

Sweeteners

SWEET TASTE IS PART OF THE 5TH PRIMARY TASTE, CONSIDERED AS A VERY APPEALING ONE

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SWEET	SALT	UMAMI	BITTER	SOUR
Carbohydrates (energy source)	Minerals	Proteins, Amino acid	Plant toxin	Spoiled food (eg. fermentation)
Attractive	Attractive	Attractive	Repellent	Repellent

Why sugar taste is the most appealing?

- 1 In nature, it is necessary for animals to be able to select from a wide variety of potential foods to satisfy their daily nutrient requirement.
- 2 Sweet taste is linked to glucose, the molecule allowing respiration. Glucose is the fuel of cells and consequently of all animals.
- 3 In consequence, this molecule is a question of survival for animals which explain the high attractivity of sugar and sweet taste.

Sweeteners in the feed industry

In feed industry, different ingredients can be used to improve feed attractivity:

- **Plant-derived:** Glycerol, Brazzein, Stevia, Thaumatin
- Artificial: Aspartame, Saccharin, NHDC
- Alcool: Sorbitol...



Used alone, a sweetener (e.g. saccharin) can have a **limited effect on the animal feeding behaviour** due to its bad after-taste.

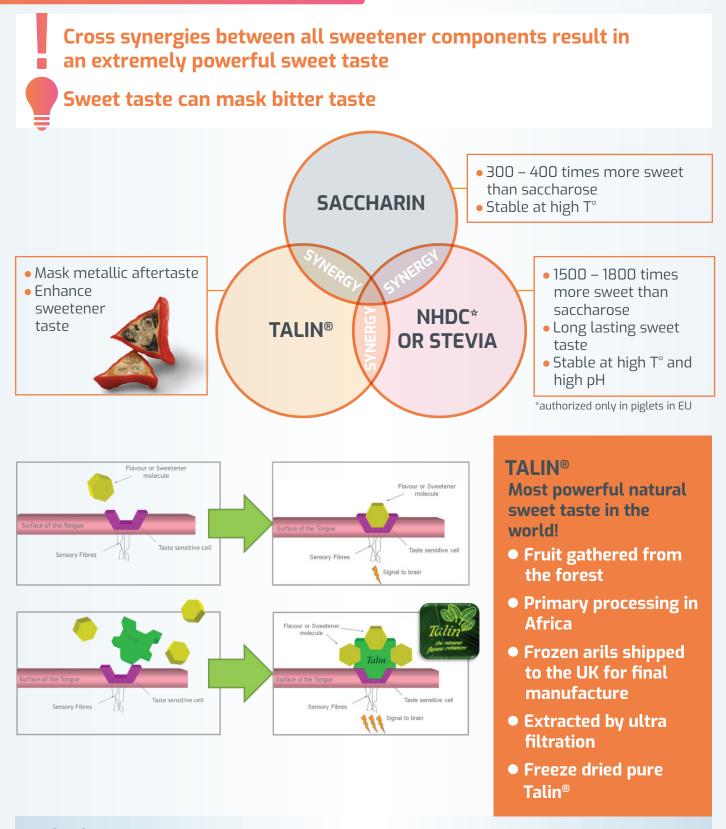
Discover the Optisweet® range

Energy creation through cellular respiration

Glucose + Oxygen = Carbon dioxyde + Water + Energy



ADISSEO SWEETENERS COMPLEX



Take-home message

- Sweet taste is appealing to animal because it means source of glucose and carbohydrate
- Single sweeteners have bad aftertaste
- Sweeteners complex with Talin[®] are the best option to ensure a powerful synergy

