



Masking and taste improvement

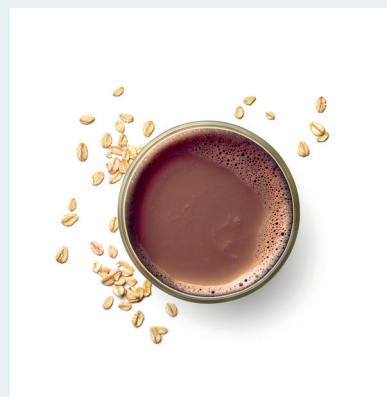
In Beverages

Benefits at a glance

Off-taste masking

Jungbunzlauer ingredients effectively reduce off-notes in beverages by:

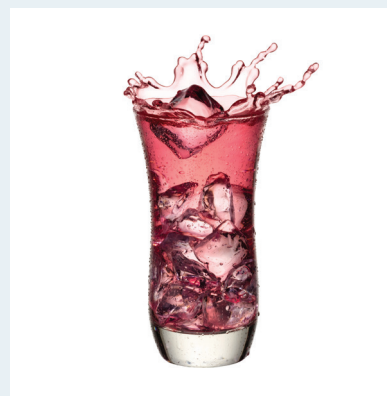
- **Minimising bitterness** from sweeteners, mineral salts, and other bitter substances
- **Decreasing the lingering sweetness** associated with artificial and natural sweeteners
- **Masking undesirable off-notes** and reducing the astringency of natural colours
- **Providing effective masking** for amino acids, as well as plant and animal proteins
- **Reducing the burning sensation** of alcohol in beverages



Flavour enhancement

Jungbunzlauer ingredients enhance the flavour profile of beverages by:

- **Improving the sweetness profile** through the addition of sweetness and body
- Delivering **fruity, refreshing, and well-rounded acidic flavours** that surpass those of phosphoric acid-based beverages
- **Balancing acidic taste** for a more refreshing overall flavour profile
- **Replacing bitter agents** with safe food additives that provide bitterness without physiological effects



Improvement of overall acceptance

Jungbunzlauer ingredients increase overall acceptance by:

- **Potentially qualifying as natural flavours** under FEMA GRAS regulations
- **Avoiding concerns related to «sin tax»** as they are not problematic ingredients
- **Enabling higher protein** content in protein waters by minimising unpleasant off-notes
- Being **safe food additives** that are trusted for quality and compliance, aligning with more natural product concepts



Jungbunzlauer ingredients in function

Flavour enhancement / Ingredient replacement

- ERYLITE® Erythritol, ERYLITE® Stevia blends
- CITROFOL® Al Triethyl Citrate
- Citric Acid
- Lactic Acid
- Gluconic Acid

Off taste masking

- Sodium Gluconate
- Potassium Lactate
- ERYLITE® Erythritol, ERYLITE® Stevia blends

Limitations in usage levels

EU

- Most Jungbunzlauer ingredients are approved as food additives under Regulation (EC) No 1333/2008 and can be used in food products under the quantum satis principle
- Erythritol is approved as flavour enhancer in energy-reduced flavoured drinks or those with no added sugar, max. 1.6%
- It is recommended to check for eventual specific limitations applicable for some food categories of Regulation (EC) No 1333/2008

USA

- The following ingredients are listed as GRAS (Generally Recognized As Safe) for use in food without limitations other than current GMP as referenced
 - Citric Acid 21 CFR § 184.1033
 - Lactic Acid 21 CFR § 184.1061 including flavour enhancer, flavouring agent
 - Triethyl Citrate 21 CFR § 184.1911 including flavouring agent
 - Sodium Gluconate 21 CFR § 182.6757
 - Potassium Lactate 21 CFR § 184.1639 including flavour enhancer, flavouring agent or adjuvant
- Erythritol is classified as GRAS by the FDA and is permitted for use in food according to current Good Manufacturing Practices (GMP). Specific upper limits for applications include: Less than 3.5% for reduced or low-calorie carbonated and non-carbonated beverages, as well as dairy products (e.g., chocolate and flavoured milks)
- The Flavour and Extract Manufacturers Association of the United States (FEMA) has granted FEMA GRAS status to the following products: Sodium Gluconate (FEMA No 4934), Erythritol (FEMA No 4819), Triethyl Citrate (FEMA No 3083), for use as a flavour ingredient with modifying properties for specified applications and use levels

Value proposition

