Cancer affects all aspects of your life. So it's not surprising that it can affect your sexual feelings and the ways you express those feelings. You and your spouse or partner remain sexual beings and may have much the same needs and desires as you had before the illness struck.

Sexuality can be expressed in many ways—in how we dress and how we move and speak, as well as through kissing, touching, masturbation, and intercourse. Changes in body image and tolerance for activity as well as anxieties about survival, family, or finances can strain the expression of sexuality and can create concerns about sexual desirability. But if you were comfortable with and enjoyed your sexuality before your illness, the chances are excellent that you will be able to keep or regain a good sexual self-image despite any changes brought about by cancer.

Many people, and in particular those dealing with an illness, find that being sexually active is not important to them to maintain a loving, intimate relationship. This can be a healthy, normal choice for any individual or couple. However, the loss of interest may be transient for others, and they may be quite distressed either by their loss of libido (sexual interest) or by their inability to respond or perform sexually as they had in the past. If sexual intimacy has been a joy and comfort to you, you may want to resume or continue being sexually active even though your cancer has been diagnosed, is being treated, or has been treated.

This may require some adaptation of your normal sexual patterns, and it might be a challenge to change them. Support groups can give understanding and encouragement, and open, comfortable communication with your partner is essential. Make a point of sharing your concerns with your partner: He or she wants and needs to help sort out the problems. You may also need specific information and guidance from your doctor. But the subject of sexual health for people with chronic illnesses, especially cancer, has been neglected for far too long. Members of your medical team may find it hard to initiate discussions about sexual problems. Nevertheless, don't make the mistake of trying to be a “good” patient by not complaining and simply suffering in silence. Sexuality is a legitimate area of concern. Don't be shy: Take the initiative and ask your doctor any questions you have about your sexuality. Seek referral to a sex counselor if needed. You can overcome many problems, reduce tensions, and get much more sexual satisfaction.

The Phases of Sexuality
Understand the phases of sexuality and how cancer can affect one or more of them can help you increase your satisfaction with sex.
• **Desire** This varies from person to person, ranging from an uninterested, indifferent attitude that may or may not change with time to a very active desire for sex. Desire can often be increased by physical, visual, or fantasy stimulation. The initial emotional impact of a cancer diagnosis and its treatment may leave little or no energy left for sexual desire. Depression or certain classes of medications can directly lower desire, as can treatment that alters hormone levels. Discussing your lack of interest with your doctor is important. It may be that alternative medications can be prescribed that do not have such a negative effect. Indeed with some conditions, hormonal replacement therapy, which may correct or at least improve the symptoms, may be appropriate. The important thing to remember is that you do have options. Explore them!

• **Excitement** The body reacts to stimulation with increased blood flow in the sex organs and increased heart rate and blood pressure. Sexual interest and stimulation are popularly thought to be characterized by an erection in men and increased vaginal lubrication in women. On the other hand, particularly after cancer therapy, a person may feel desire yet those physiological responses may not follow. Sexual problems often occur during the excitement phase. This can lead to considerable anxiety and distress. Men may lose the ability to get or keep an erection. Women may not have enough vaginal lubrication for comfortable penetration, making intercourse difficult or painful.

• **Orgasm** This is a peak of pleasurable expression followed by a gratifying relaxation. It is both a physical release and an emotional high.

Some men might ejaculate only after prolonged stimulation. Sometimes nothing happens despite prolonged effort. Or the ejaculate might be reversed into the bladder (retrograde) rather than going forward and out through the penis. In this case, orgasm still occurs, but there is no semen or liquid.

For women, the painful intercourse (dyspareunia) that sometimes follows cancer treatment can inhibit both enjoyment and orgasm. There are a number of treatments available, so don't give up before you have explored the possibilities available to you.

• **Resolution** Many people feel relaxed and satisfied after sex regardless of whether or not they reach orgasm. For others, who experience problems during the desire, excitement, or orgasm phase, the satisfying resolution may be replaced by sexual tension, discomfort in the pelvis, or emotional frustration.

### Sexuality and Cancer

Treatment for some cancers may have little effect on sexuality beyond the effects of fatigue, pain, weakness, or other temporary side effects. However, there are two distinct questions and concerns that may arise. First, in the younger patient, will the treatment of your cancer affect or impair your ability to have a family in the future, and if so, what can you do about it? Second, will the treatment directly affect your ability to function sexually? It is important to recognize that lengthy treatments and impaired fertility may cause marital stress unless both partners are encouraged and willing to communicate their feelings.

### Cancer and Fertility

The improved long-term survival rates and cures following treatment for many cancers have made future fertility a question to be considered in young, reproductive-age patients, preferably even before the actual cancer treatment is begun. The importance of this question has been recognized, and while the existing options are currently
limited, particularly in women, this is an area of active research and it is likely that in the near future other options will become available.

**What Can Be Done to Preserve Fertility?**

Clearly, cancer treatment that requires surgical removal of the testes or the ovary will render the patient sterile. When preservation of fertility is an important consideration, particularly in minimally invasive disease, sometimes the surgeon may suggest alternative surgical treatment that is less radical and still may be a reasonable possibility. Alternatively, the question may arise about the possibility of collecting sperm or ova (eggs) prior to cancer treatment (surgical, radiation, or chemotherapy).

In men, radiation and chemotherapy may cause long-lasting or permanent damage to sperm-producing cells. So, younger men who will require radiation and/or extensive chemotherapy might consider sperm-banking before treatment in case the sperm count and quality do not return to normal. While this option deserves to be considered, it is important to realize that there is no guarantee that a sperm sample collected once any illness, particularly cancer, has struck will be of good quality. Furthermore, in addition to the illness itself, some of the early less radical therapies may themselves adversely affect both the sperm count and the quality.

In women, the damage done to ovaries by cancer treatment is dependent on a number of factors, including the patient's age at the time of treatment, the dose and particular chemotherapeutic drug used, and the dose and fractionation schedule of radiation given. Sometimes, to protect them from radiation, the ovaries may be surgically moved out of the area to be radiated or they may be shielded from radiation.

A question that frequently arises is “Can I ‘bank my eggs’ just like men can bank their sperm?” Unfortunately, at the present time, this is not routinely possible. However, in a few select centers, it is being tried on an experimental basis under the strict supervision of the institutional research committee. While hopeful for the future, currently the relatively poor survival of frozen eggs after the rethawing process, and the low pregnancy yield, make freezing of ova obtained prior to cancer treatment not available as a clinical option. However, advances are being made in this area that are of considerable research interest, so it is likely that “egg banking” may be a therapeutic possibility in the near future.

A second approach currently being looked at is that of freezing ovarian (or testicular) tissue in the hope that later, after successful treatment of the cancer, it can be transplanted back into the patient and still function. A concern remains, however, that when replaced, this frozen ovarian (or testicular) tissue may carry with it some of the cancer that was present in the individual, prior to the tissue removal.

Currently, what is available and what has been shown to be successful is the freezing of embryos. Thus, in patients whose cancer treatment can be delayed for at least several weeks and in whom exposure of the cancer to the high levels of estrogen that may necessarily occur with treatment can be tolerated, the ovaries can be stimulated and the ova obtained following the usual IVF (in vitro fertilization) protocols. Following fertilization with the partner's sperm (or when acceptable, by donor sperm), the embryos can successfully be frozen and at a later date thawed for transfer into the patient (or even a surrogate).

### The Sexual Problems Associated with Specific Cancers and Their Therapies

The treatment of several kinds of cancer may directly affect sexual function.
**Bladder Cancer** Surgical therapy for bladder cancer can lead to decreased desire, a reduced ability for men to get an erection, retrograde ejaculation, and orgasm problems, including a lower intensity. About half of women who have this therapy end up with a shorter and narrower vagina, making penetration more difficult. Communication with your partner will become especially important in such cases, as will the use of lubricants such as K-Y jelly, Astroglide, or Crème de la Femme.

**Breast Cancer** Psychological counseling and support groups are helpful for many women treated for breast cancer, given the symbolic sexual significance of the female breast. Thirty to 40 percent of women who have a modified radical mastectomy report sexual concerns; fewer sexual problems are reported if a lumpectomy is required, which results in less change to body image; but even 10 percent of women who have a benign biopsy may want to discuss sexual concerns.

Premature menopause following chemotherapy, hormone replacement therapy, or radiation can contribute to a woman feeling a loss of desire or even an aversion to sex. When it can be done safely, treatment with low doses of testosterone cream (not commercially available, but it can be prepared by a compounding pharmacy) applied vaginally may help women regain desire and sexual enjoyment. It is hoped that women may soon have another option: the testosterone patch, which has been widely tested and shown to be effective in both naturally and surgically menopausal women distressed about their low sexual desire.

Taking more time with sexual activities other than intercourse, using vaginal lubricants, reading erotic literature or watching erotic videotapes or DVDs, and using sensory enhancements such as music, scented candles, and massage lotion are additional things to try. Of course, having a warm, caring, and communicative relationship with your partner is one of the best enhancers of sexual pleasure. The same applies to people without a partner, who can and should treat themselves with love and nurturing.

**Colon Cancer** There is twice the amount of sexual dysfunction after surgery for colon cancer as there is after surgery for a benign cause such as an ileostomy for ulcerative colitis. Some preliminary data suggest that following endoscopic colectomy, there may be less sexual dysfunction because there is less surgical disruption of pelvic innervation. People with ostomies may have embarrassment or worry about their partner's reaction that might interfere with their sexual responsiveness. Direct communication with and reassurance from a partner can be very helpful.

**Gynecological Tumors** A woman having gynecological cancer surgery with removal of the ovaries will have a sudden loss of estrogen resulting in premature menopause. Sudden loss of ovarian function is associated with very intense symptoms of menopause: severe hot flashes, joint and muscle aches and pains, mood swings, sleeping problems, anxiety, and depression. Sexual partners often have a hard time coping with these changes. All this can reduce a couple's ability to have sex or their inclination to even think about it. With the feelings of abandonment and rejection that often follow, the relationship can definitely suffer. But the right kind of help and counseling can assist the couple in talking about and coping with these problems. Seeking this help may be an important first step. Hormonal replacement therapy may also resolve some of these issues.

Hysterectomy and radiation treatment to the female genitals may lead to problems in the excitement phase. The surgery might also affect orgasm, and painful intercourse can be the result of
lack of hormone (estrogen), caused by the premature failure of the ovaries that we discussed earlier, or from the radiation effects on the tissues. Consequently, the frequency of intercourse might be reduced. Some women who have had hysterectomies for benign disease report similar problems—a decrease in sexual desire especially in the first six months after the operation, with desire often returning to normal within a year.

Radical surgery to the vagina and vulva can so change the physical aspects of the genitalia that sexual activity can become very difficult both physically and psychologically because of the fear of pain or bleeding during intercourse. Plastic surgery to reconstruct the organs, along with sex counseling, can be very helpful to some, while others may learn to enjoy lovemaking without intercourse.

**Hodgkin’s Disease** About 20 percent of men and women with this type of cancer lose energy and interest in sex. Hodgkin’s disease doesn’t usually affect the ability of men to get an erection, but in women, premature failure of the ovaries with the resulting lack of circulating estrogen may cause vaginal dryness, leading to painful intercourse. While the ovarian failure may be permanent, return of ovarian function particularly in young women may occur, even several years later. In general, the shorter the treatment, the lower the dose, and the younger the patient, the better the chance is that (some) recovery of ovarian function will occur.

**Cancer of the Penis and Testicles** As challenging as it sounds, men who lose part of their penis may still be capable of getting erections, having orgasms, and ejaculating. Removal of the whole penis can naturally cause very severe sexual difficulties. But orgasm may still be possible with stimulation of the bones, pubis, perineum, and scrotum, and ejaculation through a urethrostomy.

With testis cancer, the sexual problems depend on the type of tumor. With non-seminoma, removal of a testicle and the lymph nodes in the area usually results in a decrease in fertility and sexual activity. Some men with seminoma who have had a testicle removed plus radiation therapy report low or no sexual activity, decreased desire, problems with erections and orgasms, and decreased volume of semen. Others continue to function and enjoy their sexuality—individual responses vary considerably, as in any aspect of sexuality.

**Prostate Cancer** The diagnostic biopsy might result in less seminal fluid in the ejaculation. Surgical removal of the prostate can cause similar problems and, with hormonal therapy, the ability to get an erection and ejaculate may be lost or diminished.

Radiation produces problems, too, but only half as many as the surgical approach. When the pelvic lymph nodes are removed and a radiation implant is used for localized tumors, 15 to 25 percent of men have difficulties with erections and about 30 percent have a retrograde ejaculation. New “nerve-sparing” surgical approaches and new chemotherapy treatments help reduce erection and ejaculation problems. The PDE-5 inhibitors, such as tadalafil (Cialis), vardenafil (Levitra), and sildenafil (Viagra), may help men regain erectile functioning after prostate cancer treatment.

For some men following treatment such as surgery, urinary incontinence might be a problem, but this usually resolves over the course of six months, while a few men may take up to eighteen months to heal. It is important to consult with a urologist about “aggressive therapy” for erectile functioning following prostate surgery. This might entail injections or oral medication to help the erectile tissue heal.
Drugs That Affect Sexual Desire and Activity Most cancers occur in people over fifty, many of whom may already have experienced some decrease in sexual activity. The diagnosis of cancer itself may result in a significant reduction in sexual desire, as can such diseases as diabetes and alcoholism and/or psychological problems. Furthermore, it is important to know that a great many drugs can lower sexual desire and activity and can therefore lead to sexual dysfunction.

If You’ve Had Treatment to the Genitals or Reproductive Organs Even the prospect of surgery or radiation treatments for these cancers can make you intensely concerned about your body image. But it is usually impossible to predict the effects of treatment for any one person. Treatment can affect some people’s ability to get erections, to ejaculate, or to have intercourse. The same treatment for someone else might result in little or no change in sexual functioning.

Anxiety Sexual problems that seem to be the physical results of treatment may actually be due to anxiety. You can reduce your worry by discussing potential problems and possible solutions prior to or following treatment with your doctor, other members of the health care team, or support group members who have gone through similar experiences. This discussion will also reassure you that if problems do come up, there are ways of handling them. Since in most situations physical and emotional causes of sexual problems interact, your exploration and experimentation about what you can do is very important. Your diagnosis does not dictate what is possible for you sexually.

Use of Some Medications in the Following Categories May Be Associated with Sexual Difficulties

It is always important to take the medication your medical provider prescribes for you. But if you are experiencing some sexual difficulties and you are taking any drugs from the following categories, you should be aware that the problem may be related to your medication. So, it is worthwhile to ask whether your problem is drug related and if an alternative preparation or drug is appropriate and available and could be tried.

| Alcohol | H$_2$-receptor antagonists |
| Anticancer drugs and hormones | Hallucinogenic drugs |
| Anticonvulsants | Hormone blockers |
| Antidepressants | Nonsteroidal anti-inflammatory agents |
| Antihypertensives including beta-blockers (at high dosage) | Opiates |
| Carbonic anhydrase inhibitors | Pain medications |
| Codeine or other narcotics | Psychedelic drugs |
| Cytotoxic drugs | Recreational drugs |
| Digitalis family | Sleep medications |
| Diuretics | Tobacco |
| | Tranquilizers |
Painful Intercourse Women may find that intercourse is painful not only after treatment for a genital cancer, but also if pelvic or total body radiation has been part of your therapy. There are four common reasons why this problem may arise:

- Infection of the bladder or vagina (this may be a recurring problem)
- Lack of lubrication
- Vaginal shortening
- Anxiety with resulting spasm of the vaginal muscles

Have a gynecological examination to find the cause.

Infection Vaginal or bladder infections are common and may cause painful intercourse in any woman, including a woman recovering from cancer therapy. These conditions are readily treatable: Vaginal infections may be treated either locally (vaginal cream or suppositories) or systemically; bladder infections are treated with systemic antibiotics. A yeast infection (with or without a discharge) may occur as a result of treatment with some systemic antibiotics, and this possibility should be considered when intercourse becomes uncomfortable or painful during or after a course of antibiotics.

Lack of Lubrication The vagina may feel “dry” in the presence of a yeast infection. But if this cause is excluded, commonly there are two reasons: (1) inadequate estrogen effect and (2) lack of adequate sexual arousal.

Estrogen is produced normally during reproductive life by the ovaries. Surgical removal of the ovaries permanently deprives the body of this natural source of female hormones. Chemotherapy and radiation therapy may temporarily or permanently stop the production of estrogen. This removal of estrogen may be an important and necessary part of the treatment of the primary cancer (e.g., breast cancer and uterine [endometrial] cancer, but not cervical cancer). Your doctor will be able to tell you for sure about this, and you should therefore feel free to discuss the question with him or her.

Unless estrogen deprivation* is essential to your management, and particularly if you are in your forties or younger, hormonal therapy with an estrogen (ET) or an estrogen plus a progestin or progestosterone (EPT) is almost certainly appropriate for you and can be prescribed by your doctor. This may even be true following breast cancer therapy, particularly if the disease is receptor negative. However, any decision to initiate hormone treatment must be made in conjunction with your oncologist.

Hormone Replacement Therapy (HRT) may be in the form of either systemic medications such as pills, patches, gels, injections, or implants; or local vaginal applications such as estrogen-containing creams, vaginal rings, or vaginal tablets or suppositories. Often, despite use of adequate systemic doses of hormones, additional vaginal estrogen therapy is required to relieve symptoms of vaginal dryness (see “Hormonal Replacement Therapy in Women,” in this chapter).

It may take many months for hormone treatment, local and/or systemic, to return the vagina to normal and improve lubrication. A change of dose (systemic)

* Even if your cancer treatment involves estrogen deprivation and thus treatment with systemic estrogens is considered inappropriate, your doctor may permit use of an estradiol vaginal ring (Estring), which releases a tiny amount of estrogen to the vagina daily; or a small amount of estrogen cream (less than the amount of toothpaste you would use on your toothbrush) applied with your finger to the vaginal and urethral openings, perhaps once every one to two weeks. This may be quite adequate to relieve itching and irritation and may make the tissues softer and more pliable and therefore allow penetration to occur.
or frequency of use (local vaginal application) is sometimes required to achieve a more rapid relief from symptoms. More commonly, though, healing brought about by time is what is needed. Keep in mind that many couples—even those without any health challenges—find that they need to use a vaginal lubricant for intercourse. Estrogen cream is not meant to be used for this purpose. Treatments and products that may be appropriate are noted below.

If the cause of dryness is not enough lubrication, use of saliva, a natural lubricant, or products such as water-soluble lubricants or baby oil can reduce friction. Artificial lubricants such as K-Y jelly, Astroglide, and Jergens lotion and other creams may make coitus possible where the lack of circulating estrogens has caused dryness. Replens (a non-hormonal vaginal gel that is available without prescription in both the United States and Canada) is a vaginal moisturizer that is applied three times a week and may improve lubrication for sexual arousal and intercourse. In some cases, small amounts (one-third to one-half an applicator) of a poorly absorbed estrogen like Premarin or Ortho-Dienestrol (dienestrol; no longer available in Canada) may help restore lubrication and atrophy of the vagina. However, if breast cancer has been diagnosed, use of even small amounts of estrogen may be discouraged. Do discuss this with your doctor.

- **Vaginal Shortening**  Surgery or radiation therapy can cause shortening of the vagina or make the vagina less elastic. Either situation may make intercourse difficult. Your doctor may recommend dilators to exercise and stretch the vagina. Getting back to intercourse soon after treatment can also help prevent these problems. Different positions during intercourse, especially sitting or lying on top of your partner, may let you move in pleasurable ways. Although significant improvement can be expected after the first month of treatment with local estrogen-containing products (e.g. Premarin cream, estradiol vaginal tablets [Vagifem], or an estradiol vaginal ring [Estring]), often six to twelve months, or more, are required to fully restore the genitourinary tract to its normal state. This time lag also occurs when systemic therapy is used.

Vaginal dilators require prolonged regular use before they achieve maximal lengthening and stretching of the vagina. If treatment is begun early, a more rapid response can be expected. The penis is an excellent dilator; therefore repeated attempts at intercourse with adequate lubrication (natural or artificial), gentleness, and persistence are likely to succeed.

Do not be discouraged if initial attempts at penetration or complete penetration are unsuccessful or painful. Several months of treatment with hormone creams may be needed before the tissues soften adequately to allow penetration to occur.

- **Anxiety**  Fear and anxiety may prevent the normal flow of vaginal fluids in response to sexual stimulation. Correction of this situation requires a number of combined treatments: application of a lubricating cream or gel plus relaxation plus and (most important) communication with your partner. Taking a little more time to enjoy foreplay may promote relaxation, enhance sexual response, and increase vaginal lubrication.

Sometimes anxiety can lead to a spasm of the pelvic muscles, which blocks the vaginal passage and prevents penetration. Forceful attempts at penetration may be both painful and frustrating. Consultation with a sex counselor may help you overcome the problem. This condition is readily treatable, so do not be discouraged if your initial attempts are unsuccessful.
Time, patience, sharing your feelings with your partner and support group members, and seeking help from your doctor and possibly also a sex counselor are your best guarantees of improving the quality of your sexual and intimate experiences.

Expressing Yourself Sexually After Treatment

With all the possible effects of cancer treatment, the prospect of having a normal sex life may seem out of reach. But whatever your cancer, there are steps you can take that will help you increase your sexual enjoyment.

If You’ve Had an Ostomy People with ostomies and their partners have to learn about ostomy appearance, care, and control. Women may be comfortable wearing special undergarments that cover a pouch while still permitting sexual stimulation. Specially designed and aesthetically attractive pouches are available.

If You’ve Had a Laryngectomy Laryngectomy patients should be acquainted with how to deal with sounds and odors escaping from their stomas. Wearing a stoma shield or a T-shirt will muffle the sound of breathing and will minimize your partner’s feeling the air that is pushed through the stoma.

If You’ve Had a Mastectomy After a mastectomy, you may be worried about how you look. Undressing in front of your partner or sleeping in the nude may feel awkward and uncomfortable. That’s natural, especially in light of the overemphasis our culture places on the sexual significance of breasts. Grieving over what you have lost is important. But with time and patience, most women overcome their self-consciousness and feel secure and comfortable with their bodies again.

Some women have found it helpful to explore and touch their bodies, including the area of the scar, while nude in front of a mirror. You may want to try this alone at first and then with a spouse, lover, or close friend. Share your feelings about your new body.

Be aware that your partner may not know what to say. Your spouse or lover may not know how or when to bring up the topic of sexuality and so may wait for you to do it. Your partner may be afraid of hurting or embarrassing you and want to protect your feelings. Sometimes this “protection” may feel like rejection. Although you might feel that it’s risky to break the ice and approach the topic yourself, most patients as well as their partners feel relieved once they’ve done it.

You both may also worry about pain. If your incision or muscles are tender, minimize the pressure on your chest area. If you lie on your unaffected side, you can have more control over your movements and reduce any irritation to the incision. If your partner is on top, you may protect the affected area by putting your hand under your chin and your arm against your chest.

If you feel any pain, stop. And let your partner know why you are stopping. If he or she knows that you’ll speak up when you notice any pain, you will both feel more relaxed and less inhibited in exploring and experimenting. Taking a rest or changing position may help you relax, and relaxing will usually decrease any pain. With communication and cooperation, you can work together to find positions and activities that give you the most pleasure.

Experimentation and time seem to be the keys to finding satisfactory ways of adapting to the loss of such a symbolically important part of the body as the breast. Talking with other women who have had mastectomies—women from the American or Canadian Cancer Society’s Reach to Recovery program, or support
groups, for example—can provide support and encouragement as well as suggestions about clothes and prostheses.

Some women find breast reconstruction important for their emotional well-being, while others find that they learn to love and appreciate their altered bodies over time.

**If You’re Having Trouble Reaching Orgasm**

The natural interruption in the ability to experience sexual pleasure after an illness may make having orgasms more difficult for some women. If this is a problem for you, learning to re-explore pleasurable body sensations may be helpful.

It is important to do this when you can be alone and not distracted by having to please or perform for your partner. So find a comfortable place where you can be alone—your bedroom or bathroom—and a time when you won’t be interrupted. Undress slowly and gently stroke your whole body. Then focus on the most sensitive areas—your neck, breasts, thighs, genitals, or any other area that feels good to you.

Use different kinds of touch, soft and light, firm and strong. Try moistening your hands with oil, lotion, or soap. Pay attention to the sensations you feel, and discover which ones are most pleasurable. Learning which kinds of touch feel best will help you heighten your sensation and will give you information to share with your partner. There are many excellent books on women’s sexuality that can help to make you comfortable with this kind of exploration.

**If You’re Having Trouble with Erections**

Since some drugs can temporarily interfere with the ability to have erections, you may want to ask your physician about possible side effects of your treatment.

**Physical and Emotional Causes**

If you can get an erection by masturbating or you wake up with an erection in the night or morning, it is most likely that anxiety or “trying too hard” is the cause, and it’s not a physical problem. If you are not sure of the cause, ask your doctor to refer you to a urologist or sex therapist or both for evaluation and treatment.

**Taking the Pressure Off**

The more options you have for sexual expression, the less pressure there is on having erections. This in turn makes it more likely that they will happen. Many couples report that they have learned to have very pleasurable sexual experiences without erections or intercourse. Many kinds of sexual expression and stimulation do not require an erect penis. It may be reassuring to know that to have an orgasm, many women need or prefer direct stimulation by hand or mouth on or around the clitoris. This is stimulation that even an erect penis in a vagina can’t provide.

If you explore other kinds of sexual touching and expression for a while, you may discover that erections will return with time or that the increased variety of sexual options satisfies both you and your partner. Patience, communication, and time are critical factors in developing pleasurable sexual experiences.

**Counseling**

If erections don’t come back and intercourse is important to you and your partner, ask your doctor to refer you to a sex therapist for counseling. Counseling will help you with relaxation techniques, with planning time for proper stimulation, and with methods for using visual stimulation and fantasy. Other cancer survivors who have had the same problem report that group counseling can also help.

A number of new medications for erection problems have come on the market in the last few years. Taken before a sexual encounter, these medications increase blood flow to the penis, resulting in an erection. The first of these, sildenafil (Viagra), became available in late 1997,
followed by vardenafil (Levitra) and tadalafil (Cialis). They differ in onset of action, duration of action, and interaction with food. Sildenafil and vardenafil should be taken on an empty stomach for optimal effect, have an onset of action of thirty to sixty minutes and a duration of action of about four hours. On the other hand, tadalafil can be taken without regard to meals, has an onset of action of about forty-five minutes and a duration of action of twenty-four to thirty-six hours. Side effects include headaches, visual disturbances, and flushing. While considered generally safe for most men (including those using most blood pressure medications), sildenafil, vardenafil, and tadalafil should not be used by men taking nitrates. Medical clearance is essential prior to use of these drugs. Other medications are becoming available, so discuss the appropriateness of their use in your case.

If even with the help of these medications you are still not getting erections, the counselor may refer you to a urologist. Together with you and your counselor, the urologist can explore another option, such as use of a vacuum pump, injection therapy, or a penile implant.

**Hormonal Replacement Therapy in Women**

**Estrogens from Reproductive Life to Menopause** From puberty to menopause, the ovaries produce estrogen (estradiol), and when ovulation occurs, progesterone is added. The ovaries also produce the male hormones testosterone and androstenedione. Estrogen and progesterone act on their target organs, so called because they contain specific receptors or receiving areas where these hormones can enter the cells and produce the required effect. The target organs for estrogen and progesterone are the breasts, vulva, vagina, uterus, urethra, bladder, skin, and parts of the brain that control mood, sleep (insomnia), and temperature (hot flashes).

After menopause, the ovaries secrete very little estradiol, so the total amount of estrogen in the body drops to only a fraction of that produced during reproductive life. As a result, an alternative though small source of estrogen becomes significant. Male hormones continue to be produced by the adrenal gland—and, important, also by the ovaries—for about five years after menopause (the increased facial hair that women report in the early postmenopausal years is the result of the male hormones that continue to be secreted). These male hormones are carried to the skin, liver, body fat, and brain, where they are converted to a weak but effective estrogen, estrone. Body fat is a particularly important site of estrone production; it has long been recognized that women with more body fat have higher circulating estrone levels.

**Why Is Estrogen Important?** The degree to which estrogen affects the tissues becomes evident after menopause, when levels of estrogen drop. Following menopause, the deficiency in estrogen causes obvious symptoms such as hot flashes, insomnia, vaginal dryness, increased urinary frequency, increased incidence of bladder and vaginal infections, and in the long-term osteoporosis and a predisposition to arteriosclerosis. Hormonal replacement therapy (HRT) provides symptomatic relief whenever it is begun and is particularly important when the production of estrogen stops prematurely (before the age of forty)* because the long-term consequences (bone loss

* The Women’s Health Initiative (WHI) studied the effects of menopausal hormone use in women fifty to eighty years of age and provided no guidance as to hormone use in women with premature ovarian failure.
and cardiovascular problems) are often even more significant.

What Are Menopause and Premature Ovarian Failure? Menopause means that the periods (“menses”) have stopped (“paused”). Menopause occurs naturally around age fifty. However, radiation, chemotherapy, or surgical removal of the ovaries before menopause will result in ovarian hormone deficiency even earlier. In younger women who have experienced premature ovarian failure as a result of chemotherapy or radiation therapy, the ovaries may later begin to function again. Although we are unable to predict whether this will occur, factors that appear to play a role are age and type and amount of chemotherapy or radiation. Until ovarian function resumes, these women should be on hormonal replacement therapy and, if pregnancy is not desired, also on some form of contraception.

Hormonal therapy prescribed after menopause is often called estrogen therapy (ET) or hormone replacement therapy (HRT), which usually means estrogen with progesterin therapy.

HRT Medications There are many possibilities for hormonal replacement therapy. Nonsmoking reproductive-aged women with premature ovarian failure (POF) are often best treated with birth control pills (oral contraceptives), which contain adequate amounts of both estrogen and progesterin. The advantages of this approach are that the higher dose of hormones in birth control pills is what is often needed to control estrogen-deficiency symptoms in younger women, and that at the same time, it provides contraceptive protection should the ovaries begin to function again.

When vaginal or urinary symptoms persist despite systemic hormonal therapy, local hormonal therapy may be added. This may be in the form of an estrogen vaginal cream like Premarin or Ortho-Dienestrol (dienestrol; no longer available in Canada), estradiol vaginal tablets (Vagifem), or an estradiol vaginal ring (Estring).

Standard hormonal therapy consists of estrogen preparations, which include oral estrogens such as conjugated estrogen tablets (Premarin), estrone (Ogen), and estradiol (Estrace); an estradiol gel (EstroGel); and a transdermal estradiol patch (Estradot, Estraderm, or Climara). Women who have not had a hysterectomy need to add a progestin—either medroxyprogesterone acetate (Provera), norethindrone (Norlutate), or progesterone (Prometrium). Estrogen-progesterin combinations may be used together, continuously (nonstop) or cyclically (i.e., estrogen alone for about two weeks, then estrogen with the addition of a progestin for an additional ten to fifteen days). Two products that contain a combination of both estrogen and progestin are available: CombiPatch, a transdermal estradiol-norethindrone patch, and FemHRT, an oral pill that contains ethinyl estradiol and norethindrone.

Another possibility is an implant under the skin (subdermal implant) of nomestrol acetate (Uniplant), which needs to be replaced every six months. This preparation currently is not available for use in Canada. For many years, a popular form of postmenopausal replacement therapy has been an injection of Duratestin, which is a combination of estradiol and testosterone that is given intramuscularly every six weeks. This preparation not only treats estrogen-deficiency symptoms, but also may improve libido as a result of the testosterone in the mixture. Occasionally, a small dose of testosterone is prescribed alone, specifically to treat problems of decreased libido. Oral tablets of Andriol (testosterone undecanoate) may be used two to three times per week and are available on prescription in Canada. Testosterone creams and gels in doses
appropriate for women are not commercially available but can be compounded by some pharmacies for topical transdermal applications. A testosterone patch (Intrinsa) has been widely tested in North America and found to be effective in the treatment of women distressed about their problem of low libido. The testosterone patch is currently under review by Health Canada, and it is hoped that they will approve the use of this product in the near future.

**Treatment Routines** Estrogen with or without a progestin may be given cyclically (resulting in “menstrual periods”) or in a continuous combined nonstop regimen (no “menstrual periods”). A common routine using both estrogen and progestin is to give estrogen alone for fourteen to fifteen days, then add progestin (such as medroxyprogesterone acetate [Provera]) for seven to fourteen days. Both hormones are then stopped, and a period follows in one or two days. The cycle is repeated monthly.

Similarly, if continuous estrogen is given and progestin is added only for twelve to fourteen days, a period is expected one or two days after the progestin is stopped. This routine is commonly used with transdermal preparations.

For women who do not wish to have a period but want and need HRT, a combined routine of estrogen and progestin is given continuously. After a short adjustment period (approximately six months) during which some vaginal bleeding may occur, most women enjoy all the benefits of HRT, including relief of hot flashes, insomnia, and vaginal and urinary symptoms.

**Effects of HRT** HRT has numerous normal effects, not all of which are welcomed by women. These effects, addressed below, are the result of estrogen’s effects on the target organs and tissues. Obvious early benefits include a reduction in hot flashes and night sweats and more restful sleep. Some women also report a greater sense of well-being.

After a few months’ treatment, women may notice other beneficial effects. The vagina and cervix can be expected to become healthier and more moist with increased vaginal secretion and better lubrication during intercourse. Many women also report increased sexual awareness and enhanced sexual response after starting hormone replacement therapy. In addition, fewer bladder and vaginal infections occur.

However, there may be some normal but undesirable effects as well, including increased sensitivity and sometimes tenderness of the breasts, increased vaginal discharge, and the return of vaginal bleeding, or “menstruation.”

**Is Hormonal Replacement Therapy (HRT) for You?** Whether or not systemic HRT is appropriate or likely to prove beneficial for you can best be decided by your doctor. Talk to him or her about the possibility of this treatment. You may be an ideal candidate. This is particularly likely if your periods have stopped and menopause has occurred in your early forties or before. On the other hand, you may want or need to manage your symptoms without hormones.

**Management of Menopausal Symptoms Without Hormonal Replacement** Standard estrogen therapy may not be safe or appropriate for some; thus, it is heartening that considerable research has been directed to finding other, nonhormonal and nonmedical approaches that can improve sexual functioning and menopausal symptoms after breast cancer. These include giving patients access to educational pamphlets discussing menopause, estrogen replacement therapy, urinary incontinence, tamoxifen (Nolvadex), and sexuality and teaching them the use of slow abdominal breathing (for
hot flashes), the use of Kegel pelvic-floor-muscle exercises (for urinary incontinence and sexual response), and the use of moisturizers such as Replens and lubricants such as Astroglide (for vaginal dryness). Also, patients with particular psychosocial stressors benefit from referral to counseling or to support groups.

**General Guidelines for Resuming Sexual Activity**

Whenever you are sick, your usual sense of control over your body may be shaken. You may feel inadequate and helpless. An illness can change the way you experience your body or it might actually change the way you look because of surgery, amputation, scarring, or weight loss or gain.

These changes can create painful anxiety. You wonder whether you’ll be able to function in your usual social, sexual, and career roles. You wonder what people will think of you. This anxiety—and the depression and fatigue that often go along with it—understandably make sexuality seem less important. But once the immediate crisis has passed, sexual feelings and how to express them may become important again.

Feeling anxious about resuming sexual activity is normal and natural. It is easy to “get out of practice.” You may have questions about whether sexual activity will hurt you in some way. You may wonder how you will be able to experience sexual pleasure, and your partner may share the same worries. He or she may be especially concerned about tempting you out or hurting you somehow.

But once you resume sexual relations, your comfort and confidence should gradually increase. If not, sex counseling may help you discover ways to deal with whatever problems you are having. For many people, a “new start”—by themselves or through counseling—is refreshing. It might even create opportunities for greater intimacy and sharing than ever before.

**What to Do When You Are in the Hospital**

Your cancer treatment might involve long stays in the hospital and long separations from those you love. Hospitals or rehabilitation facilities don’t usually provide much privacy, so there may be little opportunity for sexual expression unless you speak up.

Although health care facilities are rarely designed to ensure patients’ privacy, there is no reason why you and your partner can’t have time for intimate physical contact in the hospital. With a little friendly intervention, your doctor might be able to arrange for a special room where you and your loved one can spend some time alone. Or you can always make a sign reading “Do Not Disturb Until ___ o’clock” or “Please Knock” and hang it on the door to your room. The nurses will respect your wishes.

If this sounds important to you, ask your doctor to speak to the hospital staff and help foster a caring and respectful attitude toward your need to express your sexuality with guaranteed privacy. It takes some education and maybe a change in the “way things are always done around here,” but may be well worth the effort.

**Developing Helpful Attitudes and Practices**

Whenever you are ready to become sexually active again, there are a few things you should keep in mind.

- **You are loved for who you are, not just for your appearance.** If you were considered lovable or sexually desirable before you got cancer, chances are that you will be afterward, too. Your partner, your family, and your friends will still love you and value you, as long as you let them.

- **We are all sexual beings.** Whether we are sexually active or not, sexuality is
part of who we are. It is not defined just by what we do or how often we do it.

- **Survival overshadows sexuality.** If you’ve lost your good health, it is normal and natural for stress, depression, worry, and fatigue to lower your interest in sex. Just coping with basic everyday decisions can seem like a burden. But take one day at a time and be patient. Sexual interest and feelings will probably come back when the immediate crisis has passed.

- **Share your feelings.** Making relationships work is a task we all face, but it can be made more difficult by worries about our worth and attractiveness. Whether you are looking for a new relationship or already have a regular partner, you may find yourself in the position of having to share your sexual feelings with someone, perhaps for the first time.

  This sharing may feel awkward at first. Learning how and when to talk about sexual issues may not come easily. You may feel shy or nervous about exploring new and different ways of finding sexual pleasure. You may be waiting for your partner to make the first move, while your partner is waiting for you to make the advances. This familiar waiting game is often misunderstood as rejection by both people. It may be frightening to think of breaking the silence yourself. Yet a good move is to make the first move. Try sharing some of the myths or expectations you grew up with about sexuality. Often this is humorous and may break the ice in starting a frank discussion about your sexual needs and concerns. Try not to make broad, generalized statements. Talk about what is important to you and about how you feel. The payoff is greater understanding of each other’s needs and concerns, and that is worth the effort.

- **Expect the unexpected.** The first time you have sex after treatment, physical limitations, worry about your performance or appearance, or fear of rejection may keep you from focusing on the sheer pleasure of physical contact. On the other hand, you may be surprised by unfamiliar pleasurable sensations. If you expect some changes as part of the natural recovery process, they will be less likely to distract you from sexual pleasure if they do happen.

- **Give yourself time.** You and your partner may be frightened of, or even repulsed by, scars, unfamiliar appliances, or other physical changes. That’s natural, too. But such feelings are usually temporary. Talking about them is often the first step to mutual support and acceptance. Don’t pressure yourself about having to “work on sex.” A satisfactory and enjoyable sex life will happen one step at a time. You may want to spend some time by yourself exploring your body, becoming familiar with changes, and rediscovering your unique body texture and sensations. Once you feel relaxed doing this, move on to mutual body exploration with your partner.

- **Take the pressure off intercourse.** Almost all of us were brought up to believe that intercourse is the only real or appropriate way of expressing ourselves sexually. Yet sexual expression can encompass many forms of touching and pleasuring that are satisfying psychologically and physically. When you resume sexual activity, try spending some time in pleasurable activities—touching, fondling, kissing, and being close—without having intercourse. Reexperience the pleasure of playing, of holding, and of being held without having to worry about erections and orgasms. When you feel comfortable, proceed at your own pace to other ways of being sexual, including intercourse if you like.

  Experiment and explore to discover what feels best and what is acceptable. If
radiation therapy, for example, has made intercourse painful, try oral or manual stimulation to orgasm, or intercourse between thighs or breasts. If you are exhausted by the disease or movement is painful, just cuddling or lying quietly next to your partner can be a wonderfully satisfying form of intimacy.

- Don’t let your diagnosis dictate what you can do sexually. Your sexuality cannot be “diagnosed.” You will never know what pleasures you are capable of experiencing if you don’t explore. Try new positions, new touches, and above all new attitudes.

- Your brain is your best and most important sex organ! And its ability to experience sensation is virtually limitless.

- Plan sex around your changing energy levels. Life with cancer can be exhausting. Fatigue, depression, and just feeling sick are almost normal for cancer patients at certain times. The amount of energy you have for all kinds of activities, including sex, can vary from day to day or week to week. So plan sexual activities to coincide with the times when you think you will feel best.

- Ask for help if you need it. Don’t hesitate to seek counseling or information if you have problems. Help is available from a wide range of sources. If you want to discuss any problems, bring them up with your health care providers. Ask them to recommend competent sex counselors or therapists in your area. There may also be other resources available nearby, such as people who have had both cancer and experience in talking about sexual concerns.

- Be patient. The important thing is to be patient, with both yourself and your partner. You won’t adjust overnight. Give yourself time to explore and share your feelings about your body changes and time to again see yourself as a desirable sexual being. When you can accept the way your body looks and recognize your potential for sexual pleasure, it will be easier to imagine someone else doing the same.

The satisfaction and good feelings—emotional and physical—that can come from a sexual relationship require patience, communication, respect, cooperation, and a willingness to remember that in some respects the relationship must be learned all over again, physically if not emotionally.

Everything may not work properly at first. Everything may not be enjoyable at first. But for those for whom sexuality is still an important component of their intimacy, continuing to have the courage and confidence to keep trying should bring healing results.

**BIBLIOGRAPHY**

**Books**


Written in an honest, compassionate style by a patient with prostate cancer and his wife. Discusses impotence in nonmedical terms, with information on commercial treatments. Gives practical advice about making love. Includes everything from getting into the mood to commonsense suggestions for having sexual satisfaction and intimacy when erections are not possible.


Classics that empower women to enjoy their own sexuality, with suggestions for
women who want to learn to become orgasmic alone and with a partner.


Self-help workbooks for men and women.


Wonderful and realistic book on maintaining intimacy.


Moving and insightful account of one woman’s experiences.


Results of over twenty-five years of research pointing out the danger signals for troubled marriages, with suggestions to help marital communication.


Written by an Australian patient and her physician to show that a good life after cancer is possible. Includes anatomy and function of female reproductive organs, gynecological cancers and their treatment, and thoughtful and comprehensive strategies about sexual survival during and after cancer therapy.


Beautifully and simply written book on the various aspects of loving relationships; how to establish and maintain intimacy in communication.


Based on the personal stories shared by cancer survivors and nurses, oncologists, and psychiatrists treating cancer patients; for more information, see www.intimacyaftercancer.com.


Discussion of national survey of ethnically diverse women ages twenty-one to eighty-five years in expanding the view of sexuality, intimacy, spirituality, and religion. Suggests various strategies to enhance and explore women’s sexuality.


Provides validation and useful suggestions for men and their partners.


A useful book covering various issues about sex and fertility. Helpful in learning how to enjoy sex again and to make informed choices about pregnancy after cancer treatment.
Excellent, comprehensive booklets.


Eloquently describes how our deepest longing for love is in fact the key to healing our personal wounds and the wounded nature of the world at large . . . echoing Buddha, with the message that we have direct access to the love and happiness we most long for, as our very essence.

A commonsense, practical discussion of the fantasy model of sex and myths of male sexuality and the importance of an individual’s conditions for good sex; with specific self-help chapters dealing with common male and couples’ sexual problems.