or even insanity.

We know today that there is no evidence to substantiate such assertions (Ev 80).

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An abnormal lack of interest in the opposite sex is not an indication of purity.

The purity which results from the ability to combat one's thoughts is a means to greater happiness, but complete lack of interest in the opposite sex is abnormal and should not be mistaken for virtue.

1:1.14 Masturbation (sometimes called self-abuse) is a common form of solitary sexual expression.

It is practiced by stimulating the nerves in the penis, usually by manipulating it with the hand,

until a discharge of semen is produced.

In a well-meant but unwise effort to break boys of this habit it was at one time customary to tell them that it would wreck their health, cause feeble-mindedness, or result in a nervous breakdown or even insanity.

Modern science knows better than this,

SOURCE

1: LIVING A SANE SEX LIFE

even though masturbation is not a desirable practice. It is fully discussed in a subsequent chapter.

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE MALE GENITAL ORGANS (Everett 30)

Nature has a device for disposing of the accumulation of the seminal fluid previous to the time when one begins to have regular sex relations.

Every two weeks or so, when one is asleep, the secretions which have accumulated in the reservoirs of the vasa deferentia, the seminal vesicles and the prostate gland,

stimulate the nerves that control the blood vessels of the penis, causing them to stop the flow of blood from the penis, so that it becomes erect and rigid.

At the same time the muscular fibers which cause the semen to be expelled through the urethra are stimulated and a discharge occurs.

The condition of erection of the penis is then relaxed. Such discharges are called *nocturnal emissions* (popularly “wet dreams”).

Dreams of a sexual nature often accompany nocturnal emissions. The causal relation between the emission and the dreams is not clear.

1:1.15 Nature’s plan for taking care of the accumulation of seminal fluid prior to marriage and regular sex relations,

is the nocturnal emission, or “wet dream,” as it is popularly called.

Every week or so, during sleep, the accumulation of secretions in the seminal vesicles and prostate gland

so stimulate the nerves controlling the blood vessels of the penis that the flow of blood from it is stopped, with the result that it becomes erect and rigid.

In connection with this, the muscular fibers which cause the expulsion of the semen through the urethra are stimulated and a discharge occurs,

after which the penis relaxes.

1:1.16 Sexual dreams usually accompany nocturnal emissions though the relationship between the emission and the dream is not fully understood.

SOURCE

Certainly the dream alone would not be sufficient to produce a discharge. Possibly the congestion of the sexual organs causes the dream and the dream may then lend further aid to the process which the congested organs have set in motion.

The pressure of a full bladder probably helps also to cause erection,

as nocturnal emissions usually occur near the end of a night's sleep when one's bladder is full (Ev 33-34).

III: MAN'S SEXUAL NATURE (Fielding 47)

ACTIVITY OF MALE SEX ORGANS (Fielding 61)

Diurnal, or day, emissions are sometimes experienced instead of night discharges. When they occur, it is usually a reflex mechanical process, taking place at the time of bowel evacuation, and perhaps caused by the muscular action of the pelvic regions upon the vesicles (F 63).

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE MALE GENITAL ORGANS (Everett 30)

[contd from 1:1.16] Nocturnal emissions are perfectly natural and are nothing to be concerned about.

Normally, they occur two or three times a month after one has reached complete maturity, though individuals differ in the frequency of them.

1: LIVING A SANE SEX LIFE

While the dream alone would not produce a discharge, the congestion of the sexual organs may cause the dream, and the dream may then further the process which has been set in motion.

A full bladder also has an influence in causing the erection.

Nocturnal emissions usually occur toward morning when the bladder is full.

The nearness of the seminal reservoirs and the prostate gland to the rectum may account for an occasional slight *diurnal emission* during a difficult *bowel movement*.

1:1.17 These nocturnal emissions are natural and need cause no concern.

They normally occur three or four times a month after one has reached maturity, though individuals differ in their frequency.

SOURCE

Individuals also vary as to the age when nocturnal emissions begin, the range being from around fourteen to around eighteen (Ev 34).

[contd] The description of the sexual process as it occurs in nocturnal emissions will serve also to give some notion of the mechanism involved in sexual intercourse.

Sexual intercourse is a more complete experience involving the highly emotional, conscious pleasures that come from bodily contact, especially if there is a strong personal attachment and attraction of two persons toward one another.

The undulations of the body and the friction of the genital organs in *coitus* (the sexual act) also increase the stimulation of the nerve centers involved in the seminal discharge (Ev 34).

[contd] In all of the sexual process we have just described, the secretion that is of supreme importance in the reproduction of life is the seminal secretion of the testicles, which contains the spermatozoa.

The secretions of the seminal vesicles, the prostate gland and the glands of Littre are simply aids to the spermatozoa in reaching their destination, and are unable in themselves to produce life.

The sexual act can occur without the presence of spermatozoa, but the discharge in such cases is sterile, *i.e.*, incapable of fertilizing an ovum or egg cell of the female (Ev 34-36).

1: LIVING A SANE SEX LIFE

They do not begin at a definite age, the range being from around fourteen to sixteen or seventeen.

1:1.18 The sexual process of nocturnal emissions is quite similar to that of sexual intercourse.

The latter is a more complete experience embellished by the highly emotional, conscious pleasure resulting from bodily contact, all of which is greatly enhanced if there is a strong personal attachment between the two persons involved.

The movements of the body and the friction of the genital organs in *coitus* (the sexual act) increase the stimulation of the nerve centers involved in the seminal discharge.

1:1.19 In the sexual process the secretion of supreme importance in reproduction is that of the testicles which contains the spermatozoa.

Those from the seminal vesicles, the prostate gland, and Cowper's glands only help the spermatozoa reach their destination; they do not produce life.

Absence of spermatozoa in the seminal discharge does not interfere with the sexual act, but the discharge is incapable of fertilizing the female ovum.

SOURCE

[contd] Sterilization can be produced artificially by an operation called *vasectomy*. This operation consists in cutting the vas deferens so that the seminal fluid containing the spermatozoa is absorbed by the blood instead of being allowed to escape from the body.

Some states provide for having this operation performed on the insane and mental defectives when paroled or discharged from state institutions. This is a very wise measure for improving the stock of the race and should be more widely adopted.

The great advantage of vasectomy as a means of sterilization is that it does not interfere with the normal desire, exercise and pleasure of the sexual function. The seminal vesicles and the prostate gland produce the bulk of the seminal discharge, since only a drop of the total product comes up the vas deferens from the testicles (Ev 36).

[?]

The seminal vesicles and prostate gland, however, cannot alone produce the sexual act, but the influence of the internal secretion of the testicles is also needed.

Vasectomy, of course, does not interfere at all with the internal secretion of the testicles and therefore does not destroy sexual desire and capacity (Ev 36).

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1:1.20 Artificial *sterilization* can be produced by vasectomy, an operation which merely involves cutting the vas deferens so that the fluid which contains the spermatozoa is absorbed by the blood instead of being allowed to escape from the body.

In some states incurable criminals and the hopelessly insane are compelled to submit to this operation.

A vasectomy does not interfere with the normal desire, exercise, and pleasure of the sexual function as the seminal vesicles and prostate gland produce enough secretion

to make the sexual act possible without the spermatozoa,

and the internal secretion of the testicles, which is also needed because of its influence on the nervous system,

is not in any way interfered with by this operation.

SOURCE

[contd] *Castration*, or the complete removal of the testicles, eliminates all possibility of sexual activity.

Castration performed early in life also prevents the development of the secondary sexual characteristics of the male.

In ancient times eunuchs were slaves who had been castrated (Ev 36).

[contd] *Impotence* is the inability to function sexually (Ev 36).

[See six rows down.]

V: MENTAL HYGIENE OF SEX (Everett 63)

ABNORMALITIES IN THE INTERNAL STIMULUS (Everett 71)

About 3 per cent of men are completely impotent. Some men are partially impotent... Impotence in young men is not extensive enough to justify the emphasis sometimes placed upon it in popular conversation, although it is true that partial impotence does contribute to sexual maladjustment in marriage to a considerable extent, as we shall see later (Ev 71-72).

1: LIVING A SANE SEX LIFE

1:1.21 *Castration*, the complete removal of the testicles, destroys all possibility of sexual function

and practically all desire for it.

Castration in early life prevents the development of the secondary sexual characteristics previously mentioned.

Ancient eunuchs were castrated slaves.

1:1.22 *Impotence*, the inability to function sexually,

is sometimes caused by some anatomical condition which interferes with the stoppage of the flow of blood from the penis, thus preventing erection, although it may be due to some abnormal state of the nervous system or to some maladjustment in the mental life.

The condition is so rare that the average person need give it no thought.

SOURCE

There is no particular merit in being “potent” or having “the powers of manhood,” when almost all men have ample sexual capacity without devoting any effort to the matter.

Moreover, potency does not depend upon the size of the penis (Ev 72).

In fact, one may regard nine-tenths of all that one hears on the subject in popular conversation as nonsense (Ev 72).

If a genuine case of impotence does occur, the advice of a competent physician should be sought to determine whether the difficulty is due to some physiological defect or whether it may be due to some nervous disturbance or inhibition which may yield to treatment by a psychiatrist.

Quacks who advertise themselves as specialists in this field or engage in other unethical practices should be avoided (Ev 72).

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE MALE GENITAL ORGANS (Everett 30)

Impotence and sterility should not be confused.

A man can be perfectly potent and yet be sterile, that is, for some reason or other his spermatozoa may fail to fertilize the ova of the female (Ev 36).

1: LIVING A SANE SEX LIFE

No special credit is due one for being “potent” or having the powers of “manhood,” for practically every man has ample sexual capacity.

Another thing, potency does not depend upon the size of the penis.

As a matter of fact, nine-tenths of the popular ideas on these matters is nonsense.

In the rare cases of impotence, a reputable physician or psychiatrist should be consulted.

Advertised remedies should never be taken. Advertised cures are almost invariably utterly worthless—pure quackery.

No reputable physician advertises.

1:1.23 Impotence and sterility are not the same conditions.

A man may be perfectly potent, but for some reason his spermatozoa may not fertilize the ova of the female.

If this is the case, there is nothing much that can be done about it.

2. SEXUAL ANATOMY AND PHYSIOLOGY OF THE FEMALE*

THE FEMALE GENITAL ORGANS (Everett 36)

[contd] The genital organs of woman consist of two ovaries, the uterus, or womb, and the vagina.

[See 1:2.8.]

The uterus is a pear-shaped body with the small end down, located behind the bladder.

The wall of the uterus is very thick and is capable of expanding greatly.

It is within this organ that the fetus, or developing child, has its growth before it is born.

On each side of the uterus is an ovary, which is an organ corresponding to the testicle of the male. Connecting each ovary with the uterus is a Fallopian tube.

The Fallopian tubes enter the uterus near the top.

At the bottom of the uterus is the cervix, or neck of the uterus. This opens into the vagina, which is the inner passage which receives the penis of the male in sexual intercourse (Ev 36-37).

1:2.1 In the female the genital organs are two ovaries, the uterus, or womb, the vagina,

and the vulva, or external genital organ.

The uterus is a pear-shaped body, its small end turned down, situated behind the bladder.

Its wall is very thick and can be greatly expanded.

Within this organ the baby develops before birth.

An ovary, which corresponds to the testicle of the male, is located on each side of the uterus and is connected to the latter by the Fallopian tube.

These tubes, one for each ovary, enter the uterus at the sides of the top.

The mouth of the uterus, the cervix, is at its lower end and protrudes into the vault of the vagina, which receives the penis of the male in sexual intercourse.

III: THE SEX ORGANS OF MEN AND WOMEN (Wright 54)

The Female Sex Organs (Wright 60)

Vagina is a Latin word meaning sheath; it was so called because of its purpose: the male sex organ or penis fits into it like a sword into a sheath (W 66).

The latter fits into the vagina much as a finger enters a glove.

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE FEMALE GENITAL ORGANS (Everett 36)

[contd from 1:2.1] The uterus enters the vagina at an oblique angle—almost at a right angle—so that at the end of the vagina two pockets are formed, one in front of the cervix and the other behind it.

1:2.2 The uterus enters the vagina at an angle, pockets being formed at the end of the vagina, one in front of the cervix and the other behind it.

These are called the *anterior fornix* and *posterior fornix* respectively, the latter being the larger of the two (Ev 37).

These are known as the anterior and posterior vaults, the latter being the larger of the two.

[[T]here are two distinct parts of the Vault or Fornix, the one flatter and lying in front of the *portio* (*fornix anterior*, *laquear antarius*, or anterior vaginal vault), and the other, much deeper, behind the portio: this is the *Fornix posterior*, *Laquear posterius*, or *posterior vault* ... (Van de Velde 72).]

At the front end of the vagina is a thin membrane, the *hymen*, or maidenhead, which partially covers the entrance to the vagina.

There is a thin crescent-shaped membrane, the hymen, or maidenhead, at the front end of the vagina which partially covers its entrance, which is on the anterior or front side.

[As a rule, it may be described as a crescent-shaped, and very thin continuation of the posterior (back) vaginal wall, which stretches forward and nearly closes the *introitus* from behind (Van de Velde 58).]

This membrane is usually nicked or torn on the first occasion of sexual intercourse, if not before (Ev 37).

The hymen is usually broken at the time of the first sexual intercourse.

II: THE BIOLOGY OF SEX (Ellis 8)

The Nature of the Sexual Impulse (Ellis 14)

In ancient days, this little flap of tissue [the hymen]—the maidenhead as it was suggestively termed—was frequently regarded as of immense significance in determining the status of the woman.

Its presence was held to decide the moral character of an unmarried woman (E 20).

There are many natural variations in the shape and size of the hymen; various accidents (as well as virginal masturbation) may cause its disappearance;

while it may occasionally persist after intercourse,

even in prostitutes (E 21).

1:2.3 In a former generation the intactness of the hymen was regarded with great concern,

as it was believed to be an infallible determiner of an unmarried woman's moral status, an exclusive badge of virtue.

Nowadays it is well known that the hymen is fractured, not only by medical examination,

but also by vaginal masturbation,

and besides some women possess such elastic hymens that they are apparently intact even after years of married life.

Some prostitutes possess such hymens.

This membrane may be very inelastic, almost fibrous, and so difficult to fracture that physicians are often consulted by women who have been married thirty or forty years and yet have never engaged in the complete sex act. Such hymens should be either dilated under local anesthesia or given proper surgical treatment under general anesthesia.

V: THE SEXUAL PHYSIOLOGY OF THE ADULT WOMAN (Van de Velde 51)

II. *The Internal Genital Organs* (Van de Velde 64)

Regarding the vagina, we may further observe that, though it contains no glands, its walls secrete a slight amount of fluid which contains lactic acid. The proportion of lactic acid secreted varies rhythmically, and this rhythm corresponds to the recurrent changes which we know as the processes of ovulation and menstruation, to which we shall refer presently in detail.

Approximately midway between two menstrual courses (a time which coincides with ovulation or the expulsion of an egg-cell or *ovum* out of the ovary), the proportion of lactic acid in the vaginal secretions is at its minimum, *i.e.*, about 0.05 per cent.

And this is specially important in view of the fact that male spermatozoa retain their vitality and mobility longest in a weak lactic solution (from 0.05 to 0.1 per cent) and perish with relative ease in a stronger solution (V 72-73).

[contd] This lactic acid in the vagina has also a protective function as a medium for various harmless or even beneficial micro-organisms or bacteria, and as an antidote and antiseptic against disease germs from the outside (V 73).

1:2.4 The vagina walls secrete a fluid containing lactic acid, which varies in amount.

About half way between two menstrual periods the proportion of lactic acid is at a minimum of .05 to .1 per cent.

Spermatozoa cannot survive a much stronger solution than this.

The volume of lactic acid is high during pregnancy and lactation (the secretion of milk in the breast) until menstruation begins again.

This lactic-acid secretion also is a medium for harmless or beneficial bacteria and is an effective antiseptic against disease germs.

SOURCE

With this secretion there are normally mingled epithelial cells and some leucocytes (white blood corpuscles), so that in quite healthy genital conditions a slight amount of thin milk-white fluid is found in the vagina (V 73).

A thick yellowish secretion is an unmistakable sign of disease (V 73).

[contd] The vaginal walls *absorb* as well as *secrete* (V 73).

As I write, I see an article in the *Zentralblatt für Gynäkologie*, 1924, No. 18. It mentions a case—which ended fatally—of characteristic sublimate poisoning, in an unmarried lady of twenty-five, who had introduced a *pastille* containing 0.5 gr. sublimate for contraceptive purposes. And refers to a similar case, after *douching with the same chemical* (*Ibid.*, 1923, No. 6.) (V 74).

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE FEMALE GENITAL ORGANS (Everett 36)

The uterus is constructed of muscular and elastic tissues and is lined on the inside with a mucous membrane which performs important functions in the development of the fertilized ovum.

The muscles of the wall of the uterus are extremely powerful, as they have to expel the child during the convulsions or “labor” of childbirth.

During pregnancy this muscular tissue increases to around sixteen times its normal weight (Ev 38).

1: LIVING A SANE SEX LIFE

Epithelial cells and white blood corpuscles (leucocytes) are normally mingled with it, the whole fluid having a milk-white appearance. It is usually thin and limited in amount.

A thick yellowish secretion is a sign of congestion and should receive attention from a gynecologist.

1:2.5 Because the walls of the vagina can *absorb* fluids as well as *secrete* them,

pastes, suppositories, or douches containing harmful chemicals should never be introduced into it.

1:2.6 The walls of the *uterus* are made up of muscular and elastic tissues, lined with a mucous membrane which plays an important part in the development of the fertilized ovum.

The muscles of the uterus wall are very powerful, and necessarily so, as they have to expel the child during the contractions of “labor.”

During pregnancy these muscles increase to around eighteen times their normal weight.

SOURCE

[contd] The uterus can be moved about to a considerable extent and can be displaced, sometimes with serious results, by various causes.

Under ordinary conditions, it may be displaced temporarily by certain stresses and strains, by a full bladder or by an overloaded bowel.

Several sets of suspension muscles enable the uterus, as well as the vagina, to spring back into place after having been subjected to strain (Ev 38).

III: THE SEX ORGANS OF MEN AND WOMEN (Wright 54)

The Female Sex Organs (Wright 60)

In the resting condition the womb is, roughly, pear-shaped, small end down, and measures about three inches in length, two in width, and one in thickness.

When it has within it a developing egg-cell, it grows with the baby, and reaches the comparatively enormous size necessary to contain an infant just before birth.

During birth, the muscles of the womb stretch its mouth open and the abdominal muscles push the baby into the world.

After birth the womb muscles shrink, and in a few weeks the walls have come back to their original state (W 63).

1: LIVING A SANE SEX LIFE

1:2.7 The uterus is fairly movable, so much so that it can sometimes be displaced, even seriously.

Among the conditions causing displacement are: certain stresses and strains, a full bladder, an overloaded bowel.

Its several sets of suspension muscles enable the uterus, and the vagina as well, ordinarily to spring back into place after such strains.

The uterus is about three inches long, two wide, and one thick.

During pregnancy it grows with the baby and reaches the comparatively enormous size necessary to contain the fully developed infant.

The muscles of the uterus contract during labor and **do most of the work** that pushes the baby through the vagina.

Following birth these muscles contract and in a few weeks return to their original size.

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE FEMALE GENITAL ORGANS (Everett 36)

The external genitals are referred to as the vulva, which consists of two large folds called *outer lips*, and some smaller folds within called the *inner lips*.

[See Van de Velde 52-53 for *labia minora* and *labia majora*.]

There is a growth of hair about the external genitals, as in the case of man, though not to the same extent.

The *urethra*, or outlet to the bladder, opens into the vulva and has no connection with the vagina (Ev 38).

[contd] Near the mouth of the urethra in the vulva are two very small openings leading to *Skene's glands*.

The two openings of another and larger set of glands, *Bartholin's glands*, are located between the inner lips and the outer surface of the hymen.

These correspond in function to the glands of Littre in the male.

Under the influence of sexual stimuli, especially in the psychic stimulation of intimate love-play, they secrete a transparent and very slippery preparatory fluid which makes entrance into the vagina easier and prevents irritation.

A deficiency in this secretion sometimes necessitates the use of artificial lubricants (Ev 38).

1:2.8 The external genital organ, the *vulva*, consists of two outer folds, the *labia majora*, or larger lips, and several smaller ones within, the *labia minora*, or lesser lips.

Hair grows about the external genitals, as in the male.

The outlet to the bladder, the *urethra*, opens into the vulva.

1:2.9 The two very small openings to Skene's glands lie in the vulva near the mouth of the urethra.

The two openings of the larger Bartholin's glands are situated between the inner surfaces of the *labia minora* and the outer surface of the hymen.

These two sets of glands correspond to Cowper's glands in the male.

Sexual stimuli, particularly the psychic stimulation of intimate love-play, causes these glands to secrete a transparent and very slippery preparatory fluid by which entrance into the vagina is made easier and irritation prevented.

If this secretion is deficient, artificial lubricants are necessary.

SOURCE

[contd] Another factor which contributes to the preparation of the female genital organs for the sexual act is the presence of a net-work of sponge-like blood vessels beneath the surface on each side of the vulva.

[These so-called *bulbi vestibuli* consist of a network of broad, thin-walled, sponge-like blood-vessels, which become congested and swollen (like the clitoris, described above) in response to sexual stimuli, whether psychic or local (Van de Velde 63).]

These become congested under sexual stimulation and cause the outer lips of the vulva to expand. This increases the pleasurable sensations for both man and woman (Ev 39).

[contd] At the front of the vulva is a small sensitive organ called the *clitoris* (Ev 39).

III: THE SEX ORGANS OF MEN AND WOMEN (Wright 54)

The Female Sex Organs (Wright 60)

[I]n the center in front, is a small round body, about the size of a pea, movable to a fair extent, and coated with delicate membrane, which is always more or less moist. Its anatomical name is the clitoris.

This little organ is capable of giving the most acute sensations; the tissue of which it is made is similar to that of the penis,

and during sex stimulation it has a limited power of filling with blood and thereby becoming larger and harder than it is in an inactive state.

1: LIVING A SANE SEX LIFE

1:2.10 The *bulbi vestibuli*, a network of spongelike blood vessels beneath the surface on each side of the vulva, also aid in the preparation of the female genital organs for the sexual act.

These bulbovaginal glands become congested under sexual stimulation and cause the outer lips of the vulva to expand, which increases the pleasurable sensations for both participants.

1:2.11 The *clitoris*, a very small sensitive organ, is situated at the front of the vulva.

This small round body is only about the size of a pea

but is capable of giving the most acute sensations; the tissue composing it is similar to that of the penis,

and during sex stimulation it fills with blood just as does that organ, thereby becoming larger and harder than when in its inactive state.

SOURCE

The only purpose of the clitoris is to provide sensation; a full understanding of its capabilities and place in the sex-act is therefore of supreme importance (W 67).

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE FEMALE GENITAL ORGANS (Everett 36)

As in the case of the male organ, it has a small prepuce, or foreskin, which can usually be drawn back without difficulty, but sometimes has to be loosened by a physician in case of adhesion (Ev 39).

[The foreskin covering the shaft can be *moved*, but not *drawn back* (Van de Velde 53-54).]

[See 17:4.5.]

V: MENTAL HYGIENE OF SEX (Everett 63)

THE SEXUAL INSTINCT (Everett 67)

For example, a very young child, even an infant, either boy or girl, through some accidental pressure on the genital organs, may discover that the sensations obtained by contact are pleasurable, and thus develop the habit of masturbation (Ev 69-70).

1: LIVING A SANE SEX LIFE

Since the sole purpose of the clitoris is to provide sensation, an understanding of its function in the sex act is of maximum importance.

The clitoris, as does the penis, has a foreskin which is small

and cannot be *drawn back* completely, although it can be *moved*.

When inflamed, this foreskin sometimes has to be removed, the operation corresponding to circumcision in the male.

Sometimes a young girl *accidentally* discovers the possibility of pleasure in the excitation of this organ and gradually falls into the habit of masturbation.

SOURCE

III: THE SEX ORGANS OF MEN AND WOMEN (Wright 54)

The Female Sex Organs (Wright 60)

The sensation-providing parts in a woman are partly on the outside, and partly hidden. They are more complicated than those of the male.

As in the male, acuteness of sensation varies: least sensitive are the two large folds covered with ordinary skin and hair, which run from back to front, between the thighs (W 66-67).

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE FEMALE SEXUAL ORGANS (Everett 36)

[contd from 1:2.11] Within the foreskin of the clitoris a greasy, white lubricant, called *smegma*, is secreted,

which, if not removed, becomes solid and offensive in odor (Ev 39).

IV: NOTES ON THE SEXUAL PHYSIOLOGY OF THE ADULT WOMAN (Van de Velde 51)

I. *Introduction and Definition. The External Genital Organs* (Van de Velde 51)

[R]emoval [of clitoral secretions] is absolutely necessary, not only for the reasons given above, but because the *smegma* and the *bacteria* which may infect it are a danger in the case of operations and of *deliveries* in the matter of asepsis (V 56).

1: LIVING A SANE SEX LIFE

1:2.12 The genital organs of the woman which provide sensation are partly on the outside and partly hidden and are more complicated than those of the male.

But just as with the latter, acuteness of sensation varies: least sensitive are the two large outer folds which are covered with ordinary skin and hair and extend from back to front, between the thighs,

while the most sensitive is probably the clitoris.

1:2.13 A greasy, white fluid, *smegma*, is secreted under the foreskin of the clitoris.

If the parts are not frequently cleansed, this fluid *solidifies* and takes on an offensive odor.

Such lack of cleanliness may prove dangerous to life since an accumulation of *smegma* and the *bacteria* which infect it increase the possibility of blood poisoning during *childbirth*.

SOURCE

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE FEMALE SEXUAL ORGANS (Everett 36)

Turning now to a more detailed consideration of the internal organs, we may note first that the ovaries, like the testicles in the male, have a double function:

(1) to produce ova or egg cells,

and (2) to produce internal secretions. The latter not only cause the secondary female characteristics to appear (narrow shoulders, well-developed breasts, higher pitch of voice, etc.), but also help bring about all the bodily changes necessary to make childbirth possible (Ev 39-40).

III: THE SEX ORGANS OF MEN AND WOMEN (Wright 54)

The Female Sex Organs (Wright 60)

The ovaries of a new-born girl baby already contain, in germ, all the egg-cells that she will ever produce.

Up to the age of beginning sex activity they remain quiet, all the egg-cells in a similar stage of development.

At puberty a change comes over the ovary, and from then onwards, at more or less regular intervals, one only of all the thousands of sleeping egg-cells, begins to develop by itself.

1: LIVING A SANE SEX LIFE

1:2.14 Considering the internal genital organs in greater detail, the first point to note is that the ovaries, as do the testicles in the male, have the double function

of producing both ova, or egg cells,

and the internal secretion which stimulates the formation of the secondary female characteristics,

including sexual interest, which usually develops into a desire for the attention and companionship of men.

1:2.15 In the ovaries of the newly born girl baby are contained, in germ, all the ova she will ever produce.

Until the beginning of sex activity both the ovaries and their ova remain in a quiescent state.

At puberty a change occurs, and from that time until the menopause, at more or less regular intervals, a single ovum of the thousands contained in the ovary, begins to develop by itself.

SOURCE

It slowly grows larger than its neighbours, and, probably by the pressure of its growth, finally makes a tiny slit in the outer surface of the ovary.

Through this slit it escapes loose into the spaces of the lower abdomen, at the side and behind the womb (W 61).

At each corner of the broad part there is a short tube, also made of muscle, ending in a ring of tiny filaments or fingers.

The tube is soft, and hangs loosely, and the ring of fingers is capable of movements which are rather like those of the suckers of a sea-anemone.

When the egg-cell breaks out of the ovary, it is set free in a kind of pocket, roofed over with bowels, where, close by, hang the slender fingers of the expanded end of the tube which leads to the inside of the womb.

[See three rows down and nine rows down.]

These fingers may seize the ovary.

The currents made within the tube by waving, thread-like tentacles waft the egg along the canal, aided by the rhythmic waves of contractions of the delicate muscle layers in the walls of the tube (W 64).

1: LIVING A SANE SEX LIFE

It slowly grows larger than the others and, probably by the pressure of its growth, eventually makes a tiny slit in the outer surface of the ovary.

This is called *ovulation*.

Through this slit the ripened ovum escapes.

1:2.16 At each corner of the uterus is one of the two Fallopian tubes, also consisting of muscle, which ends in a ring of tiny filaments, or fingers.

These tubes are soft, and hang loosely, and the ring of fingers which each possess makes movements that resemble those of the suckers of a sea-anemone.

1:2.17 When the cell leaves the ovary, it is in a comparatively large space; fairly close, on each side, are the waving fingers at the end of the tube leading to the inside of the uterus.

By some means not fully understood, perhaps by chemical attraction or by the currents made by the moving fingers in the moisture which is everywhere present in the body's interior,

the ovum is seized by the fingers and directed into the Fallopian tube.

From then on its movement is in one direction, towards the uterus,

made so by the rhythmic contractions of the muscles in the wall of the tube.

SOURCE

During the course of its journey one of two things must happen to the egg-cell: it may meet with sperms and be entered by one of them, or it may not.

The process whereby the egg-cell meets and fuses with a sperm is called fertilization.

Development begins during progress toward the womb, and continues during the three or four days until the egg-cell embeds itself in the womb, and immediately begins the long story of its development into a new individual (W 64-66).

If there is no fertilization, the egg-cell moves on through the womb, carried by the slight currents of moisture that are always flowing there, to the vagina, and so passes unfertilized out of the woman's body (W 66).

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE FEMALE GENITAL ORGANS (Everett 36)

The reproductive cycle of woman

[See 1:2.20, below.]

involves a very intricate mechanism which is not yet fully understood (Ev 41).

Every four weeks in either the right or the left ovary a small follicle or pouch—called the *Graafian follicle*—ripens and comes to the surface of the ovary.

1: LIVING A SANE SEX LIFE

1:2.18 During its journey it may meet and fuse with a sperm, or it may not.

The process of fusing with the sperm is known as fertilization.

When this occurs, the ovum embeds itself in the wall of the uterus and begins the long experience of developing into a new human being.

This union of ovum and sperm is conception.

When fertilization is not accomplished, the ovum moves on through the uterus to the vagina and by that route passes unfertilized out of the woman's body.

1:2.19 This ovulation process,

occurring each lunar month (about every 28 days),

is very complicated and not fully understood.

Every four weeks in either the right or the left ovary the developing ovum is held in a pouch—the Graafian follicle—which in ripening comes to the surface of the ovary.

SOURCE

This follicle is filled with a fluid containing the ovum, which is about one-fifth of a millimeter in diameter (roughly 1/125 of an inch).

When the follicle becomes entirely ripe, it bursts, and the fluid from it carries the ovum to the opening of the Fallopian tube.

The burst follicle, however, does not cease to function but develops into a gland, called the *corpus luteum*, which secretes and pours into the blood a substance which has some function in connection with pregnancy (Ev 41).

The human female organism prepares once every lunar month (twenty-eight days) to perform its biological function of reproduction. This cycle consists of: (1) ovulation ...; (2) the *proliferation* or development of membranes in the uterus to receive a fertilized ovum and provide a nest for it, so to speak, where it will be nourished until it has become a fully developed child, ready to be born;

and (3) *menstruation*, or the breaking down of these tissues when the ovum is not fertilized and there is consequently no function to be performed by the surplus membranes of the uterus (Ev 40).

1: LIVING A SANE SEX LIFE

The follicle is filled with a fluid containing the ovum, which is only about 1/125 of an inch in diameter.

When fully ripe, the follicle bursts, and the fluid sprayed out from it carries the ovum near the opening of the Fallopian tube.

The bursted follicle does not stop functioning even if the ovum is fertilized but develops into a tiny gland, the corpus luteum, which secretes and pours into the blood a substance that is of great importance in reproduction,

a substance that stimulates the uterus to receive and nourish the ovum, and that creates the most favorable conditions possible throughout the body of the mother for the development of the child.

1:2.20 Stimulated by the corpus luteum,

the membranes of the uterus enlarge and, as it were, begin to build a nest for a fertilized ovum;

if no fertilized ovum arrives, they collapse,

SOURCE

[This is heralded locally by the dissolution and expulsion of the greater part of the freshly grown mucous membrane, accompanied by the secretion of a thin blood-stained fluid, which may be full of blood, until the cessation of the menses (Van de Velde 92).]

Menstruation, sometimes referred to as the menses or the period, or popularly as “monthlies,” appears as the discharge of blood and mucus which results from the destruction of cells in the lining of the uterus (Ev 40).

Ovulation in the human female occurs around the fourteenth day after the onset of the menses.

The ovum probably remains alive, while being carried along the Fallopian tube into the uterus, until about the twenty-first day (Ev 42).

[O]n the whole it is probably true to assume *both as the normal and the average (or most frequent) day, for the bursting of the follicle and release of the ovum—the twelfth of the interval between menstrual periods.* The ovum is drawn into the oviduct, remains alive for about fifteen days, and if not fertilised, perishes (Van de Velde 88).

VI: SEXUAL PHYSIOLOGY OF THE ADULT WOMAN (Van de Velde 86)

III. Ovarian Activity, Rhythm of Vital Manifestations in the Female Organism, and Menstruation (Van de Velde 86)

[contd from two rows up] Immediately a new follicle begins to develop, and another cycle begins (V 88).

But what exactly is the impetus given by the follicular explosion to the growth of the corpus luteum?

1: LIVING A SANE SEX LIFE

and the surplus mucous membrane is dissolved and expelled from the uterus, accompanied by a thin fluid containing more or less blood.

This is known as menstruation, or the menses, in popular parlance, the “monthlies.”

1:2.21 Ovulation occurs about the twelfth day after the beginning of each menstruation,

the ovum remaining alive until the twenty-sixth day, or thereabouts.

At its death the activity of the corpus luteum declines,

and another follicle, containing a new ovum, begins to develop and ripen.

In just what way the bursting of the follicle at ovulation stimulates the development of the corpus luteum,

SOURCE

And how does the extinction of the ovum initiate the decline of the corpus luteum? (V 90)

[W]e only know that the corpus luteum checks and prevents the formation of a fresh follicle, because (in teleological terms) such a fresh follicle is unnecessary, so long as the preliminary changes for the reception and conservation of the ovum which has just been extruded are taking place (V 90).

An equally vigorous—if not more vigorous—exercise of activity by the corpus luteum causes the membranous lining of the womb *to proliferate and develop in order to afford a resting place and nourishment to the ovum* (V 91).

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE FEMALE GENITAL ORGANS (Everett 36)

It is known, for example, that the anterior pituitary gland (located beneath the front part of the brain) periodically produces a hormone which has an influence upon the activity of the ovaries and which indirectly causes the increase of tissues in the uterus each month. But it is not known just why the absence of a fertilized ovum leads to the breaking down of these tissues (Ev 41).

On the other hand, if the ovum is fertilized, the corpus luteum usually continues its activity for at least several months during pregnancy (Ev 42).

1: LIVING A SANE SEX LIFE

how its activity is determined by the life or death of the ovum,

and how it prevents the development of other follicles

and encourages the growth of the membranes of the uterus—

all this is not fully understood.

It is thought that secretions of the anterior pituitary are involved in the phenomenon.

1:2.22 If the ovum is fertilized, the corpus luteum continues its activity,

SOURCE

[Menstruation] naturally is not expected to occur if conception has taken place and there is a fertilized ovum which provides work for the developing membranes of the uterus, so that they do not disintegrate.

Hence the failure to menstruate is usually a sign of pregnancy, although there are occasional cases in which menstruation continues even though a child is developing in the uterus.

Sometimes, too, for reasons which will be discussed in the next chapter, a woman may miss a period or be delayed in her menses and believe that she is pregnant when she is not (Ev 40).

[Compare Ev 49 and V 192.]

After childbirth the menses are resumed within a month or two in the case of about half of all women.

In the other half this takes place after the period of *lactation* (the time during which the child is fed at the breast) (Ev 40-41).

[Compare 18:4.8.]

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the uterus prepares to receive and nourish the ovum, and no menstruation occurs.

This is why failure to menstruate is usually a sign of pregnancy.

Sometimes the menstruation is merely delayed.

There may be a number of reasons for this, among them the stimulation of taking a journey or changing climate, or some emotional stress, such as fear of pregnancy.

1:2.23 About 50 per cent of women begin to menstruate again soon after childbirth.

The other 50 per cent do not menstruate until breast nursing (the period of lactation) has been discontinued.

These latter women are quite safe from pregnancy during lactation.

Because of this, some European peasant women nurse each child as long as possible to prevent too frequent pregnancies. But in about half the cases this gives them no protection.

SOURCE

[contd] The monthly cycle of twenty-eight days must not be regarded as invariably the same.... Occasionally women are found to menstruate every three weeks or every five weeks.

Also, some women are very regular in their periods while others are quite irregular.

Women differ, too, in the length and extent of menstruation.

The discharge usually lasts from three to five days. The loss of blood is usually greatest on the first two days.

The quantity of blood lost is much less than is commonly believed, being between 1 and 1½ ounces. The mucus and blood combined normally amount to between 2 and 3 ounces (Ev 41).

VI: SEXUAL PHYSIOLOGY OF THE ADULT WOMAN (Van de Velde 86)

III. *Ovarian Activity, Rhythm of Vital Manifestations in the Female Organism, and Menstruation* (Van der Velde 86)

The menstrual discharge has a specific odour, which is intensified by the secretions of the vestibular glands; these glands secrete more profusely than usual during the period.

It is, of course, obvious that the slightest neglect of cleanliness results in a most unpleasant smell, owing to the bacterial contents of the fluid, when it coagulates and dries.

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1:2.24 The monthly cycle of twenty-eight days is not an absolute rule, for some women menstruate as often as every three weeks, and others go more than four weeks.

The periods of some women come very regularly, while those of others are irregular.

1:2.25 The length of the menstrual period and the amount of the flow differ in different cases.

The period usually continues from three to five days, the loss of blood being greatest on the first two days.

The amount of blood passed is between 1 and 1½ ounces, the mucus and blood combined ordinarily being between two and three ounces.

1:2.26 The secretions of the vestibular glands, which are more profuse than usual during the period, intensify the specific odor of the *menstrual discharge*.

Special care must be given to cleanliness, for otherwise the coagulation and drying of the fluid produces an objectionable odor.

SOURCE

This also promotes local irritations and inflammations of the vulva, which may become obstinate sores, owing to the continual fresh flow of secretions and the friction of damp towelettes if these are not changed very often.

Also, the outer genitalia, being swollen and congested during menstruation, are more easily injured and inflamed (V 103-04).

The membrane of the vulva is a brighter red, and the outer labia slightly dilated and everted (or rolled back), as is the case in certain stages of sexual excitement.

The vagina often has a bluish tinge. The womb feels slightly larger than usual, and laxer. Both inner and outer genitals are especially sensitive and vulnerable (V 104).

[contd] There is a similar congestion in the uterine adnexæ and in the ligaments and surrounding connective tissues. This gives rise to a sensation of heaviness and swelling in the lower abdomen, pressure on bowels and bladder, and a “drawing” pain in the upper thighs.

All these symptoms are more or less normal and to be expected (V 104).

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Local irritations and inflammations in the vulva may develop if the napkins are not changed very often.

The outer genitalia are more easily injured and inflamed at this time because they are swollen and congested.

Other unusual conditions are:

the color of the vulva is a brighter red; the outer labia are somewhat dilated and roll back, as also occurs at certain stages of sexual excitement;

the vagina may have a bluish tinge; the uterus feels somewhat enlarged; the genitalia are much more sensitive than under ordinary conditions.

1:2.27 Because of the congestion in the ligaments, connective tissue, and other parts around the uterus there is a feeling of heaviness in the lower abdomen, pressure is felt on bowels and bladder, and a “drawing” pain appears in the upper thighs.

While unpleasant these symptoms are quite normal and should occasion no worry.

[contd] The same is true of the slight pain which accompanies the uterine contractions. They are generally associated at the beginning of the monthly period, and diminish when the flow is profuse and the small lumps of mucus and clots of blood are carried out of the interior uterine orifice.

Women who have experienced labour pains, described menstrual pains as identical in kind (though infinitely less), with the acute pelvic and abdominal pains peculiar to childbirth.

The intensity of the menstrual pains varies greatly in different individuals, and also frequently at different times of her life,

from zero to a degree which must be regarded as morbid (V 104).

[contd] The sum of all these manifestations, however physiologically "normal," is sufficiently disabling and unpleasant to make us understand why women describe their periods as "being unwell."

Nevertheless, there are women who are not "unwell" at these times, but free from any unpleasant symptoms, so that they only know they are menstruating by the flow of blood.

"Being unwell" is not a localised sensation, but general throughout the organism, even though the general effects must be regarded as *irradiations and reactions* of the genital symptoms (V 104-05).

[contd] We have already mentioned the typical psychic disturbances, just before and during menstruation.

1:2.28 The uterine contractions which usually accompany the beginning of menstruation and are relieved when the flow is profuse and the mucus and blood clots are carried out of the interior uterine orifice, are also to be expected.

Menstrual pains are identical in character with labor pains, but vastly less in degree.

Different individuals experience different degrees of menstrual pain; it may differ in degree at different times of the same woman's life.

These variations may run the gamut from little or no discomfort to pain so severe as to be morbid.

1:2.29 While these accompaniments of menstruation are physiological, they are sufficiently disabling and unpleasant to account for the period's being known as "being unwell," and this in a general as well as in a local sense.

Some women, however, are so free from unpleasant symptoms that the flow of blood is the only evidence they have that they are menstruating.

1:2.30 Psychic disturbances, just before and during menstruation, are not uncommon.

SOURCE

The feeling of lassitude and vague discomfort is very common. Headaches or *migraines* generally appear, in those constitutionally subject to them, at these times.

There is ... either ravenous hunger or a distaste for food; nausea and inclination to vomit, bad breath, increase of intestinal gas, frequent and profuse motions of the bowels, even diarrhœa, occur quite often, but at the end of each period there is a tendency to become constipated (V 105).

IV: WOMAN'S SEXUAL NATURE (Fielding 69)

MENSTRUATION (Fielding 85)

Over-emphasis on the part of the mother or other elder, of the supposed distressing nature of the event, has started many a girl off with an exaggerated *notion* of the ordeal. As a consequence, the anticipated "sick spells," "cramps" and other foreboding experiences have been to some extent realized by the very process of mentally encouraging them and giving them a psychological reality (F 86).

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Lassitude and an indefinite discomfort are frequent, while headache and migraines often attack those who are subject to them.

Other symptoms may be: ravenous hunger or a distaste for food; nausea and a tendency to vomit; bad breath, intestinal gas, frequent and profuse bowel movements, which may reach the diarrhea stage; constipation quite often follows the period.

1:2.31 Physicians are increasingly reaching the conclusion that many women unnecessarily complain at menstruation because of bad mental habits and false *notions* they have acquired.

It has been found that the best way to minimize the effects of menstruation is to carry on as usual. This is not universally true, for a few women are genuinely incapacitated during at least a part of one day of the period.

XI: SEXUAL DISORDERS OF WOMEN (Fielding 213)

COMMON DISORDERS OF WOMEN (Fielding 224)

Menstrual Disorders. There are a number of anomalies associated with menstruation. When accompanied by pain or great distress, the condition is called *dysmenorrhea* (F 225).

Unusual trouble at this time is known as *dysmenorrhea*.

II: THE ANATOMY AND PHYSIOLOGY OF SEX (Everett 30)

THE FEMALE SEXUAL ORGANS (Everett 36)

Woman's sexual maturity, or the period during which ovulation occurs, begins around the age of thirteen and fourteen and generally lasts until some time between forty-four and fifty-four, the average age being 49. The cessation of ovulation and menstruation is called the *menopause*, or climacteric.

1:2.32 The sexual maturity of woman, the period of ovulation, begins at about 13 or 14 years of age

[Compare E 17, W 139, F 186, and see 19:2.1.]

and usually continues until between 40 and 50, with about 50 per cent of women falling between 45 and 50.

Occasionally a woman experiences the *menopause* (cessation of menstruation) before forty or after fifty.

The tendency among peoples of the warmer climates is for women to have earlier puberty and earlier menopause (Ev 43).

In warm climates early puberty and early menopause are usual.

[See Chap. 19.]

Menopause is more fully considered in a later chapter.