Guinea pig factfile

Guinea pigs, or ‘cavies’, are social animals with a compact, rounded body shape, short legs and no tail.

They originate from the grasslands and lower slopes of the Andes Mountains in South America [1].

Guinea pigs continue to be an important source of meat in South America [2], have been a laboratory subject for over two hundred years [3] and are popular show and companion animals [4].

Insight into the biology and behaviour of guinea pigs can help you to understand your pet better, so check out our amazing facts:

1. Guinea pigs are prey animals

- As prey animals guinea pigs are generally nervous of new sights, sounds and smells [5].
- Their immediate response to a perceived threat is to freeze (remain still and alert). This freezing behaviour can last from a few seconds up to 30 minutes [6]; they may then flee to a place of safety such as a burrow [7].
- Guinea pigs are cautious and approach novel objects or unfamiliar guinea pigs with a stretched posture, making contact with their whiskers only. This posture allows them to move away rapidly if required [8].

2. Guinea pigs are active

- Guinea pigs are active up to 20 hours per day and sleep only for short periods [9].
- Guinea pigs are not very agile and are poor climbers [10].

3. Guinea pigs are explorers

- Guinea pigs have a good spatial memory and can remember learned pathways to food sources for many months [11].
- Whilst they do not dig or make burrows themselves, they use natural shelters, dense vegetation or the burrows of other animals as refuges [12, 13].

4. Guinea pigs are highly social

- Guinea pigs are social animals. In the wild they live in close family groups of 5 – 10 individuals [14], though several groups may live in close proximity to form a colony.
- Groups tend to comprise of an alpha male, 3 - 4 females and their offspring [15].
- Guinea pigs develop strong social bonds with members of their social group; these relationships are important for reducing stress [16].
- Guinea pigs use urine and secretions from their scent glands to mark one another and to mark out their territories which can cover 1500 square meters [17].

5. Guinea pigs communicate vocally

- Guinea pigs have a wide range of vocalisations which mean different things. For example, during exploration guinea pigs make short ‘chutt’ or ‘putt’ sounds, when excited (e.g. when expecting food) or when separated from companion guinea pigs they whistle (or ‘wheek’) and when seeking or experiencing physical contact they ‘purr’ [18].

6. Guinea pigs have well-developed senses

- Guinea pigs have a well developed sense of both smell and hearing. They see in partial colour and can see above and behind themselves [19].

7. Guinea pigs’ need a high fibre diet that is supplemented with vitamin C

- Guinea pigs need a high fibre diet based on grasses and hays [20].
- Guinea pigs’ teeth grow constantly [21]. They need to eat lots of hay and/or grass, which are abrasive to help wear their teeth down [22].
- Their diet needs to be supplemented with plenty of vitamin C, as they lack the enzyme needed to synthesise vitamin C and can only store vitamin C for short periods [23].

8. Guinea pigs have an unusual digestive system

- Guinea pigs perform a digestive process called caecotrophy to extract as much goodness as possible from their food [24].
- Food is passed through the gut and special droppings, called caecotrophs, are produced. Guinea pigs eat these caecotrophs, allowing the food to be re-ingested [25].

9. Guinea pig pups are born relatively independent

- Baby guinea pigs (pups) are born fully furred, with their eyes open and their teeth fully developed. Pups begin to eat solid food from the day they are born, although are not fully weaned for 3 weeks [26].

10. Guinea pigs have unique leukocytes

- Guinea pigs have unique white blood cells called ‘Kurloff cells’ [27].
- Kurloff cells act as part of a guinea pig’s immune system and function as natural killer cells [28]. Kurloff cells also have a cytotoxic (killing) effect on leukemic cells and may explain why spontaneous tumours are rare in guinea pigs [29].