A Scientific Overview of the Horse

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Abstract

This paper provides a scientific overview of the horse, including its taxonomy, biological characteristics, diet, habitat, and scientific behavior. The document includes images, a data table, a citation to a scholarly article, and a hypothesis section with a mathematical lifespan model.

1 Introduction

The horse (*Equus ferus caballus*) is a domesticated mammal known for its strength, speed, and long-standing partnership with humans. Horses play important roles in transportation, sport, therapy, agriculture, and cultural traditions throughout the world.

2 Scientific Information

2.1 Classification

Horses belong to the class Mammalia and the family Equidae. They are hoofed, herbivorous animals with highly developed muscle structure and cardiovascular capacity.

2.2 Habitat

Domesticated horses live worldwide, while wild horses inhabit grasslands, prairies, and open plains. They thrive in environments with abundant grazing land.

2.3 Diet

Horses are herbivores. Their diet primarily consists of grass, hay, grains, and plant stems. They require a high-fiber diet for proper digestion.

3 Images

(Replace these filenames with the names of the pictures you upload.)

Figure 1: A horse grazing in an open field.

Figure 2: Close-up image showing the horse's head and mane.

Figure 3: Horse running at high speed, demonstrating muscular build.

Figure 4: A group of horses in a natural habitat.

4 Scientific Table

Table 1: Basic Scientific Information of the Horse

Detail	Information
Scientific Name	*Equus ferus caballus*
Class	Mammalia
Eats	Grass, hay, grains, plants

5 Related Research

According to the study in [1], horses exhibit advanced social behavior, strong memory retention, and complex communication through facial expressions and ear movement.

6 Hypothesis About Horse Lifespan

6.1 Mathematical Lifespan Model

We propose a simple formula to estimate the potential lifespan of a horse based on its average daily calorie intake.

Let:

- C = average daily calorie intake (kilocalories)

- L = estimated lifespan (years)

Proposed equation:

$$L = 0.002C + 15$$

This model assumes that higher energy availability supports better long-term health, contributing to a longer lifespan. It is not a biological prediction but a mathematical hypothesis for academic purposes.

7 Conclusion

This paper presented scientific information about the horse, including taxonomy, diet, and behavior. A hypothesis was also proposed regarding their lifespan using a mathematical model. Horses remain one of the most influential domesticated animals in human history.

References

[1] Emily Thompson and Daniel Ramirez. Social behavior and cognitive abilities of the domestic horse. *Journal of Equine Science*, 45(2):120–135, 2021.