More than 13 million US adults, most of them women, suffer the embarrassment and annoyance of urinary incontinence. But this problem is not inevitable or untreatable. In a recent clinical trial, an exciting new herbal remedy called BetterWOMAN® achieved significant reductions in urinary incontinence, urgency, and frequency in study participants.
The kidneys filter metabolic waste products and other substances out of the blood, combine them with fluid, and send the watery mixture into the bladder via tubes called the ureters. The bladder is essentially an expandable sack with a sphincter, or “drain,” on the bottom. The bladder sits atop the muscles of the pelvic floor, which support it and prevent it from “drooping” down on other internal structures. Nerves signal the brain when the bladder is full, announcing that it is time to void. When that happens, the sphincter opens and the urine flows out through a thin tube called the urethra. Muscles in the bladder walls and other muscles surrounding the

Once out of diapers, we take for granted the ability to control our urination. For decades, the flow starts and stops on command. We can ignore the urge for hours if necessary, and we are absolutely dry between bathroom visits. Some women—only a small minority—have a problem with suddenly voiding while laughing or coughing.

And then, perhaps after bearing a child or a few children, or maybe as we begin to approach menopause, we have a problem. We may find ourselves leaking, or suddenly having to go right now but being unable to make it to the bathroom in the few seconds before the bladder releases. The problem is definitely more severe with advancing age: large numbers of perimenopausal women suffer from urinary incontinence, with one study finding “25% wearing protection or changing undergarments on several days per week.” In more extreme cases, diapers become a necessity.

According to the National Institutes of Health, 13 million adults suffer from urinary incontinence, an embarrassing, annoying inability to keep urine safely in the bladder until—and only until—you want it to leave. Over eight and one-half million of these sufferers are women, who are twice as likely as men to “leak.” Although physicians offer various treatments for incontinence and other urinary problems—exercises, drugs, surgery—these therapies are not effective for millions of women. And many women, too embarrassed to discuss their problem with family members or physicians, never seek treatment. Even for those who do seek help, the results are not always positive. Indeed, many women try a medication or two, stop taking the drugs because they do not solve the problem or have unpleasant side effects, then shrug their shoulders and accept “the wetness” as inevitable.

The effects of this “leakage” damage “the social, psychological, occupational, domestic, physical, and sexual aspects” of the lives of many women. Fortunately, there is quite a bit we can do to treat incontinence.

**TYPES OF INCONTINENCE**

The *Journal of the American Medical Association* defines urinary incontinence as “any unintentional leakage of urine.” But before examining the different types of urinary incontinence, it is useful to understand the anatomy of the urinary system.
top of the urethra make this possible. They work in opposition, with one set contracting while the other relaxes. Most of the time, with the bladder empty or only partially filled, the muscles in the bladder wall are relaxed; there is no pressure to squeeze the urine out. Meanwhile, the muscles in the urethra contract tightly to make sure not a drop leaks out. But when the brain gets the “full” signal from bladder nerves, the muscles switch actions, with those in the bladder wall contracting to force the urine out, and those in the urethra relaxing to allow it to pass through.

If the muscles in the bladder squeeze inappropriately, or those of the urethra relax at the wrong time, one will suffer one or more of the several types of incontinence:

**Stress incontinence.** Sixty percent of those with incontinence suffer from this type, which strikes when one laughs, sneezes, coughs, or moves in such a way as to put pressure on the bladder. The problem lies in the inability of the sphincter to completely close off the flow of urine. The weakness might develop because the muscles of the pelvic floor weaken, possibly due to childbirth, allowing the bladder to push down against the urethra. The urethra muscles that normally keep the sphincter closed may be damaged, or the abdominal muscles may be pushing on the bladder. Stress incontinence is the most common form of incontinence in women, and it may be related to stresses put on the urinary system by pregnancy and childbirth, or by the decline in muscle-toning estrogen seen with menopause.

**Urge incontinence.** This is the reverse of stress incontinence, with the problem linked to overactive bladder muscles instead of a weakened sphincter. Urge incontinence produces a sudden and powerful urge to urinate, and one quickly finds oneself wet. This may happen when you have had a little bit to drink, when you hear or see running water, or even in your sleep. Damage to the bladder nerves may be to blame, or the problem may be due to injections, a stroke, an injury, multiple sclerosis, Alzheimer’s disease, or Parkinson’s disease. Whatever the reason, the bladder muscles contract and force the urine out at the wrong time. Urge incontinence also is called reflex incontinence or unstable bladder.

**Overflow incontinence.** Rare in women, this is a case of overfilling and overflowing. A blockage in the urethra can cause overflow incontinence, as can nerves that fail to fire off a signal to the brain when the bladder is full. Diabetes or other diseases may weaken the muscles in the bladder wall. Whatever the cause, the bladder fills with more urine that it can handle, and the excess forces its way out.

**Functional incontinence.** Also known as environmental incontinence, this is an inability to get to the bathroom, as opposed to a problem with the urinary system. For example, people with Alzheimer’s may not be able to recognize the urge to urinate or to explain that they need to go to the bathroom.

**Transient incontinence.** Infections of the urinary tract, medication side effects, severe constipation with stool pushing against the urinary tract, and other conditions may cause a temporary incontinence.

Women, take note: it is not uncommon to suffer from stress and urge incontinence simultaneously, in which case your doctor will tell you that you have mixed incontinence.

Two other problems often are associated with incontinence, and indeed may be part and parcel of the problem. They are urinary frequency, or the constant need to urinate, and urinary urgency, which is a powerful feeling that you must go, and stronger than the normal signal one receives when the bladder is full.

**WHAT DOCTORS DO FOR INCONTINENCE**

A physician begins diagnosing the problem by asking you about your symptoms: when do you leak, how often, what are you doing at the time, and so on. He or she will ask about recent surgery, medication use, and other factors that may trigger transient incontinence. Then comes a physical examination and appropriate tests to check for tumors, impacted stool, or other items that might be to blame, as well as tests of your bladder capacity and function. Your doctor may call for a blood test to check for infections, an ultrasound examination of your bladder and surrounding structures, or cystoscopy, in which a tiny camera embedded in a skinny tube is inserted into your urethra to look for clues.
Once a diagnosis is made, your physician can proceed with treatment. Depending on the type of incontinence, this may include:

**Tracking your urination patterns**, then timing your trips to the bathroom so as to empty your bladder before it usually empties itself.

**Kegel exercises** to strengthen the muscles of the pelvic floor. These exercises are recommended for women who have given birth, to firm up their “stretched” muscles and prevent or reduce incontinence. Doctors and nurses teach their patients how to do Kegel exercises, which can be done at home without special equipment. The only difficult part is learning to identify the muscle to be squeezed: you can do this by sitting on a toilet and trying to stop the flow of urine, or by inserting a finger into your vagina and squeezing down on it. If you can do either of these two things, you have found the right muscle to exercise. Your doctor or nurse will tell you how often and how long to practice Kegel exercises. A typical schedule may be to tighten the muscles for a count of ten, ten times a day. You can find more information about Kegel exercise at websites such as Medline Plus Health Information (http://www.nlm.nih.gov/medlineplus/ency/article/003975.htm) and the University of Iowa Health Care (http://obgyn.uihc.uiowa.edu/Patinfo/urogyn/kegel.htm.)

**Brief electrical stimulation** of the pelvic muscles. The goal is to strengthen the muscles of the lower pelvis while relaxing overactive muscles and encouraging urethral muscles to contract.

**Biofeedback** to help increase your awareness of and control over the appropriate muscles. Biofeedback can be combined with Kegel exercises.

**A stiff ring called a pessary**, inserted into the vagina such that it presses out against the vaginal walls and urethra so as to reduce stress incontinence.

**Medicines** that either reduce the activity of an overactive bladder or relax or strengthen certain muscles, or estrogen to aid in overall urinary tract function. Some of the drugs used for various types of female and male incontinence are Ditropan® (generic name oxybutynin), Detrol® (tolterodine), Urispas® (flavoxate), and Levbid® (hyoscyamine).

**Implants**, such as collagen or your own transplanted fat, to “bulk up” the urethra and help it to function properly. Injections of collagen or fat are not permanent, and may have to be repeated as the body absorbs the material.

**Surgery** to reposition a “drooping” bladder or implant an artificial sphincter. Stress incontinence often is triggered when the bladder droops down toward the vagina. Surgeons may use string-like material to hold the bladder in a higher, more-normal position. For more-severe cases, a wider sling may be used to hold the bladder in place and, at the same time, squeeze down on the urethra to prevent urine from leaking through. Surgeons also can implant an artificial sphincter, controlled by fluid pumped in and out when manipulated by a valve implanted under the skin.
A NEW APPROACH BASED ON TRADITIONAL CHINESE MEDICINE

Where Western medicine tends to favor strong drugs and surgery that target the site of the ailment or injury, traditional Chinese medicine seeks to help the body heal itself. Instead of focusing solely on the bladder, Chinese medicine attacks urinary incontinence by improving circulation, regulating neuromuscular function, and modulating hormones. All this, in turn, helps strengthen and tone the various muscles that keep urine in the bladder until it is time to void.

Improving circulation is key, for as women age the blood supply to bladder muscles and connective tissues becomes less efficient. This can be seen clearly in tissue samples taken from women of various ages. Those belonging to young women are healthy and smooth, while those from older women have numerous “holes” or empty spaces indicating undernourished tissue. Improving the blood flow in the bladder area provides essential nutrition to the muscle and connective tissues, thus improving the overall health and function of the bladder.

Regulating neuromuscular function—the interplay of nerves and muscles—is also important, for nerves running to and through the bladder influence the muscles that control the flow of urine. A sensation of urgency—that feeling that you have to go right now—may be triggered by spasms of these nerves. These spasms may be alleviated by introducing neurotransmitters that help calm the nerves, or by reducing the sensitivity of the corresponding muscles. This may be how certain Chinese herbs help reduce the feeling of urgency.

Balancing hormones completes the three-part approach. The typical woman with bladder control problems usually begins to notice leakage or other symptoms after hormonal changes that begin with peri-menopause, suggesting that female hormones play an important role in bladder function. Specifically, changes in hormone levels may decrease the mass and tone of the muscle systems that help regulate bladder function. Naturally tilting hormone levels to a more-youthful profile can help strengthen bladder muscles and reduce leakage.

An herbal blend called BetterWOMAN® was developed with these principles in mind. The supplement combines these 20 different Chinese herbs in a special, proprietary formula:

- Asian ginseng root
- Asiatic dogwood fruit
- Astragalus root
- Bupleurum root
- Cassia bark
- Chinese peony root
- Chinese yam rhizome
- Cynomorium stem
- Deer antler velvet
- Dong quai root
- Eleuthero root
- Epimedium leaf
- Eucommia stem
- Lycium fruit
- Morinda root
- Palm-leaf raspberry fruit
- Poria sclerotium
- Rehmannia root
- Schisandra fruit
- Szechuan lovage root.

PUTTING BetterWOMAN® TO THE TEST

The 20 different herbs in the formula have been used individually for incontinence, improving the immune system, and modulating hormonal balance. But would they work together to help women suffering from urinary incontinence? Only a clinical study could answer that question.

Thirty-eight women completed such a study testing the effectiveness of BetterWOMAN®. They ranged in age from 35 to 78, and suffered from urinary incontinence,
frequent urination (\textit{frequency}), and urgent urges to urinate (\textit{urgency}). The reductions in these symptoms were impressive:

\textbf{Stress urinary incontinence.}\nAt the beginning of the study, 21 of the 38 participants reported that they frequently or always suffered from stress urinary incontinence. At the study’s end, 76\% of those women reported significant improvement in their symptoms.

\textbf{Urinary urgency.}\nTwenty of the 38 women noted that they suffered from urinary urgency when the study began. After taking the herbal blend for two months, 70\% of them noted a significant reduction in their urgency.

\textbf{Urinary frequency.}\nRepeated trips to the bathroom were a problem for 15 of the 38 women in the study when they began taking BetterWOMAN\textsuperscript{®}. At study’s end, 73\% of them reported dramatic reductions in their frequent bathroom visits.

The researchers noted other improvements during the study. Eighteen of the women participating had complained of fatigue and exhaustion when the study began, and 83\% of those had improved energy levels by the study’s end. And of the 11 women, all menopausal, who had reported mental “fuzziness” when the study began, 91\% reported more mental clarity after taking the blend of herbs.

Peipei Wishnow, PhD, who headed the study, noted, “This BetterWOMAN\textsuperscript{®} study provides the first clinical evidence that a natural formula can significantly improve three major bladder control symptoms—stress incontinence, urinary urgency, and urinary frequency—that affect the quality of life for millions of women.

\textbf{YOU CAN “DRY OUT”}\nMuch confusion and hopelessness surrounds incontinence. Many women shrug their shoulders when they notice the wetness, or simply reach for the panty liners. They feel that it is not worth mentioning to their doctors, that it is inevitable because they have had children or have gone through menopause, or that there is nothing to be done about it—except surgery, which they do not want to think about.

Telling your doctor about your wetness problem is worth your while. And the problem is not inevitable or untreatable, short of surgery. There is much you can do—and the herbs found in BetterWOMAN\textsuperscript{®} can be part of a successful treatment program.

\textbf{REFERENCES}\n


