Non-Sugar Sweeteners in Beverages

What are non-sugar sweeteners?

'Non-sugar sweeteners' (NSS) is the collective term used by the non-alcoholic beverages industry for sweeteners used to partially, or fully replace sugar in beverages. NSS impart a sweet taste without significantly contributing to the energy content (kilojoules). They are commonly used by the food and beverages industry to provide consumers with low- and no-sugar choices.

In beverages, NSS' are used in small amounts to achieve a desired level of sweetness, while contributing very little, or no energy at all to the final product. Beverages sweetened only with non-sugar sweeteners have a Health Star Rating of 3.5 stars, and may be consumed as an alternative to sugar-sweetened beverages as part of a balanced diet.

WHO's recommendation to reduce the global prevalence of non-communicable diseases (NCDs)[1] has driven food and beverage companies to contribute to the reduction of 'free sugars'* through reformulation and use of NSS' to provide broader choice to consumers.[2,3]

'Free sugars' are defined by WHO as monosaccharides and disaccharides added to foods and beverages by the manufacturer, cook or consumer, and sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates.

Safety of non-sugar sweeteners

Food Standards Australia New Zealand (FSANZ) conducts thorough safety assessments prior to approving the use of NSS as food additives in the Food Standards Code (the Code). [5]

FSANZ has a list of approved NSS and regulates the use of these at a maximum level and at Good Manufacturing Practices (GMP) in beverages.

FSANZ regularly monitors international legislation and reviews scientific literature conducted by international organisations such as the Food & Drug Administration (FDA), European Food Safety Authority (EFSA) and Joint WHO/FAO Expert Committee on Food Additives (JECFA). If emerging research warrants a review of the permitted NSS and their levels, FSANZ will evaluate this data and amend food standards as necessary.

JECFA has determined NSS as safe for consumption by all populations, including special populations such as the elderly, children and pregnant women, when consumed within the Acceptable Daily Intake (ADI).

Non-sugar sweeteners as part of a healthy diet

- ↗ Reduces 'free sugar' intake
- ↗ Help reduce discretionary energy (kilojoules) intake
- ↗ Used in weight management efforts
- ↗ Enables consumers to enjoy sweet-tasting beverages without or with less sugar

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Media enquiries

It is expected that the draft recommendations from the NUGAG review, will likely attract significant media attention.

The ABCL, as Secretariat of International Council of Beverage Associations Asia-Pacific Region, has been advised that media enquires may be referred to the International Sweeteners Association (ISA). The ISA, an allied global sweetener association, has developed a comprehensive media response strategy, which may be leveraged by the beverages industry.

Contact details can be found below:

International Sweeteners Association
Email: media@sweeteners.org
Phone: +1 (833) 318-2430

Alternatively, you may contact the ABCL below:

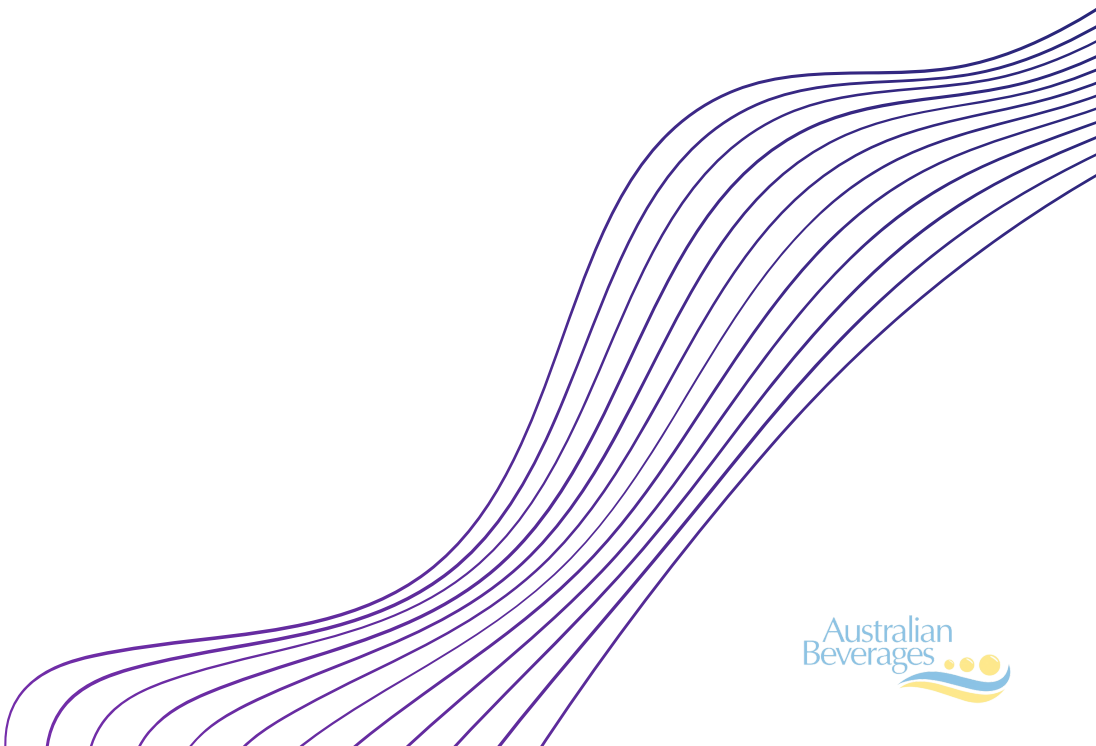
Australian Beverages Council
Email: info@ausbev.org
Phone: +61 (0)2 9698 1122

Emerging research

As ingredient innovation and consumption of NSS increases, so does the research into the wider health effects of their regular consumption. The International Sweeteners Association (ISA) and Calorie Control Council (CCC) monitor emerging research in the following areas:

- ↗ Efficacy of NSS in weight & glucose control
- ↗ Gut microbiome health
- ↗ Sweetness in the diet
- ↗ Oral caries

Available evidence supports the replacement of sugar with NSS as dietary aid for people with diabetes or modifying their diet for weight loss. Science is emerging in newer areas such as gut microbiome and increasing the 'sweetness craving' in the diet. WHO's Nutrition Guidance Expert Advisory Group (NUGAG) is expected to release recommendations on the use of NSS and their benefits by end of 2021. The ABCL has developed a briefing note on this review for Members.



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Further information

For further information on the science and research available in relation to non-sugar sweeteners and their safety and benefits, please visit:

International Sweeteners Association
https://www.sweeteners.org/latest-science/

Calorie Control Council
https://caloriecontrol.org/

For information on types of non-sugar sweeteners permitted for use in foods and beverages in Australia and New Zealand, please visit:

Australian Beverages Council Website
https://www.australianbeverages.org/initiatives-advocacy-information/ingredients/

Australian Beverages Council Member Portal
https://members.australianbeverages.org/resource-sheet/

References

This brochure is designed as a general guide only. For specific health information seek assistance from a suitably qualified health practitioner.

1 World Health Organisation (WHO) 2015, Guideline: Sugars intake for adults and children. Geneva: World Health Organisation.

2 Shrapnel, William S., and Belinda E. Butcher 2020. "Sales of Sugar-Sweetened Beverages in Australia: A Trend Analysis from 1997 to 2018" Nutrients 12, no. 4: 1016.
https://doi.org/10.3390/nu12041016

3 Public Health England (PHE) 2015. Sugar reduction: The evidence for action. Annexe 5: Food Available online at:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/470176/Annexe_5._Food_Supply.pdf

4 FSANZ (2013).How FSANZ ensures the safety of food additives.
https://www.foodstandards.govt.nz/consumer/additives/additivecontrol/Pages/default.aspx

5 FSANZ (2021). Intense Sweeteners. https://www.foodstandards.govt.nz/consumer/additives/Pages/Sweeteners.aspx

6 International Sweeteners Association. Low-calorie sweeteners and gut microbiome no effect confirmed in humans. Available online
https://www.sweeteners.org/latest-science-post/low-calorie-sweeteners-and-gut-microbiome-no-effect-confirmed-in-humans/

7 CalorieControl.org. Low Calorie Sweeteners and the Microbiome. Available online: The Microbiome - Calorie Control Council
https://caloriecontrol.org/the-microbiome/

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