Abstract

Recent studies of dietary habits in children and adolescents performed in Spain show that a high percentage of the daily energy intake corresponds to fat (42.0-43.0%). These findings show an excessive contribution of saturated fatty acids and also a considerable supply of trans fatty acids. These compounds are formed generally during partial hydrogenation of vegetable oils, a process that converts vegetable oils into semisolid fats. Also, in some cases naturally occurring trans fatty acids in smaller amounts in meat and dairy products from ruminants (cows, sheep), these trans fatty acids are produced by the action of bacteria in the ruminant stomach by reactions of biohydrogenation. On the other hand, metabolic studies have clearly shown that trans fatty acids increase LDL cholesterol and reduce HDL cholesterol. Our results show that major sources of trans fatty acids in commercial Spanish foods are fast-food (hamburger, French fries), snacks, bakery products (cakes, donuts, biscuits), margarines and dehydrated soups.

Keywords

Fats, Trans fatty acids, Commercial spanish foods.