

Yeasts make your life sweet!

Recently was found that the low-calorie sweetener Erythritol might be produced from waste by special species of yeast, *Yarrowia lipolytica*. Erythritol is natural, tastes almost exactly like table sugar, but it does not cause obesity. Erythritol belongs to a class of compounds called sugar alcohols (but you cannot be drunk after it), they are found in natural foods like fruits, honey or wine. Due to its molecular structure, sugar alcohol stimulates the sweet taste receptors on our tongues. However it is not a sugar that is why it does not change the insulin level in the blood. For people who are overweight, with diabetes or other problems related to the metabolic syndrome, erythritol seems to be an excellent alternative to sugar. Up to now, erythritol was produced from glucose at the commercial scale that is why its price was high. Recently published data showed that erythritol might be produced from molasses and glycerol, by safe yeasts, which are present in blue cheese. Molasses and glycerol are waste-products of food and bio-diesel industries, so they awkward for further utilization. Now, at the same time we can solve the problem of the waste-products, and manufacture the safe sweetener. Low price of erythritol will help to popularize it. Erythritol might be used as a sweetener by individual customer but also in food industry as a safe alternative to sugar in cookies, candies and sodas.

Publication

[A two-stage fermentation process of erythritol production by yeast *Y. lipolytica* from molasses and glycerol.](#)

Mirończuk AM, Rakicka M, Biegalska A, Rymowicz W, Dobrowolski A
Bioresour Technol. 2015 Sep 18