

# Hydrochlorothiazide

**Hydrochlorothiazide** is a *diuretic* medication. That is, it is used to increase urination, resulting in less fluid accumulation in the body. This property is useful for treatment of conditions characterized by excessive fluid buildup. Currently, hydrochlorothiazide is most often reserved for situations in which one of more other diuretic agents, such as furosemide and spironolactone, have been utilized and have not resulted in sufficient removal of fluid. The combination of hydrochlorothiazide with these other agents may increase, still, the amount of urine produced, and the amount of fluid lost from the body.

The most common use of this medication is for the treatment of *congestive heart failure*, particularly that which has become refractory to other medications already being used. Heart disease reduces the efficiency of the heart as a pump, resulting in a slow drop in blood pressure over time. The kidneys respond by retaining more fluid within the body in an effort to maintain blood pressure. Although this seems logical, it is counterproductive in the face of heart disease, since the extra fluid creates more work for the heart, itself. Eventually, the amount of fluid becomes too great a workload for the heart, and fluid begins to leak out of blood vessels and into the lungs or body cavities. This fluid overload represents congestive heart failure.

By increasing the amount of urination, diuretic medications such as hydrochlorothiazide combat the fluid overload associated with congestive heart failure. The goal is to remove enough fluid to resolve the heart failure, but not so much fluid as to cause dehydration, poor kidney function, or unacceptable electrolyte imbalances. Chest x-rays and blood work are used to guide therapy in an attempt to strike the correct balance.

As is true for other diuretic agents, hydrochlorothiazide may cause an increase in thirst. Your pet should **always** have unlimited access to water in order to avoid dehydration. If dehydration or electrolyte imbalances occur, symptoms may include lethargy, weakness, and loss of appetite. If heart failure is inadequately controlled despite addition of this medication, return or worsening of coughing (in dogs), intolerance to exercise, rapid or labored breathing, or abdominal distension may occur. If any of these symptoms are noted, or if you have any questions or concerns, please contact either your veterinarian or Veterinary Specialty Services immediately to discuss an appropriate plan.