

Palatability in baked biscuits

The French company SPF Diana is committed to cat and dog food palatability and has facilities in Europe, North America, Latin America and Pacific Asia. The company offered **PET in Europe** an exclusive insight into its research.

Treats for pets cover a wide variety of products that differ in type, shape and taste but also in terms of function or claims. The diversity and particular features of the products summarised under the term "treats" thus require a specific palatability approach mainly in testing methodologies and product development. A preliminary study of retail market treats showed clear pet preferences for some specific types of treats. The question of palatability therefore has to be addressed for each type of treat individually and palatable solutions must be developed accordingly. At Panels, an

expert palatability testing centre tests on biscuits follow a strict methodology – products are presented to the pets in versus mode, with both hands simultaneously and three criteria are analysed: the first taken, the first chewed and the first finished.

The preferences perceived by a dog panel for the first taken and the first finished criteria when comparing five baked biscuits from the market to each other are represented in Figure 1. Clear differences between the products are revealed, such as two biscuits that are less appreciated and two others that seem to be

favoured by the dogs, for example. Moreover, the products taken first are not always the ones to be totally eaten first. For dog biscuits, the refusal rate generally remains low and acceptability is very high (> 90 per cent).

Can we improve palatability in baked dog biscuits?

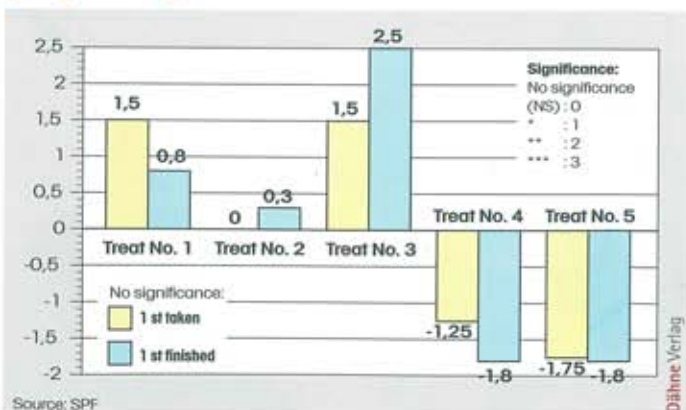
Using a super premium biscuit recipe as a basis for its work, SPF has developed a specific range for baked biscuits. Palatability enhancers (PEs) can be added directly to the dough. The other ingredients are substituted in order to maintain the same nutritional values for all biscuits. When using a coating application, the nutritional values are also preserved as the nutritional profile of treats is a priority for canine health. Following the tests carried out with the dog expert panel, application has an impact: palatability enhancers applied by

coating provide significantly better palatability compared to direct inclusion. However, coating biscuits can also have drawbacks as it requires specific equipment and know-how. The visual aspect of the biscuit can also be altered if the coating is not applied properly.

The inclusion of palatability enhancers in biscuits also significantly increases palatability for the three criteria evaluated. This performance can be modulated by increasing the dosage (see Figure 2).

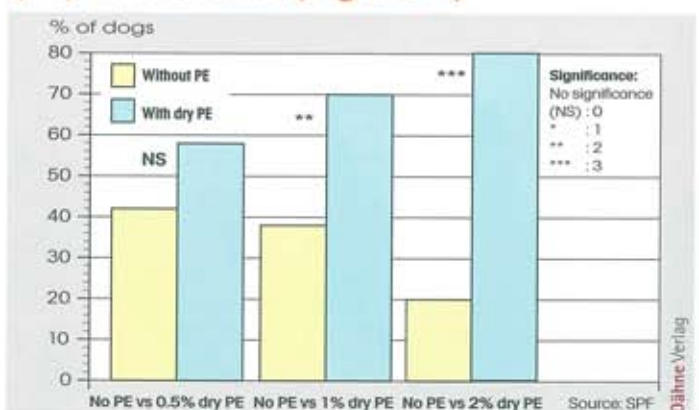
This selected example shows that palatability in biscuits can indeed be increased efficiently by an appropriate use of palatability enhancers. Furthermore, some new palatability enhancers, specifically developed for biscuits, give remarkable results in enhancing the palatability performance of the biscuits.

Dog palatability of five treats (Figure 1)



The palatability has been tested over four tests with 30 dogs, comparing five baked biscuits from the market to each other.

Impact of palatability enhancers (PE) in biscuits (Figure 2)



The palatability of baked biscuits with varying dosage of palatability enhancers (versus tests on 30 dogs).