



## WHAT IS ITP?

ITP, immune thrombocytopenia, is an autoimmune disease. In autoimmune diseases, the body mounts an immune attack toward one or more seemingly normal organ systems. In ITP, platelets are the target. They are marked as foreign by the immune system and eliminated in the spleen and sometimes, the liver. In addition to increased platelet destruction, some people with ITP also have impaired platelet production.

Platelets are relatively small, irregularly shaped components of our blood. They are required to maintain the integrity of our blood vessel walls and for blood to clot. Without a sufficient number of platelets, a person with ITP is subject to spontaneous bleeding or bruising.

People with ITP often have bruises or small purple spots on their skin (petechiae) where their blood has escaped from their veins or capillaries. Spontaneous bleeding can also occur in the mucus membranes on the inside of the mouth or in the gastrointestinal tract. It is possible, with a decreased number of platelets, to have a spontaneous cerebral hemorrhage. ITP is often accompanied by fatigue and sometimes depression.

**Normal** platelet counts range from **150,000** to **400,000** per microliter of blood. Under new international consensus report guidelines, **ITP** is defined as a platelet count of **less than 100,000**. People with platelet counts **under 10,000** have a severe case of ITP. For many, a count of 30,000 is sufficient to prevent a **catastrophic bleed**. Individual reactions to low platelet counts differ. Determining a safe platelet count is a decision to be made in consultation with an experienced treating physician.

It is difficult to determine how many adults have ITP, so estimates vary. One study reports that the incidence of adult ITP (how many people get diagnosed each year) is from 1.64 to 6.65 per 100,000. The estimated prevalence (how many adults have ITP at any time) in the US is 50-60,000 based on a limited payor source, but is probably closer to 120,000. The private payor data only includes symptomatic patients, which, for adults, neglects around half of the persons with ITP. More women than men have the disease in the 30 to 60 age group. In other age groups, about the same number of men and women are diagnosed with ITP.

While most cases of ITP are controlled, it can be fatal in a small percentage of ITP patients.

## Our Mission:

*The Platelet Disorder Support Association is dedicated to enhancing the lives of people with immune thrombocytopenia (ITP) through education, advocacy, and research.*





## ITP IN ADULTS & CHILDREN FAQ'S

### Q :: What is ITP?

**A ::** ITP, immune thrombocytopenia, is an autoimmune disease. In autoimmune diseases, the body mounts an immune attack toward one or more seemingly normal organ systems. In ITP, platelets are the target. They are marked as foreign by the immune system and eliminated in the spleen and sometimes, the liver. In addition to increased platelet destruction, some people with ITP also have impaired platelet production.

### Q :: What are platelets?

**A ::** Platelets are relatively small, irregularly shaped components of our blood. They are required to maintain the integrity of our blood vessel walls and for blood to clot. Without a sufficient number of platelets, a person with ITP is subject to spontaneous bleeding or bruising. It is possible, with a very low platelet count, to have spontaneous bleeding including a cerebral hemorrhage.

### Q :: What is a normal platelet count?

**A ::** **Normal** platelet counts range from **150,000** to **400,000** per microliter of blood. Under new international consensus report guidelines, **ITP** is defined as a platelet count of **less than 100,000**. People with platelet counts **under 10,000** have a severe case of ITP. For many, a count of 30,000 is sufficient to prevent a **catastrophic bleed**.

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### **Q :: What causes ITP?**

**A ::** The specific cause of ITP is unknown. Some cases appear after a viral or bacterial infection, after immunizations, after exposure to a toxin, or in association with another illness such as lupus or HIV.

### **Q :: Can you inherit ITP?**

**A ::** ITP is not usually considered a disease that can be passed from one generation to another. There are cases in which multiple family members have been diagnosed with ITP, but most researchers consider these a misdiagnosis.

### **Q :: What are the symptoms of ITP?**

**A ::** The symptoms vary greatly from person to person. Most people with ITP experience spontaneous bruising. Some find they have petechiae (pe-TEEK-ee-ay), tiny red dots on the skin caused by broken blood vessels or leaks in a capillary wall. If the platelet count is very low other bleeding symptoms include blood blisters on the inside of the cheeks or blood in the urine or stool. In general, the more bleeding symptoms, the lower the platelet count.

### **Q :: How is ITP diagnosed?**

**A ::** ITP is a diagnosis of elimination. A doctor will do tests that rule out other causes of low platelets. If no other cause is found, then the diagnosis is often ITP. There is no accurate, definitive test for ITP.

### **Q :: Can ITP be cured?**

**A ::** While there is no cure for ITP, many patients find their platelet count improves following treatment. What proves difficult for many ITP patients is finding the treatment that works for them without unwanted side effects. Some patients report that changing their diet or lifestyle helps them feel better. The disease can go into remission for a long time, perhaps for the remainder of a person's life. ITP can also recur. There is currently no way to predict the course of the disease.



### **Q :: How is ITP different in children than in adults?**

**A ::** ITP can be either acute (sudden onset, often temporary) or chronic (long lasting). Most children (80-90%) have acute ITP. These children usually recover within a few months whether they receive treatment or not. Recovery is possible even if your child is considered to have chronic ITP.

### **Q :: How do children get ITP?**

**A ::** Doctors don't know what causes ITP, but it often occurs in otherwise healthy children a few days or weeks after a viral infection. It's thought that for some unknown reason this infection causes the immune system to lose the ability to distinguish between the body's own cells and those of invaders. There is also some evidence that certain vaccines may trigger ITP, but this occurs in only a small percentage of cases. Why ITP happens in some children and not others who have had the same infection, virus or vaccine is not known.

### **Q :: Is ITP dangerous to children?**

**A ::** It can be. But, the danger is primarily related to your child's platelet count. For example, a platelet count of less than 50,000 may cause your child to bleed or bruise easily. A platelet count lower than 10,000 will increase the risk of serious bleeding. However, life-threatening bleeding, including intracranial hemorrhage (bleeding in the brain) is rare, and occurs in less than 1 percent of children.

### **Q :: Is ITP contagious?**

**A ::** No. ITP is not contagious.





There is no answer as to what causes the immune system to mount an attack on platelets and unfortunately, there is no method we know that can definitively prevent the onset of **ITP**. There are, however, several signs and symptoms that may indicate **ITP** and when directly defined, may assist in early detection. Possible early indicators of **ITP** are listed below along with several tips for living a healthy lifestyle in an effort to assist with prevention. There are many treatments for ITP and some people go into remission, but there is no cure for **ITP**. With increased awareness, education, and research there remains hope.

For more detailed information and explanations visit:

[www.pdsa.org](http://www.pdsa.org)

## EARLY DETECTION

### Understand Normal Platelet Counts and Potential Causes of Low Platelets

- Test your platelet count with an annual complete blood count (CBC)
- See a hematologist if the results show a platelet count below 100,000
  - A normal platelet count is 150,000 – 400,000
  - Together with your hematologist, determine if your low platelet count may be caused by a new drug you have taken, an infection, an exposure to toxins, or something you ate. For more information visit: [About ITP: Warnings](#)
  - Familiarize yourself with drugs known to lower platelet counts. See the Cleveland Clinic list of drugs known to cause platelet dysfunction: [Cleveland Clinic](#)

### Know the Possible Signs and Symptoms of Low Platelets

#### Signs (things you see)

- Petechiae – small, reddish-purple spots that look like a rash, but are not raised
- Bruising or Purpura - dark red or purple bruises caused by bleeding underneath the skin with no known cause
- Be aware of any bleeding that may be unusual, heavier or last longer than normal
  - Heavy menses in women
  - Frequent, heavy, or persistent nosebleeds
  - Bleeding inside the mouth from the cheeks (blood blisters) or from the gums with no known cause
  - Blood in urine or stool

#### Symptoms (things you feel)

- Fatigue
- Depression

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## PREVENTION

### Maintain a Healthy Diet and Lifestyle

1. See [PDSA's Diet and Lifestyle suggestions](#)
2. Maintain a healthy digestive system by eating mostly fruits and vegetables and chewing them well - [Autoimmune Illness Natural Treatments](#)
3. Maintain healthy levels of both Folic Acid and Vitamin D, which can strengthen the immune system in an attempt to prevent serious infections - a known cause of low platelets. See page 32 in the PDSA booklet "[Living with ITP: Answers to Common Questions](#)" for studies on Folic Acid. Contact PDSA to request a copy. Information about the benefits of Vitamin D can be found here: [Mayo Clinic](#)
4. Make an effort to reduce stress level - [LiveStrong.com](#). Stress reducing activities include:
  -  Yoga
  -  Meditation
  -  Relaxation techniques
5. Avoid environmental toxins - [Article by Dr. Mark Hyman](#)
6. Understand the potential effects of environmental triggers - [AARDA Web site](#)



### Our Mission:

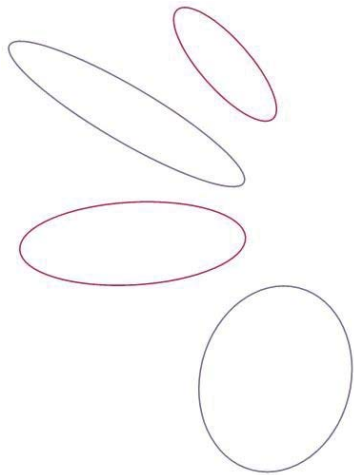
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# Know Your AQ

## (Autoimmune Quotient)

*The AQ consists of several simple points that all individuals should know and record about their own health in order to receive an accurate diagnosis in a more timely manner:*

- Know and record your family medical history and give a copy to your doctor
- Keep a detailed list of your symptoms and record when you have them (many symptoms come and go, are non-consistent, or happen infrequently in autoimmune diseases)
- Get the opinions of more than 1 doctor if you feel your health concerns are not being addressed
- Educate yourself



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ITP is a diagnosis of exclusion. When all other causes of low platelets are considered and ruled out, the diagnosis is ITP. The problem with that scenario is the number of possible causes of low platelets and variety of information that the physician and patient need to share to arrive at the correct diagnosis and approach to treatment. A lot rests on good communication because a misdiagnosis can mean treating the wrong disease.

## *DIAGNOSING ITP ~ Important Information for Patients*

**What follows is a list of 25 items to mention to your doctor if you or your child experience an episode of low platelets:** (*“You” or “your” below refers to the person with the low platelet count.*)

1. Your platelet count history
2. If you've ingested some of the following foods prior to the drop in platelets:
  - wood ear mushrooms
  - quinine (tonic) water
  - bitter melon (dark green melon found in Asian grocery stores)
3. If you took any new prescription or non-prescription medications prior to the drop in platelets
4. If you had any vaccinations or shots in the month prior to the drop in platelets
5. If you took any new supplements, vitamins or herbs prior to the drop in platelets
6. If you were exposed to pesticides, herbicides or other chemicals
7. If you have been diagnosed with lymphoma, lupus, hepatitis C, or HIV
8. If you have recurrent stomachaches or an ulcer
9. If you had a fever or felt sick prior to the drop in platelets or are currently not feeling well
10. If you were bitten by an insect prior to the drop in platelets



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## DIAGNOSING ITP ~ Important Information for Patients (continued)

11. If you were scratched or bitten by an animal or had contact with a new animal prior to the drop in platelets
12. If you had poison ivy or other skin irritation
13. If you recently traveled to another country
14. If others in your family have an autoimmune disease such as lupus, MS, rheumatoid arthritis, or thyroid disease
15. If others in your family or ancestors have a bleeding disorder or bruise easily
16. If you've always bruised easily
17. If you have a long history of getting more colds, flu, or other infections than your friends
18. If you have a hearing problem
19. If you experienced swelling or aching in your joints, sun sensitivity rashes, hair loss, or the feeling of numbness or "pins and needles" in your extremities
20. If you have a history of problems with your thyroid gland
21. If you have recently been under a lot of stress
22. If you were recently hospitalized or treated for another condition
23. If you changed your diet or started a new exercise program
24. If you drink more than five alcoholic beverages per week
25. If your low platelets seem to go in monthly or periodic cycles

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## **ITP DIET SUGGESTIONS**

In our Survey of Non-Traditional Treatments in ITP ([www.itpeople.com/surveyres/](http://www.itpeople.com/surveyres/)) about 40% of the responders reported some improvement in their bleeding symptoms and their platelet count with either the macrobiotic diet or the diet recommended in *Eat Right for Your Type* by Dr. Peter J. D'Adamo. Less success was reported for the Atkins and Zone diets, high protein, low carbohydrate diets.

The recommendations listed here are based on principles from the macrobiotic and "Eat Right" diet, general nutritional research and research linking the impact of diet changes on other diseases that have common features with ITP.

If you would like to implement some of the diet changes listed in this article, please make the changes slowly so your body can adjust. Sometimes diet changes can cause withdrawal and detoxification symptoms as your body adjusts to the new foods and eliminates the old.

*These suggestions are guidelines only. Be sure to discuss any diet changes with your physician.*

### **1. Eat a wide variety of fresh food**

Maximize the value of each bite. Eat food from as close to the source as possible and as soon as possible. Avoid canned and frozen foods and leftovers. The nutritional value of food deteriorates with time. A wide variety of food assures your body gets the variety of nutrients it needs.

### **2. Eat whole foods**

Eat whole grain cereals, brown rice, and whole wheat products. Reduce white flour, white rice, and processed foods. Processed grains are stripped of their natural nutrient-rich coating.

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### **3. Eat organic foods**

Eat un-sprayed foods grown using natural fertilizers. Some pesticides and herbicides have been shown to exacerbate autoimmune diseases and lower platelets. Additives and preservatives can increase the disease-causing free radicals in your body.

### **4. Reduce sugar**

Reduce the amount of white refined sugar as well as fructose, corn syrup, honey and other sweeteners. Limit fruit and fruit juice. Sugar contributes to an acidic disease-promoting body condition.

### **5. Reduce dairy products**

Reduce or eliminate milk, cheese, ice cream, and yogurt from your diet based on your reaction to these foods and other dietary needs. Dairy foods have been shown to contribute to mucus formation and exacerbate some autoimmune diseases.

### **6. Eat healthy fats**

Use cold pressed oils such as olive or canola in cooking and baking. Avoid hydrogenated, partially hydrogenated or trans- fats. These contribute to free radical damage. Reduce the amount of deep fried food, which also adds to the free radical load.

### **7. Eat green**

Eat as many leafy greens as possible, especially kale and collards. Add sea vegetables (seaweed) to your diet. These choices contain large amounts of calcium, minerals, and vitamin K to help clotting.

### **8. Limit meat**

Rely on lean, white fish, whole grains and beans and some nuts for protein. Meat is often laced with residual antibiotics, hormones, and saturated fat.

### **9. Avoid problem foods**

Avoid alcoholic beverages, which can damage bone marrow. Reduce the amount of blueberries, red/purple grape products, garlic, onions, ginger, ginseng, and tomatoes. These foods can interfere with blood clotting. Avoid food and drinks containing quinine as these can lower platelets.



### **10. Avoid allergic foods**

Many people have delayed food allergies that produce vague and difficult-to-diagnose symptoms. If you don't feel well, consider having a food allergy test.

### **11. Chew your food well**

Chewing each bite until it is liquid can aid digestion, aid the passage of nutrients into your blood stream, and promotes healthy alkaline blood chemistry.

### **12. Drink pure warm water**

Drink plenty of filtered or bottled water at room temperature or above. Taking periodic sips of hot water can cleanse impurities from the body. Ice water can slow and hinder the digestive process. Tap water may contain small amounts of chemicals that are harmful.

