



There's NO(LO) limits with C*Sweet L

**Let's find out why
now is the time for NOLO
and how C*Sweet L will
help you ride the wave...**

NOLO (no- and low-alcohol) beers are not just for "Dry January." These on-trend beverages are here to stay throughout the year, provided that they can deliver to consumer wishes. Fortunately, C*Sweet L low declarable sugar glucose syrups will enable you to achieve desirable NOLO beers by improving mouthfeel, adding body, and controlling sweetness.

NOLO beers triumph amid health trends

Trends such as sugar reduction, label friendliness, and sustainability are being driven by a more health-conscious beverage consumer base. The rise of NOLO (no- and low-alcohol) beer reflects a growing preference for options that align with healthier diets.

The European NOLO beer market volume is projected to **grow by 3.3% CAGR** over the next few years, continuing its steady expansion. A decade ago, NOLO

beers made up **less than 4%** of the beer market. Fast forward to 2024, and this share has **risen to 6.5%**. This momentum is expected to continue, with NOLO beers predicted to account for **more than 7%** of total beer volumes by 2028.¹

While major brewers like Heineken, Carlsberg, and AB InBev may be driving the trend, smaller players are also becoming increasingly active in this evolving market too.

1 in 10 beer launches is classified as NOLO, with the majority being non-alcoholic²

¹ Euromonitor, Non/Low Alcohol Beer, Total Volume, 2024-2028

² Source: Innova Market Insights, 2024

NOLO options for all seasons

Initially, NOLO options were seen as alternatives for occasions when individuals preferred to abstain from alcohol e.g. New Year's resolutions and campaigns like "Dry January." However, they are now more popular throughout the year, as consumers become increasingly mindful of their health and the link to alcohol consumption.

Key NOLO trends in 2024

- **Health concerns** drive product development, with sugar reduction emerging as a platform.
- **Creating new occasions** outside of regular beer drinking moments.
- **Variety is key** to reach wider audiences.
- **Flavors and hybrids** bring excitement to the shelves.



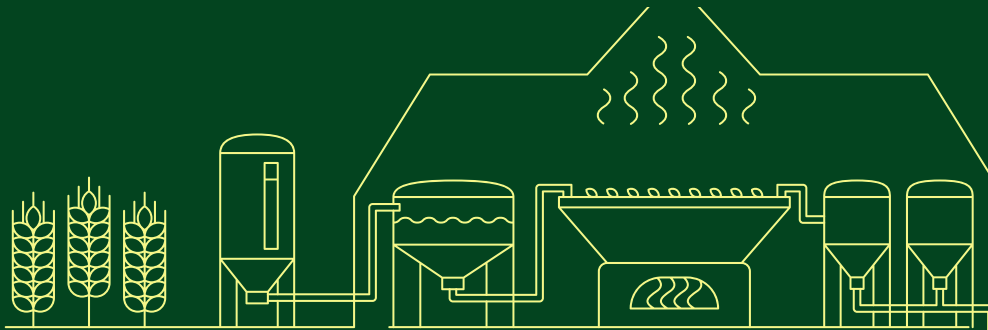


NOLO consumers are unwilling to compromise

While health considerations increasingly influence purchase decisions, NOLO consumers are not willing to sacrifice the enjoyable taste and drinking experience of their favorite beers. They still expect to enjoy high-quality, full-bodied flavors that are comparable to those of traditional alcoholic beverages.

Top 5 purchasing influencers for non-alcoholic alternative beverages

	Top country
1 Low/no/reduced sugar	Germany
2 Made with real ingredients/natural	Denmark
3 No artificial flavors or colors	Poland
4 Traditionally made/crafted	Spain
5 Indulgence claims	Poland



Existing barriers to NOLO success

Creating NOLO beers is not as easy as it might seem! Up until now there have been two basic methods to producing low alcohol beers. But both present barriers to entry...

- 1. Produce a regular alcoholic beer, then remove the alcohol through a physical process (e.g., distillation or reverse osmosis).**
The drawback of this method is that it requires a substantial financial investment. Additionally, there is significant uncertainty around balancing the volatile taste and sensory components.
“When you remove the alcohol, you are also removing a big part of the components responsible for the taste and sensory profile of the beer,” explains Lutgart Van Nieuwenhuyze, Beverage Application Specialist

2. Create an alcohol-free beer through a two-step biological process that intervenes in the traditional fermentation process.

Since beer fermentation is stopped early, many components responsible for an unpleasant warty taste remain. To address this, a costly separative column can be added to capture the warty taste, or flavors can be added to mask off-taste and restore the beer's sensory profile.



C*Sweet L rises up to the challenge

C*Sweet L low declarable sugars (DE) glucose syrups allow you to produce NOLO beer without the need for investment in a separate purification technology. Furthermore, they enhance the quality of NOLO beers by improving mouthfeel, adding body, and controlling sweetness.

Cargill's Food Solutions offers a range of low DE¹ glucose syrups (DE between 20.5 and 32) that enable low fermentability (between 18% and 28%) and contain fewer declarable sugars compared to a classical wort or most other types of glucose syrup used in the brewing process.



¹ Dextrose Equivalent (DE) is a measure representing the percentage of reducing sugars in a syrup sweetener, expressed as dextrose on a dry solids basis. The higher DE value, the further starch is hydrolyzed to sugars, resulting in a higher sweetness.

The key benefits of C*Sweet L



Lowers alcohol formation due to low fermentable sugar content while still providing the necessary food source for yeast activity.



Improves NOLO beer off-taste by dilution of non-desirable warty off-notes.



Moderates sweetness level so that the NOLO beer does not become overly sweet and brewers can maintain a balanced flavor profile.



Allows brewers to use standard wort recipes, providing additional fermentable sugars without significantly altering the wort composition.



Improve the colloidal stability of the beer by helping to reduce the content of haze-forming proteins and polyphenols.



Enhances body and mouthfeel, which is often lacking in NOLO beers due to the absence of alcohol.



C*Sweet L: Toasting sustainability

Today's consumers are increasingly conscious about their purchases, and are seeking transparency about where their products come from, and how they are made.

FSA certified ingredients help you to demonstrate your commitment to sustainable sourcing, reduce risks within your supply chain, and elevate your sustainability story.



At Cargill's Food Solutions, we can offer C*Sweet L in Europe produced from wheat that is benchmarked Silver against the SAI Platform Farm Sustainability Assessment (FSA). This industry-recognized benchmark system supports good agricultural practices in key sustainability areas.



Ride the NOLO wave all year long with C*Sweet L

NOLO beverages are here to stay throughout the year, provided that they can deliver the sensory characteristics that consumers expect. Fortunately, C*Sweet L low declarable sugar glucose syrups are there to meet these needs, by enabling brewers to produce NOLO beers without compromise.

Furthermore, our passionate beverages experts are there to support you in developing and testing fully integrated solutions that deliver consumer-pleasing beverages using C*Sweet L and much more. In this way you'll benefit from their deep ingredient, application and category knowledge.

After all, **Cargill's Food Solutions**
is your partner for co-creating
growth in beverages.



Want to learn more about how our
C*Sweet L syrups could perform in your
recipe? **Reach out to us!**

Seeking a similar yet more label-friendly option?
Contact us to learn more about
MaltWise® – our wheat and barley malt syrups!

