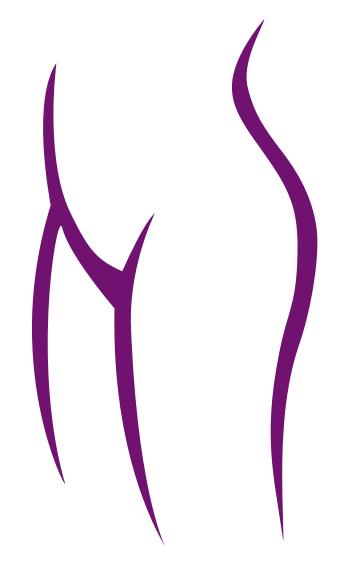
What every woman should know

about the vagina and the possible discomforts in this area



About the authors

Mathilde Boon (19-7-1941) and Annelize Goedbloed (6-12-1939) combined their expertise with the aim of improving the quality of life of women. Mathilde is a pathologist and runs the Cytological and Pathological Laboratory (LCPL) in Leiden. The LCPL serves some 900 GP's in the Netherlands and is also involved in the Dutch government program of screening for cervical carcinoma. As a special interest Mathilde has been observing the relationship between the vaginal flora and pathogens for many years.

Annelize has a career in clinical research and is now director of Research and Development of BioClin bio-active remedies BV in Delft. With the development of the Multi-Gyn products and the evaluation of their efficacy by means of vaginal smears and their related complaints, she brought the suffering of women directly to the attention of the lab of Mathilde.

They started offering a free help program to women which 'got stuck' and are desperate, especially those that are told to "just live with their complaints" and that "intimate complaints are not life threatening". Too often such intimate complaints are either underestimated and neglected or overmedicated and ineffectively medicated. As a result there can be an enormous impact on the physical and psychological well-being of a woman.

The help program offers do-it-yourself tests during a full month cycle, advice and coaching.

The diagnosis of the cause of a vaginal complaint is usually done by means of a culture or a smear. But one culture and one smear only gives a picture of one moment in the menstrual cycle; the vaginal ecology changes with hormonal balance not only during the menstrual cycle but also during the life cycle. The smear has the advantage that the composition of the whole microbial flora can be observed. A culture, whilst useful, gives no insight of how many microbes are actually present nor if these are therefore the culprit of the complaints. Repeated tests during one cycle document the changes occurring during one month.

The program involves women from all over the Netherlands, they are also invited to meetings during which they can exchange experiences, discuss and ask questions.

The program has not only been of benefit to the women themselves but Mathilde and Annelize have also learned a lot. The results of their research and experience in the management and prevention of intimate complaints are of course a unique part of this booklet.

In this booklet they aim to make women familiar and -above all- at ease with what is going on in this particular part of their body.

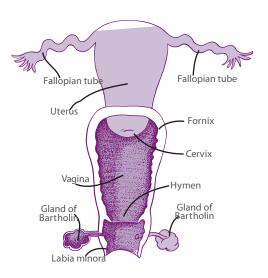
Introduction

"Intimate problems" is a term often used to describe vaginal complaints. The vagina is a part of the female body of which the complaints are even today not easily discussed and taboo. Because of this taboo many women know very little about their vagina. This is a pity, because a healthy vagina is very important in a woman's life. Many so-called minor complaints occur in this area which can have a great influence on a woman's general well-being. It is also a "risk-area" for infections. Of course the vagina has a major role in the sexual life of women as well.

In this booklet we will inform you about the vagina and the factors that are of influence in this part of the female body. We will advise you on good vaginal hygiene and discuss the most frequently asked questions and disorders. We will also introduce you to the Multi-Gyn range of products. The key product is Multi-Gyn Actigel: a bio-active gel that is highly effective in the treatment of the most frequent intimate complaints. But Multi-Gyn also offers a number of other products for intimate care such as its ergonomic Vaginal Douche and Tablets for douching fluid, Liquigel which is a vaginal moisturizer, Compresses for treatment of anal discomforts and FemiWash; the mildest vaginal wash in the world.

Content

About the authors	2
Introduction	3
Content	4
The vagina	5
The vaginal mucous tissue	6
The vaginal flora	6
1. Lactobacilli	6
2. Lactobacilli and cocci; the mixed flora	6
3. Cocci	7
4. The natural protection of the vagina	. 7
5. The dangers of disturbed balances in the vo	•
External factors	7
1. Mechanical factors	7
2. Hygienic factors	7
3. Chemical factors	8
4. Sexual intercourse	8
Internal factors	10
1. Health condition	10
2. The sex hormones	10
3. Medication and drugs	10
Frequent intimate complaints	10
The negative effects of	
recurrent intimate complaints	10
Yeast infection: Candidiasis It is better to prevent than to cure	12
Excessive discharge, Fluor vaginalis	12
Vaqinal dryness	13
Bacterial Vaginosis (B.V.)	13
Itching, Pruritis vulvae	14
Vulvitis and vaginitis	14
The vaginal smear	15 16
The most frequent pathogenic organisms	10
(organisms that can cause disease)	16
Trichomonas	16
Gardnerella	16
Actinomyces	16
Chlamydia	16
Gonorrhea	17
Syphilis	17
Herpes	17
HPV	17
Prevention and treatment of	,
intimate complaints	18
Vaginal douche	18
Bio-active vaginal gel	18
Summary: prevention is better than cure	19
Conclusion	19
Bio-active products	20
Frequently asked queastions	22



De vagina

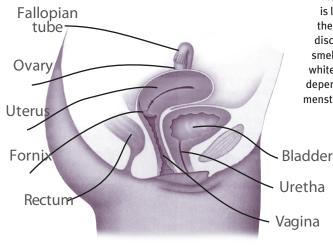
In popular speech the vagina is the entire area of the vagina and vulva involving everything that is pink and of mucous tissue, so also the inside of the labia majora and minora. The outside of the labia majora is hairy. The inside of the labia majora and all of the labia minora carry many small sweat- and sebaceous glands. The secretions of these glands (different from those of the skin) lubricate this area and form a thin protective layer against urine, bacteria and menstrual blood.

On both sides of the vestibulum (the entrance into the vagina) are two glands that produce slime during sexual excitement and lubricate the vestibulum in preparation for sexual intercourse.

The vagina itself is a 7-10 cm. long tube, which extends from the vestibulum to the cervix.

On both sides of the cervix the vagina bulges out into a pocket, which is called a fornix. In these fornices, especially the one on the rear (see diagram), secretion of the cervix and shed cell debris may collect. The

vagina itself has no glands but is lubricated by the secretion of the cervix. Normal vaginal discharge has a pleasant, mild smell and looks like a milky white cream or a clear egg white, depending on the moment of the menstrual cycle.



Time Life Books ISBN 07054 30308

The vaginal mucous tissue

The vagina is covered with a mucous tissue, which is relatively strong and protective. The thickness of this tissue is determined by the balance of the sex hormones. This balance changes during the menstrual cycle, during pregnancy and with age. In young girls and older women the mucous tissue is only a few cell layers thick. In these women this tissue is therefore quite vulnerable and the balance of the vaginal environment can easily be disturbed.

The vaginal flora

In the vagina (as well as e.g. the mouth and the bowel) a great many microorganisms are living in balance with each other and their hostess. This community is called the "vaginal flora". It is also important to know that the vagina usually has an acidic environment (a low pH).

1. Lactobacilli

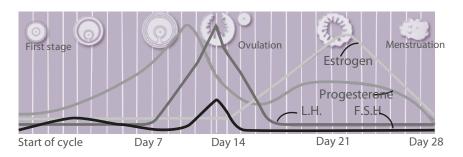
We probably all have heard of Lactobacillus vaginalis as a useful bacterium. Lactobacilli -lactic acid bacteria- are named after their property to produce lactic acid as an end product from feeding on sugars of the cells of the vaginal wall. Thus they largely determine the acidity of the vaginal environment. This acidity is the basis of a healthy vagina because it keeps many harmful micro-organism from growing. As in all balanced situations, too many can be a nuisance as well. Some women have a surplus of Lactobacilli and many of these complain about fluor (excessive white mucous discharge). This diagnosis is called Lactobacillosis.

....

2. Lactobacilli and cocci; the mixed flora Cocci are often present as well.

Cocci are often present as well. They originate from the flora of the bowels. They are certainly not of any use to the vaginal environment but as long as they keep in balance with the Lactobacilli this "mixed flora" is still considered to represent a healthy vaginal environment.

The menstrual cycle



Time Life Books ISBN 07054 30308

3. Cocci

When no Lactobacilli are present at all the healthy pH (acidity) of the vagina has also disappeared. The environment will have become alkaline and this is a perfect condition for the cocci to grow rampantly. Cocci produce a very unpleasant fishy smell. When they cause an infection with symptoms of pain, itching and excessive, malodorous discharge the diagnosis is called Bacterial Vaginosis (B.V.). Basically this means an overgrowth (not an infection) of harmful microbes. Infectious microorganisms prefer this alkaline condition as well.

4. The natural protection of the vagina

In summary the natural protection of the vagina is determined by:

- the thickness of the mucous tissues (the number of cell layers) of the vaginal wall.
- the pH (the acidity) of the vaginal environment
- the balance between the microorganisms present in the vagina
- the good condition and general health of the woman

5. The dangers of disturbed balances in the vagina

It is obvious that any disturbance of the balance is of consequence. In the worst cases it can result in infections and inflammations. The disturbances can be caused by external factors as well as factors from within the body -internal factors- or by a combination of both.

External factors

The external factors that can cause a misbalance in the vaginal environment are subdivided in mechanical, hygienic and chemical factors. Sexual intercourse should be considered as a combination of all of these factors and will therefore be discussed separately.

1. Mechanical factors

Mechanical factors can cause tissue damages e.g. delivering a baby, a rough internal examination or collection of a vaginal smear vour physician, medical a intervention etc. In such a case repair processes of the body for the eliminaof inflammation. tion infection and those for tissue repair will be activated by the immune system.

Combined mechanical and hygienic factors that we should mention: much too tight trousers (occlusion and chafing) and underwear (occlusion) as well as poor application of tampons (wounding).

2. Hygienic factors

Hygienic factors that may cause problems from inappropriate hygienic measures as well as neglect of vaginal hygiene. A very bad hygienic measure is washing this area too often with normal soap. Soap is alkaline and disturbs the pH, so coccoid bacteria (which grow well in an alkaline environment) can get a chance to grow rampant and eliminate the lactobacilli. We advise to wash with a very mild special washing product such as FemiWash that has been developed especially for your daily intimate hygiene. Otherwise washing mostly with just water or a slightly acid water (1 spoon white vinegar to half a litre of water) is an alternative.

Neglect of vaginal hygiene is bad as well. It is important to change tampons, sanitary napkins and panty liners very regularly.

We do advise you to flush the vagina once in a while and certainly when you have "an intimate complaint".

By flushing (douching) you will remove the debris in the vaginal pouch next to the cervix (fornix) and clean the cervix. Especially sexually active women should use a vaginal douche regularly.

We advise however against aggressive (synthetic) douching fluids. Best is to use Multi-Gyn Tablets –based on helpful herbal extracts- or otherwise just clean water (with some vinegar if you like).

The Multi-Gyn Vaginal Douche is the most woman friendly and ergonomic device on the market.

It is important to apply correct toilet habits. In wiping with toilet paper, women should always wipe from front to back and not the other way around. This avoids the spread of micro-organisms like yeast from the bowels into the vagina.

Both inadequate as wrong vaginal hygiene can cause overgrowth of undesirable micro-organisms that may result in Bacterial Vaginosis.

3. Chemical factors

Some vaginal sprays and anti-conceptive gels have detrimental chemical effects. Some women can develop an allergy for the rubber of condoms, cosmetic products or detergents.

4. Sexual intercourse

We discuss sexual intercourse separately under this chapter "External factors", because it really is a combination of mechanical, hygienic and chemical factors.

From a scientific-medical point of view, sexual intercourse —especially unprotected sexual intercourse- has a major effect on the vaginal environment. Just as so many enjoyable things in life, sexual intercourse can have negative consequences. In order to enjoy sexual intercourse without fear of undesired consequences it is important to understand what could be happening to the vaginal environment and how to prevent this or correct this.

Certain mechanical factors are left to your own fantasy. However a dry vagina can cause p a i n f u l intercourse and increase the risk of t i s s u e damage. Good

lubrication helps to

protect the tissues. When natural lubrication is insufficient such as after menopause or when the woman is not sexually aroused, a good lubricant should be applied.

Multi-Gyn Liquigel is a non-chemical, oil free jelly that also optimises the condition of the vaginal tissues and stimulates the natural moisturising. It truly is a vaginal moisturizer and not just some lubricant.

9

The hygienic factor is the possible transmission of all sorts of microorganisms. These are not only the ones that cause venereal diseases but also other bacteria and virusses: from a bladder infection, from skin diseases, from the mouth (such as fever blister's Herpes virus) through oral sex etc.. The danger lies not only in the transmission of undesirable micro-organisms. Sexual intercourse disturbs the vaginal environment chemically as well. Sperm is alkaline and can therefore change the pH of the vagina from acid to alkaline. It is also very rich in proteins. Both of these factors are favourable for the growth of microand organisms

The capacity to repair the vaginal environment after the "alkaline shock" of

overgrowth.

alkaline pH the lactobacilli

will give way to coccoid

(unprotected) intercourse is different in every woman: some can do this without any problems and in others we observe great difficulty or even lack of the recuperation of the vaginal balances.

In the latter case the woman will notice a malodorous discharge a day after (unprotected) intercourse. The cocci can produce substances, which have an unpleasant fishy odour.

Especially these women should clean their vagina by douching within some 6 hours after intercourse. The alkaline sperm and the surplus of coccoid bacteria will be removed so it will be easier for the lactobacilli to grow back and re-establish the appropriate acid pH.

Not only women who have difficulty in re-establishing their acid vaginal pH, but every woman will profit from this measure of vaginal hygiene. This is not an anti-conception measure but a support for the re-establishment of the vaginal balance. With the use of a condom there are of course no chemical changes in the vaginal environment.

It should also be noted that bacteria can attach to sperm and be carried through cervix and then into reproductive the organs, causing pelvic infectious disease (PID). bacteria These can be from the man as well as from the woman's vagina. A healthy vaginal environment and a good hygiene for men are extremely important

factors in sexual intercourse.

The internal factors which are of influence on the vaginal environment are: the condition of the general health of the woman, the balance of the sex hormone levels and the use of medication and drugs.

1. Health condition

The condition of general health includes psychological health. Stress and distress reduce resistance as well. The results of a decreased health condition and a decreased resistance are obvious. Infectious micro-organisms will have a better chance to attack and invade the mucous tissues of the vagina.

2. The sex hormones

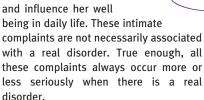
The tissues of the vagina are under the influence of sex hormones; the vagina is optimally protected during ovulation and minimal protection exists at very low hormone levels (young girls and postmenopausal women). It is because humans are one of the very few species that allow sexual intercourse irrespective of ovulation (and its associated optimal condition of the vagina) that we often meet with the problems as described in the chapter on sexual intercourse.

3. Medication and drugs

Some medication, e.g. the use of some antibiotics such as tetracycline for the treatment of acne, or repeated courses of antibiotics for infections may influence the condition and the environment of the vagina. The use of drugs can influence the vaginal tissues as well.

Frequent intimate complaints

The most frequent intimate complaints are: itch, pain, soreness, irritations, excessive vaginal discharge, dryness and associated problems during sexual intercourse. Almost any woman will have some intimate complaints in her lifetime. These can be very annoying and influence her well



The negative effects of recurrent intimate complaints

Recurrent intimate complaints can have a tremendous influence on a woman's life and psyche.

In recurrent intimate complaints there is the danger of a negative cascade of events of which all may be sustaining the recurrence of the intimate complaint.

Recurrent vaginal problems will lead to you to not really wanting sex, resulting in less arousal and less lubrication of the vagina, resulting in unpleasant sex with a

Table Spontaneous complaints in women with vaginal problems

More discharge than usual	71%
Itch in/around the vagina	54%
Irritation in/around the vagina	43%
Unpleasant odour of the discharge	30%
Different colour of the discharge	15%

J.H. Dekker, A.J.P. Boeke, J.Th.M. van Eyk, Huisarts en Wetenschap 1991: 34 (10).



dry vagina, resulting in lack of relaxation, resulting in painful intercourse, resulting in damaged vaginal tissues, resulting in the recurrence of the intimate complaints. Psychologically the negative spiral starts with a negative attitude towards the vagina resulting in a negative idea of 'self', resulting in feeling that you are a 'complainer', resulting in problems with the partner and/or resulting in withdrawing from social life.

Both the physical and the psychological negative cascades have a negative influence on the immune system, the defence mechanism of the body, making you even more susceptible to the recurrence of intimate complaints.

Reversing the cascade starts with an effective treatment of the actual infection and/or the management of the complaint. For example in the case of recurrent candidiasis, the candida fungus plus yeast should be thoroughly killed with courses of anti-mycotic medication. The natural immune system then gets a chance to regain control and ward off re-infection before you notice. Then you can build up your self esteem and the love of your body including its weak points (in your case the susceptibility for vaginal problems). If you accept and deal with the consequences of its weak points you can enjoy life and intercourse just as you should.

Table 1

Age distribution of women visited their GP for vaginal complaints

What's found in a smear?



The Pap Smear. M.E. Boon en A.J.H. Suurmeijer, Press Leyden, Leiden 1991.

Yeast infection: Candidiasis

Candidiasis is the infection of the vagina with candida albicans. This common yeast occurs in the bowel, mouth, skin and also the vagina. A healthy woman's vagina often has bacteria and yeast living in a balanced ecosystem.

Under certain circumstances the yeast can become rampant, invade the tissues and thus cause an infection. It is a very frequently occurring infection. 37 % of women, that refer to their doctor because of vaginal infection, have candidiasis. The complaints start with excessive vaginal discharge and itching of the genital area. The discharge looks a bit like cottage cheese and has an unpleasant smell. Swelling, redness, irritation of the outer and inner labia, painful urinating and painful intercourse are other frequent symptoms. This infection often takes place when the cells of the vagina wall contain a lot of sugar. This is the case during the second half of the menstrual cycle, in pregnancy and with the use of a birth control pill. Also women with diabetes are pre-disposed for infection with candida. The infection with candida is often "easy to treat, but difficult to cure". It can be very tenacious, recurrent and even chronic in spite of courses of medication. Candida is in fact the only infectious agent found in an acid environment (low pH). This is quite understandable because the lactobacilli feed on sugar as well! It is obvious that candida is rarely found post-menopausal women, unless these are on HRT (Hormone Restitution Therapy) because the amount of cell sugar has diminished.



It is better to prevent than to cure
It is important for you -you individually- to understand why candida could flourish in your ina.

Your health condition (mentally and physically) together with your sugar diet (you should limit sugars, dairy products and sweeteners in your food) are things you can understand and control.

You can also "mechanically" remove quite a lot of yeast cells with a vaginal douche. This also gives the immune system a better chance to control the situation. In case of the prevention of a candida infection we advise to use a flushing fluid with the Vaginal Douche that is a bit salty, like a mineral water. Because Candida is more invasive in an acidic vagina the salty flushing fluid will reduce this risk. When you do have a real candida infection your physician will prescribe a medication. Again we advise you to support this treatment with vaginal flushing.

To counter the development of yeast (Candida) and to soothe the itching and pain the topical application of Multi-Gyn Actigel can be very effective.

Women should realise that a certain amount of discharge is normal, that this amount is very individual and varies during the menstrual cycle. The individual woman determines what is normal and what is excessive discharge. We are not talking now about malodorous discharge, or discharge of an abnormal colour or consistency. Excessive discharge is often caused by a disturbance of the balance of the vaginal environment. The irritation of the vagina does not necessarily involve a real infection that needs medication. Every disturbance of the vaginal environment shows more discharge as a first signal. Excessive discharge can caused by bacteria, parasites, yeast or viruses, but also by "mechanical" irritation e.g. tight trousers or occlusion e.g. synthetic underwear

You should take action to prevent the development of a real infection. You should apply extra vaginal hygiene. This means: no soap but washing with a special product like FemiWash and internal "washing' with a vaginal douche. Often excessive discharge also comes with itching, pain (during intercourse as well), burning or irritated labia.

Multi-Gyn Actigel can be a great relief for

these complaints and will restore the

normal vaginal environment.

panty liners.

Vaginal dryness

This is a frequent symptom, especially of the menopause. Because of hormonal insufficiency, the lining of the vagina becomes thinner and the cervix no longer secretes as much mucous for lubrication as it once did. Vaginal dryness can cause painful intercourse and irritated tissues. Fortunately, this problem is easily remedied with Multi-Gyn Liquigel, a natural, non-oily lubricating and moisturising jelly that is based for 100% on bio-active herbal ingredients. Slower sex with more foreplay may also be helpful. Regular sex, through intercourse or masturbation, increases the amount of vaginal lubrication. Finally, if necessary, the prescription of oestrogen cream could alleviate the problem.



Bacterial Vaginosis (B.V.)

B.V. is a very frequently occurring misbalance of the vaginal flora.

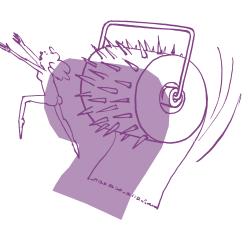
It is easily diagnosed by a fishy, malodorous discharge which is caused by the overgrowth of coccoid bacteria. The pH is always alkaline because lactobacilli have been overgrown or are absent otherwise as e.g. in post-menopausal women. Apart from these symptoms the complaints are pain, itch and burning. B.V. is in fact a more 'dangerous' infection than candidiasis. It is associated with the presence pathogenic microorganisms such as Trichomonas, with a higher chance of premature delivery, and even HIV and carcinoma of the cervix. The bacteria of B.V. can also attach to sperm and be carried through the cervix and into the reproductive causing pelvic infectious organs, disease (PID). Therefore B.V. is usually treated with medication. Gardnerella bacteria often form a part of the discharge in B.V. Again it is better to prevent than to cure. Correct vaginal hygiene as described in the chapter 'Vaginal Hygiene' is very efficient for prevention of B.V.

Multi-Gyn Actigel is the ideal treatment of bacterial overgrowth and B.V.. This bio-active gel blocks the development of harmful microbes in a completely safe and natural manner. It provides direct relief of all common discomforts related to bacterial overgrowth.

Itching, Pruritis vulvae

This is the persistent itching of the labia. It can be caused by different factors such as allergies (e.g. to synthetic underwear, soap, the rubber of condoms, sprays, medication), infections, occlusion by tight trousers or panty liners, irritations by tight trousers, rough toilet paper, not frequently enough changing of sanitary napkins etc.. It is important that you check for yourself which factor can be the cause of your complaint and avoid that factor.

Against this itching you should apply Multi-Gyn Actigel, because you should not get into the vicious circle in which scratching will cause more irritation and thus more scratching and so on.



Vulvitis and vaginitis

These are infections of the vulva (the area of the labia) and the vagina.

The infection occurs when pathogenic micro-organisms are present and get a chance to grow rampant. Decreased resistance offers such a chance. Often a sexual transmitted micro-organism is present. The complaints are usually pain (also during intercourse), burning, itching, swelling and redness.

Excessive discharge is again present and this looks usually abnormal and smells foul. Again extra vaginal hygiene and vaginal douching are indicated points of action to wash the excess of micro-organisms out and to help repair the vaginal environment.

We also advise to apply Multi-Gyn Actigel internally and externally. This gel blocks the microbes, helps to restore the environment and is very effective against the complaints as well.

In all cases, when your complaints have not disappeared within 2 weeks with your own measures of extra vaginal hygiene and the application of Multi-Gyn Actigel, you must consult your physician for a thorough examination and a vaginal smear.

tabel 2

Peak frequency

	spring	summe	r fall	winter
Trichomonas			8	0
Candida			8	
Actinomyces	8		0	
Chlamydia			0	
HPV		4		
Herpes			®	9

The Pap Smear. M.E. Boon en A.J.H. Suurmeijer, coulomb Press Leyden, Leiden 1991.

The vaginal smear

You all know this test method for the early detection of cervical carcinoma.

The vaginal smear is also an excellent method to see what is happening in the vagina. With a small spatula or brush some tissue is scraped from the vagina wall and spread out on a glass slide. In the laboratory this glass slide is treated with special staining agents by which not just the cells but also the bacteria, yeast and several other micro-organisms can be made visible.

With this test we can get a good impression of the presence of obnoxious microorganisms and the condition of the vaginal environment. Only in a few cases this test -the so called PAP smear- will be expanded with cultures (e.g. Chlamydia). A smear from the cervix is used to detect cervical carcinoma. It is most important to have this test performed on a regular basis not only to provide an early warning for carcinoma growth but also to detect vaginal infection.



The most frequent pathogenic organisms (organisms that can cause disease)

Trichomonas

This little animal (a flagellate) is transmitted by sexual intercourse. It causes more discharge, itching, pain and easy bleeding of the vagina. Recently whirl pools and Jacuzi's appear to be a source of infection as well.

Gardnerella

This coccoid bacterium is quite common and occurs in an alkaline pH.

It is not known whether it causes infection by itself. It is always present in combination with other coccoid micro-organisms and with excessive, malodorous white discharge and itching (Bacterial Vaginosis).

Actinomyces

This is a bacterium from the oral cavity. It is brought into the vagina by oral sex but also by hand. It is often seen in women who use an IUD or a diaphragm or a cervical cap and also when tampons are not changed often enough. It may cause an infection with sometimes a brownish foul smelling discharge.

Chlamydia

This micro-organism is still a bacterium, but very much like a virus as well.

It is much dreaded because its infection can easily spread into the uterus and the tubes and induce infertility. Besides typically not producing any symptoms of infection to warn you, chlamydia is also very difficult to culture (to detect in a laboratory). It is transmitted by sexual intercourse and often seen in sexual active teenagers and in women who are already infected with another venereal disease.

Gonorrhea

This is a world-wide venereal disease caused by a bacterium. It is very contagious and causes a serious infection of the vagina, the urethra as well as of the uterus and the whole abdomen.

Syphilis

Treponema pallidum is the name of the little animal that causes this venereal disease, which affects the vagina and the cervix with painless raw ulcers. If left untreated, syphilis can cause brain deterioration and be fatal.

Herpes

2 types of herpes virus can infect the vagina. One is the herpes from the mouth that causes fever blisters. This one is transmitted by oral sex. The other one is

the vaginal herpes virus that is transmitted by intercourse. Both inflict pustules and boils which start on the labia and can spread into the vagina.

HPV

Venereal warts on the labia and cervix are caused by the HPV virus. It is a very serious disease that is transmitted by intercourse and most often seen in sexually active young people and can disappear spontaneously. There seems to be a relationship between the development of carcinoma of the cervix and persistant HPV infection in women with a coccoid flora that flourishes in an alkaline vaginal environment.

tabel 3

	Coccoid overgro	owthMixed flora	Lactobacilli
Trichomonas	52	48	0
Actinomyces	24	74	2
Candida	0	60	40
HPV	12	66	2 2
Chlamydia	18	50	32

The Pap Smear. M.E. Boon en A.J.H. Suurmeijer, coulomb Press Leyden, Leiden 1991. 1*) Mixed flora is a combination of cocci and lactobacilli.

Prevention and treatment of intimate complaints

You can prevent and treat intimate complaints by helping your body to maintain or to restore a healthy vaginal environment. This can be done by:

- good hygienic measures. These are the necessary precautions for sexual intercourse, cleanliness, not washing with normal soap, etc..
- to use a vaginal douche (Multi-Gyn Vaginal Douche) for internal hygiene of the vagina
- application of the bio-active Multi-Gyn Actigel to neutralize harmful microbes, restore the vaginal environment and stimulate the lactobacilli flora

Vaginal douche

Application of this device is an important hygienic measure. It removes mechanically the surplus of micro-organisms and the cells shed from the vagina and cervix. especially the debris collected in the vaginal pouches (fornices) next to the cervix. You can compare this measure of hygiene with brushing your teeth. As a douching fluid made with a Multi-Gyn Tablet is best but water with some vinegar is also acceptable. Medicated douching fluids such as chlorhexidine or betadine should never be applied without the specific advise of your doctor. The frequency of douching depends on your individual 'life-style'. As a hygienic measure, usually once a week is enough. It took many years to establish the relationship between oral hygiene and cavities and to incorporate teeth brushing as a means of prevention. We now have evidence that proper vaginal hygiene, especially post-coital hygiene, is an important tool in the prevention of vaginal disorders.



Bio-active vaginal gel

The application of Multi-Gyn Actigel is unique in its ability to block harmful microbes with its patented 2QR complex. It offers direct relief of intimate complaints such as itching, unwanted discharge or odor, soreness during intercourse etc. The gel will also restore the vaginal environment, enhance the growth of lactobacilli and improve the condition of the mucous tissues.

The 2OR complex neutralizes harmful microbes in a safe and natural way. It is also effective in countering yeast (candida). This bio-active gel does not contain any hormones nor irritating substances. The gel does not have harmful side effects and it is natural and safe. In a Dutch study with Multi-Gyn Actigel the most frequent intimate complaints were shown to be effectively treated. These minor complaints (itching, soreness, redness, swelling, pain, irritation, pain during intercourse etc.) are usually not treated by a physician if no real infection can be diagnosed.

Summary: prevention is better than cure

The frequent use of normal soap is strongly disadvised for vaginal hygiene. Vaginal douching should be used at minimum twice a month, after intercourse and at the first sign of intimate complaints.

For the treatment of BV and relief of intimate complaints the application of Multi-Gyn Actigel is advised.

If the complaints persist for more than 2 weeks you should see your physician. In this case you will probably receive a prescription medication.

Conclusion

Every woman will irrevocably be confronted in her lifetime with a number of the above factors which are of influence to her vaginal environment. The most important factors are: vaginal hygiene, the balance of the sex hormones, the sexual activity (specifically the influence of semen and the sexual transmitted micro-organisms) and the menstrual cycle.

It is important that she is aware of these factors and that she gives this area the appropriate care. The individual woman can very well discover for herself what is best for her when she understands the underlying mechanisms and the effects that internal and external factors can have on the vaginal environment.

It is always of great importance that she pays her physician a visit from time to time for a vaginal test, even when she has no complaints. This will not only detect the early signs of cervical cancer but also give an insight in the status of the vaginal environment.



Multi-Gyn products available in your local pharmacy or drugstore

Multi-Gyn ActiGel

The bio-active treatment of BV (bacterial overgrowth) and its related intimate discomforts. ActiGel is based on the patented 2QR-complex. This natural substance is derived from medicinal plants and consists of bio-active polysaccharides.

It has the unique ability to block adhesion of harmful bacteria and in this way it neutralizes these bacteria effectively.

It is especially developed for bacterial overgrowth and its related vaginal discomforts. Multi-Gyn ActiGel optimizes the condition of the tissue and the vaginal environment.

Multi-Gyn ActiGel has a pH of 4.1 (the pH of a healthy vagina) and stimulates the growth of the useful lactobacilli in the vagina. Multi-Gyn ActiGel is a clear natural gel with a neutral fragrance. It is very easy and comfortable in its use and application. Each tube contains about 25 applications and comes with a special nozzle. As a gel that sticks well to mucous tissues ActiGel will exert its beneficial effects for a longer period of time. For the external parts the gel can be applied with the finger. Multi-Gyn ActiGel is registered as a Medical Device Class IIa.

Multi-Gyn LiquiGel

The bio-active vaginal moisturizer.

Multi-Gyn LiquiGel offers direct relief of vaginal dryness. It optimises the condition of the vaginal tissue and stimulates its own moisture.

Multi-Gyn LiquiGel is based on the patented 2QR-complex that neutralizes harmful bacteria in a safe and natural way. It is therefore also suitable to support the natural healing process of tissue damages (e.g. after childbirth). This unique selfcare product is ideal for relief of vaginal dryness caused by e.g. sexual intercourse, hormonal changes, medication, stress or insertion of tampons. It is an excellent lubricant and has a strong soothing effect

Multi-Gyn LiquiGel is registered as a Medical Device Class I.

Multi-Gyn FloraPlus

The bio-active treatment of vaginal yeast problems and its related discomforts. Multi-Gyn FloraPlus is a natural product, based on the patented bio-active 2QR-complex in combination with prebiotic components. Multi-Gyn FloraPlus optimizes the vaginal flora and pH. Multi-Gyn FloraPlus keeps your vagina in balance by suppressing harmful microbes and by supporting the useful Lactobacilli flora. The useful lactobacilli (lactic acid bacteria) are stimulated in their development. Like this Multi-Gyn FloraPlus creates an optimal and natural flora that prevents discomforts related to overgrowth of unwanted micro-organisms such as candida. In this way FloraPlus is highly effective in preventing (recurring) vaginal problems. It alleviates discomforts such as discharge, itch, irritations, odor, redness and sensitivity.

It is very easy and comfortable in its use and application. Each monodose tube corresponds to a single application quantity. The prebiotic vaginal gel is applied directly into the vagina with a specially shaped applicator. As a gel that sticks well to mucous tissues FloraPlus will exert its beneficial effects for a longer period of time.

Multi-Gyn FloraPlus is registered as a Medical Device Class IIa.



Multi-Gyn products available in your local pharmacy or drugstore

Multi-Gyn Vaginal Douche

The ergonomic vaginal douche for intimate hygiene

The Multi-Gyn vaginal douche meets all the requirements and wishes as specified in a survey amongst women and professionals (gynaecologists and GP's). It has been tested in the laboratory and proves to flush (and not spray) clean, efficiently and gently. The canule has a valve that blocks pressure and makes it impossible to suck back in any fluids. The canule is rounded and easy to insert. Because of the combination of the angle in which the canule is attached to the reservoir and the pliable bottleneck, the douche can be used in any position; sitting on the toilet, standing under the shower or lying down. The result of the design is a practical, woman friendly, highly effective and ergonomic device. Multi-Gyn Vaginal Douche is registered as a Medical Device Class I.

Multi-Gyn Tablets

Multi-Gyn Tablets are used to create a concentrated purely herbal vaginal douching fluid that is aimed at the relief and prevention of complaints such as itch, burning and excessive and/or malodorous discharge. The Tablets are very practical; just place a tablet in the bottle and fill with lukewarm water. After a minute the tablet has dissolved. The vaginal douching fluid is mildly cleansing and soothing. It stimulates a healthy vaginal environment and the growth of lactobacilli. It can also be applied for the cleaning of the intimate parts and for a hip bath. Most of all it is the ideal douching fluid that should be used in combination with the Multi-Gyn Vaginal Douche. Multi-Gyn Tablets are absolutely safe and natural. They do not contain any preservatives. Multi-Gyn Tablets is registered as a Medical Device Class I.

Multi-Gyn Compresses

Direct relief of discomforts in the external intimate area

Multi-Gyn Compresses have been developed to offer maximum relief of discomforts in the external intimate area such as the labia, vulva (vaginal opening) and the anus.

Each compress has been impregnated with a bio-active gel. This natural gel is based on the patented 2QR-complex that blocks the development of bacteria and prevents infection. The outside of the pad is coated with a thin layer of plastic. This creates optimal conditions for the natural healing process. A Compress is placed on the intimate area (vaginal and anal) where it forms a soft protective pad.

Multi-Gyn Compresses are ideal in the prevention and treatment of minor tissue problems such as irritations, rashes, overstretched tissue, minor damages, fissures and haemorrhoids.

Multi-Gyn Compresses are registered as a Medical Device Class I.

Multi-Gyn FemiWash

Triple concentrated and ultra mild for your daily hygiene.

Multi-Gyn FemiWash is a unique formula for washing the intimate area. Independent laboratory testing has proven FemiWash to be the mildest intimate wash on the market. It leaves a very fresh and soft feel and is ideal for frequent use. The special foamer-bottle transfers the liquid to a thick mousse that you apply directly to the intimate area. So you do not first use water to make a foam with your hands. Just like all other products in the Multi-Gyn range it is based on the patented 2QR-complex and does not contain harsh chemicals or preservatives.

Frequently asked questions

 Is washing with soap bad for women which suffer of malodorous discharge?

Yes, this will worsen the situation because soap is alkaline. Washing with just water is sufficient for the hygiene of the area but there are also special soaps and washing emulsions on the market. It is important to improve the acidity of the vagina for example with Multi-Gyn ActiGel that, as a sticky acid gel, will stay in place.

• Is there a relationship between the pH (acidity) of the vagina and conception?

Yes. For conception the pH is most favourable on the moment of ovulation. The vagina is not very acidic and sperm does not like acidity. If there are problems with conception it could be considered to help the vagina to be less acidic for example to wash with alkaline soap before sexual intercourse on the day of ovulation.

• Is there a relationship between nutrition and yeast infection?

The answer is 'yes'. Yeast is feeding on cell sugar (glycogen). The amount of cell sugar is indeed influenced by nutrition. A low sugar – and dairy diet is advisable in yeast infections or the susceptibility for these (a yeast infection is the same word for a Candida infection)

 Should a doctor prescribe oestrogen in case of yeast problems?

Yes, that could be possible because oestrogen counter-acts the effect of progesterone (strong storage of cell glycogen). However, Actigel also effectively counters yeast and on top of that gives direct relief of discomforts.

 Is it normal that I suffer of malodorous discharge after menopause while I never had this problem when I was still menstruating?

The answer is 'yes'. In your case the disappearance of lactobacilli, now you have no cell glycogen after menopause, resulted in coccoid overgrowth.

A possible solution is the application of Multi-Gyn Actigel to block the bacteria and improve the vaginal acidity.

 I frequently get a bladder infection after sexual intercourse. What is the reason and what can I do?

Probably (unprotected) sexual intercourse disturbs the balance of the vaginal bacteria and results in an overgrowth of coccoid bacteria. These can travel up into the urethra into the bladder and cause a bladder infection. It is advisable to douche after intercourse and restore the vaginal acidity with Multi-Gyn ActiGel. You could also drink cranberry juice to make your urine more acidic.

 I am pregnant and suffer from candida infections. What should I do?

You should see your doctor and he will select an anti-candida medication which can be used during pregnancy. To counter yeast and relieve the symptoms such as itch you can use Multi-Gyn Actigel. Multi-Gyn is absolutely safe during pregnancy.

• Is it possible that a hot climate causes more vaginal complaints?

In principle 'yes'. Especially yeast infections occur more frequently in tropical climates.

 Why do I suffer most from vaginal complaints, especially yeast infections, in the second half of my menstrual cycle?

This is because in the second half of the menstrual cycle progesterone is dominating the hormone balance. Progesterone stimulates the storage of cell sugar (glycogen) and this glycogen is what yeast needs to thrive.

When looking for candida (yeast), we therefore advise to do a wet mount or culture in the second half of the cycle, because that is the best time to detect it.

 I learned that the vagina is a selfcleansing organ so why should I douche?

In principle that is correct and that is why there is always some discharge. It depends however on the individual anatomy of the woman how deep the folds (fornices) are behind the attachment

of the uterus to the vagina. (Compare this to the space between your teeth. Some people have to floss all the time and for other people a tooth brush is sufficient.) In these fornices dead cells of the vaginal lining, mucous and also

time and for other people a tooth brush is sufficient.) In these fornices dead cells of the vaginal lining, mucous and also remains of sperm may collect and create an environment for the growth of undesirable micro-organisms. It is wise to flush these fornices clean with douching.

How often should I douche?

Within some 6 hours after (unprotected) sexual intercourse and as a routine for hygiene at least 2 times per month. Not during but after menstruation.

 I heard that douching is dangerous and can cause PID.

The cervix is closed with a mucous plug and forms strong barrier against bacteria to keep the uterus sterile. It takes a lot of pressure to "blow away" this plug and a vaginal douche, and certainly the one of Multi-Gyn, does not create this pressure, even by squeezing with full force. There are indeed negative publications on douching, but we question these, because we could not demonstrate any negative effects in 25.000 women who have been advised to douche. On the contrary! We therefore believe other factors are involved and give rise to the negative reports of douching. It should be noted that we strongly advise against douching with aggressive douching fluids such as chlorhexidine and betadine which kill all bacteria and also the useful lactobacilli (unless this is prescribed and controlled by your physician).