

Reducing sugar in biscuits

Reducing sugar and maintaining consumer appeal can be a challenge. Experience how our portfolio of solutions can help meet your texture, label, claims and deliciousness objectives.



Bulk & function VERSAFIBE[™] 285*

Soluble corn fiber that provides **bulking and functional properties** (binding, browning) like sugar, with half the calories.

It can easily replace 50% of sucrose in biscuits, without changes in formulation, process or in the biscuit's texture. Label: "soluble corn fiber". No E-number



Zero calorie sweetness ERYSTA[™] C40 & C100

Polyol with 0 calorie and excellent digestive tolerance, erythritol is a very good tool to fully replace sucrose in biscuits and cookies. Available in 2 particle sizes (crystal and powder), ERYSTA[™] erythritol delivers **70% of the** sweetness of sucrose and delivers a high-quality sweetness profile.

Label: "erythritol". E968



Tapioca dextrins can be used to replace sucrose in biscuits up to 30%, on their own or in combination to achieve the right firmness and shortness. At higher sucrose replacement, they are used to complement VERSAFIBE[™] 285 soluble corn fibre and finetune the texture.

Label: "dextrin", or "tapioca dextrin", or "modified starch". No E-number



Flavour upgrade NSF-04



Natural flavour which **boosts the sensory experience** by bolstering buttery/dairy notes while masking off-notes. Part of the NSF portfolio, a range of stevia-based flavours with modifying properties that offers sweetness quality improvements and taste modification.

Label: "natural flavour". No E-number





Process – planetary mixer with paddle attachment

I. Weigh butter and sugar

- 2. Weigh and mix flour, salt, starch, fiber, tartaric acid and flavour
- 3. Weigh water and dissolve sodium bicarbonate and ammonium bicarbonate
- 4. Mix butter and sugar to a creamy texture, add the egg until homogenous, add the dry ingredients until homogenous
- 5. Add water with carbonates
- 6. Sheet down to 3 mm and cut.
- Bake in the convection oven at 160 °C with fan speed 1 for 10 min. Dry the biscuits until they reach 2,5-3,5% moisture



50% SUGAR REDUCED SHORTDOUGH BISCUITS

- 50% sugar with minimal impact on the eating experience
- Formulated without polyol

INGREDIENTS	Full sugar Control (24.8% sugar)	50% Sugar Reduced with VERSAFIBE™ 285*/ CRYSTAL TEX™ (12% sugar)	50% Sugar Reduced with VERSAFIBE™ 285*/ CRYSTAL TEX™ & NSF (12% sugar)	50% Sugar Reduced with VERSAFIBE™ 285* (12% sugar)
Pastry wheat flour	50.84	50.84	50.806	50.806
Fine crystal sugar	20.72	9.3	9.3	9.3
Butter vanilla flavour	0.2	0.2	0.2	0.2
Butter	17.37	17.37	17.37	17.37
Pasteurized whole egg	7.67	7.67	7.67	7.67
Water	2.79	2.79	2.79	2.79
CRYSTAL TEX™ 644 tapioca dextrin		2.85	2.85	
VERSAFIBE™ 285* soluble corn fibre		8.56	8.56	11.41
NSF-04 natural flavour			0.034	0.034
Salt	0.17	0.17	0.17	0.17
Sodium bicarbonate	0.15	0.15	0.15	0.15
Ammonium bicarbonate	0.03	0.03	0.03	0.03
Tartaric acid	0.06	0.06	0.06	0.06
Total	100	100	100	100

*Experimental product - Not commercially available in EMEA

Tell us about your needs

We would love to schedule time with you to discuss how we can help you drive impact for consumers, the planet, and your company

www.ingredion.com/emea

*Launch planned for Q1 2022