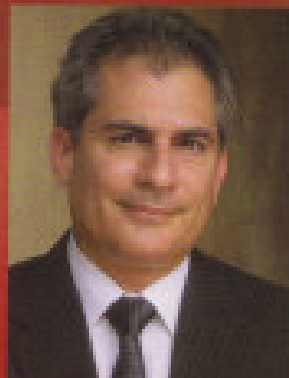


A microscopic view of numerous red blood cells, appearing as bright red, biconcave discs against a dark background. The cells are scattered across the frame, with some showing their characteristic central indentation. The lighting highlights the texture and color of the cells, creating a sense of depth and movement.

Balancing the Blood

How Goji Can Lower
Dangerous Blood Acidity



Dr. Victor Marcial-Vega
Completed Residency at Johns
Hopkins School of Medicine

During high school, we learned that blood is the vital fluid circulating throughout our bodies transporting oxygen, nutrients, and metabolic waste. It is thick because it is made up of a variety of cells, each with a different job. In addition to water, blood plasma contains salts, sugars and other substances. And, most importantly, it contains proteins that carry important nutrients to the body's cells and strengthen the body's immune system so it can fight off infection.

An average adult has 5.6 liters of blood traveling through their heart, lungs, arteries, veins, capillaries and cells, performing these important tasks:

- Distributing essential nutrients to cells
- Carrying away metabolic waste materials for disposal
- Recognizing antigens (foreign substances) and producing antibodies (immune-defense mechanisms)
- Clotting cuts, wounds and scratches
- Replenishing oxygen and removing carbon dioxide. The human body is programmed to correct for either respiratory or metabolic acidosis to maintain normal pH. For example, if the acidosis is caused by excessive carbon dioxide (which is an acid) the body will correct the pH by retaining bicarbonate (a base). Respiratory acidosis develops when there are excessive amounts of carbon dioxide in the body.

Our blood is also an excellent barometer of our health. The body is designed so its fluids are slightly alkaline. Some parts of the body are acidic in order to protect us from micro-organisms, such as the skin, stomach and vagina. When cells function normally, they produce a very mild acid that is converted to carbon dioxide and removed from the lungs.

With Western diets, which are overloaded with protein, refined carbohydrates and animal fats, we have put ourselves into a state of

metabolic acidosis, meaning we have made our bodies more acidic. Since our body's goal is to keep a careful balance, it works extra hard to try to restore that balance and neutralize acidity with alkalinity.

This balance is called homeostasis, defined as the optimal balance of physiological well-being. When the body loses its normal homeostasis, adverse symptoms appear. Symptoms are not the cause of health problems, but an expression of the body's efforts to defend its weakest areas and bring itself back into balance.

To restore balance, it may take calcium from bones or nitrogen from muscle cells and carry them away in the bloodstream for excretion. Dr. Peter Lazarnick, a chiropractor who has practiced in Georgia for 28 years, says when we take in these large amounts of protein—such as eating a big, 16 ounce steak—an acidic ash is created in the body. "This drains the body's energy, turns the body acidic, and sets up an environment for a state of illness instead of health."

It is in Our Blood

Dr. Victor Marcial-Vega is a 1984 graduate of the University of Puerto Rico School

"I found that 90 percent of the patients had reversed their acidity to alkalinity just by ingesting goji juice."

—Dr. Marcial-Vega

of Medicine. He completed his internship and residency in radiation oncology at Johns Hopkins Hospital and School of Medicine in Baltimore. Dr. Marcial-Vega dedicates his time to the research and implementation of nutritional medicine for the management of disease.

Dr. Marcial-Vega has been studying 'before' and 'after' affects of various treatments on the blood for years in thousands of patients. He also devised a revolutionary system to study 'live' blood, using a microscope and video camera to record the results. The following images are microscopic slides of human blood samples from Dr. Marcial-Vega's research and his observations on goji's incredible impact on a patient's blood over a 7-day period.

Blood That is Too Acidic

This is the blood of one of my patients before he began drinking goji. It looks like there are stacks of coins piled against each other. These are red blood cells. They are not supposed to be like that. They are supposed to be separate from each other, nice and round, and floating around the blood transporting oxygen, which is not happening here. The blood is very acidic. So, in this person there is not an adequate transport of oxygen.

The little dots in the background are bacteria in the blood. We are not sterile. In this particular person, the bacteria levels are way above normal. The dark spots in the background are pieces of cholesterol.

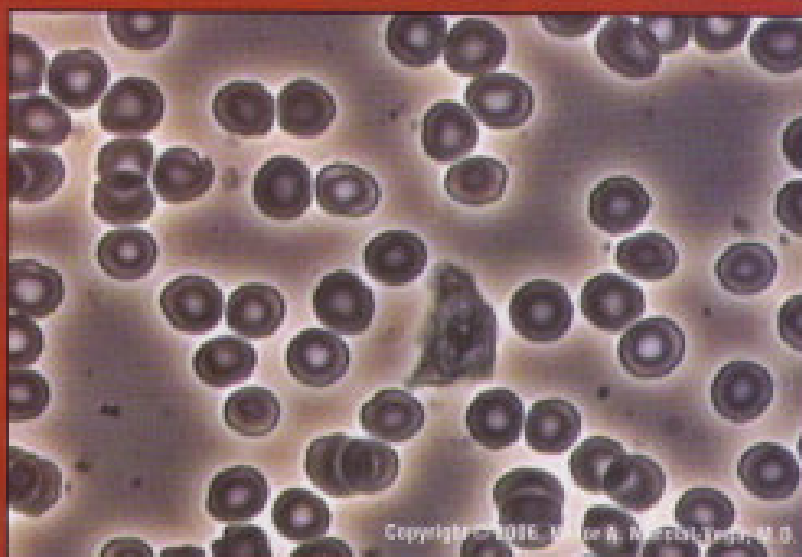


Improvement Just Hours After Drinking Goji

This is what happened 24 to 36 hours after drinking goji juice in that same patient. The cells have separated, meaning the blood is becoming more alkaline. Oxygen is being transported better. The bacteria floating in the background are still there, but there has been improvement.

The white blood cell in the center is moving up and is becoming wider. It is supposed to move across the blood, eat the bacteria, eat the cholesterol pieces and recognize what is supposed or not supposed to be there.

Again, the white blood cell in the center is becoming wider because it is moving up and to the sides. Its edges are not fixed.



A Week Later

And after seven days of taking goji—Look at the cells. There is very little Anemia—just a little bit in the lower right hand corner. But most of the cells have a good content of hemoglobin. So, we are seeing at the cellular blood level how goji and subsequent alkalization of the blood is affecting the parameters that we know make a big difference in predicting how these people are going to do.

Not only that, but this white blood cell looks healthy. It has well delineated edges. It is not fuzzy like the first one we saw.



Dr. Marcial-Vega says there has been an underestimation of the nonphysical aspects of disease. "There are so many illnesses on the planet right now, but there is one thing in common with all of them," he says. "The common denominator is acidity, either because of an accumulation of toxins or because the bacteria are growing more because of an immune depression. Whatever the disease, the end result will be the same—increased acidity of the body."

Dr. Marcial-Vega started using strips of litmus paper with his patients. Litmus paper is used to determine whether a solution is acid or alkaline. By putting litmus strips in patients' mouths, he obtained a reading of their bodies' alkalinity. "The saliva is one of the few places where every human being should have alkalinity," he says. "If you have acidity, it is eating your teeth, eating your gums and is an indication that your body is acidic. So this is a way of measuring how you are doing in a very simple way. And it also keeps you away from the doctor's office as much as possible."

Blood is Relative

Dr. Marcial-Vega has studied the effects of goji juice on the human body for nearly three years. He started 86 patients on a goji juice regimen under close medical supervision, including weekly blood testing. The patients were instructed to take between 1 and 15 ounces of goji juice a day, depending on the amount Dr. Marcial-Vega gauged was required to correct their alkalinity. "We all have different toxins and poisons in our body," he says. "So I would individualize the dosage for each patient depending on what their requirement is." The patients took saliva measurements with the litmus strips before drinking the goji juice. "It was always acidic," Dr. Marcial-Vega says. "Then they would take the goji. As soon as they became 7.4 [in pH] or the strip turned a dark blue color, I knew the dose was right for that particular patient."

He noticed that as the alkalinity changed, so did the reversal of all illnesses, including cancer, high blood pressure, diabetes, chronic renal failure, obesity, high cholesterol, arthri-

tis and other illnesses associated with physical or mental discomforts, including attention deficit disorder, anxiety and depression. "I wanted to compare, and I wanted to corroborate and confirm this," Dr. Marcial-Vega says. He found that 90 percent of the patients had reversed their acidity to alkalinity just by ingesting goji juice.

Then Dr. Marcial-Vega explored whether goji made any difference in their illnesses, including patients undergoing cancer treatment, chemotherapy or radiation. "Many of these patients had elevations toward normal blood levels during therapy," he says. "So, this indicated a marked protection of the bone marrow during cancer therapy."

He also observed high cholesterol levels decreased a minimum of 50 points in four weeks in 67 percent of the patients; high blood pressure dropped in 80 percent of the patients, and 50 percent of these patients decreased or eliminated their high blood pressure medications. Dr. Marcial-Vega also observed that 85 percent of his obese patients had a significant decrease in their weight, while their lean body mass remained the same or increased. "That means they did not lose muscle," he says. "So now we see that that alkaline-acidity thing we are talking about makes a difference."

There was something else he discovered—changing body temperature. "In 85 percent of these patients, there was an decrease in temperature," Dr. Marcial-Vega says. "Most of the patients that are acidic have a low temperature, meaning low energy. When your energy is low, you are ill. When you are ill, your energy is low. When you are acidic, the energy is low. All this translates into low temperature. Normal temperature is 98.6 degrees Fahrenheit. So we

are seeing in these patients an abnormally low temperature that corrects itself with administration of goji juice in 85 percent of the cases. This is significant. Blood sugar levels decrease in 64 percent of the patients with diabetes, and more than half of them decreased or eliminated their medications."

Dr. Jerry Shaw, who has spent nearly 20 years in private practice as a chiropractor, is not surprised by Dr. Marcial-Vega's findings. At a recent health symposium about goji, Dr. Shaw said, "The ancient Himalayan healers knew thousands of years ago that people were healthier and stronger; that they lived longer when they took goji." During his years



in practice Dr. Shaw realized just how important high-quality nutrition was to the overall health of his patients. He says goji is an example of how the ancient is meeting the modern.

Dr. Shaw says the human body is always attempting to reach homeostasis, whether it is acid-alkaline, the proper temperature or the balance of electrolytes. "That is what health is about ultimately, homeostasis," he says. "And that is what I see goji playing a huge part in, not only in acid-alkaline, but in helping our body's cells function at their optimal level, allowing homeostasis to take place, allowing health to happen naturally. And alkaline-acid is a big part of it. It is the key part of homeostasis." ■■■