

# Strategies to



## 1

### Learned behavior

✓ Dogs and cats, just like most mammals, receive food from their mothers during the first stages of their lives according to their needs and wishes. However, as they grow, this changes and the animals must start to ingest the same food that their mothers eat. Early separation from the mother sets back this learning.



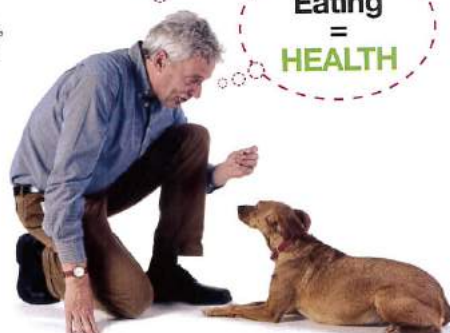
Calling for attention  
=  
HUNGER



Eating  
=  
HEALTH

✓ Sometimes owners misinterpret the signs of a puppy or a kitten calling for attention as them wanting food. During this entire process, there will be a change and a selection of the palatability of the foods according to the pet's preferences.

✓ It is therefore very important to stimulate an animal's ingestion of different foods from a young age. Different experiences with flavors and textures will condition the acceptance or rejection of foods in the future.



## 2

### Food monotony

✓ It is likely that young animals who have been given the same ration for a period longer than six months will reject a change to their diet.



✓ When they are adults, the contrary takes place: they show more interest in new flavors and textures than in their previous diet when said diet has been their only food for a long period of time. We could call this food fatigue or monotony. It is important to vary a pet's diet so that they become accustomed to new flavors.



✓ Affinity for a diet may occasionally be caused by changing homes or stressful situations. In these cases, formulas to increase voluntary ingestion must be found.

# stimulate ingestion (I)

## 3

### Strategies to stimulate consumption in healthy animals

- ✓ In some cases, we can add substances and in others, by varying the form or presentation, we will achieve the desired effect, but we must always respect the pet's nutritional requirements. We must remember that we are trying to modify a poorly learned regime.
- ✓ Having the owner participate in the strategy is highly important, but only as long as they feel deep trust and conviction with the veterinary team. If we can achieve this, success is guaranteed.



## 4

### Improving the palatability of the food ration

- ✓ **Moisture of the food ration:** substituting dry food for canned food (wet) in dogs and cats represents the simplest and most effective technique. This is not only determined by the variations in moisture of the food from 10 % to 75 %, but greater proportions of protein and fat are included in its manufacturing.

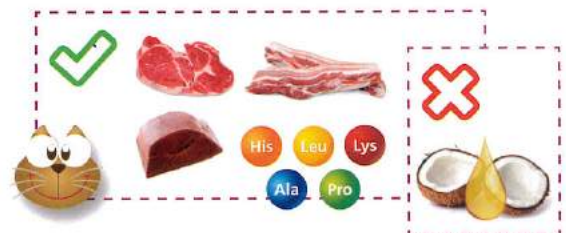


Good results are achieved in some dogs by adding water to their dry food (1/3 or 1/2 of the volume of the food in water).

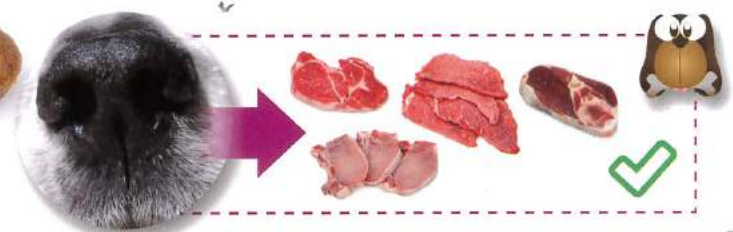


- ✓ **Protein and fat, origin and quality:** proteins, certain protein extracts, some amino acids and animal fat stimulate the consumption of food in both species.

For cats, there is a high level of acceptance of flavors enriched with fresh meat, liver (with a special preference compared to meat), protein hydrolysates, proline, alanine, lysine, histidine, leucine and animal fat. However, they do not accept medium-chain fatty acids present in coco and palm oils.



Dogs are not as picky as cats, but they have been known to be selective of meats from different origins, which improves ingestion: they prefer lamb, beef, pork, and horse meat over chicken or liver. Dogs also like certain nucleotides that are generated during the decomposition of cadavers. This selection is more frequently associated with the sense of smell rather than with taste: dogs with anosmia show reduced discrimination between different types of meat.



# Strategies to

## 1 Smells

The sense of **smell** and **taste** determine the experience of food ingestion, and therefore, also the processes of affinity or aversion toward said food. Of all of the organoleptic characteristics of foods, taste is the most complex given that it is a mix of smells and flavor. The importance of the sense of smell for pets to select their food is greater than that of humans.

SENSE OF SMELL



200-300 million



TASTE

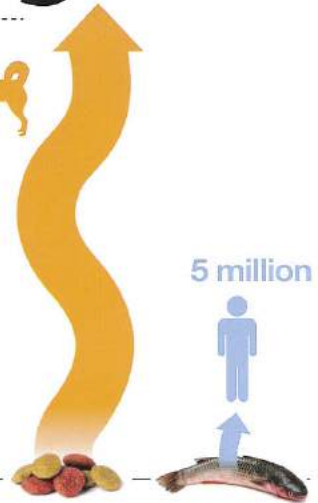


SMELL + FLAVOR

5 million



Olfactory cells



### TRICK

- ✓ Feeding our pets after 30 minutes in an environment where a piece of meat is cooking. The smells produced during the cooking process of certain types of meat stimulate the consumption of food in cats.



Any substance or extract (meat extracts used in human food, grated cheese) that is similar to the smell and taste of meat can be used to stimulate a pet's appetite.

## 2 Flavors

Pets' responses to flavors are variable according to their ability to differentiate between different ones, depending on the species.



- 1 Salty
- 2 Bitter
- 3 Umami
- 4 Acidic
- 5 Sweet



### Glutamic acid

The presence of glutamic acid and its derivatives act as a stimulant for dogs, however, not for cats, who reject this flavor (umami).



### Salt

The inclusion of NaCl increases the palatability of food rations for all animals. In cats, this is based on their preference for foods that do not cause metabolic acidosis: they reject low-sodium diets. Sodium participates in the acid-base balance of the body.



#### Safe upper limit

2.7 g (10-kg dog)  
1 g (5 kg cat)

10-25 times the daily requirements

- ✓ The use of potassium chloride (KCl) is more effective than sodium chloride.

### Sugars

Some monosaccharides and disaccharides function properly in dogs, but not in cats (they lack sweet flavor receptors).



#### Safe upper limit

10 g/5 kg/day

Maximum:

10% of the calories ingested

### Acids

Some organic acids such as phosphoric ("cola" drinks) and citric acid (in fruits) have positive effects on ingestion.



## 3 Texture

- ✓ Both species show an elevated preference for textures that imitate pieces of meat. Sticky or powdery foods should be avoided.
- ✓ Cats also show that they consume foods better when each piece has the same size and form.

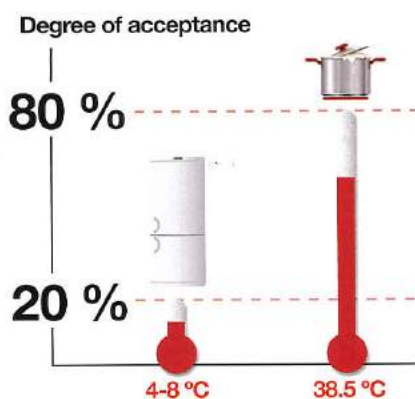


# stimulate ingestion (II)

## 4

### Temperature

- ✓ The temperature affects foods with high water content.
- ✓ Heating foods to body temperature has a positive effect on their texture and the sense of smell. Heat releases the volatile compounds present in food.
  - **Refrigerated foods:** 20 % acceptance rate.
  - **Foods at 38.5 °C:** 80 % acceptance rate.
- ✓ Likewise, fresh or recently opened foods stimulate ingestion. The release of aromatic substances is greater. Special attention should be paid to how foods are stored.



## 5

### Creating an adequate environment

If we use common sense, the same methods that we use for our own meals can be applied to our pets. Most of them are geared toward minimizing stress, such as:

- ✓ A comfortable environment should be created where our pets can eat peacefully. For example: children should be reminded not to bother animals while they eat, voices should be lowered and no electrical kitchen appliances should be used at that time...

- ✓ When pets are kept in confined spaces, their food dishes should be kept away from dirty areas.

- ✓ The animal should not be pushed or frightened when we are offering them food. Preferably, a soft and kind tone of voice should be used.



## 6

### Food dishes and feeders

- ✓ **Dish/feeder materials:** materials that do not give off strange smells should preferably be used, such as porcelain, glass or metal.
- ✓ **Dish/feeder design:** occasionally, the surfaces impede correct traction of food.
- ✓ **Dish/feeder cleaning materials:** these may also play a role in the acceptance/rejection of foods.

