

# TREATING IRRITABLE BOWEL SYNDROME WITH CHINESE HERBS

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Irritable Bowel syndrome (IBS) is a chronic functional bowel disorder that mainly affects the large intestine (colon). It is characterized by abdominal pain, bloating, and distention with a change in frequency and/or consistency of stool recurrent over months or years.

IBS is also known as spastic colon, functional bowel disease, and, commonly, “nervous stomach.” Spastic colon implies an increase in muscle contractions and is not the most accurate term, as IBS is associated with both an increase and a decrease of motility. IBS is also known by spastic colitis and mucus colitis; however, these terms tend to be problematic, as they imply substantial inflammation of the colon, which is not the case with IBS.

IBS has only been recognized by Western medicine during the past half century, though the signs and symptoms of the disorder have long been present. Now, it is estimated that 15–20 percent of adults in the US show signs and symptoms of IBS, with twice as many women affected as men. IBS affects mostly young adults, with the first signs and symptoms beginning in most people between the ages 20–40. IBS accounts for close to half of the gastrointestinal complaints with primary care physicians, making it one of the most common digestive disorders.

## CLINICAL MANIFESTATIONS

The signs and symptoms of IBS include diarrhea, constipation (or alternating diarrhea and constipation), accompanied by abdominal pain and discomfort, bloating, gas, cramping, and the presence of mucus in the stool. Abdominal pain is often located below the umbilicus and to the left. Symptoms are often worse with stress, worry, and over-exertion. Discomfort is often relieved by bowel movement.

## ETIOLOGY AND PATHOGENESIS

The causes of IBS are yet unknown and there is currently no cure in Western medicine. IBS is a functional disease, meaning that the muscles and nerves of the intestines function abnormally. There are no anatomical or biochemical changes to the intestinal lining, and it does not cause the inflammation of the intestinal lining seen in inflammatory bowel disorders. IBS does not progress into a serious disease or illness, but it does impact quality of life.

While the etiology is unknown, IBS can be attributed to several factors. Altered motility is one of the main factors for IBS, with the motility problems ranging from very little or no intestinal contraction, as seen in constipation-type IBS, to excessive intestinal contraction, as seen in diarrhea-type IBS. These types of IBS are described below. Severe contractions resulting in abdominal pain can also occur. Another factor is heightened or increased sensitivity. The nerves in the gut become over-sensitized, causing discomfort from the stretching of the intestinal wall by gas and stool. Individuals with IBS perceive intestinal pain differently than those without IBS.<sup>i</sup>

The enteric nervous system, specifically a neurotransmitter imbalance, may play a role in IBS. Neurotransmitters—specifically serotonin—are associated with intestinal secretion, sensory function, motor function, and sensitivity to pain. It is thought that increased serotonin levels in the intestinal tract cause an increase in peristalsis. Serotonin also plays a role in mood disorders such as stress, anxiety, and depression—making the connection between mood disorders and IBS, and explaining why antidepressant drugs are often prescribed. Another factor that may play a role in IBS is an increase or overgrowth of bacteria in the small intestine, often due to a bacterial migration from the large intestine, causing excessive gas, bloating, and diarrhea. This is why probiotics and antibiotics can help with the signs and symptoms of IBS. Increases in the volume of mast cells are found in patients with IBS,<sup>ii</sup> which may attribute to a low-grade inflammatory response. Mast cells, which are part of the immune system, release inflammatory mediators that act on the gastrointestinal system, specifically the smooth muscle, nerves, and immune cells, which can then result in dysfunction and IBS symptoms.

## TRIGGERS AND RISK FACTORS

There are several known triggers that commonly cause IBS symptom flare-ups. The most common trigger is food. Patients diagnosed with IBS often have alleviation of signs and symptoms while on elimination diets.<sup>iii</sup> Studies have shown that people with IBS have elevated antibody levels to more foods than people without IBS, suggesting that food sensitivities are a factor.<sup>iv</sup> Emotional stress, anxiety, or depression can also trigger episodes of IBS. There is a link between IBS and a history of psychosocial issues like emotional, physical, sexual, or domestic abuse or trauma.<sup>v</sup> It is known that people with IBS report higher levels of stress, depression, and anxiety, and IBS commonly occurs after a stressful life event. Other known triggers include: infections, physical trauma, and pain.

Several risk factors have been found for IBS. Age is a factor, with the first onset of signs and symptoms most commonly beginning in the late twenties and early thirties. A first degree (parent or sibling) family history has shown a connection with IBS, although it is unclear whether genetics plays a greater role, whether it is due to a shared connection with environmental factors, or both.<sup>vi</sup>

## WESTERN MEDICAL DIAGNOSIS

IBS is a symptom-based diagnosis as well as a diagnosis of exclusion. Western physicians will look at history, characteristics of bowel movement, and the results of a physical exam to help make a diagnosis. Lab tests, stool cultures, endoscopic procedures (endoscopy, colonoscopy), radiologic procedures (gastrointestinal CT scans, MRI's, ultrasounds, x-rays) may be used to rule out conditions like celiac disease, food allergies, diverticulitis, lactose intolerance, intestinal

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parasites, colon cancer, bowel obstruction, diverticulosis, diverticulitis, gallbladder problems, bacterial infection, and inflammatory bowel diseases, such as Crohn's disease and ulcerative colitis.

### Western Medical Differentiation

IBS is differentiated into several different types according to the predominant symptoms. IBS-D is diarrhea-predominant, characterized by diarrhea due to excessive intestinal muscle spasms, resulting in the stool passing too quickly and mal-absorption occurring when not enough water is being absorbed from the waste product. The body may also inappropriately release water into the bowel. Diarrhea may occur immediately after waking (daybreak diarrhea) or immediately after eating, and often with pain, bloating, and urgency. IBS-C is constipation-predominant, characterized by very little muscle contraction, with the body absorbing too much water, resulting in a stool that is hard, painful, and difficult to pass. Pain is often relieved by bowel movement. Mucus may be present in the stool. Bloating and gas may accompany the constipation. IBS-A is alternating constipation and diarrhea, also known as IBS-M for mixed. This is often seen with mucus as well as other signs and symptoms such as bloating, gas, nausea, and upset stomach. Another sub-type of IBS is IBS-PI, post infection. IBS-PI is defined as prolonged gastrointestinal problems after an acute infection, usually bacterial, has resolved. Signs and symptoms can include diarrhea, nausea, vomiting, and abdominal bloating and cramping. Like the other IBS types, signs and symptoms are often worse with anxiety and stress. Roughly 50% of patients diagnosed with IBS-PI return to normal bowel function.

### Types of IBS

<b>IBS-D</b>	Diarrhea, often occurring first thing in the morning or immediately after eating Often accompanied w/ pain, bloating, and urgency
<b>IBS-C</b>	Hard, painful stool (with mucus), difficult to pass Pain is often relieved by bowel movement Often accompanied with bloating and gas
<b>IBS-A (IBS-M)</b>	Alternating constipation and diarrhea (with mucus) Often accompanied with bloating, gas, nausea, and upset stomach
<b>IBS-PI</b>	Diarrhea after acute gastrointestinal infection Often accompanied with nausea, vomiting, abdominal bloating and cramping Bowel function returns to normal in roughly half the cases

### WESTERN MEDICAL TREATMENT

The Western medical treatment principle is to relieve signs

and symptoms of IBS. This is done by management of stress, diet, and lifestyle, western pharmaceuticals, and psychotherapy. Treatment for IBS is usually broken down into several categories depending on the severity of the signs and symptoms. For mild IBS, treatment plans are usually non-pharmacologic, involving stress management along with diet and lifestyle changes. For moderate IBS, again management of stress, diet, and lifestyle changes, plus the addition of over-the-counter medications to help control signs and symptoms. For diarrhea-type IBS, anti-diarrheal medications are used. For constipation-type IBS, laxatives are used to relieve symptoms. Probiotics may also be used for IBS-D or IBS-C. For severe IBS symptoms that have no relief from any of the previous therapies, prescriptive medications like antispasmodics, antidepressants, serotonin antagonists, chloride channel activators, and antibiotics may be prescribed.

### Non-Pharmacologic Treatment

**IBS Diet and Lifestyle Changes:** Food and emotional stressors are common triggers that can be managed by diet and lifestyle changes to help control the frequency and intensity of IBS attacks. There is no single diet that is effective for everyone with IBS, and it is important to individually determine which food allergies and intolerances trigger IBS for a particular patient. Avoiding these triggers will ease IBS signs and symptoms. Working with a dietitian can help this process. Some common foods that have been identified to trigger IBS signs and symptoms in the majority of people dealing with the disorder include: soda, coffee, caffeine in general, alcohol, sugar, artificial sweeteners, dairy, wheat, corn, eggs, and chocolate. In general, it is good to avoid fatty, greasy, and spicy foods. Foods that worsen gas and bloating such as cruciferous vegetables (broccoli, cauliflower, Brussels sprouts, and cabbage), beans, onions, peas, and soybeans should also be avoided.

Eating smaller meals and drinking lots of water can help reduce symptoms. Fiber is important for softer stools, especially for IBS-C. Soluble fiber, coming from fruits and vegetables—with an emphasis on vegetables—is better than insoluble fiber coming from whole grains.

There are a couple of diets that show promising results when managing IBS. Low carb diets, limited to 20-30g of carbohydrates a day, provide relief of IBS signs and symptoms, and can improve quality of life.<sup>vii</sup>

Another relatively new diet that has been shown to be effective in the symptomatic treatment of IBS is the FODMAP diet.<sup>viii</sup> FODMAP is an acronym which stands for fermentable, oligosaccharides (fructans, galactans), disaccharides (lactose), monosaccharides (excess fructose), and polyols (sorbitol, mannitol, xylitol, isomalt). Foods that contain these short-chain carbohydrates have poor absorption in the small intestine; when the food reaches the large intestine, it acts as a food source for bacteria, which rapidly digest and ferment the food within the gastrointestinal tract. This overgrowth of bacteria results in gas, bloating, abdominal pain, distention,

and a change in bowel movement. By controlling the intake of foods containing these molecules, IBS symptoms can be managed and avoided.

Stress management is very important when dealing with IBS. Meditation, relaxation therapy, massage therapy, and counseling are all therapies that can be effective for controlling stress and subsequently, IBS symptom flare-ups.

Other lifestyle changes that will prevent and relieve IBS symptoms include regular exercise, adequate rest, and avoiding smoking.

### Western Pharmaceutical Treatment

**Over-the-counter Medications:** The over-the-counter medications used for IBS fall into two categories: anti-diarrheal (anti-motility) medications such as loperamide (Imodium) and bismuth subsalicylate (Pepto-Bismol) for IBS-D, and laxatives for IBS-C.

Laxatives can be broken down into sub-categories: osmotic/hydrating laxatives such as polyethylene glycol (Miralax) and magnesium supplements, stool softeners like docusate (Colace), and bulk forming laxatives/fiber supplements like psyllium (Metamucil) and methylcellulose (Citrucil). All of these medications help soften the stool and make the stool easier to pass. Stimulant laxatives like senna (Ex-lax) are also used to increase motility to induce a bowel movement; they should only be used for short period of time. Probiotics contain beneficial yeast and bacteria and, while they do not remain in the system for an extended period of time, they have been shown to manage signs and symptoms of IBS, although the benefits appear to be strain-specific.

### Prescription Drugs

Prescription medications include:

1) Antispasmodic medications like dicyclomine hydrochloride (Bentyl) and hyoscyamine (Levsin) help relax smooth muscle to reduce spasms.

2) Tricyclic antidepressants, like imipramine (Toframil) and amitriptyline (Elavil) help relieve the signs and symptoms of IBS-D. These antidepressants are often prescribed at a lower-than-normal dosage unless patient also suffers from depression.

3) SSRI antidepressants, like paroxetine (Paxil), fluoxetine (Prozac), and sertraline (Zoloft) help treat the signs and symptoms of IBS-C.

If none of the above treatments work to help relieve IBS there are a couple of other western medications that are prescribed, although there can be serious side-effects with these medications. For severe diarrhea, alosetron hydrochloride (Lotronex), a 5-HT<sub>4</sub> antagonist, can be prescribed for female patients who do not respond to any other treatments. This pharmaceutical can cause serious gastrointestinal side-effects, and deaths have been reported with the use of this medication. For severe constipation, lubiprostone (Amitiza) or linaclotide (Linzess)

can be prescribed to relieve bloating, abdominal pain, excessive straining, and to improve consistency and frequency of bowel movements.

If bacterial overgrowth is suspected in IBS, as seen in small intestine bacterial overgrowth, antibiotics—specifically rifaximin (Xifaxan)—can be prescribed.

### IBS AND ORIENTAL MEDICINE

IBS is a general categorization labeled by western practitioners. Oriental medicine practitioners must look at the signs and symptoms and differentiate the pattern according to Oriental Medicine. The spleen and liver are the two main organs involved with IBS, though the whole digestive system plays a role in the disease. The liver-spleen disharmony is the core mechanism for IBS. The presence of damp-heat can also manifest simultaneously. IBS responds well to Oriental medicine, with a focus on eliminating signs and symptoms, while strengthening the individual's constitution to prevent episodic recurrences.

### Oriental Medicine Diagnosis of IBS

#### Liver

The most important role of the liver is to rule the free-flowing movement of qi. When the liver cannot perform this harmonizing task, stagnation and obstruction of the qi occurs. This disrupts digestion and emotions, two key components of IBS.

#### Liver Qi Stagnation / Liver Overacting on Spleen

Liver qi stagnation is one of the most common clinical patterns in Oriental Medicine. When the liver qi stagnates, it overacts on the spleen, causing gastrointestinal problems. This liver/spleen disharmony is the most common pattern for IBS, and can present as IBS-D, IBS-C or IBS-A. Liver qi stagnation affects digestive, emotional and gynecological issues, as well as meridian and bile obstructions. The digestive issues that can arise are: diarrhea, alternating diarrhea and constipation, painful bowel movements, abdominal distention and pain, and poor appetite. These can be accompanied by nausea, belching, and acid reflux. Emotional factors—depression, moodiness, irritability, frustration, anger, and stress—often originate from stagnation of liver qi. Emotions can also exacerbate liver qi stagnation. This is a vicious cycle of emotional disharmony and liver qi stagnation—each feeding upon the other's disharmony—leading to a worsening of symptoms with stress, frustration, and anger. Other signs and symptoms that may accompany liver qi stagnation are: irregular and/or painful periods, hypochondriac pain and tenderness, breast tenderness, bitter taste in mouth, frequent sighing, and jaundice. Several herbal formulas may be effective for treating IBS due to liver qi stagnation overacting on the spleen.

**Peony and Atractylodes Formula** (*Tong Xie Yao Fang*) is a classical formula, also known as “Important Formula for Painful Diarrhea” and is an excellent choice for, as the name suggests, treating painful diarrhea. It is a primary formula for IBS-D due to liver/spleen disharmony. Symptoms include recurrent diarrhea, often with low volume. Pain comes with

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an urgency to defecate; pain is often relieved by bowel movement and worse with stress. This formula focuses on the spleen and liver, often with spleen qi deficiency primary, and the condition exacerbated by liver qi stagnating and overacting on the middle burner. **Peony and Atractylodes Formula** (*Tong Xie Yao Fang*) supplements the spleen and clears damp with white atractylodes (*bai zhu*) and tangerine peel (*chen pi*). By supporting the spleen, it helps prevent the liver from overacting upon it. This formula soothes the liver with white peony root (*bai shao*). The last herb in the formula is siler (*fang feng*), which acts as an envoy, directing the herbs to both the spleen and liver. Its acrid nature helps disperse liver qi stagnation. It supplements the spleen, drains damp, and ascends the qi to help stop diarrhea. *Fang feng* helps clear wind lodged in the intestines that causes spasms, contractions, pain, and diarrhea.

**Peony and Atractylodes Formula** (*Tong Xie Yao Fang*) is the exemplar formula for IBS and can be combined with other formulas to strengthen the effectiveness of stopping the diarrhea.

#### Formula Combinations:

For diarrhea due to liver qi stagnation or liver/spleen disharmony	combine with <b>Minor Bupleurum Formula</b> ( <i>Xiao Chai Hu Tang</i> ) or <b>Bupleurum and Tang Kuei Formula</b> ( <i>Xiao Yao San</i> )
For diarrhea due to spleen deficiency	combine with <b>Ginseng and Astragalus Formula</b> ( <i>Bu Zhong Yi Qi Tang</i> )
For daybreak diarrhea with a deficient pulse	combine with <b>Sea of Qi Formula</b> ( <i>Qi Hai Yao Fang</i> )
For diarrhea due to damp-heat	<b>Wu Hua Formula</b> ( <i>Wu Hua Tang</i> ) or <b>Intestinal Fungus Formula</b> ( <i>Chang Mei Jun Fang</i> ) or <b>Pulsatilla Intestinal Formula</b> ( <i>Bai Tou Weng Li Chang Fang</i> )

**Minor Bupleurum Formula** (*Xiao Chai Hu Tang*) and **Bupleurum and Tang Kuei Formula** (*Xiao Yao San*) are common formulas used for a wide range of conditions. They can be very effective formulas for treating IBS with a pattern of liver qi stagnation overacting on the spleen. Both formulas soothe the liver, nourish liver blood, supplement spleen qi, and harmonize the liver and spleen. **Bupleurum and Tang Kuei Formula** (*Xiao Yao San*) may be more appropriate when emotional issues are more severe; **Minor Bupleurum Formula** (*Xiao Chai Hu Tang*) may be more appropriate if the physical symptoms are more severe than the emotional issues. If heat signs are present, use **Free and Easy Wanderer Plus** (*Jia Wei Xiao Yao San*) instead of **Bupleurum and Tang Kuei Formula** (*Xiao Yao San*). If IBS is severe due to emotional changes, use **Bupleurum D Formula** (*Chai Hu Jia Long Gu Mu Li Tang*) instead of **Minor Bupleurum Formula** (*Xiao Chai Hu Tang*) or **Bupleurum and Tang Kuei Formula** (*Xiao Yao San*). In addition to addressing the liver and spleen disharmony, **Bupleurum D Formula** (*Chai Hu Jia Long Gu Mu Li Tang*) sedates and calms the shen.

Another formula to consider is the classical formula **Bupleurum and Aurantium Immaturus** (*Si Ni San*) (KPC 0970). It

is similar to **Bupleurum and Tang Kuei Formula** (*Xiao Yao San*), but stronger in coursing the liver, though not as strong in nourishing spleen qi and liver blood. This *Shang Han Lun* formula has a close relation with **Peony and Atractylodes Formula** (*Tong Xie Yao Fang*), as both formulas soothe and regulate the liver and spleen. The slight variations in herbs define the primary functions of the formula.

<b>Bupleurum and Aurantium Immaturus</b> ( <i>Si Ni San</i> ) (KPC 0970)	<b>Peony and Atractylodes Formula</b> ( <i>Tong Xie Yao Fang</i> )
<i>Chai Hu</i> (Bupleurum Root)	<i>Fang Feng</i> (Siler)
<i>Zhi Shi</i> (Bitter Orange)	<i>Chao Chen Pi</i> (Tangerine Peel, dry-fried)
<i>Zhi Gan Cao</i> (Chinese Licorice Root, honey-fried)	<i>Chao Bai Zhu</i> (Atractylodes, dry-fried)
<i>Bai Shao</i> (White Peony Root)	<i>Chao Bai Shao</i> (White Peony Root), dry-fried)

Bupleurum root (*chai hu*) and siler (*fang feng*) both raise qi and soothe liver qi. *Fang feng* has the additional function to nourish the spleen and reduce intestinal wind. Bitter orange (*zhi shi*) and tangerine peel (*chen pi*) both regulate qi. *Zhi shi* is better for treating constipation and *chen pi* is more for diarrhea. Honey-fried Chinese licorice root (*zhi gan cao*) and atractylodes (*bai zhu*) both tonify qi, *bai zhu* better treats diarrhea, and both formulas contain white peony root (*bai shao*) to soothe the liver. **Peony and Atractylodes** (*Tong Xie Yao Fang*) is more suited to stop diarrhea, and **Bupleurum and Aurantium Immaturus Formula** (*Si Ni San*) (KPC 0970) is better for constipation-type IBS.

**Shu Gan Formula** (*Shu Gan Wan*), also known as “Soothe the Liver Pill” can also be effective for treating IBS. This formula focuses on soothing and regulating the qi of the liver and middle burner. It has less of a tonifying effect than that of formulas like **Minor Bupleurum Formula** (*Xiao Chai Hu Tang*) or **Bupleurum and Tang Kuei Formula** (*Xiao Yao San*). **Shu Gan Formula** (*Shu Gan Wan*) can be especially effective for relieving the abdominal discomfort and pain of IBS.

For IBS-C, combine **Persica and Cistanches Formula** (*Tao Ren Cong Rong Wan*) to treat constipation due to exhaustion of fluids and dryness, with either **Minor Bupleurum Formula** (*Xiao Chai Hu Tang*), **Bupleurum and Tang Kuei Formula** (*Xiao Yao San*), or **Bupleurum and Aurantium Immaturus Formula** (*Si Ni San*) (KPC 0970).

#### Spleen

The spleen is the principle organ of the digestive process. It transforms food into qi, blood, and *jin ye*, and transports those nutrients throughout the body. Food and drink is separated by the spleen. The pure goes to the lung and throughout the body and the turbid goes to the small intestine and kidney for further refinement. When the function of the spleen is healthy and balanced, there is sufficient qi and blood for the body. When the spleen is weak, it is unable to perform its task of transforming and transporting qi throughout the body, causing qi and blood

deficiency along with damp-phlegm accumulation, resulting in fatigue, poor appetite, loose stools, weak limbs, and loss of appetite. The spleen yang energy is also responsible for ascension of qi, and when the spleen's ascending function is inhibited, along with poor transportation and transformation function, it can result in diarrhea.

### **Spleen Qi Deficiency**

Diarrhea-predominant IBS is the most common type of IBS classified under spleen qi deficiency in Oriental medicine. It presents as diarrhea, especially after eating, accompanied by gas, bloating, fatigue, and poor appetite. Signs and symptoms are worse with over-exertion, after eating, or when tired. Diarrhea is the result of poor transportation and transformation function of the spleen, as well as the spleen qi not being able to hold up. There are several classical formulas that can be used for treating diarrhea-predominant IBS due to spleen qi deficiency. One is **Ginseng and Astragalus Formula** (*Bu Zhong Yi Qi Tang*). Classically, a primary function of this formula is to treat sinking qi. Chronic diarrhea is characterized as a sinking of the middle burner qi. This formula addresses the root conditions by strongly supplementing spleen qi while raising yang qi. It is a perfect choice if gas, bloating, and abdominal discomfort are present along with the diarrhea. Another formula that can be used to treat diarrhea-type IBS due to spleen qi deficiency is **Lotus and Citrus Formula** (*Qi Pi Wan*) (KPC 3000). This formula, like **Ginseng and Astragalus Formula** (*Bu Zhong Yi Qi Tang*), has the strong effect of supplementing the spleen qi, but differs in how it stops diarrhea. **Lotus and Citrus Formula** (*Qi Pi Wan*) (KPC 3000) does not stop diarrhea by raising the qi, as in the previous formula, but contains lotus seed (*lian zi*) as its chief herb, which astringes to effectively stop diarrhea, while still supporting the spleen. This herb also nourishes the heart, calms the shen, and supports the kidneys, helping to relieve the anxiety that often accompanies chronic diarrhea.

Although not as common, patients can present with constipation-type IBS. This will be a deficient type of constipation, where there is not enough energy to push the stool out, accompanied by a feeling of incomplete bowel movements. For this type of IBS, look at combining **Persica and Cistanches Formula** (*Tao Ren Cong Rong Wan*) with a general qi tonic, such as **Ginseng and Astragalus Formula** (**Bu Zhong Yi Qi Tang**) or **Major Four Herb Combination** (*Si Jun Zi Tang*) (KPC 0960).

### **Spleen Qi Deficiency with Damp Accumulation**

The spleen likes dryness for optimal function. As damp accumulation occurs, the spleen's abilities become impaired, inhibiting its transportation and transformation functions. General spleen qi deficiency signs and symptoms are accompanied by damp accumulation signs and symptoms, such as the feeling of heaviness, especially in the limbs, nausea, and mucus in the stool. IBS-D is the most prominent type of IBS associated with spleen qi deficiency with dampness. With the focus of treatment on resolving dampness, use a formula like **Resolve the Middle Formula** (*Jia Jian Ping Wei San*). This formula will clear the damp accumulation, but does little to strengthen the

spleen—the underlying root condition. After the encumbered damp has been addressed, it is important to use a qi tonic to strengthen the spleen. Another option is to use a formula like **Six Gentlemen Formula** (*Liu Jun Zi Tang*), which treats the underlying spleen qi deficiency while also resolving dampness—although it is not as strong at clearing damp accumulation as **Resolve the Middle Formula** (*Jia Jian Ping Wei San*). You can also use a classical formula like **Ginseng and Atractylodes Formula** (*Shen Ling Bai Zhu San*) (KPC 2920) to tonify the spleen, clear damp, and stop diarrhea. Herbs in this formula include ginseng root (*ren shen*), atractylodes (*bai zhu*) poria (*fu ling*), and licorice (*gan cao*), which make up **Major Four Herb Combination** (*Si Jun Zi Tang*) (KPC 0960), with the addition of Chinese yam (*shan yao*) to tonify and strengthen the spleen qi. **Ginseng and Atractylodes Formula** (*Shen Ling Bai Zhu San*) (KPC 2920) uses coix (*yi yi ren*), poria (*fu ling*), and amomi fruit (*sha ren*) to address the damp accumulation, and dolichos nut (*bai bian dou*) and lotus seed (*lian zi*) to astringe and stop diarrhea. **Six Gentlemen Formula** (*Liu Jun Zi Tang*) has a stronger function of draining dampness than **Ginseng and Atractylodes Formula** (*Shen Ling Bai Zhu San*) (KPC 2920) and may be more appropriate for more chronic deficient conditions.

### **Spleen and Kidney Yang Deficiency**

Proper functioning of the spleen and stomach, particularly the transportation and transformation process, is dependent on the function of the kidney yang and the *mingmen* fire to warm the spleen. If the kidney is deficient and the *mingmen* fire is weak, it cannot aid the spleen in the digestive process. Spleen and kidney yang deficient IBS-D is marked by daybreak diarrhea—diarrhea first thing in the morning—often with undigested food. This will be accompanied by other spleen and kidney yang deficient signs and symptoms like cold hands and feet, feeling of cold, aversion to cold, lower abdominal discomfort that is better with warmth or massage, poor appetite, low back pain, low libido, frequent urination, and edema, especially in the lower burner. **Sea of Qi Formula** (*Qi Hai Yao Fang*) warms and supplements the spleen and kidney qi and yang. In this formula, cuscuta seed (*tu si zi*), the chief herb, and psoralea fruit (*bu gu zhi*) specifically address daybreak diarrhea. **Poria and Cuscuta Formula** (*Fu Tu Dan*) (KPC 2400) can also be a good choice to treat IBS-D. This formula, like the last, uses cuscuta seed (*tu si zi*) as its chief herb to tonify yang and stop morning diarrhea. It differs by adding the astringent herbs, schisandra fruit (*wu wei zi*) and lotus seed (*lian zi*), to strengthen its ability to stop diarrhea. This formula does not contain herbs like cinnamon bark (*rou gui*) or dried ginger root (*gan jiang*) and is therefore not as strong at warming and supplementing the spleen and kidney as **Sea of Qi Formula** (*Qi Hai Yao Fang*), but may be a better choice to initially stop the diarrhea.

**Ginseng and Ginger Combination** (*Li Zhong Wan*) (KPC 2970) is another formula that is commonly prescribed for diarrhea due to cold, caused by spleen yang deficiency. This formula is most suitable when diarrhea is accompanied with, or secondary to, abdominal pain that is relieved by warmth and

massage. **Ginseng and Ginger Combination** (*Li Zhong Wan*) (KPC 2970) focuses on warming the middle burner to relieve pain and stop diarrhea. Herbs like nutmeg seed (*rou dou kou*) and psoralea fruit (*bu gu zhi*) may need to be added to help stop the diarrhea. For severe abdominal pain, use **Aconite, Ginseng and Ginger Combination** (*Fu Zi Li Zhong Tang*) (KPC 1760), which adds prepared aconite (*fu zi*) to help dispel the cold. Another formula that can treat diarrhea due to spleen and kidney yang deficiency is **Ginger, Aconite, Poria, and Peony Combination** (*Zhen Wu Tang*) (KPC 2580). This formula warms the kidneys and supplements the spleen to relieve pain and diarrhea and like **Ginseng and Ginger Combination** (*Li Zhong Wan*) (KPC 2970), may need additional herbs such as psoralea fruit (*bu gu zhi*) and lotus seed (*lian zi*) to effectively stop diarrhea.

One useful combination is **Poria and Cuscuta Formula** (*Fu Tu Dan*) with either **Sea of Qi Formula** (*Qi Hai Yao Fang*) or **Ginseng and Ginger Combination** (*Li Zhong Wan*) (KPC 2970). The latter two formulas focus on warming and supplementing the spleen and kidney while **Poria and Cuscuta Formula** (*Fu Tu Dan*) (KPC 2400) gives the needed astringent action, as well as a little more support to the spleen and kidney.

### Middle Burner Cold

Middle burner cold is an excess cold condition. This is usually acute and due to external influences like climate exposure to cold or excessive intake of raw food and cold drink. This condition usually occurs when the body is already weakened and is often a mixed pattern with spleen and kidney yang deficiency. The deficient yang energy is unable to warm, making it vulnerable to cold invasions. Both patterns will present at the same time: an external invasion of cold temporarily creating acute exasperation of a chronic condition. This manifests as severe sharp abdominal pain, which is worse with touch, and may present with either diarrhea or constipation, although diarrhea is more common. **Aconite, Ginseng and Ginger Combination** (*Fu Zi Li Zhong Tang*) (KPC 1760) which was mentioned above, is the best formula to warm the interior, dispel cold, and tonify the spleen qi to strengthen the middle burner.

### Large Intestine

The large intestine is the final part of the digestive system. It receives the turbid from the small intestine, absorbs water, and eliminates the waste as feces. Most disharmonies of the large intestine start with, or involve, and may be difficult to separate from, other organs responsible for digestion: the spleen, stomach, and small intestine.

### Large Intestine Damp-Heat

IBS-D may also present as large intestine damp-heat. Damp-heat in the large intestine is often a result of damp-heat originating in the middle burner, especially when related to acute conditions like food poisoning, contaminated food, and food allergies or sensitivities. Clinical manifestations present as explosive, foul-smelling diarrhea with a sense of urgency. It will be accompanied by a burning sensation around the anus, heaviness in body/limbs, scanty yellow urine, abdominal pain and distention, as well as heat signs and symptoms like fever, thirst,

or dark, scanty urine. **Wu Hua Formula** (*Wu Hua Tang*) is a formula derived from a modern patent. It disperses heat due to the ascending nature of the flowers, drains damp through promoting urination, and has astringent properties focusing on the intestines that help to stop diarrhea. This is different than other formulas that clear lower burner damp-heat through purging and urination. These formulas often have cold bitter herbs that can damage qi and yin. **Wu Hua Formula** (*Wu Hua Tang*) clears lower burner damp-heat without damaging qi and yin. For this purpose, this formula is a good one for patients with weak constitutions, or children. It is also effective at clearing heat in the blood and can be used if there is blood in the stool.

Dr. Jake Fratkin, OMD, designed two formulas that can be very beneficial for IBS-D due to damp-heat in the intestines. The first formula is **Intestinal Fungus Formula** (*Chang Mei Jun Fang*). This formula is very effective for relieving diarrhea due to damp heat. It uses phellodendron bark (*huang bai*), coptis (*huang lian*), pulsatilla root (*bai tou weng*), and capillary (*yin chen hao*) to strongly clear intestinal damp-heat, and poria (*fu ling*), coix (*yi yi ren*), and pinellia (*ban xia*) to dispel damp and mucus. The second Fratkin formula, **Pulsatilla Intestinal Formula** (*Bai Tou Weng Li Chang Fang*), can also be used to clear lower burner damp-heat, though it is often used to heal the intestinal lining after the acute damp-heat condition has resolved. This formula is gluten-free and may be more appropriate for patients dealing with food allergies or sensitivities. Another formula that can be effective at treating IBS-D is **Coptis Relieve Toxicity Formula** (*Huang Lian Jie Du Pian*). This is a modification of the classical formula *Huang Lian Jie Du Tang* with the “three huangs” draining damp-heat, accompanied by gardenia fruit (*zhi zi*), which clears heat in the three burners, and modified by lophatherum (*dan zhu ye*) and Chinese rhubarb (*da huang*). This can be a strong formula to stop diarrhea and is particularly indicated if there is blood in the stools. It is not intended for long term use or for patients with a weak constitution.

There are a couple of classical formulas that can treat IBS-D due to damp-heat. **Peony Combination** (*Shao Yao Tang*) (KPC 1540) can effectively treat diarrhea due to damp-heat in the lower burner. This formula also has the function of regulating and harmonizing middle burner qi and is most appropriate when there is abdominal pain accompanied with diarrhea. For severe diarrhea, **Pulsatilla Combination** (*Bai Tou Weng Tang*) (KPC 1120) can be more effective, especially if there is the presence of blood in the stool.

## Formula Comparison Chart

TCM Differentiation	Formula	IBS type	Actions	Tongue and Pulse	Notes
Liver Qi Stagnation	<b>Peony and Atractylodes</b> ( <i>Tong Xie Yao Fang</i> )	IBS-D	Nourishes spleen, soothes liver, stops diarrhea	Thin tongue with white coat. Wiry pulse.	Diarrhea triggered by stress Excellent formula for combinations
	<b>Minor Bupleurum Formula</b> ( <i>Xiao Chai Hu Tang</i> )	IBS-D, IBS-C, IBS-A	Soothe liver, nourish spleen, harmonize liver and spleen	Thin tongue with white coat. Wiry pulse, especially in the liver position.	Focuses on physical signs and symptoms
	<b>Bupleurum and Tang Kuei Formula</b> ( <i>Xiao Yao San</i> )	IBS-D, IBS-C, IBS-A			Focuses on emotional issues
	Bupleurum and Aurantium Immaturus Formula ( <i>Si Ni San</i> ) (KPC 0970)	IBS-D, IBS-C, IBS-A	Regulates qi	Normal tongue. Wiry pulse, especially in the liver position.	Better for constipation
	<b>Shu Gan Formula</b> ( <i>Shu Gan Wan</i> )	IBS-D, IBS-C, IBS-A			Especially beneficial for abdominal pain primary to erratic stool
Spleen Qi Deficiency	<b>Ginseng and Astragalus Formula</b> ( <i>Bu Zhong Yi Qi Tang</i> )	IBS-D (IBS-C)	Supplements spleen qi	Pale tongue with a thin white coat. Weak pulse.	Raise middle burner yang qi to stop diarrhea
	Lotus and Citrus Formula ( <i>Qi Pi Wan</i> ) (KPC 3000)	IBS-D			Astringe to stop diarrhea
	Major Four Herb Combination ( <i>Si Jun Zi Tang</i> ) (KPC 0960)	IBS-D, IBS-C			Focuses on root condition
Spleen Qi Deficiency with Damp Accumulation	<b>Resolve the Middle Formula</b> ( <i>Jia Wei Ping Wei Fang</i> )	IBS-D	Resolves damp	Tongue will be pale with teeth marks, may be swollen, with a white greasy coat. Pulse will be weak, possibly slippery.	Very little tonification of spleen qi
	<b>Six Gentleman Formula</b> ( <i>Liu Jun Zi Tang</i> )	IBS-D	Tonifys spleen, expels damp		
	Ginseng and Atractylodes ( <i>Shen Ling Bai Zhu San</i> ) (KPC 2920)	IBS-D	Tonifys spleen, dries damp, astringes to stop diarrhea		Diarrhea will be worse with dietary changes or worse when tired. Best formula to initially stop diarrhea while still addressing underlying condition
Spleen and Kidney Yang Deficiency	<b>Sea of Qi Formula</b> ( <i>Qi Hai Yao Fang</i> )	IBS-D	Warms spleen and kidney yang	Pale tongue, may be swollen, with a thin white coat. Pulse will be deep and slow.	Contains herbs that specifically address daybreak diarrhea
	Poria and Cuscuta Formula ( <i>Fu Tu Dan</i> ) (KPC 2400)	IBS-D			Astringes to stop diarrhea. Tonifies kidney, but not as strong as the other formulas in this category. Can be a good formula for combination
	Ginseng and Ginger Combination ( <i>Li Zhong Wan</i> ) (KPC 2970)	IBS-D			Warms yang, may need additions to effectively stop diarrhea
	Aconite, Ginseng and Ginger Combination ( <i>Fu Zi Li Zhong Tang</i> ) (KPC 1760)	IBS-D			Strongest to warm yang, may need additions to effectively stop diarrhea
	Ginger, Aconite, Poria, and Peony Combination ( <i>Zhen Wu Tang</i> ) (KPC 2580)	IBS-D			Warms yang, may need additions to effectively stop diarrhea
Middle Burner Cold	Aconite, Ginseng and Ginger Combination ( <i>Fu Zi Li Zhong Tang</i> ) (KPC 1760)	IBS-D	Warms spleen dispels cold	Pale, swollen tongue with thin, white coat. Deep, slow pulse.	
Damp-Heat	<b>Wu Hua Formula</b> ( <i>Wu Hua Tang</i> )	IBS-D	Clears intestinal damp-heat	Red tongue with a yellow coat. The coat may also be greasy. Wiry, rapid pulse, possibly slippery.	Does not damage qi or yin
	<b>Intestinal Fungus Formula</b> ( <i>Chang Mei Jun Fang</i> )	IBS-D			Severe diarrhea (with mucous and blood)
	<b>Pulsatilla Intestinal Formula</b> ( <i>Bai Tou Weng Li Chang Fang</i> )	IBS-D			Gluten-free
	<b>Coptis Relieve Toxicity Formula</b> ( <i>Huang Lian Jie Du Pian</i> )	IBS-D			Severe diarrhea (with blood)
	Peony Combination ( <i>Shao Yao Tang</i> ) (KPC 1540)	IBS-D			Regulates qi and blood. Abdominal pain with diarrhea
	Pulastilla Combination ( <i>Bai Tou Weng Tang</i> ) (KPC 1120)	IBS-D			Severe diarrhea (with blood)

## FOOTNOTES

- <sup>i</sup> Denters, MJ, et al., “Patients’ Perception of Colonoscopy: Patients with Inflammatory Bowel Disease and Irritable Bowel Syndrome Experience the Largest Burden,” *European Journal of Gastroenterology and Hepatology*, 2013.
- <sup>ii</sup> O’Sullivan, M, et al., “Increased Mast Cells in the Irritable Bowel Syndrome,” *Neurogastroenterology and Motility*, 12(5), 2000.
- <sup>iii</sup> Carroccio, A, et al. “A Comparison Between Two Different In Vitro Basophil Activation Tests for Gluten and Cow’s Milk Protein Sensitivity in Irritable Bowel Syndrome (IBS)- Like Patients,” *Clinical Chemistry and Laboratory Medicine*, 2012.
- <sup>iv</sup> Sameer, Z., et al., “Food Specific Serum IgG4 and IgE Titers to Common Food Antigens in Irritable Bowel Syndrome,” *American Journal of Gastroenterology*, 2005.
- <sup>v</sup> Bradord, K, et al., “Association Between Early Adverse Life Events and Irritable Bowel Syndrome,” *Clinical Gastroenterology and Hepatology*, 10(4), 2004.
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- <sup>vii</sup> Austin, GL et al., “A Very Low-carbohydrate Diet Improves Symptoms and Quality of Life in Diarrhea-Predominant Irritable Bowel Syndrome,” *Clinical Gastroenterology and Hepatology*, 7(6), 2009.
- <sup>viii</sup> Staudacher, HM, et al., “Comparison of Symptom Response Following Advice for a Diet Low in Fermentable Carbohydrates (FODMAP’s) Versus Standard Dietary Advice in Patients with Irritable Bowel Syndrome,” *Journal of Human Nutrition and Dietetics*, 24(5), 2011.
- <sup>ix</sup> Ortiz-Lucas M, et al., “Effect on Probiotic Species on Irritable Bowel Syndrome Symptoms: A Bring Up to Date Metaanalysis”, *Revista Espanola de Enfermedades Digestivas*, 105(1), 2013.

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