

Developing a Relevant Weight for Age Chart for Australian GSD's Karen Hedberg BVSc. 2007

For all breeders, new comers and pet owners alike, there is a real need to realise what the **normal weight ranges** for German Shepherd dogs and bitches are during the critical growth periods, particularly the 2-9 months period. Excessive rapid weight gains in the 2-5 month period in particular can push rate of growth and influence the incidence of elbow dysplasia influence as well as the end height range.

While many new owners are guided by their veterinarian as to the “correctness” of the weight and rate of growth, few veterinarians (and even fewer novice owners) are experienced enough in the breed to correctly assess the ideal weight range of the GSD males and females particularly during this rapid growth phase. Males can be gaining over 2 kg/week around the 12-16 week age which is well above what is desirable.

I have been examining young German Shepherds in their various stages of growth for many years and by far and away the majority of problems are associated with excessive weight and rapid growth in puppies up to the age of 9 months. Many of the owners are totally unaware that their dogs are often vastly overweight. Rarely has any veterinarian pointed out the weight of the puppy at that age was a problem. Breeders equally have constant complaints from pet owners coming back to them with problems (most commonly soreness of joints), mostly acerbated by excessive weight gains in short periods.

The weight for age chart which follows has a range of acceptable weights for different age and sex groups, which can be given to be handed out to new owners (and their veterinarians). In this way we can hopefully prevent some of the problems veterinarians and breeders are seeing from over feeding and excessive rates of growth. Equally, we can point out when (less commonly) puppies are presented significantly *under* weight for age.

Eventually correlating this type of data and results of say HD/ED schemes could be very beneficial in providing better information to breeders and pet owners alike *as to a realistic and desirable rate of weight gain for each sex at each stage of growth.*

It is noteworthy that with the end weight of the GSD, there is up to 25% difference in weight between males and females. This large difference between the sexes in weight highlights the additional strain of excessively high rates of weight gain can have on males in particular.

The weight ranges shown I would consider to be fairly close to normal from my own experience of the breed. Some general overviews of acceptable weight gains per week in the early stages of rapid growth are added after the chart. We may over time be able to correlate this weight with heights at different ages to give good estimation of end height/weight ratios.

Quick Overview of Joint Problems associated with Rapid Growth

Rapid weight gain and rate of growth through excessive nutritional intake may cause a disparity of development of supporting tissues.

All dog studies in this area support the concept that high caloric intake rather than the specific intake of protein, minerals or vitamins, influences the frequency and severity of osteochondrosis and HD. The causes of ED while not as thoroughly studied, show similarities and probably similar outcomes.

The common conclusion from studies on dogs is that excessive calcium, phosphorus and vitamin D along with a high energy diet and rapid weight gain causing rapid growth, are almost a sure fire recipe for pushing the parameters for normal structural growth and joint soundness well beyond their normal limits, resulting in joint disorders.

The higher incidence of osteochondrosis in males versus females is probably a direct reflection of this as males can be anywhere between 15-25% heavier than females at any one time (and certainly by full maturity), despite being born at a comparable weight.

Equally, this is not to say that genetics does not play a very important part in the body's structural soundness. Excessive rates of weight gain and thus rapid growth result in pushing the body's parameters beyond which they can cope, particularly if they were not the most structurally stable to start with. For example, an excessive rate of growth and weight will not create severe HD in itself but it certainly can make an existing problem considerably worse.

New Owners and Pet Owners

Many pet owners pick up their puppies (usually at a good weight), go home and then start fiddling with diets. Veterinarians may then add their preferences for types of dry food and different diets. Puppies often become picky eaters mostly due to lack of competition having come from a litter, and diets get changed even further.

The type of dry food can make significant differences in weight gains, particularly the super premium or more concentrated dry foods. The high energy or calorie diets are easily overfed as being concentrated, the correct amount to be fed can look very "small", so inexperienced owners often increase the amounts per feed.

I would also suggest that feeding high energy foods to pets with sedentary life styles is probably not an ideal thing as it tends to make the dogs more hyperactive. To avoid this, with my own GSD puppies, I suggest that the puppies go onto a middle of the road, average quality adult dry food from 8-12 weeks onwards. Usually I suggest a complete dry food with 22-24% protein and 12-14% fat. Further I usually suggest that one feeds $\frac{3}{4}$ dry food to $\frac{1}{4}$ what ever (chicken, red meat, cheese etc). If these dry foods are overfed the consequences are not as drastic in relation to rate of weight gain or activity wise.

Looking at the chart, one can see there are tremendous growth spurts occurring between the 2-5 month period. Excessive rates of gain on a per week basis can set up joint problems for life. While we as breeders and exhibitors tend to keep a close eye on the weight of our puppies (show puppies in particular), novices and pet owners are not nearly as attentive in this area. Most pet owners prefer their pets "well covered"!

German Shepherd Weight for Age Growth Chart

Age Months	Male Range	Male average	Female Range	Female Average	% Adult weight (approx)
1	2.5-4	3.5	2- 3.5	3	10
2	6- 9	7	5- 7.5	6.5	22
3	10-14	12	8- 12	10	40
4	16-18	17	13-16	15	50
5	18-22	21	16-20	18	60
6	22-26	24	20-22	21	70
7	26-28	27	22-24	23	80
8	28-30	29	24-26	25	85
9	29-32	31	25-27	26	90
10	30-33	32	26-28	27	92
11	30-34	33	27-29	28	95
12	32-34	34	27-29	28	95
18	32-36	36	27-30	28	98
24	32-38	37	28-30	29	98
36	36-40	38	28-32	30	100

Some generalizations on growth rates

- 1. Males** – between 12-20 weeks on average are gaining up to 1-1.25 kg max /week.
 - between 20-26 weeks, gaining .75-1kg max per week.
 - between 26-35 weeks gaining .5-.75kg/week

Male GSD's *largely stop growing in height* by 9 months and may gain an extra 1cm (maximum) in height by 15 months.

Adult Male 18 months Average weight range 32-38kg Average 36,

Male full grown 3-4 years Average weight range 36-40kg Average 38kg

- 2. Females** - between 12-20 weeks are gaining up to .75-1kg maximum week,
 - between 20-26 weeks, gaining .5-.75kg maximum week,
 - between 26-32 weeks, gaining .25-.5kg/week

Female GSD's *largely stop growing in height* by 8 months of age and may gain up to 1cm in height by 12-15 months of age.

Adult Female 18 months - average weight range 26-32kg Average 28kg

Fully grown female 2-3 years - average weight range 26-32kg, Average 30kg

#The weight of a puppy (male or female) at 4 months (16 weeks) is roughly 1/2 the adult end weight.