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TRANS FATTY ACIDS ARE NOT SIGNIFICANT IN YEAST

Content of trans fatty acids in yeast is very low: below 0.2 % (expressed on dry matter).

Fat content itself in yeast is very low: below 7 % (expressed on dry matter)[1], and according to analysis performed by members of COFALEC, quantity of trans fatty acids in this fat content is less than 2%. Considering the dosage of yeast in the final products, yeast is not a significant source of trans fatty acids at all.

Background information

What is a trans fatty acid (TFA)?

Trans fatty acids (TFA) belong to lipids category.
They are either naturally present in dairy products, meat and ruminant fat (cows, beef, etc.), either formed when vegetable oils are transformed during industrial processes, for example, when they are hydrogenated or heated at a high temperature.

What are the main contributors in the diet to the consumption of TFA?

TFA in foods originate from three main sources:
- dairy products, meat and ruminant fat (cows, beef, etc.) due to bacterial transformation of unsaturated fatty acids in the rumen of ruminant animals;
- hydrogenated unsaturated vegetable oils: industrial hydrogenation (used to produce semi-solid and solid fats that can be used for the production of foods such as margarines, shortenings, and biscuits) and deodorization (a necessary step in refining) of unsaturated vegetable oils (or occasionally fish oils) high in polyunsaturated fatty acids;
- during heating and frying of oils at high temperatures.

Yeast is not a source of TFA.

[1] See COFALEC general characteristics of yeast :
http://www.cofalec.com/mgt/resources/fichiers/07-06-01_General_characteristics_DRY_YEAST_final.pdf

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How do TFA affect health?

Excess consumption of TFA increases “bad” cholesterol levels, while decreasing the level of “good” cholesterol. High consumption of TFA is therefore associated with an increase in cardiovascular risk

What the current recommendations?

In March 2003, the Danish Authorities adopted legislation which provides that eventually food products must not contain more than 2 g of TFA per 100 g of fats or oil in the product as sold to the final consumer. This restriction would not apply to naturally occurring trans fatty acids and conjugated linoleic acid (CLA).
Nevertheless, there is currently no maximum limit in TFA fixed at European level as the need has not been confirmed and positions of member States differ.

Indeed, more recent dietary surveys indicate that the intakes of TFA have decreased in a number of EU countries, mainly due to reformulation of food products, e.g. fat spreads, to reduce the TFA content.
In France for instance, a survey conducted by AFSSA (French Food Safety Agency) in 2008 confirms that intakes of TFA are inferiors to those in 2005 on all categories of the population and inferior to the French recommendation of 2% of total energy intake.

Sources:

- European Food Safety Agency EFSA, Opinion of the Scientific Panel on Dietetic products, nutrition and allergies [NDA] related to the presence of trans fatty acids in foods and the effect on human health of the consumption of trans fatty acids, July 2004
- French Food Safety Agency AFSSA, Health risks and benefits of trans fatty acids in food - Recommendations, April 2005

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