

Geriatric Nutrition

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A Little Long in the Tooth...

- **Wild horses live to about 15 yrs old**
- **Domesticated horse live to 25-30**
- **About 10% of horse population is over 20**



A Little Long in the Tooth...



- **Extra 10 yrs can be very productive and enjoyable**
- **Big \$ for aged geldings**
- **Challenges**

Equine vs Human Age

- **1 yr. = 4 yr.**
 - **10 yrs. = 30-40yrs**
 - **15 yrs. = 50 yrs**
 - **20 yrs. = 60 yrs**
 - **25 yrs. = 70 yrs**
 - **30 yrs. = 80 yrs**
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- **Ratio changes from 1:4 to 1:2.7 !!**

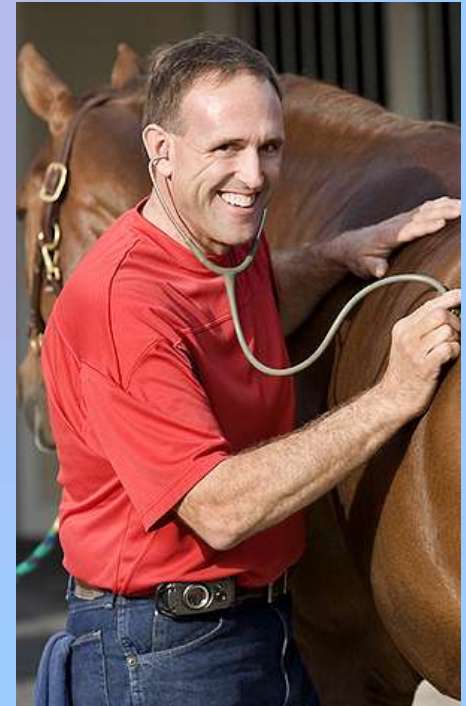
Keys to Long Life

- **Genetics**
 - **Inherited disorders/predispositions**
 - **Breed specific?**
- **Environment**
 - **Climate and exposure**
 - **Stress and level of production**



Keys to Long Life

- **Healthy lifestyle when younger**
 - **Proper healthcare**
 - **Avoidance of life threatening diseases/disorders**
 - **Deworming**
 - **Hoof care**



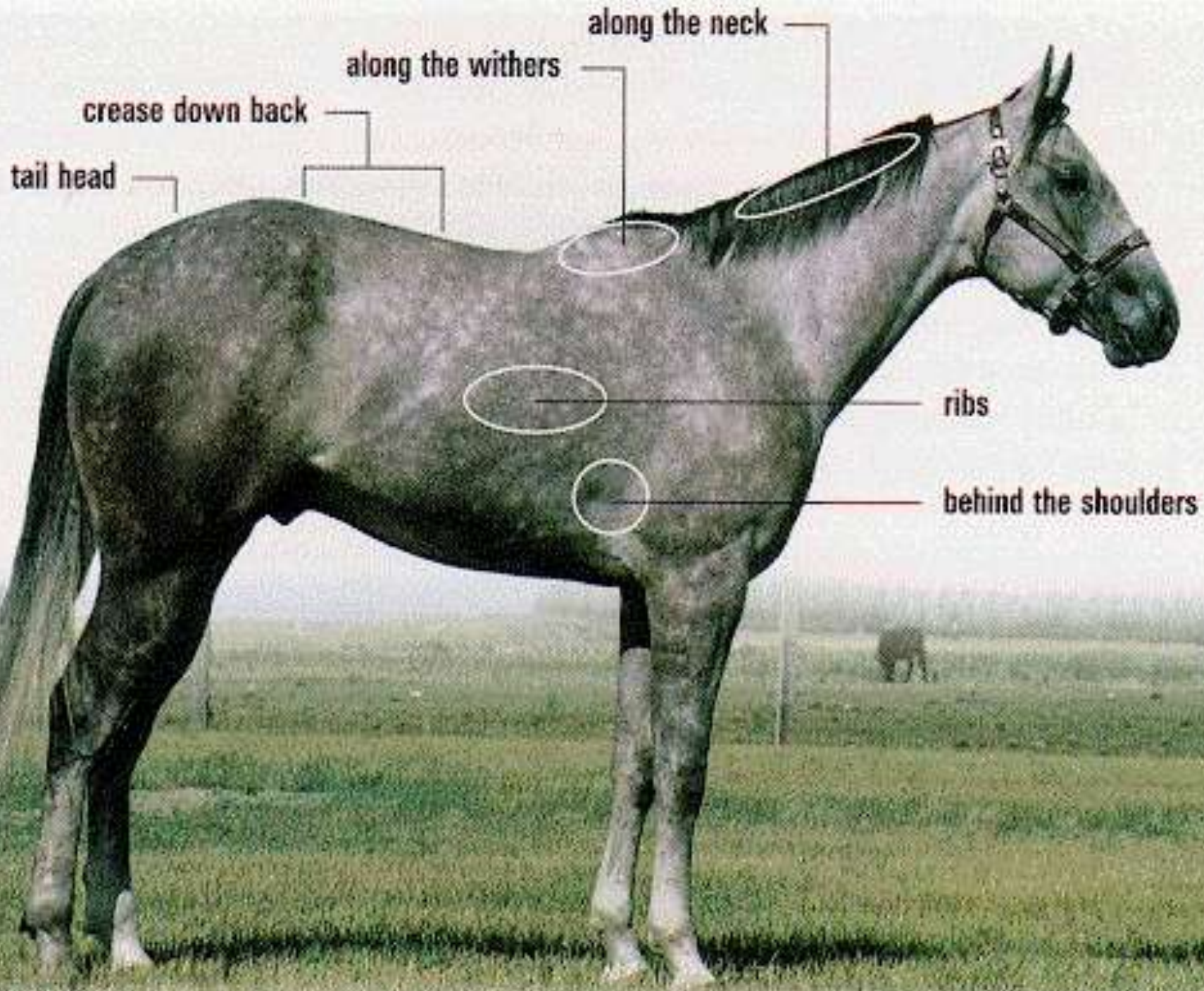
Keys to Long Life



- **Dental care**
 - **Throughout life**
 - **In senior yrs**
- **Maintain BCS**
 - **4-6 ideal for this age range**
- **Nutrition**
 - **1.5-2% BW in roughage**

Body Condition Scoring

Score	Description
1	Extremely Emaciated
2	Very Thin
3	Thin
4	Moderately Thin
5	Moderate
6	Moderately Fleshy
7	Fleshy
8	Fat
9	Extremely Fat







Realities of Old Age

- **The extended life is going to include complications**
 - **Digestive tract health**
 - **Chronic pain**
 - **Metabolic imbalances**
 - **Dental abnormalities**

Dietary Needs



- **Components of ration are the same**
 - **Forage**
 - **Minerals and Vitamins**
 - **Concentrates**
- **Variety of products for different needs**

Forage Portion

- **Long stemmed hay**
 - **Grass, alfalfa or mix**
 - **Gut health**
 - **Chewing difficulties**
 - **High protein alfalfa may be a problem**

- **Hay cubes**
 - **Grass, alfalfa or mix**
 - **Soaked if necessary**



Forage Portion



- **Chopped forage**
 - **Many different formats**
 - **Increased enhancements**
 - **Mold issues/not insiled**
- **Fiber alternatives**
 - **Beet pulp**
 - **Advantages and disadvantages**



Minerals and Vitamins

- **Function and importance**
- **Salt still necessary for hydration**
 - **Loose mineral or formulated feed**
- **Ca:Ph ratio still important**
 - **1.5:1**
- **B Vitamins**
 - **Stressful or comprised health may cause horse to not produce as much**
 - **May help with renal disease**

Minerals and Vitamins

- **Antioxidants**

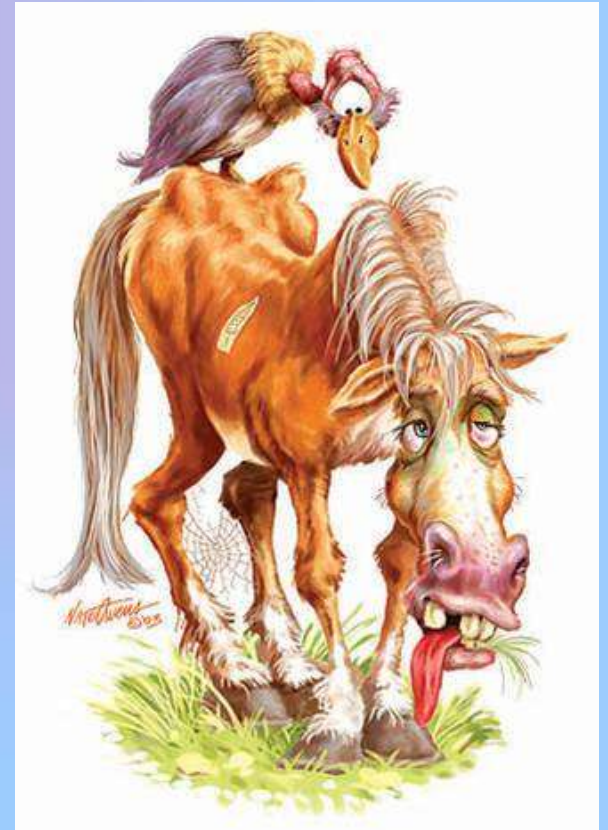
- **Defense against aging**

- **Can slow down process by feeding Vitamin E and Selenium**

- **Zinc and Copper are also antioxidants, best in 3:1 ratio**

Concentrate Portion

- **Senior feed is huge market with many different products**
- **Have a common theme**
 - **High fiber**
 - **Easy to chew**
 - **Palatable**
 - **Higher fat**



Concentrate Portion



- **Grain = more concentrated calories**
- **Overwhelming, need a processed feed that has begun to be broken down**
- **In sweet feeds this means crimped, steamed, flaked, etc.**

Concentrate Portion

- **Pelleted feed is even more broken down, but not low quality**
- **Usually includes beet pulp and other fiber sources**
- **May need to be soaked for easier chewing**



Concentrate Portion

- **Extruded feed is assumed to be the most digestible**
 - **High pressure and temperature**
- **Different process and texture**
 - **Palatability**
 - **Little molasses**
 - **Made into mash**

Summery

- **Aging process is inevitable however we can slow it down**
- **Proper care throughout life is essential**
- **Nutrition is just one portion but can have a great effect on quality of life**

Questions?

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