Series of FEFANA Booklets: 
*Carotenoids in Animal Nutrition* hot off the Press

Brussels, 18 December 2014 - FEFANA is pleased to inform you about the publication of its new booklet on carotenoids and their use in animal nutrition.

Colours play important biological functions in nature that relies on a variety of natural compounds (e.g. carotenoids, chlorophylls, etc.) for the colouration of living animal and plant matter. In animal nutrition, colours come from the animal diet and are mostly linked with the presence of carotenoids, which form the largest group of naturally occurring pigments, widely responsible for the variety of yellow to red colours in fruits, vegetables, fungi, feathers of birds, fish flesh, cuticles of crustaceans or insects, as well as aquatic plants and algae.

They are synthesized by all photosynthetic organisms, some aphids, some bacteria and fungi alike. More than 750 carotenoids have been identified and approximately 60 of them are precursors of vitamin A, β-carotene being the most important. Animals are generally unable to synthesize carotenoids and require a dietary intake of plant products to meet daily demands. Carotenoid derivatives promote health, improve sexual behaviour (colour signalling) and are essential for reproduction. Some dietary carotenoids can be cleaved to provide vitamin A and are valuable for many physiological functions (e.g. antioxidant activity, immunostimulants, yolk nourishment to embryos, photoprotection).

Carotenoids have always been part of the daily diet of animals and humans. With the ongoing optimization of animal nutrition, they are included in the feed as part of the nutrients which support animal health and product quality.

The new FEFANA booklet aims at presenting an overview on carotenoids, with a focus on oxycarotenoids or xanthophylls, their use in animal nutrition and the benefit for the consumers. This publication describes the natural occurrence, the classification and the role of the carotenoids as well as their use as feed additives. More technical details are also provided in specific monographs.

The booklet *Carotenoids in Animal Nutrition* is available in paper format and also electronically on the FEFANA Virtual Library at [http://www.platform-fefana.org/Website/Booklets](http://www.platform-fefana.org/Website/Booklets). Other FEFANA publications can also be downloaded from this online library.

One booklet on amino acids and another one on vitamins are due to be published in the first half of 2015. In the words of Didier Jans, FEFANA Secretary General, “Our Association has been constantly engaged in communicating properly about the benefits and safety of its industry’s products. With this booklet and other publications, FEFANA is willing to provide the best of its knowledge to those interested in learning more about Specialty Feed Ingredients and their Mixtures.”