

A VEGETARIAN OR VEGAN DIET IS POSSIBLE IN DOGS AND CATS?



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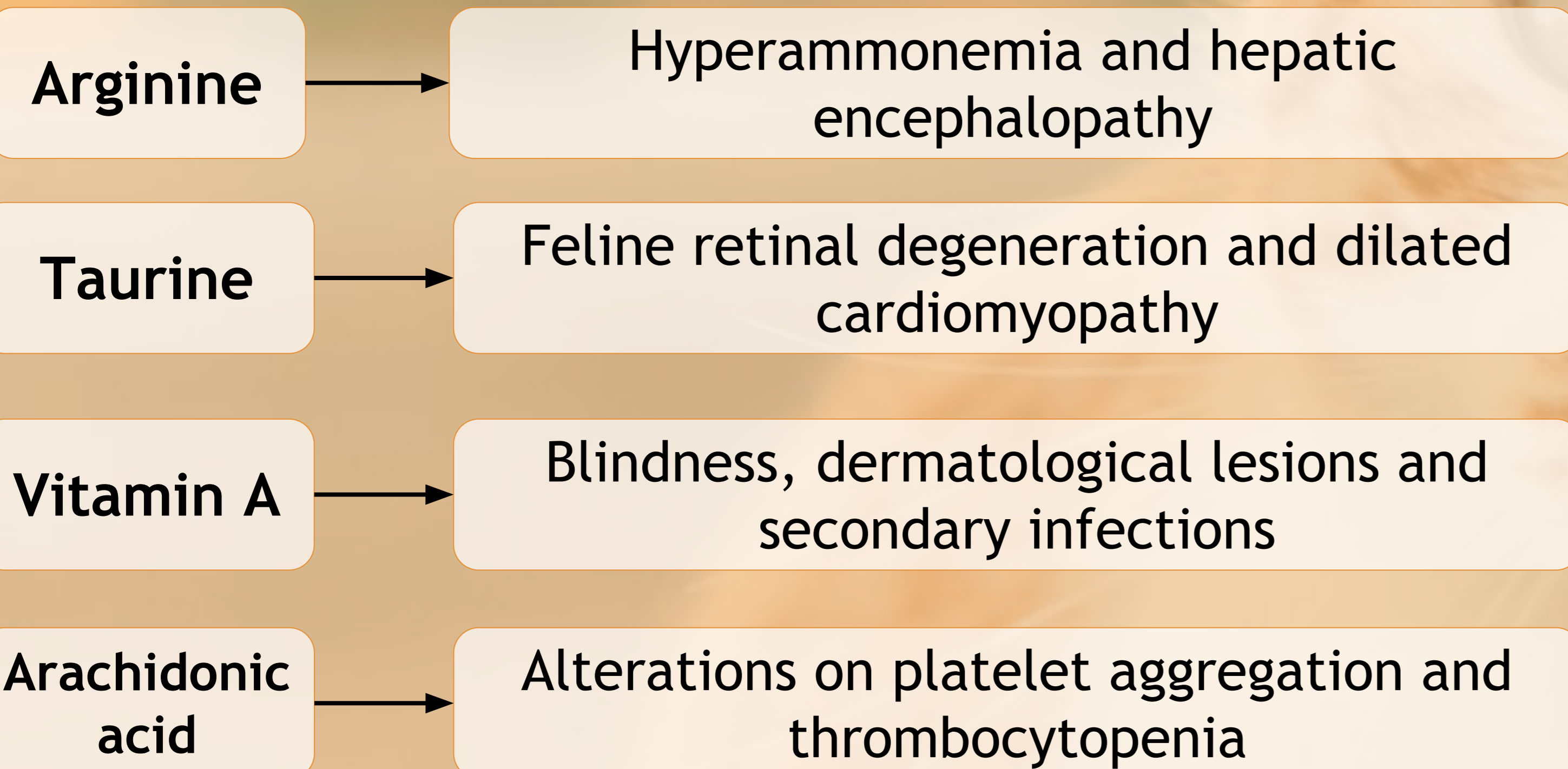
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OBJECTIVES

To perform a bibliographic research about the possibility of feeding dogs and cats with a vegetarian or vegan diet without compromising their health status, using a comparative study of commercial vegetarian, vegan and conventional diets for dogs and cats.

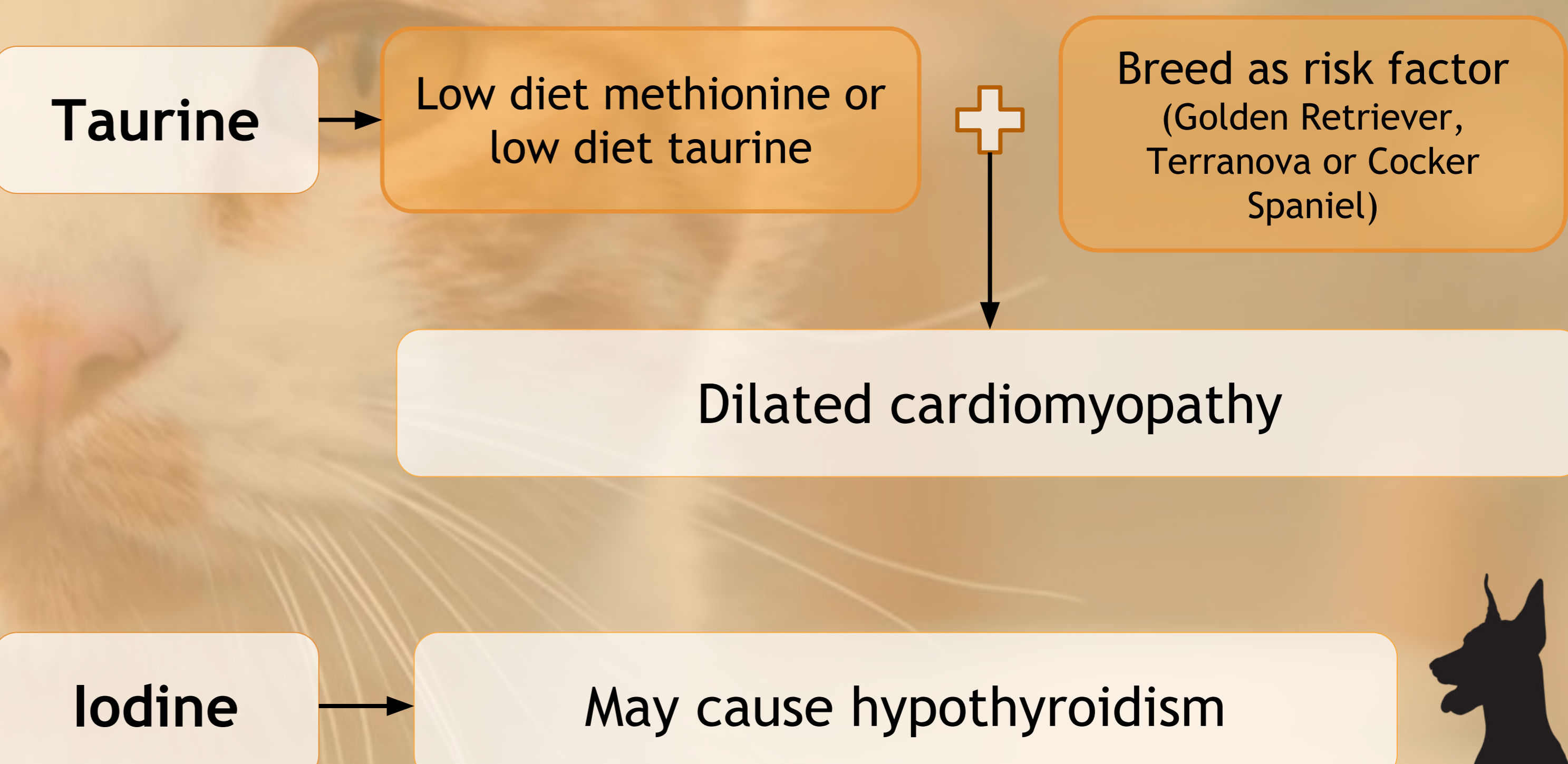
RESULTS AND DISCUSSION

Cats cannot synthesize some essential nutrients found principally on animal products, therefore the risk to present nutritional deficiencies is higher. For example:



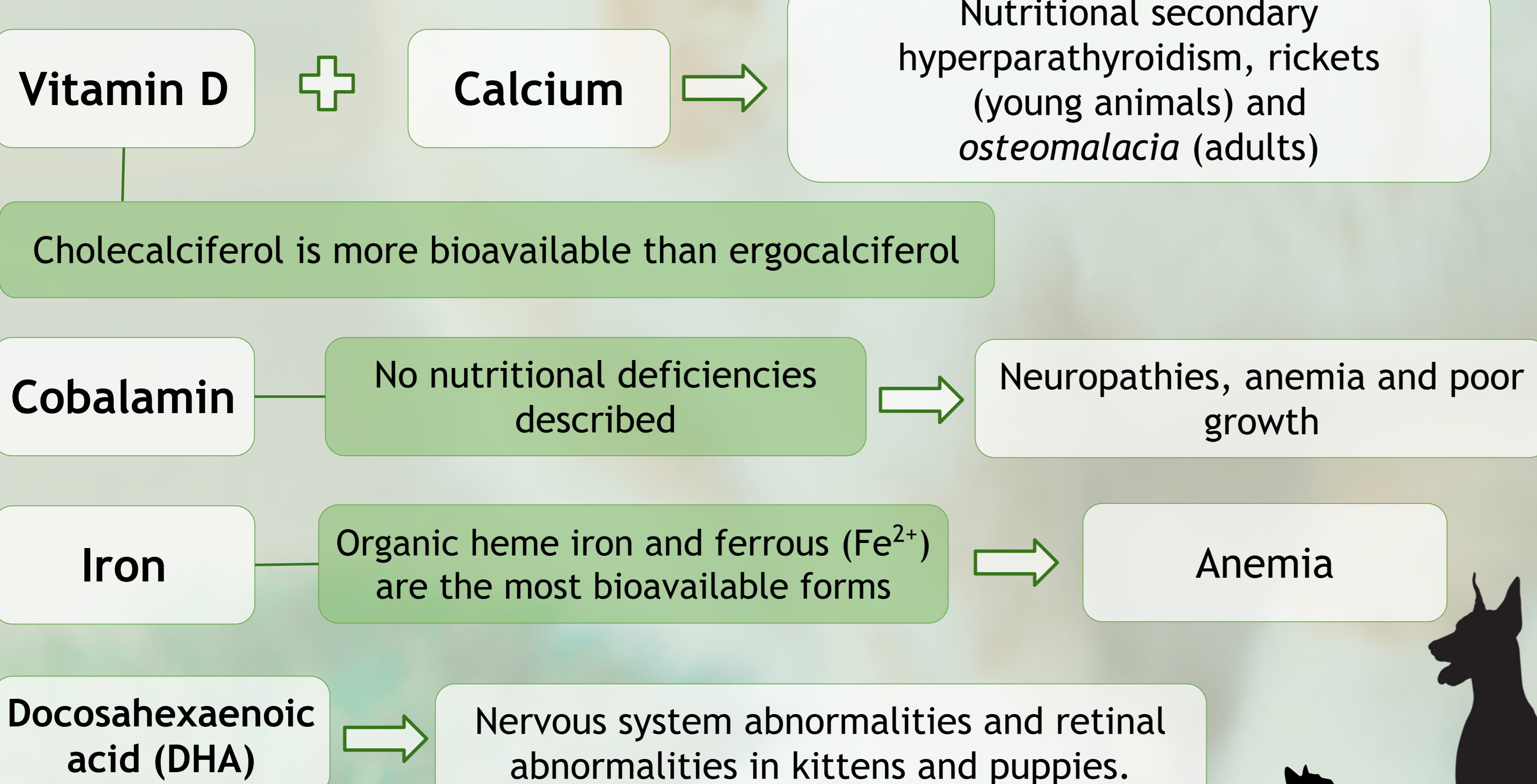
Moreover, they have other metabolic idiosyncrasies related to methionine and niacin.

Dogs, unlike cats, can synthesize more essential nutrients as they can use precursors found on vegetal products. Nevertheless, they may develop pathologies in some cases.



They can synthesize vitamin A from beta-carotenes and niacin from tryptophan.

Both species could develop pathologies due to these nutritional deficiencies:



If a patient fed with these unconventional diets comes to veterinarian's clinic, it should be performed these analysis after seven days of transition and every six months.

Hemogram + Biochemistry analysis + Urinalysis

To discard general alterations and urine alkalinisation

Table 1. Serum and blood taurine normal levels and serum cobalamin normal levels. Adapted from Wakefield et al. 2006.

	Plasma levels	Blood levels
TAURINE	60-120 nmol/mL	300-600 nmol/mL
COBALAMIN	290-1499 ng/L	

CONCLUSIONS

- Any diet can be suitable for animals as long as it provides nutrients in the quantities and qualities necessary to meet their nutritional requirements, and therefore will not depend on the ingredients contain.
- Dogs could be fed a vegetarian or vegan diet without compromising their health status.
- Cats cannot be fed a vegetarian or vegan diet without compromising their health status.
- Owner's commitment and veterinarian formation is essential for pet's welfare if this diet change is choose.
- Pregnant bitches, pregnant queens, puppies and kittens cannot be fed a vegetarian or vegan diet without compromising their health status, due to their high nutritional requirements.