

MAYO CLINIC HEALTH LETTER

Reliable Information for a Healthier Life

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Irritable bowel syndrome

New approaches for relief

The meal was delicious, but it was difficult to enjoy because you have irritable bowel syndrome (IBS), and you knew what was coming next. Sure enough, the familiar rumblings in your gut begin, and soon you're dealing with cramps that only go away after a bout of diarrhea. On other occasions, you find yourself dealing with a bloated feeling and constipation.

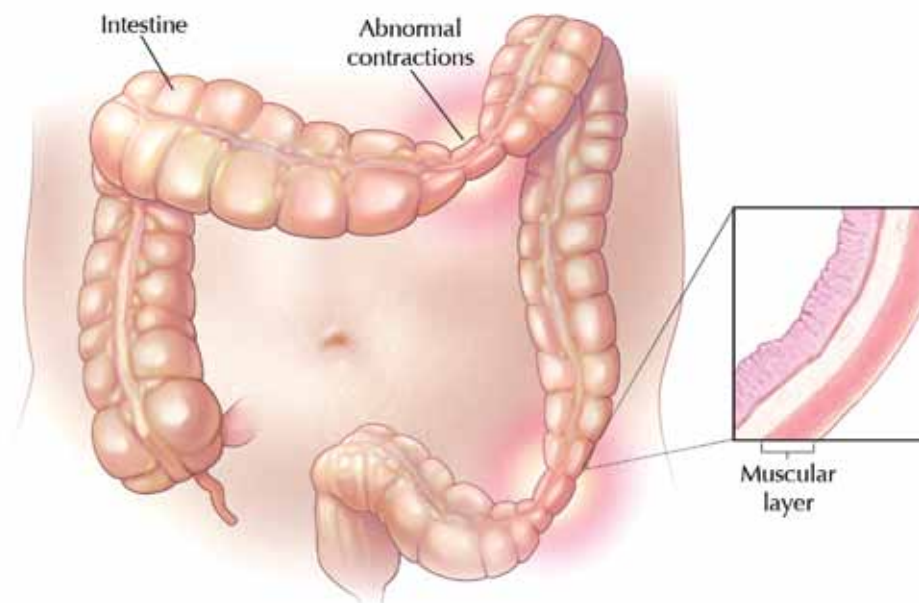
IBS is a disorder affecting the large intestine (colon), and it's a frustrating and very common problem. Relief can often be found by taking a diligent ap-

proach to lifestyle modification and discovering and avoiding dietary or emotional triggers. Researchers continue to find links between certain triggers and signs and symptoms in some people, offering new routes to relief.

Double trouble

IBS is a chronic condition characterized by abdominal pain that occurs before or along with diarrhea or constipation. The diarrhea or constipation can lead to other signs and symptoms, such as excessive gas, bloating and mucus in stool, and often eases after a bowel movement.

But the overall range of signs and symptoms that occur with IBS can vary widely. Some people have diarrhea more often, some have constipation more often, and some have more of an



The walls of the intestines are lined with layers of muscle that contract and relax, helping move food through your digestive system. With irritable bowel syndrome, these muscles may function abnormally, including causing painful muscle spasms.

even mix between occurrences of the two conditions. Most people with IBS have milder signs and symptoms, but in some people they can be severe enough to be disabling.

For many people, flares of diarrhea may last for a few days, followed by periods of remission. Constipation may last for days or even months, along with intermittent diarrhea or normal bowel function. However, a small fraction of people with severe IBS have unbearable pain that may sometimes be more continuous.

There are no tests that can conclusively diagnose IBS, although there are sets of symptoms that help guide doctors. Even if your doctor suspects IBS, certain tests may be done to rule out other problems that can cause similar signs and symptoms, but these tests aren't necessary for a diagnosis. Other conditions that may mimic IBS include intolerance to lactose found in dairy products (lactose intolerance), bacterial overgrowth in the small intestine, gluten intolerance or celiac disease, pelvic floor dysfunction, colon cancer, infections, and inflammatory bowel disease.

Multiple factors

No one knows for certain what causes bowel dysfunction with IBS. There may be multiple causes, as no one explanation fits all cases. Suspected mechanisms include:

- **Gut hormones** — The gastrointestinal tract is a large factory of many hormones. Some, such as serotonin, are predominantly made in the gastrointestinal tract. Serotonin is important for control of gut movement and sensation. Several IBS studies demonstrate abnormalities in serotonin release and action.
- **Abnormal bowel contractions** — The walls of your intestines are lined with layers of muscle that contract and relax in a coordinated rhythm, helping to move food through your digestive system. With IBS, these muscles may function abnormally.
- **Heightened nerve sensitivity** — Nerves that control bowel sensation

— or brain areas that process those signals — may be more sensitive than normal, causing a stronger reaction sensations in your intestines, such as stool movement or gas.

- **Stress and psychological factors** — Stress and anxiety are known to affect the intestines, and some people find that their IBS signs and symptoms are more severe or frequent during stressful times.
- **Food sensitivity** — Some people have an allergy to a certain food or difficulty digesting foods containing lactose, gluten, or certain types of sugars or artificial sweeteners.
- **Hormonal factors** — Women are twice as likely as men to develop IBS, leading to speculation that hormones may play a role.
- **Altered gut bacteria** — It appears possible that alterations in the complex ecology of “good” bacteria in the large intestine may contribute to IBS signs and symptoms.
- **Infection** — Some people develop IBS on the heels of an infection that causes diarrhea, and research suggests that such an infection increases IBS risk.

Lifestyle steps

The foundation of IBS therapy is developing habits that generally facilitate smooth bowel function. Steps may include working with your doctor or other health professional to develop a plan for regular exercise and management of stress, anxiety or other psychological factors.

For some with IBS, increasing fiber intake can help reduce constipation by softening stools, or it can help cause loose stools to become more bulky. A trial of increased fiber intake is usually recommended, but with the knowledge that for some people, increasing fiber may make IBS symptoms worse.

Those with constipation can experiment with gradually adding fiber by incorporating more vegetables, fruits, whole grains and other plant foods into their diets. Fiber supplementation with 1 to 2 tablespoons daily of products such as psyllium (Metamucil)

or methylcellulose (Citrucel) can be added to — or used as a substitute for — increased dietary fiber intake. Those with diarrhea may also benefit from fiber supplementation. However, in those with excess gas, psyllium isn't recommended. Drinking plenty of water is recommended in conjunction with fiber experimentation.

Beyond basics

In addition to lifestyle improvements, more-specific routes to finding symptom relief may include:

- **Avoiding problem foods** — A diagnosis of celiac disease or lactose intolerance gives you guidance on foods to avoid. Otherwise, discovering problem foods often requires keeping a food diary to help identify potential problem foods — or eliminating or reducing a certain food for a couple of weeks and documenting changes, if any.

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Common causes of diarrhea include caffeine, high-fat foods, high amounts of fructose such as from soda or processed foods, and artificial sweeteners found in diet soda, sugar-free gum or candy. Gas-producing foods include numerous plant foods — such as beans, broccoli and legumes — and alcohol and caffeine.

Recently, experimentation with diets low in certain sugars or in wheat or gluten has come into favor as a possible route toward symptom relief. FODMAP is an acronym for a list of certain fermentable sugars, such as can be found in fructose or in wheat. A FODMAP diet is one in which a dietitian helps you eliminate these sugars from your diet for a period of weeks. If signs and symptoms improve, one of the sugars may be added back to the diet to see if your signs and symptoms return. With enough experimentation, you may be able to identify the offending sugar or sugars and maintain a diet that's low in those sugars.

Another tack is related to the recent recognition that some people who don't have celiac disease may nevertheless be sensitive to wheat or gluten. A two-week trial of a wheat- or gluten-free diet may be worthwhile for those with diarrhea-predominant IBS.

■ **Nonprescription drugs** — For those with constipation that isn't responding to other methods, a laxative such as magnesium hydroxide (Phillips' Milk of Magnesia) or polyethylene glycol (MiraLax) can be helpful. For those with diarrhea, an anti-diarrheal medication such as loperamide (Imodium) may help. For IBS, loperamide is taken 30 minutes before meals. For bloating, simethicone (Gas-X, Mylanta Gas, Phazyme) or alpha-galactosidase (Beano) may offer relief.

Even though these are nonprescription products, talk with your doctor about safe and effective use.

■ **Certain supplements** — Numerous supplements for IBS are on the market, but many of them have limited scientific evidence demonstrating effective-

ness. Among the better studied supplements, peppermint oil taken in capsules appears to reduce abdominal pain related to IBS. Iberogast is a brand name for a mix of nine herbal extracts that also has been associated with reduced abdominal pain with IBS.

Supplementation with live, beneficial bacteria (probiotics) is commonly used by people who experience abdominal discomfort. The idea is that probiotics can help populate the gut with these microorganisms. However, it's not clear whether probiotics actually cause changes in gut flora. Still, probiotic species of bifidobacteria or lactobacilli — or the specific probiotic combination VSL#3 — appear to reduce excess gas and bloating in people with IBS, with improvement in pain being less consistent.

Prescription for relief

If IBS signs and symptoms are moderate to severe, you may need more help than what lifestyle changes or nonprescription drugs or supplements can offer. Drugs to relax the bowel wall (antispasmodics) can be helpful for both constipation and diarrhea-predominant IBS. These are taken 30 minutes before a meal and include hyoscyamine (Levsin) and dicyclomine (Bentyl).

Antidepressant medications also may be considered for the moderating effect they can have on pain perception. A tricyclic antidepressant may be helpful for diarrhea-predominant IBS, not only for its pain sensation benefits, but also because it can slow bowel movements. For this reason, antidepressants other than tricyclics are used for pain with constipation-dominant IBS.

For more severe or persistent constipation, the laxatives lubiprostone (Amitiza) and linaclotide (Linzess) may be considered. For severe diarrhea in women, the drug alosetron (Lotronex) may be an option. Reports suggest it doesn't work in men. It can only be prescribed by doctors enrolled in a special program because of concerns about rare but potentially dangerous side effects. □

Health tips

Healthy travel habits

Riding in a car, train, bus or airplane seat can add up to a lot of time spent doing very little. Use that time to benefit your health by:

■ **Practicing relaxation** — Reduce stress by focusing on your breathing for a few minutes. Then inhale deeply through your nose, hold your breath for a few seconds, and exhale through your mouth. As you exhale, relax your face and shoulders.

■ **Playing mind games** — Exercise your mind to keep it sharp. If you have a mobile computer device, there are brain games that can be downloaded for free, such as from AARP (<http://games.aarp.org>). Think of math problems to solve, or play memory games. Trying new things and playing games or solving problems for speed appear to be important.

■ **Squeezing an object** — There's some evidence that gripping an object such as a foam stress ball or spring-loaded grip device at about 30 percent of your grip strength — and holding that grip for about two minutes — may have a positive effect on blood pressure. Do this twice in each hand separately, with a couple of minutes rest in between.

■ **Eating healthy snacks** — Options include fruits, vegetables, unsalted nuts, a sandwich on whole-grain bread, and a low-calorie or no-calorie beverage.

■ **Moving your legs** — If you're riding more than an hour, gently but firmly contract leg muscles for a couple of seconds. Begin with the lower leg muscles, then the thigh muscles to help move blood out of the legs. □

News and our views

Dogs prove effective at sniffing out cancer

Dogs — thanks to their extremely sensitive sense of smell — are used by law enforcement to detect hidden narcotics and explosives. Now studies suggest that dogs might be trained to sniff out various forms of cancer.

The notion first occurred with anecdotal reports of dogs detecting skin cancer in their owners. Persistent, intent sniffing by the dogs led their owners to seek medical attention for skin lesions, which were identified as cancerous. Cancer cells may produce certain “odor signatures” that are present in breath, sweat, urine, blood and tissue. This, combined with a dog’s ability to detect subtle smells, has led to studies of canine cancer detection.

Dogs were trained to identify characteristic smells in urine samples of people with bladder cancer and the scent of lung and breast cancers from exhaled breath samples. Dogs were also able to distinguish samples of cancerous ovarian tissue from normal ovarian tissue. Dogs could also identify people with colorectal cancer through breath and stool samples. In most of the studies, dogs were able to correctly identify cancer almost every time.

Mayo Clinic doctors find the possibilities appealing, but say obstacles remain. It would take time to find and train the right dogs, and they would have to perform better than existing tests. Canines would also have to be taught to distinguish between cancer and other diseases that might cause competing — and perhaps confusing — odors. And to truly be effective, dogs would need to be able to reliably detect early-stage cancers. One possibility is that dogs might help identify potential odor markers of cancer that could then be detected by more standardized chemical analysis. □

Mayo research: New ways to get drugs to the brain

Your brain is protected by something called the blood-brain barrier that keeps blood from touching brain tissue. The blood-brain barrier protects the brain from all sorts of chemicals and infectious diseases, while selectively allowing needed substances to pass through from the bloodstream, such as lipids and glucose for energy.

However, for those with brain disease — such as brain cancer, Alzheimer’s disease or Parkinson’s disease — the blood-brain barrier is a hurdle to therapy. That’s because potentially therapeutic drugs usually can’t pass through it — a serious limitation to therapy that researchers have long sought to overcome.

There’s new hope that this hurdle may be cleared, thanks to Mayo Clinic researchers who created a synthetic biological compound — a peptide called K16ApoE. This can attach to proteins in the blood to create binding molecules (ligands) that are recognized by a receptor found in the blood-brain barrier. Like a key in a lock, the ligand-receptor interaction temporarily opens up microscopic portals through the blood-brain barrier, allowing therapeutic drugs to pass through.

There’s still a long way to go before K16ApoE becomes available for use. Trials on humans to test for effect and possible side effects have yet to be performed. However, Mayo Clinic experts are optimistic that their discovery may start facilitating more and better therapy options for people with brain cancer and other brain diseases within five to 10 years. □

Lymphedema surgery

New solutions for swelling

Surgery and radiation for your cancer was a struggle, but you made it through, and your healing was going better than you expected. That is, until your arm started to feel heavy, harder to move and visibly swollen. Your doctor said you have another challenge — dealing with lymphedema.

Lymphedema typically involves the swelling of an arm or leg that occurs after the flow of your lymph system is somehow disrupted — such as by cancer therapy. Sometimes, lymphedema is mild and goes away. Other times, it becomes a chronic problem requiring diligent physical therapy and home care.

For some, lymphedema either fails to satisfactorily improve with physical therapy or worsens. Until recently, there wasn’t much more doctors could do about persistent lymphedema, unless it reached a very severe level.

A breakthrough in recent years has been the development of new forms of microsurgery that can help restore lymph fluid drainage. These surgical procedures aren’t 100 percent effective, but they frequently lead to noticeable improvement — and sometimes, dramatic improvement — in lymphedema. Progression of lymphedema is usually halted, and the use of a compression garment can be reduced or eliminated.

Disrupted drainage

Your lymph system includes a network of lymph vessels that help lymph fluid flow to the bloodstream. Lymph fluid is in large part made up of infection-fighting white blood cells (lymphocytes) and the watery part of blood (plasma). Lymph nodes are lymph-filtering pods along the lymph networks that also create and store white blood cells.

Lymphedema can develop from a congenital abnormality. However, it

most commonly develops as a result of some type of damage to the lymph system so that lymph fluid is retained in the affected arm or leg. Cancer treatment, especially breast cancer treatment — whether with surgery or radiation — is a common cause of lymphedema. Even a lymph node biopsy can occasionally cause lymphedema, although biopsy overall has greatly reduced the need for lymph node removal and, therefore, lymphedema rates. Treatment of other cancers, such as sarcoma, lymphoma, gynecological cancers, prostate cancers and others, also are causes, and there are noncancerous causes, as well.

When lymphedema begins, initiation of a management program is crucial. This often includes a strong educational component, in addition to various forms of arm or leg compression and specialized massage and exercise techniques. These measures often keep swelling under control. Still, not everyone experiences sufficient improvement, and that's where the newer surgical procedures can come into play.

Intervening with surgery

Microsurgery to improve lymph drainage is a new and increasingly common option for those who have plateaued with conservative therapy in terms of the benefit they may see, or in those who have lymphedema that isn't responding well to conservative therapy. Once these situations occur, a decision to attempt microsurgery is best made fairly soon — continued lymphedema can eventually damage tissues of the affected arm or leg to the point where microsurgery won't be effective.

The go-to procedure is lymph-to-vein bypass surgery. It involves connecting tiny lymph channels in the affected limb to tiny veins so that blocked-up lymph fluid has an outlet to flow into the circulatory system.

This outpatient procedure involves injecting a dye into the skin that allows your surgeon to see where lymph channels are located. Lines are drawn on the skin to mark locations for small,

shallow incisions that are made to access the lymph network. After the incision is made, the dye helps your surgeon find the otherwise clear lymph channels and also allows visualization of whether the chosen lymph channel has free-flowing lymph. A small vein is located near the lymph channel, and using the finest surgical thread available, the lymph channel end is attached to the vein, and the flow of lymph begins. This may be done in a couple of locations on the affected arm or leg, or in up to 10 or more locations.

The rate of complications with lymph-to-vein bypass is low and results are variable. A small percentage of people see no benefit, and a small percentage see dramatic improvement. Most people fall somewhere between, with many people experiencing a 20 to 50 percent reduction in swelling. If some benefit is seen, the procedure can be repeated in an attempt to attach additional lymph channels.

If lymph-to-vein bypass is unsuccessful or isn't possible, a more involved procedure called lymph node transfer may be considered. This involves cutting a wedge of skin tissue containing lymph nodes from one area — often the groin — and transplanting it into a spot on the affected arm or leg. Blood vessels between the transplant and the new site are connected. Lymph channels can be connected as well. The transplanted lymph nodes are often able to clear lymph fluid from the affected arm or leg, resulting in partial or full reduction in limb swelling.

This procedure requires a multiday hospital stay, and complications are more likely than with lymph-to-vein bypass. A possible side effect is that it may cause lymphedema in an arm or leg near the donor site. Although steps are being made to reduce the risk, it remains a possibility.

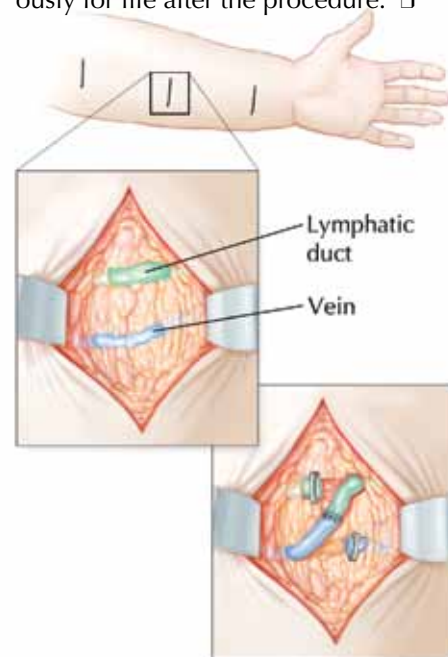
So far, the procedures above are primarily performed at larger medical centers, such as Mayo Clinic. Researchers are examining many aspects of these procedures — including equip-

ment, imaging of lymph channels, candidate selection and other aspects — to identify techniques for better and more-predictable results.

Severe lymphedema

Older forms of surgery are an important option for severe lymphedema. Despite the best efforts, swelling may remain or worsen, and over time it may lead to the accumulation of fatty deposits that may further enlarge the arm or leg. Skin and tissues within the skin may become fibrous, taking on a leathery or wooden feel. The arm or leg may become increasingly large and difficult to use, and emotional distress and side effects such as infection are common.

One older procedure involves cutting away all of the skin layers of the affected arm or leg — including the lymph network — then covering what remains with donor skin grafts. This eliminates the lymphedema, but it's an extreme procedure with many possible complications. Suctioning fat deposits from the arm or leg (liposuction) can help reduce bulk, but the underlying lymphedema remains and a compression garment must be worn continuously for life after the procedure. □



Lymph-to-vein bypass involves connecting tiny lymph channels to tiny veins so that blocked-up lymph fluid has an outlet.

Vitamin E

Hero or villain?

Remember when vitamin E seemed to be good for almost everything from erasing wrinkles to preventing cancer? Lately, the news hasn't been so great. There are concerns associated with taking too much vitamin E, particularly in supplement form. How can vitamin E be good but also bad for you?

The antioxidant story

The proposed benefits of vitamin E rest on its powerful antioxidant properties. Antioxidants are substances believed to protect cells from damage caused by free radicals, which are produced by your body. Exposure to certain environmental substances, such as sunlight, tobacco smoke or radiation, also can create free radicals.

Normally, free radicals perform a number of useful tasks. But too many free radicals cause what's known as oxidative stress. They overwhelm and damage cells, resulting in tissue breakdown and damage to DNA. Oxidative stress has been tied to a number of conditions, including cancer, heart disease, diabetes, Alzheimer's, Parkinson's, cataracts and macular degeneration.

Antioxidants, such as vitamins E and C, and carotenoids, are found in foods, especially plant-based foods. In laboratory experiments, antioxidant molecules have been found to stabilize free radicals and counteract oxidative stress. And many observational studies indicate that a diet high in fruits and vegetables can help reduce risk of disease, including heart disease, stroke and cancer.

In search of an answer

Preliminary studies suggested that antioxidants might have big health benefits. To make antioxidants such as vitamin E easier to study, researchers used them in a supplement form.

But despite well-designed trials in large numbers of people, vitamin E

supplements generally haven't proved helpful in preventing disease. In addition, high doses of vitamin E supplementation have been associated with an increased risk of bleeding, especially when taken in combination with blood thinners, such as aspirin, warfarin (Coumadin) or heparin.

The benefits of vitamin E were somehow lost in the switch from food to supplement. Possible explanations include:

■ *Oversimplification of vitamin E* — Part of the problem may lie in the complex nature of vitamin E. Vitamin E is a family of eight slightly different chemical versions — alpha-, beta-, gamma- and delta-tocopherol and alpha-, beta-, gamma- and delta-tocotrienol.

The best known version is alpha-tocopherol. It's the form the body absorbs and transports most efficiently. It's also the version used in almost all research studies. But newer evidence suggests that other forms of vitamin E, such as gamma-tocopherol, may have greater antioxidant effects than does alpha-tocopherol. In addition, taking supplements of alpha-tocopherol reduces the level of gamma-tocopherol in the body, reducing its benefits and perhaps explaining the harmful effects of high doses of alpha-tocopherol supplements.

■ *A sum greater than its parts* — Food sources contain varying amounts of all eight versions of vitamin E. Some of these versions may have more beneficial properties than others. It also may be that a variety may work better in combination than as a single ingredient. Food sources of vitamins and minerals also contain various other antioxidants and as yet unrecognized beneficial compounds that might work independently or in concert with each other to promote good health.

■ *Other factors* — It's possible that the health benefits observed in people who eat a diet rich in fruits and vegetables are caused by other lifestyle factors that might typically accompany such a diet. For example, people accustomed to eating fruits and vegetables may also

choose to exercise regularly or not smoke, factors that may minimize the risk of disease. Dosing issues, health characteristics of volunteers, and the exact role of free radicals in damaging or promoting health also may affect the way vitamin E supplements work.

Where the treasure lies

Whole foods are generally a better source of vitamins than are supplements. You'll find vitamin E in foods such as almonds, sunflower seeds and vegetable oils. Vegetables, including tomatoes, broccoli and red bell peppers; green leafy vegetables, such as spinach and kale; and fruits such as raspberries, kiwi and mango are also good sources. Wheat germ is a natural source of vitamin E and in a pinch, a fortified cereal can provide your daily dose.

Because vitamin E is destroyed by heat, vegetable and nut oils — canola and corn, sunflower, safflower, and hazelnut oils — as well as wheat germ oil, are best used in salad dressings or drizzled over finished dishes, such as pasta or grilled vegetables. □

Getting your vitamin E

Ten ways to get vitamin E:

- Mango and kiwi smoothie
- Spinach, tomato and avocado salad with sunflower seeds
- Peanut butter sandwich
- A handful of almonds
- Roasted broccoli with pine nuts
- Whole-grain bread sticks dipped in olive oil
- Shrimp, red bell pepper and broccoli, stir-fried
- Wheat germ added to cooked cereal or pancake and waffle batter
- Trail mix made of sunflower seeds, almonds, peanuts and dried cranberries
- A handful of spinach or kale added to broth-based soups

Vaginal atrophy

Treatment options

You may not want to talk about it, even with your girlfriends. But that doesn't mean that the changes that come with menopause don't bother you.

By some estimates, loss of lubrication and elasticity in the vaginal area (vaginal atrophy) affects at least half of women in midlife and beyond. Only a small portion of these women seek help.

Systemic hormone therapy — taken as an oral pill or a skin patch — isn't the only treatment for menopausal vaginal atrophy. Other treatments are specific for vaginal atrophy. In fact, if you experience only vaginal symptoms related to menopause, without hot flashes and night sweats, these other therapies are probably better choices.

What causes vaginal atrophy?

Vaginal atrophy is caused by a decrease in estrogen production. As you approach menopause, your body's production of estrogen, the main female hormone, ebbs and flows and eventually decreases permanently. Less estrogen can make your vaginal tissues thinner, drier, less elastic and more fragile.

Vaginal atrophy due to menopause may begin to bother you during the years leading up to menopause, or it may not become a problem until several years into menopause. Some women are never bothered by it.

Estrogen reduction and vaginal atrophy may also occur as the result of certain medical treatments, such as the removal of both ovaries, pelvic radiation, chemotherapy or hormonal treatment for breast cancer.

Signs and symptoms of vaginal atrophy often include dryness, soreness, itching, burning, bleeding and pain during sex. Vaginal atrophy can also be a risk factor for an overactive bladder, stress incontinence and repeated bladder infections. And unlike hot flashes and night sweats — which tend to even-

tually go away on their own — vaginal atrophy can worsen without treatment. Left untreated, changes to vaginal tissue — such as a narrowed opening, loss of elasticity and easy bleeding — can become permanent. Worsening atrophy can lead to avoidance of sex, which can lead to further atrophy.

Nonhormonal options

If you have symptoms of vaginal atrophy, don't put off seeking help. Treatment can help you feel better, prevent complications and may even improve your relationship with your partner.

For mild symptoms, the first thing you might try is vaginal moisturizers and lubricants, which are available without a prescription. Vaginal moisturizers (Luvena, Replens, others), used every few days, can help maintain the moisture of vaginal tissues. Lubricants (Astroglide, K-Y Intrigue, others) can be used as needed for sexual activity.

Vaginal lubricants can help decrease pain during sexual activity and can be applied as often as needed during sex. If you're using condoms, avoid lubricants that aren't listed as safe with condoms.

Regular sexual activity itself helps to maintain active blood flow to the vagina and helps produce vaginal lubrication. Stimulation with a lubricated vaginal dilator or vibrator also may help maintain vaginal health and prevent or reverse vaginal narrowing.

Local estrogen therapies

If nonhormonal therapies aren't enough to relieve symptoms, your doctor may recommend a vaginal estrogen cream, tablet or ring. These use a much lower dose of estrogen than do systemic hormone therapies and thus limit your overall exposure to estrogen and its associated risks. Vaginal estrogen therapies help to reverse vaginal tissue changes by restoring the vagina's normal pH balance, thickening surface tissue and increasing lubrication. They can also help reduce urinary tract infections and overactive bladder symptoms. Vaginal estrogen therapies typi-

cally work better for moderate to severe symptoms than do nonhormonal therapies or even systemic hormone therapy.

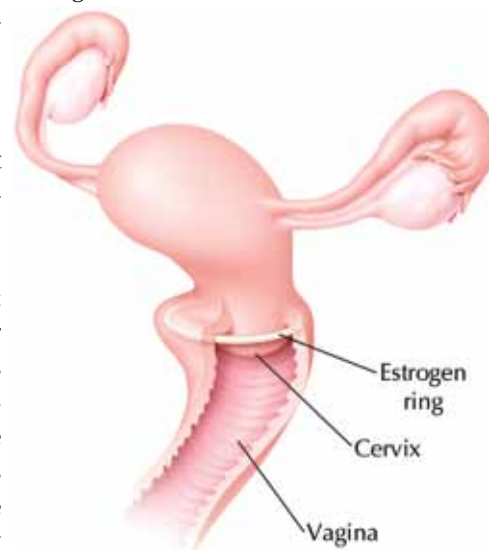
Vaginal estrogen therapy comes in several forms. You and your doctor can determine if one of them is best for you:

■ **Vaginal estrogen cream** — You insert this cream (Premarin, Estrace) directly into your vagina with an applicator, usually at bedtime. An advantage of creams over some other forms of vaginal estrogen is that they can be applied to areas where dryness is a particular problem. However, they can be messier.

■ **Vaginal estrogen ring** — You or your doctor inserts a soft, flexible ring (Estring) into the upper part of the vagina. The ring releases a consistent, localized dose of estrogen while it's in place. It needs to be replaced about every three months. Many women like the convenience this offers. A different, higher dose ring (Femring) is considered a systemic rather than topical treatment.

■ **Vaginal estrogen tablet** — You use a disposable applicator to place a vaginal estrogen tablet (Vagifem) in your vagina. Tablets may be less messy than are some other forms of vaginal estrogen.

■ **Ospemifene (Osphena) oral tablet** — This was approved in 2013 for women who don't want a vaginal product. It's not approved for those with or at high risk of breast cancer. □



A vaginal estrogen ring releases a consistent, localized dose of estrogen.

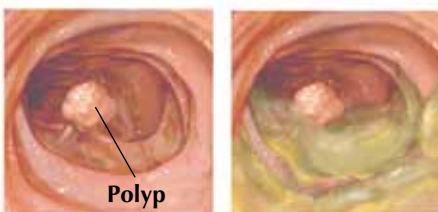
Second opinion

Q I recently had a colonoscopy, but the cleansing preparation didn't work so well. My doctor had a hard time visualizing the inside of my colon and recommended another colonoscopy in a year. Does that seem right?

A Yes, your doctor's recommendation is in line with current guidelines. If an immediate follow-up isn't feasible, the next step is to repeat the colonoscopy within a year. You'll probably need to go on a clear liquid diet for 48 to 72 hours before starting the colon-cleansing procedure. Some experts recommend a clear liquid diet before starting any prep procedure to avoid this problem in the first place.

Your doctor may ask you to use a different type of preparation to see if your body responds better to it than the previous one. The more thorough the bowel cleansing, the easier it is for your doctor to perform an accurate screening for potentially cancerous polyps.

Typically, the preferred recommendation after a less than ideal colonoscopy preparation is to have you stay on a clear liquid diet, repeat the colon-cleansing procedure and undergo a



Successful colonoscopy preparation, left, allows a clear view of the colon, including any polyps that might be present. Less than ideal colonoscopy preparation, right, could result in missed polyps.

second colonoscopy the following day. But this isn't always possible.

The interval until your next colonoscopy depends on whether polyps were removed. If polyps were suspected but none were removed, a shorter interval may be recommended. If polyps were removed, it's reasonable to wait a bit longer until the next colonoscopy but sooner than the recommended five-year interval — perhaps between two and three years. □

Q I was considering wearing some shapewear under my outfit for an upcoming class reunion. But I heard a recent report saying that these garments can be risky. Is this true?

A With shapewear — as with most things in life — moderation is key. While most people can't imagine wearing something as restricting as an old-fashioned corset, the concept behind it continues, using contemporary materials and newer styles. Shapewear can target a particular area, such as your waist or thighs, or help contour your body from bust to knee.

The main issue with shapewear is simple discomfort. However, if you push yourself into sizes that are too small or wear them too long or too often, the discomfort may manifest in different ways. Here's how:

■ **Acid reflux** — Wearing tightfitting clothing around the waist can increase reflux and heartburn.

■ **Bloating and gas** — If you frequently experience these signs of irritable bowel syndrome (IBS), a food intolerance or other gastrointestinal issue, you may

find that constricting clothing compounds the discomfort.

■ **Thigh pain or numbness** — Pressure on nerves that run to the thighs can cause a condition called meralgia paresthetica. Commonly caused by tight clothing, it causes tingling, numbness and burning pain in the outer thigh.

■ **Varicose veins** — Wearing tight clothing for long periods can worsen these swollen veins.

■ **Rash or infection** — Tight, synthetic fabric can trap moisture. The sweating caused by extended wear can cause skin irritation. Yeast and bacterial infections also are a possibility.

When sized correctly and used for limited periods, there's little risk in using shapewear. You may want to try on options in the store to make sure you're comfortable and can move freely — and you're able to manage using the restroom — when wearing them. □

Have a question or comment?

We appreciate every letter sent to Second Opinion but cannot publish an answer to each question or respond to requests for consultation on individual medical conditions. Editorial comments can be directed to:

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