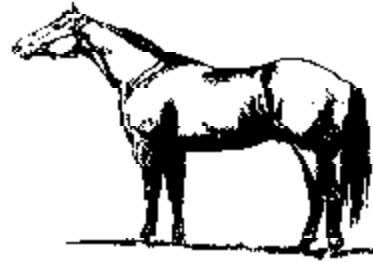


Extension Animal Science Horse Information Series

Phone: 423-974-7294

Fax: 423-974-7297



ANABOLIC STEROIDS DON'T INCREASE GROWTH IN YOUNG HORSES

**Dr. Frederick Harper
Extension Horse Specialist
University of Tennessee**

If you follow the sports pages, you have read tragic stories about athletes who used anabolic steroids, thinking it would make them stronger or faster.

Some horse owners also think that anabolic steroids will give their horses a competitive edge in the show ring.

What they anticipate getting is increased growth with greater muscling, especially in those heavy-muscled breeds with halter classes for young horses--weanlings and yearlings--and horses that perform as two-year-olds.

Australian researchers studied the effects of anabolic steroids on growth in yearling fillies and colts. They divided the yearlings into four groups of two fillies and two colts each, testing three anabolic steroid dosage levels, along with a control group given a placebo.

The anabolic steroid was injected every three months for a period of 18 months. The yearlings were kept on pasture and supplemented with energy and protein when needed to maintain body weight gain.

The researchers concluded there was no difference in growth rate between the control yearlings and the treated groups.

They conducted a nitrogen balance study to determine if treated yearlings were better at utilizing nitrogen from protein. The actual amount of nitrogen retained was not different between treated and control groups.

So, anabolic steroids did not result in more rapid growth nor more muscle mass due to greater nitrogen retention.

The fillies retained significantly more of the digested nitrogen than did the colts (62% vs. 58%), which was explained based on sex hormone binding. But, the greater efficiency of nitrogen retention in the fillies was offset by behavioral changes. They tended to be more aggressive as noted by fighting and other abnormal actions. So, the fillies retained more of the nitrogen they consumed but did not gain more weight.

Past research has shown that anabolic steroids have negative behavioral and reproductive effects on fillies and colts.

The researchers concluded that when a balanced ration is fed to normal, healthy horses, anabolic steroids will have minimal effects.

When one considers the negative reproductive results, increased risks of injury due to more aggressive behavior and a lack of growth promotion, anabolic steroids should not be used with normal, healthy horses.

There are certain situations, best determined by your veterinarian, when an anabolic steroid may be beneficial. Unless prescribed by your veterinarian, it is not wise to use anabolic steroids.

For proper growth, select genetically superior individuals, feed them properly balanced rations and provide adequate health care. Avoid gimmicks and fads.

#