

The Importance of pH Balance in the Human Body

Different fluids in the human body generally have a delicate range of acid-alkaline balance they maintain for optimal functioning. Human blood has a normal pH of about 7.41. The pH of urine has a wider range. Normal ranges for urine pH are from 4.5 to 8. Urine pH tends to have wider variations based on the acid or alkaline forming potential of foods eaten during the course of the day. First morning urine before any foods are eaten is often considered the most accurate indicator of true urine pH because it is not influenced by the acid or alkaline forming potential of recent meals or snacks.

When the pH levels of blood or other key bodily fluids fall out of optimal pH range due to adverse metabolic or respiratory conditions, the human body goes through a variety of adjustments to try to correct the acid or alkaline imbalance. If the body is too alkaline, a condition called alkalosis results. Conversely, an overly acid condition results in acidosis. Checking urine pH is one way doctors look for imbalances in the pH levels of the body. Testing blood pH levels is another option.

Holistic doctors often recommend self testing your urine pH or saliva to determine the pH levels and then adjusting your diet accordingly to try to balance your overall body pH. That is, if your urine is too alkaline to eat a more acid forming diet, or if it is too acid to eat a more alkaline forming diet. Conventional medical doctors are often skeptical at the idea that diet can influence anything but your urine pH levels and that diet has no impact on stomach acid or blood pH. This view is no longer as wide spread as it once was, and in recent years it has been suggested by some researchers that a low grade acidosis among the general population of industrialized countries caused by cereal grains and other refined foods common in modern diets may be partly responsible for many of our modern diseases.

Studies on animals do tend to support the holistic view that diet can influence the body's acid-base balance. A paper that appeared in the *European Journal of Nutrition* entitled *Animal nutrition and acid-base balance* cited multiple examples of nutrition induced acidosis or alkalosis induced through dietary intervention in animals that could prevent various diseases. In one example, dietary induced acidosis has been used to prevent hypocalcemic postparturient paresis in dairy cows. An another example, dietary induced alkalosis has been induced to prevent mineral loss and subsequent stress fractures in athletic horses.

Links:

[Acid and Alkaline Diets: What are they used for?](#)

Sources

1. Haas, Elson, *Staying Healthy with Nutrition, Celestial Arts*, Berkeley, California, 1992.
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3. Balch, James F. and Phyllis A., *Prescription for Nutritional Healing*, Third Edition, Avery, New York. 2000
4. Riond JL., *Animal nutrition and acid-base balance*, *European Journal of Nutrition*, 2001 Oct;40(5):245-54.
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