



REDsugar

**Functional taste solutions for sugar
reduction in instant coffee drinks**
Bell Flavors & Fragrances

Get in touch with taste.

REDsugar: Functional taste solutions for sugar reduction in instant coffee drinks

Sugar reduction is one of the major topics of the food and beverage industry, especially in Western Europe. Political restrictions, efforts by manufacturers to reduce the sugar content in their products, and consumers' increasing health awareness are encouraging reformulations, leading to a rising demand for sugar-reduced products, especially within the beverage, bakery, dairy and ice cream segments.

Growing aspirations for healthy food choices and increasing concerns on sugar intake are driving the food and beverage industry to respond with reformulation of products or new developments based on less or low sugar, natural ingredients and by substituting artificial sweeteners.

At the same time, governments have set up taxes on sugar-sweetened products, making reformulation inevitable in many Western European countries.

The industry is therefore facing challenges, as successful products need to be adapted – with only slight compromises on taste being accepted by the consumers.

The challenge of sugar reduction



Changing consumer behaviour and growing concerns on sugar consumption are driving the growing need for reformulated products.

Over 50% of consumers worldwide are concerned about **sugar-related health issues**.

70% of global consumers find **sugar-related claims** on pack appealing.

Moderate consumption of confectionery and sweet beverages have become common.

Naturalness and simplicity are key – consumers are increasingly avoiding artificial sweeteners.

*All data based on Global Data consumer surveys.

With **indulgence** being consumers' top priority, sugar reduction creates challenges, esp. for soft drinks and sweet goods.

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Taste, texture and mouthfeel are consumers' top priority

In instant coffee products, sugar has a significant impact on bitterness derived from the coffee alongside taste and the perceived mouthfeel.

Reformulated, sensory appealing instant coffee mix varieties using **less sugar** are therefore the **key to market acceptance**, as they meet current consumer needs and expectations.

New product developments based on reduced sugar content are on the rise

Consumers across the world are actively reducing their daily consumption of sugar, mainly because of health concerns.

In order to compensate for the gap of taste originating from the lack of sugar, reformulation in instant coffee drinks is essential.

Sugar-related claims on packagings are growing constantly across a wide range of segments and markets.



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Sugar reduction challenges in instant coffee products

Sugar is a main ingredient in this category: Successful market products contain up to 65% sugar in the instant coffee mix.

Substituting sugar and its technological properties requires reformulation to maintain e.g. texture and mouthfeel, but furthermore the characteristically sweet taste.

A product with solely reduced sugar content therefore will be perceived as less appealing.

What if.. less sugar is used in an instant coffee drink formulation?



- The characteristics in taste, especially sweetness and flavour can change significantly, even if sugar is only partially reduced.
- The lack of sugar may lead to a mouthfeel that is perceived as less rich – Sugar boosts milky, creamy and caramellic notes in instant coffee drinks.
- The taste profile will be less harmonic, as sugar balances the bitterness derived from the coffee and enhances the drinkability of the end product.

A reformulation for closing the gap in taste, texture and mouthfeel needs to be obtained.

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We understand that every application requires different approaches in keeping the taste and the product appeal when reducing sugar.

We therefore applied our flavour house expertise in developing tailor-made flavour solutions that can be individually adapted to your specific needs, delivering intense, high-quality and satisfying product properties in instant coffee drink applications.

Bell's REDsugar product line delivers a positive impact on the perception of sweetness within various types of instant coffee mix applications.

REDsugar flavours contribute significantly in closing the taste gap due to the lack of sugar.

The sweet enhancing taste profile of Bell's **REDsugar** solutions can help to achieve **at least 30% of sugar reduction** depending on the application.

Natural flavouring declaration assuring to be compliant with today's consumer expectations and **clean label** restrictions.

Functional solutions for reformulating instant coffee products to meet the political frameworks in Western European markets.

All products are designed to fulfill **high-quality industry standards** and are suitable for a variety of beverage applications, such as instant coffee drinks.

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Application Formula	Standard Instant coffee mix		Instant coffee mix, -30% sugar	
Ingredients	Quantity (g)	% 3:1 Mix	Quantity (g)	% 3:1 Mix
Coffee extract	1,0	5,88	1,00	5,88
Non-dairy creamer	6,50	38,24	6,50	38,24
Salt	0,02	0,12	0,02	0,12
Sugar	9,48	55,76	6,20	36,47
Maltodextrin	-	-	3,28	19,29
Bell's flavour in recommended dosage	x	x	x	x
Total 3:1 powder mix	17,00	100,00	17,00	100,00
Water	150		150	
Total 3:1 instant coffee drink	167		167	

Sugars (powder mix):
59,60%

Sugars (powder mix)
41,30%

Manufacturing recommendation instant coffee drink:

- 1. Add 150 ml hot water to the 3:1 instant coffee mix.
- 2. Stir well.
- 3. Enjoy warm.

TASTING SESSION

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Unflavoured instant coffee drink	
<div>1. Unflavoured instant coffee drink</div> <div>100% sugar</div>	<div>Notes:</div>
<div>2. Unflavoured instant coffee drink</div> <div>-30% sugar</div>	<div>Notes:</div>
<div>3. Unflavoured instant coffee drink</div> <div>-30% sugar</div> <div>+ REDsugar Vanilla/Caramel</div> <div>5095000 REDsugar Vanilla/Caramel Flavour Powder</div> <div>Declaration: Natural Flavouring</div> <div>Dosage (instant coffee drink): 0,17 : 100</div>	<div>Notes:</div>

TASTING SESSION

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Caramel flavoured instant coffee drink	
<p>1. Caramel flavoured instant coffee drink</p> <p>100% sugar</p> <p>0471103 Caramel Flavour, sd. Declaration: Natural Flavouring Dosage (instant coffee drink): 0,10 : 100</p>	<p>Notes:</p>
<p>2. Caramel flavoured instant coffee drink</p> <p>-30% sugar</p> <p>0471103 Caramel Flavour, sd. Declaration: Natural Flavouring Dosage (instant coffee drink): 0,10 : 100</p>	<p>Notes:</p>
<p>3. Caramel flavoured instant coffee drink</p> <p>-30% sugar</p> <p>+ REDsugar Vanilla/Caramel</p> <p>0471103 Caramel Flavour, sd. Declaration: Natural Flavouring Dosage (instant coffee drink): 0,10 : 100</p> <p>5095000 REDsugar Vanilla/Caramel Flavour Powder Declaration: Natural Flavouring Dosage (instant coffee drink): 0,17 : 100</p>	<p>Notes:</p>

YOUR PARTNER IN FLAVOUR EXCELLENCE

Bell's tailor-made flavours and extracts are created by combining the most diverse of components: the creativity and technological expertise of our flavourists, the development of market-relevant applications and focus on lifestyle-driven consumer demands.

Delivering solutions based on authenticity, naturalness (clean labelling) and indulgence, Bell's portfolio of flavour profiles provides both, excellent taste and functionality.



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