

Ask A Vet: Salt of Life-But too Much of a Good Thing...

Sunday, May 22, 2016

Dear Dr. Weldy's,

A friend of mine told me they had an outbreak in their 4H pigs where the pigs were seemingly blind, deaf and wandered around bumping into things. A few of the pigs died. What could have happened to those pigs and how do I prevent it from happening to my son's 4H pigs?

Dear Reader,

Thank you for your question – it sounds like your friend's pigs could have been affected by salt poisoning. Salt poisoning, also known as salt toxicity or water deprivation, occurs most commonly when pigs are deprived of fresh water for some period of time, but can also occur due to ingestion of high concentrations of salt. Water deprivation can occur due to failure of mechanical waterers, overcrowding of pens, medicated water that pigs refuse to drink, new surroundings or freezing of water. Poisoning can also occur in animals shipped for a long period of time without access to water and then given unlimited access immediately after. Commercial diets will have appropriate levels of salt, unless they have been improperly formulated or mixed. Additional sources of high salt intake can include: whey, ground water high in salt, brine or seawater. Pigs can gain access to brine after heavy rains fill loose-salt feeders provided for other livestock nearby and the overflow runs into the pigs' pen.

Signs that may be seen with salt poisoning are related to the high concentration of sodium ions in the brain and the edema, or swelling that follows. Signs include: constipation, blindness, loss of hearing, decreased eating and drinking, circling, bumping into things, seizures, paddling and even death. Unfortunately, there is no specific treatment for salt toxicity. If a high salt intake is suspected, the offending substance should be removed from the pigs. Pigs should be rehydrated slowly over a period of several days in small, frequent amounts to avoid worsening the symptoms. If animals are rehydrated all at once, the water will follow the sodium ions from the salt into the brain and cause severe cerebral edema (swelling on the brain). Electrolyte solutions may also be used in the rehydration process. Pigs with symptoms should be placed in a well-bedded, darkened area to help prevent injuries. Even with treatments, more than half of affected animals may not survive.

The absolute best way to deal with salt toxicity is to prevent it from happening in the first place! Always make sure that pigs have access to plenty of fresh, clean water. Check automatic waterers daily for any malfunctions, plugged or blocked nipples, frozen lines, etc. If you have any other questions about salt poisoning in pigs, or to discuss the topic further, contact your local veterinarian.

-Dr. Ashley Vander Wey