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Dental prophylaxis in carnivores

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There is an increasing occurrence of dental problems in captive carnivores which include excessive amounts of tartar, receding gum lines and broken teeth. The first two problems may be directly related to the diet. With the advent of new, soft, diets, both commercial and zoo-prepared, many of the known nutritional requirements are satisfied, but a chewable component is lacking. Many animals fed this diet are given no opportunity to chew bones or other hard materials which can be useful in scraping away accumulated tartar and stimulating gum tissue. This problem has been recognized and some zoos are substituting shank and other large bones to fulfill the need for chewing and hopefully aid the removal of tartar. The main problem with these larger bones is that they are too big for small carnivores and do not allow for proper abrasive action. There is also the danger of the bone splintering with possible impaction and intestinal perforation.

During routine vaccination and blood tests of our small carnivores at the National Zoo, we carefully examined the

teeth. Excessive tartar and resultant periodontal disease were noted and attributed to a soft diet. Oxtails were then provided on a weekly basis to provide a more acceptable and beneficial method of dental care than larger shank bones. The centre marrow cavity of the oxtail is soft and allows the teeth to penetrate while the outer hard cortical area scrapes on the surface of the teeth during chewing. This addition was well accepted and our carnivores chewed these bones with apparent relish. We found however that some oxtails contained excessive fat which could lead to gastroenteritis so this was trimmed off before feeding. The length of oxtail to be fed depends on the size of the animal, but should roughly equal 2 cm of oxtail per 500 g of body weight up to about 6 kg. Six months later we found that the amount of tartar was markedly reduced and the periodontal disease was not as severe. Oxtails are now part of the routine diet for all our carnivores.

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