FOOD DOSE FOR CHAMELEONS

How much should a chameleon eat? What is the correct dose?

The answer is not easy, because there are many factors that affect it. Therefore, all framework recommendations on the care sheets should be considered as general and indicative, and the whole issue should be understood and the feed dose should be fine-tuned according to the situation.

GOLDEN RULE

- Juveniles and pregnant females: NO LIMIT
- Adults that are no longer growing significantly: SO THAT THEY NEITHER LOSE WEIGHT NOR GAIN WEIGHT

MALNUTRITION (less common)

Otherwise, the chameleon can oscillate in captivity between two dangerous, life-threatening extremes.

OBESITY (very often)

Watch video: CHAMELEONS SKINNY TO OBESE
https://youtu.be/onrnuvE894c

Both significantly reduce the comfort of the chameleon, they are unethical and illegal and lead to stress, physiological disorders, health complications and significantly shorten their lives.

How does metabolism actually work and why should a chameleon eat at all?

Metabolism is a set of processes that ensure the cycle of energy in an individual's body and its exchange between his body and the environment of which he is a part. It ranges from the intake of substances and energy through their transformation into body structures and the provision of vital functions, movement, reproduction, etc., to defecation and urination.

THE CHAMELEON EATS TO LIVE.

IT DOESN'T LIVE TO EAT...

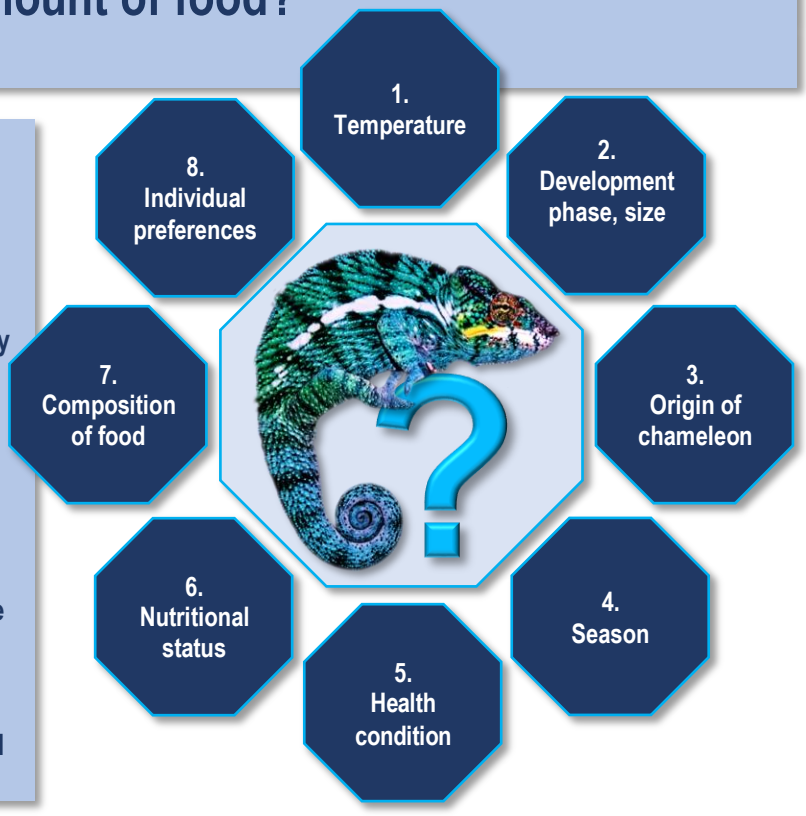
IN CAPTIVITY THE CHAMELEONS SHOULD LIVE HEALTHILY, COMFORTABLY, AS NATURALLY AS POSSIBLE AND FOR A LONG TIME.

What affects the required amount of food?

Many factors affect food needs.

1 Temperature

All heterothermal (cold-blooded) animals, whose body temperature depends on external heat sources, show a dependence (almost directly proportional) of the metabolic rate on their body temperature. At lower temperatures, therefore, they eat significantly less than at high temperatures. Unfortunately, the misunderstanding of the natural environment of many species by breeders (who often mistakenly believe that, for example, at the equator where Jackson's chameleon lives, the weather is terribly hot and exposes the kept chameleons to daytime temperatures around 40°C with a night drop to 25°C, ignoring the fact, that the temperatures are 15°C lower in their homeland!) leads to a very common riot in breeding: overheating. This, of course, results in increased metabolism and thus several times greater demand of the volume of food consumed.

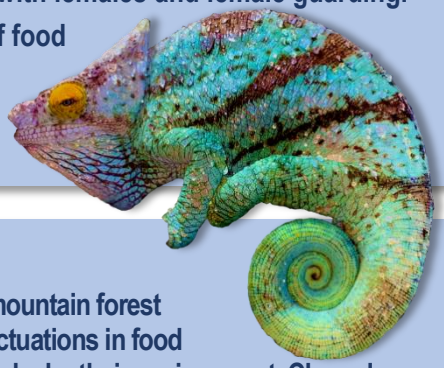


2

Development Phase, Size

Chameleons have different food requirements at different stages of their development:

- IN YOUTH, in the period from birth (or hatching) to adulthood, they use energy mainly to grow and mature to adulthood, when they fulfill the highest meaning of their lives: they pass on their genes to future generations in the process of reproduction. In some species, this growth is extremely rapid (for example, *Furcifer lateralis* and *Furcifer labordi* mature at 3–4 months of age, *Chamaeleo calyptratus* a month or two later). For other species, growth is more gradual, many species reach adulthood around 1 year of age, others, such as *Calumma parsonii,* even later.
- In the ADULT phase, chameleons usually limit the food intake, always according to internal or external "programming" provided by Mother Nature over millions of years of evolution.
- During the MATING SEASON, females tend to ingest food at standard volumes while males may limit food intake, their focus may shift to territorial fights with other males, mating with females and female guarding.
- IN THE PERIOD OF GRAVIDITY, females initially ingest larger amounts of food in order to ensure the qualitative and quantitative proper development of eggs (or embryos in the case of live-bearing species) before its end, however, they usually stop eating.



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Origin of Chameleon

Chameleons from areas with year-round abundance of food (such as rainforest or mountain forest species) restrict food intake themselves, while species from areas with seasonal fluctuations in food availability (such as savannas or the Mediterranean) face a restriction of the food intake by their environment. Chameleons from the first group usually do not have a tendency to overeat and do not suffer from obesity, or suffer only when given unusually energy-rich food (larvae of beetles, wax-moths); while species in the second group do not have an innate mechanism of restricting food intake and tend to overeat and develop obesity, sometimes even in monstrous forms.

4

Season

In their homeland, chameleons live in close connection with their natural habitat. In captivity, they sometimes maintain their cyclicality and in some periods, for example, refuse food or copy the conditions provided by the captive breeder by their behavior.

Some species (including *C. calyptratus* – almost no one takes it into account) go through several weeks to several months of „hibernation“, so-called brumation, during which they do not eat at all. The same applies to species from savannas that undergo „summer sleep“, so-called aestivation.

5

Health Condition

A healthy chameleon usually eats as much as he needs or a little more. Sick and weakened chameleons usually eat less or even refuse food. Parasites can cause great gluttony, because the chameleon has to supply them with the substances they need to exist and thus increase the Chameleon's food intake. Unfortunately, a common side-effect of parasitosis (especially coccidiosis) is noticeably rapid weight loss, which is difficult (or impossible) to compensate with increased food intake.

6

Nutritional Status

Here, a simple ratio applies: small body mass = less food intake and vice versa. Athletic chameleons have less need for food than obese ones - they have to „feed“ far bigger biomass, each movement is more energy intense, because they move more weight than athletic chameleons.

7

Composition of Food

It is obvious that the spectrum of food and its energy yield determines the volume of food. The more energy-rich the food, the less it needs to be taken in order to maintain vital functions and vice versa.

8

Individual Preferences

As with all organisms, there are individual variations in chameleons: even under the same conditions, two different chameleons will show individual variations in metabolic rate and food intake.

So, How Do You Determine The Right Food Dose?

There is no one-size-fits-all formula to follow, just the following framework recommendations, based on decades of experience:

1. It is necessary to feed the right food with the addition of pollen, vitamins and minerals (see care sheet)
2. Juveniles up to the moment of reaching about 90% of the maximum length can be fed without restriction, as much they eat of themselves
3. Pregnant females may be fed until the time of birth (in the case of live-bearing species) or the laying of eggs (in the case of ovine species) without restriction as to how much they will devour themselves
4. In adults, the ration should be limited. The ideal procedure is continuous measurement of body weight. A chameleon that is in a healthy nutritional state (which should be judged by a biologist and / or an experienced breeder - be careful with veterinarians and lay people, who are usually used to the „standard" picture of a very obese individual) and is no longer growing, must not gain weight or lose weight. Otherwise, it is necessary to adequately adjust the feed ration, or address the health status of the individual (in case of significant weight loss).
5. For some species it is possible to give indicative recommendations regarding the volume of food, which in no case can be perceived or enforced as dogma and is subject to rule 4. For adult Yemen chameleons it is the volume of about one (max two) big banana cricket per day if respecting the temperature regime according to the care sheet), in the Panther Chameleons, it is about twice as much (for the temperature regime see care sheet).

Common Misconceptions and Myths

MYTH: The chameleon can eat as much as he wants, it knows best when to stop.
REALITY: Chameleons do not overeat only in youth and pregnancy, otherwise, there is a risk that they will overeat and their food intake needs to be controlled and regulated.

MYTH: The chameleon needs to be given a specific number of insects–feeders each day.
REALITY: The chameleon needs to be supplied with the necessary amount of energy per unit of time (day, two days, week). It does not depend on the number of feeders but on the energy yield of the food. For example, the energy yield of one large wax moth can be at the level of one cricket, even though it is several times smaller in weight and size and volume. It is not necessary to feed adult chameleons daily, it is enough to do it every second day, once or 1–2 times a week, and even young can benefit from a one–day break per week.

MYTH: Up to a certain age, it is possible to feed the chameleon ad–libitum.
REALITY: The age is not decisive for determining this border, but the size achieved. The chameleons can reach the same size under different conditions and individual deviations, even with a difference of several months of age! Therefore, all data tied to age are irrelevant and unreliable.

MYTH: Chameleons thrive when they breed frequently.
REALITY: The vast majority of chameleon species reproduce in the wild once in a year. In captivity, breeders often ignore their natural cycles and deliberately keep them in a regime simulating a permanent mating season to achieve a more commercially advantageous regime in which females lay eggs 3–5 times a year. They also eat several times more than they would eat in nature. This leads to severe exhaustion and early death and is badly unethical.

MYTH: Whatever the temperature, the chameleon should still eat the same amount.
REALITY: At higher temperatures, chameleons eat more and at lower temperatures less.

MYTH: The female must always eat as much as she wants, because she will lay eggs every month or two, regardless of whether the male fertilizes her or not.
REALITY: If you keep the female at higher temperatures, she will lay eggs like a hen. When correctly simulated higher and lower temperatures and humidity according to natural cycles, females will lay eggs once a year and rest well in the meantime and regenerate and mobilize their forces.

MYTH: Females need to be fed a lot in the period after laying or giving birth to cope well with the following period of pregnancy.
REALITY: The number of follicles that females prepare for fertilization is directly proportional to the energy stores they accumulated in the previous period. If it is systemically overfed, it prepares many – sometimes too many. The unnaturally large number of eggs represents a huge burden on the female and the risk of egg retention and inability to lay them.