SUMMARY

REVIEW AND UPDATE OF TRANS FATTY ACIDS CONTENT IN CHILEAN FOODS

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As a measure of consumer protection, in recent years, national and international regulations have been created to control trans fatty acid (TFA) content in food available in the market. The food sanitary regulations of Chile (RSA, 2010) indicate 2% of TFA as maximum. Previous research, in 2006, has showed a great percentage of foods presented of less than 5% TFA content. The purpose of this investigation was to determine fatty acid profile, including TFA, from food consumed by Chilean population and evaluate variations that have these values with those previously obtained. Based on this results, three types of foods products were selected, such as snacks, ice creams and sausages. Fat content, fatty acids profile, including TFA, were determinate by GLC according to the UNE 5509 Norm. Each analysis was carried out in duplicate and three samplings were performed. The TFA content in food was compared with the previous research. The results showed that some foods have high fat content with a slightly increased of TFA when compared with previous data, exceeding the limit of 2% according to new regulations. In addition some foods presented remarkable saturated fatty acids content, generating a PUFA/SFA ratio with poor fat nutritional quality. We conclude that most of the food samples comply with current regulation, relating of TFA content, but some of these foods can be considered unhealthy, since a portion of them show high contents of total fat, saturated or trans.

Key words: Fatty Acids Profile, Trans fatty acids (TFA), Chilean foods.