

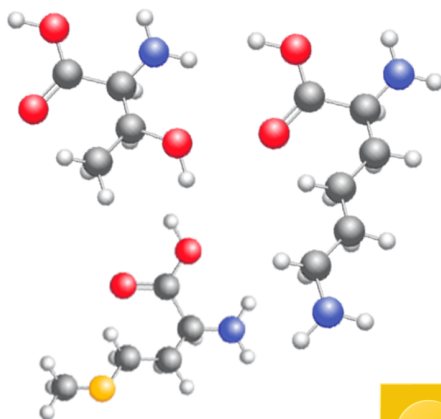
THE LOW DOWN

# AMINO ACIDS IN HORSES

## AMINO ACIDS SOURCES

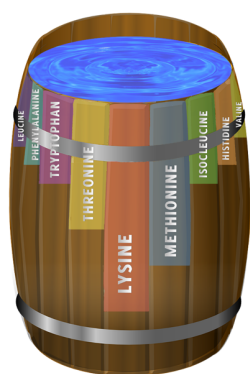
AMINO ACIDS ARE NEEDED FOR A HORSE'S HEALTH. THE TEN AMINO ACIDS NOT CREATED IN THE HORSE'S BODY ARE CALLED ESSENTIAL AMINO ACIDS. THESE AMINO ACIDS MUST BE OBTAINED THROUGH: FORAGE, GRAIN AND SUPPLEMENTS.

ALFALFA IS A TOP QUALITY SOURCE OF AMINO ACIDS



## AMINO ACIDS ROLE

AMINO ACIDS ARE THE BUILDING BLOCKS OF PROTEIN, MAKING AMINO ACIDS THE BUILDING BLOCKS OF BONES, MUSCLES AND THE BODY'S SOFT TISSUES FOR GROWTH AND REPAIR.

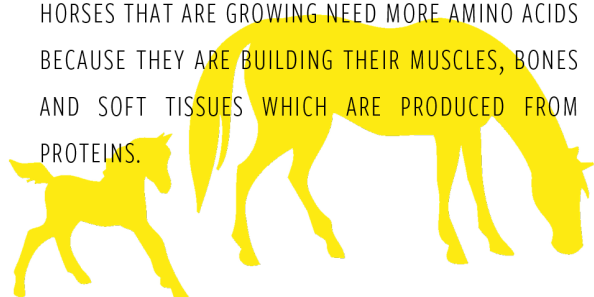


## AMINO ACID TYPES

A HORSE NEEDS 21 DIFFERENT AMINO ACIDS FOR PROTEIN SYNTHESIS. 10 ARE ESSENTIAL AMINO ACIDS. THE ONLY DETERMINED AMINO ACID REQUIREMENT TO DATE IS LYSINE. LYSINE IS **KNOWN** TO BE THE FIRST LIMITING AMINO ACID, AND METHIONINE AND THREONINE ARE **THOUGHT** TO BE THE SECOND AND THIRD.

## AMINO ACIDS GROWING HORSES

HORSES THAT ARE GROWING NEED MORE AMINO ACIDS BECAUSE THEY ARE BUILDING THEIR MUSCLES, BONES AND SOFT TISSUES WHICH ARE PRODUCED FROM PROTEINS.



## LMF HORSE FEEDS CONTAIN ADDED AMINO ACIDS

### LMF FEEDS INGREDIENTS

LMF FEEDS UTILIZES HIGH QUALITY PROTEIN SOURCES IN ALL THEIR FEEDS.

IN ADDITION, LMF<sup>®</sup> SUPPLEMENTS FEED WITH BOTH LYSINE AND METHIONINE.



IT IS MISLEADING TO LIST NUMEROUS AMINO ACIDS ON A HORSE FEED TAG AS THERE IS NO SET REQUIREMENT FOR ANY OTHER THAN LYSINE. IF LYSINE IS DEFICIENT IN THE DIET IT WILL LIMIT THE USE OF **ALL** OTHER AMINO ACIDS, FURTHER RENDERING THE AMOUNT OF THESE AMINO ACIDS IN THE FEED TO BE USELESS VALUES.

LMF FEEDS<sup>®</sup>  
800.344.0653

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[WWW.LMFFEEDS.COM](http://WWW.LMFFEEDS.COM)