SCI LECTURE PAPERS SERIES CHOCOLATE, CHOCOLATE FATS AND THE EU DIRECTIVE: "THE VIEW FROM THE USA" Stanley M. Tarka, Jr., Ph.D.

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Key words

Chocolate Directive, FDA Chocolate Standards, Codex Chocolate Standards, Vegetable Fats

Introduction

The first U.S. Standards of Identity for Chocolate and Cacao products were established by the U.S. Food and Drug Administration on December 6, 1944. These were developed in collaboration with technical representatives from the leading U.S. Chocolate and Confectionery companies and remained intact and in force for over the next 40 years. The U.S. Chocolate Manufacturers' Association worked with the FDA to update the standards in the 1990s in order to reflect new technologies and move toward harmonization with Codex. A key tenet of the U.S. for any change is that these changes would be beneficial to both the consumer and the industry. These Standards of Identity ensure that criteria for high quality and consumer trust are maintained. This presentation also provides a view of the U.S. Market in relation to that of Europe. The U.S. has been both an active participant and seasoned contributor to the advancement of the Codex Standards. The U.S. government has demonstrated its continued willingness to move toward international harmonization and simplification of the Standards outlined by Codex for foods and food additives. This is clearly reflected in the advancement of the Chocolate and Cacao Standards to Step 8 of the Codex Commission approval process.

U.S. Industry

Members of the U.S. Chocolate Industry have historically been staunch supporters of U.S. Standards of Identity. The core belief has been that their longevity and success in the chocolate business are derived from a reputation for producing high quality products that consumers trust. The Standards of Identity for Chocolate and Cacao Products ensure that criteria for high quality and consumer trust are maintained. In recent years, however, there has been division over the use of vegetable fats with no agreement within the Industry.

View of the U.S. Market in Relation to Europe

The principal leaders in the European chocolate market are Mars, Nestlé, Cadbury Schweppes, Ferrero, and Kraft whereas in the U.S. market the leaders are Hershey, Mars, Nestlé, Kraft, Russell Stovers, and Brach. The most recent information on the

Chocolate Market on a \$ Per Capita was recently released by Data Monitor (Fig1). It is important to note the upward shift in all cases.

This information is usually based on both primary research where data is obtained from chocolate manufacturers and secondary research obtained from other sources in the marketplace. It is important to note that the data does closely approximate traditional disappearance data published by the U.S. Department of Commerce for chocolate in the USA on which consumption approximations are based. Combining this data with the background information on the size of U.S. Snack Market in dollars, and the fact that Candy and Gum make up more than 31% of this market, one can clearly demonstrate the importance of chocolate and confectionery, as well as the attention by the U.S. to the Standards of Identity for these products on a global basis (Fig 2).

Figure 1: European and U.S. Chocolate (\$ per Capita)

Country	1996	2001
Austria	47.8	58.9
Belgium	57.8	67.1
Czech Republic	8.8	11.8
Denmark	46.6	46.6
Finland	26.5	33.0
France	26.6	36.5
Germany	36.6	36.9
Greece	11.4	18.2
Hungary	10.6	24.8
Ireland	64.1	74.3
Italy	17.6	18.5
Netherlands	29.5	32.4
Norway	81.8	88.9
Poland	4.5	10.0
Portugal	10.3	12.8
Russia	1.5	10.8
Spain	7.8	8.9
Sweden	47.2	46.2
Switzerland	47.1	51.1
UK	84.2	93.1
United States	41.4	46.8

2/12/03 Data Monitor

Figure 2: U.S. Snack Market



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U.S. Participation in Codex Process

The U.S. has been an active participant and seasoned contributor to the advancement of the Codex Chocolate and Cacao Standards. The U.S. delegation worked toward compromise and consensus in earnest at the last four Codex Committee meetings on Cocoa Products and Chocolate. The clear positive result is the advancement to Step 8 for adoption by the Codex Commission at the 25th Session to in Rome, Italy on 30 June-5 July 2003.

Comparison of the USA Chocolate Standards to Proposed Codex and EU Standards

Table 1

Cocoa/Chocolate Requirements

	Choc Liguor	Total Cocoa Solids	Nonfat Cocoa Solids	Cocoa Butter
Chocolate	219001	Condo	Condo	Batto
Codex, EU		≥35	≥14	≥18
EU ("quality" chocolate)		≥43	≥14	≥26
U.S. ("semisweet, bittersweet chocolate")	≥35			
Sweet chocolate				
Codex		≥30	≥12	≥18
U.S.	≥15			
Milk chocolate				
Codex, EU		≥25	≥2.5	
EU ("quality" milk chocolate)		≥30	≥2.5	
U.S.	≥10			
Family milk chocolate				
Codex, EU		≥20	≥2.5	
White chocolate				
Codex, EU, U.S.				≥20

Key Differences Between EU, Codex, and U.S.

Key Differences Between Proposed Codex and U.S.

	Codex	<u>U.S.</u>
Milk chocolate		
 Milk solids 	≥12-14%	≥12%
 Milk fat 	≥2.5-3.5%	≥3.39%
All chocolates		
 Vegetable fats 	≤5%	No*
– Whey	Yes	\leq 5% in White

 *U.S. has separate standard for chocolate products containing vegetable fats; e.g., milk chocolate with vegetable fat coating, etc.

Key Differences Between EU and U.S.

	EU	<u> </u>
 Milk chocolate 		
 Milk solids 	≥14%	≥12%
 Milk fat 	≥3.5%	≥3.39%
All chocolates		
 Vegetable fats 	≤5%	No*
– Whey	Yes	≤5% in White

*U.S. has separate standard for chocolate products containing vegetable fats; e.g., milk chocolate with vegetable fat coating, etc.

Both the EU Directive and Codex allow for usage of whey in standard chocolate whereas the U.S. does not permit its use. Both Codex and the EU allow up to 5% vegetable fats in chocolates whereas the U.S. does not permit vegetable fats in standard chocolates. It is important to note that the U.S. has a separate standard in place for chocolate products containing vegetable fats. These are labeled for example as Milk chocolate with vegetable fat coating. The key point relative to the U.S. and Codex is that

discrepancies/differences are resolved in that products containing vegetable fats are subject to appropriate legislation in the U.S. and labeling requirements are already in place.

Conclusions

Much has been accomplished toward international standard harmonization of chocolate and cocoa products. At this time, it is impossible to predict when this process will be complete. As an Industry, we must continue to support every aspect of both the maintenance and growth of chocolate consumption. As part of this effort, we must ensure that consumers' expectations are continuously met or exceeded. We must also continue to be vigilant in our responsibilities to retain the trust and confidence that our consumers place in us. Standards of Identity for Cocoa and Chocolate products play a very important role in this overall process by both ensuring fairness in the marketplace and by protecting the health of the consumers through defined specifications.