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Bakery-Confectionery and Snacks for the Iraqi Market



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Background and Objectives

After a comprehensive analysis - outlined in the study *The Potential for Food Processing in Iraq* the dairy and bakery sectors have emerged as the most promising for the development of food processing. These priorities, based primarily on a demand analysis of the Iraqi market, have been confirmed in the search for foreign investment conducted by the IIPA (Iraq Investment Promotion Agency), mainly in Europe and Turkey: Both the dairy and the bakery sectors have in fact attracted the attention of foreign investors due to their unquestionable potential.

The study *Bakery-Confectionery and Snacks for the Iraqi Market* is in reality a market research analysis based on specific investor requests and aimed at identifying:

1. The market size;
2. The market segmentation;
3. Iraqi consumer habits related to bakery-confectionery and snack products;
4. The definition of a possible portfolio of products suitable for the Iraqi market;
5. A strategy on how to enter the Iraqi market while minimizing risks and investment.

The study or market research builds on the market data of leading multinational corporations, on extensive interviews with consumers in Iraq, and on data provided by category associations, suppliers, and retailers-distributors. The findings of this study will be included in a confidential market report to investors with the objective of supporting top management in the process of developing a possible investment in Iraq.

Methodology

Realistically, for well known reasons of security, a thorough in depth analysis of the Iraqi market is to some extent limited by the impossibility of conducting extensive and numerically significant store checks in the country. Nevertheless, and as a matter of fact, consumer trends in the sector are increasingly global especially when, as is the case in Iraq, the target group is concentrated among the young population. Global food habits among children and teenagers are remarkably similar all over the world, and therefore tendencies in Europe and in the Middle East are fundamentally relevant in Iraq as well, with perhaps a few exceptions and a certain degree of adaptation. Our analysis will capitalize on our knowledge of global trends, complemented by interviews with Iraqi consumers and the few available data.

We are confident, despite the difficulties in conducting the analysis, that it offers a realistic picture of the bakery-confectionery-snacks opportunity in Iraq, along with firm recommendations concerning the business model and product portfolio required to enter the market successfully.

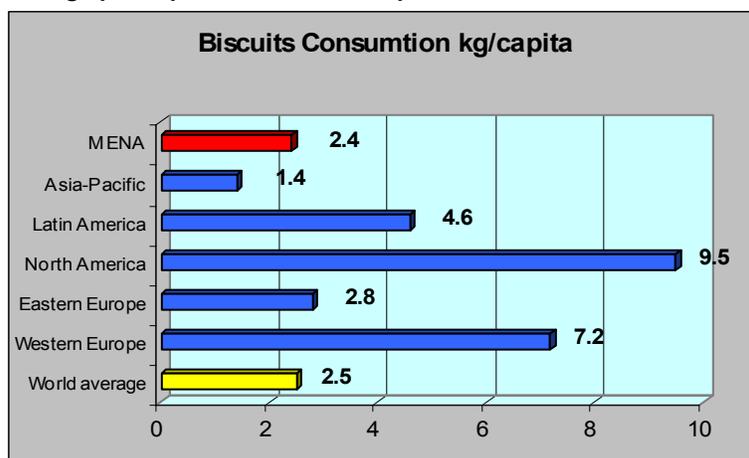
1. BAKERY-CONFECTIONERY AND SNACKS: MARKET SIZE

The market research must cover at least four different, widely overlapping markets both from a production standpoint and the aspect of consumer perception: Biscuits and cakes (bakery); chocolate confectionery (*i.e.*, biscuit wafers coated with chocolate); salted snacks (chips, Cheetos) and bread and bread substitutes. These categories actually compete for the same consumers and largely for the same consumption occasion.¹

Traditionally, in a country like Iraq, characterized by low purchasing power and a hot climate, global trends would suggest biscuits and salted snack will outpace the consumption of chocolate confectionery because of the difficulty in retaining conserving the organoleptic properties of chocolate at high temperatures.

As a general rule, the biscuit segment is an important market everywhere in the world in countries with big young population, as is the case in Iraq. Average per capita consumption of biscuits in the MENA area is growing at a double digit rate and very likely to be about 2.4kg per capita/per year based on published information.

Average per/capita Biscuit consumption in the World



There is general consensus among experts that the MENA area should soon reach the levels of Latin American per capita consumption – now at 4.6kg. These data seem consistent with the data from Turkey, Iran and Syria on biscuit exports to Iraq:

Biscuit Export	Tons	\$Million
Syria	4,000	3
Iran	22,000	16
Turkey	18,000	19
Total	44,000	38

The total official biscuit export figures from Iran, Turkey and Syria to Iraq was of 44,000 tons in 2005, with a total turnover of almost \$40 million. The value data are probably underestimated. The total biscuit market in Iraq could well be as high as 60,000 - 65,000 tons.

¹ Basically this is comprised of away-from-home consumption at school – for children and teenagers – or at work – for adults.

As with dairy, the most active FMCG multinational in the Middle East biscuit and snack market, is the French Danone group:

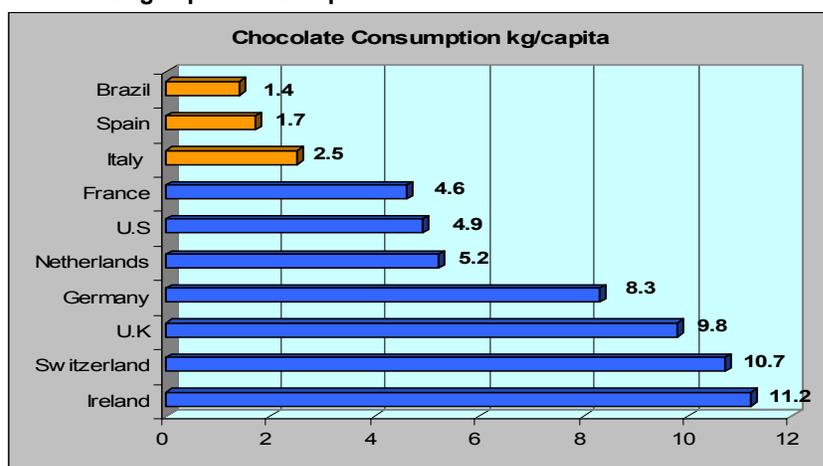
1. Danone is strengthening its position in North Africa and the Middle East through acquisition or raising its participations in biscuits in Egypt (Rachid Group), Tunisia (Sotubi from 20 to 49% with a market share of 60%), Algeria (in partnership with Sotubi), and Morocco (Bimo).
2. Danone CEO Frank Ribout stated clearly in the 2005 annual report that the Middle East has become a top priority for the Groupe because of a biscuit growth rate of almost 15%, outpacing the 10% rate growth in Asia.
3. In a press release dated 04/04/2006, Danone, the world's number two biscuit maker, announced that it will sell its biscuit business in New Zealand, Griffin Food, to concentrate on high growth markets in the Middle East and Asia.

The aggressive acquisition strategy undertaken by Danone – a prominent player in the worldwide biscuit market – underlines the importance of the Middle East and arguably would confirm the potential for biscuits in a country like Iraq.

On the other hand, there are no reliable data in Iraq on chocolate confectionery and snacks. The available data would suggest that both markets are currently limited by inadequate product supply in both quantity and quality.

As far as chocolate confectionery is concerned, it should be remembered that average consumption of chocolate is usually extremely low in most countries with hot climates due to the difficulty of preserving the properties of chocolate at high temperatures.

Worldwide kg/capita consumption



As an example, the Italian manufacturer Ferrero Rocher withdraws all its chocolate confectionery products from trade in summertime throughout southern Europe due to the product's rapid deterioration.

The current demand in Iraq for salted snacks such as chips and extruded products (*i.e.*, Cheetos) appears to be severely hampered by lack of quality suppliers and by faulty logistics: Such snacks are volumetric products with an extremely high cost of transportation (usually >20% of total revenue) and therefore prohibitively expensive to import (unlike biscuits).

All over the world, without exception, the consumption of biscuits and salted snacks is primarily correlated to the number of young consumers (the core target market is 5-14 years), and secondly to purchasing power. For chocolate confectionery however, climate also plays an important role.

The size of the young population (5-14 years) ultimately determines the size of the market, while purchasing power deeply affects market segmentation: Poor countries usually have only a few basic products available in the market. No deep line extension is actually viable because of low demand for sophisticated, expensive products.

2. OVERALL RELEVANT MARKET TRENDS

1. Children and teenagers are the core market for these products: They account for an average of 85% by volume of biscuit, chocolate confectionery and snacks sales.²

Because of its demography, Iraq is set to become an important market for biscuits and salted snacks despite relatively low purchasing power. For chocolate confectionery, on the contrary, the hot temperatures could seriously limit the development of some products despite their appeal to consumers.

Young Population % and Purchasing Power Comparison, 2005

	Egypt	Iran	Iraq	Jordan	Syria	Turkey	UAE	EU25
Pop. < 14 years	33%	26%	40%	34%	37%	25%	25%	16%
PPP GDP/Capita	\$3,900	\$8,300	\$3,400	\$4,700	\$3,900	\$8,200	\$43,400	\$28,100
	Brazil	Bolivia	Peru					
Pop. < 14 years	26%	35%	31%					
PPP GDP/Capita	\$8,400	\$2,900	\$5,900					

Iraq, with only 27 million inhabitants, has a massive young population of almost six million between the ages of 5 and 14, a higher number than Italy with a total population of 57 million. This part of the population will surpass 8 million by the year 2025.

Iraq and Italy Young Population Comparison, 2005-2025

Population in million	Pop (aged between 5-14)		Tot Pop.	
	Iraq	Italy	Iraq	Italy
2005	5.7	5.3	27	57

² The U.K and USA are the only notable exceptions.

2025	8.3	4.3	40	56
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2. Universally, children (from 4 to 8 years) show different consumer habits from teenagers (8 to 14 years). In particular, products adopted by children are strongly rejected by teenagers and labeled as “childish”. Therefore, in order to cover the whole spectrum of the core target, two different lines of products are required.
3. Universally, children have a clear preference for “sweet” over “salted”. This tendency starts reversing from the age of 8 years on. By the age of 12, the trend is totally reversed, while by the age of 14 the consumption pattern turns overwhelmingly salted with total - or at least significant - abandonment of sweet products. Once again, in order to cover the entire market, both salted and sweet lines are required.
4. In most of the world - with Italy and France perhaps the only exceptions - breakfast is turning predominantly “salted”, with little or decreasing consumption of biscuits, cakes, and sweets in general. Even among children, salted products are gaining ground at a fast pace.

3. THE BISCUIT MARKET: TRENDS and INSIGHTS

In developing countries with low purchasing power, usually only four segments achieve considerable volumes: Filled biscuits (e.g. Oreo), wafers, dried plain biscuits (Marias), and cream crackers.



Marias



Wafers



Cream crackers



Filled - Oreo

Filled biscuits are predominantly consumed by children (4 to 8-10 years). They usually account for 75% of total category consumption. Wafers, on the contrary, have their core target among teenagers (10 to 14 years). Dried biscuits (Marias) have no clear target, but are important, because of their low cost in poorer countries. Cream cracker is usually an important category in countries with “spread” habits (butter or margarine) or as a bread substitute (usually for diet purposes, since some consumers perceive them as having fewer calories than bread).

With respect to developing countries, it is also important to keep in mind the following trends:

1. All over the world - and above all in the developing countries - the consumption of butter cookies is decreasing at a very fast rate. In South America, for instance they have a market share of only 6% of the total biscuit market, down from of 18% in the 90's.
2. Special biscuits - more expensive and sophisticated - have a very small share in all developing countries, never higher than 3%.



Special biscuits



3. Marketing efforts to encourage biscuit consumption at breakfast (dipping biscuits into milk) - popular in Italy and to some extent in France - have largely failed.



Biscuits consumed with milk at breakfast

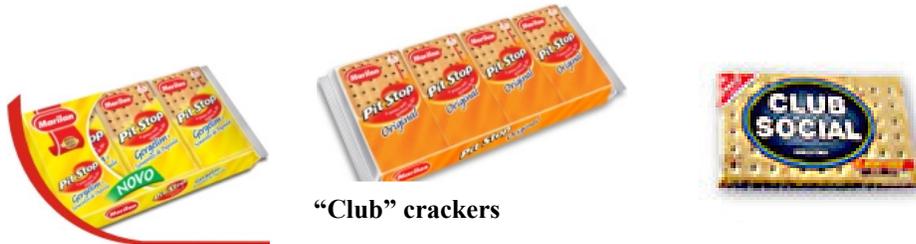
4. In terms of new product development, few novelties have entered the market during the last ten years. Perhaps the most significant phenomenon was the successful launch in many developing countries of a second generation of filled biscuits (referred in the market as “half filled”). They are apparently more successful in gaining some acceptance among teenagers too, as compared to the traditional filled (Oreo) type.



Filled biscuits new generation



5. Away-from-home, consumption is gaining importance; “product snackization” is the marketing terminology for the strategy to gain market share. One of the most successful segment launches as of the last decade was the “club” category. The product is, technically speaking, a plain cracker. The innovation is in the packaging, creating single use portions for take away usage. It has proved extremely popular among young women and as a snack during working hours.



4. BISCUITS IN IRAQ: THE POTENTIAL RANGE

Based on consumer interviews and market analysis, the following peculiarities should be considered:

1. Biscuit consumption at breakfast does not exist;
2. Spreads are not popular in Iraq;
3. The market could be categorized as more salted than sweet;
4. Away from home consumption is by far predominant, therefore only “snack” portions should be considered.

A biscuit range could successfully cover the segment of children and teenagers with filled biscuits and wafers, while dry biscuits (*Maria* type), cream crackers, “club”, and butter cookies seem to have limited appeal and potential. As far as flavors are concerned, only three should be contemplated for filled biscuits at the beginning (chocolate, vanilla, and strawberry) and only two for wafers (chocolate and vanilla).



5. THE MINI-CAKES MARKET: TRENDS – INSIGHTS and CONCLUSIONS

Unlike biscuits, mini-cake trends are not global, and their acceptance is quite uneven around the world. Production-wise, and as far as technology and know-how are concerned, mini-cakes mainly have Italy as a reference. From the production standpoint the mini-cake market is clearly divided into five segments, each requiring a different technology and differentiated production lines:

- Colati
- Sfogliati
- Lievitati
- Crostate
- Pan di Spagna

Colati

Colati (literally “dripped into molds”) are the simplest and cheapest products to produce.



They are popular all over the world (usually referred as plum cakes) but not particularly suitable for countries with high temperatures. They dry out easily and crumble, and are not particularly suitable for filling. They have a short shelf life, deteriorating quickly just 35 -40 days after production.

Sfogliati – Lievitati - Crostate

These are all typically Italian products with uneven acceptance in other countries. Lieviti and sfogliati are also technically difficult to produce and expensive.



Lievitati (leavened)

Crostate

Sfogliati

Pan di Spagna

Pan di Spagna is extremely popular in Italy because of its perceived higher nutritional values as compared to other mini-cakes. It is a capital intensive product, but with cheap direct costs. Outside Italy its acceptance has been limited, since it is considered by most consumers to be too spongy. A more tantalizing version, coated with chocolate, is extremely well accepted in the Italian and southern European markets.



Pan di Spagna



New Trends in Merendine

Consumption of Merendine in the western world is decreasing steadily because of their high percentage of hydrogenated fats. In developing countries, mini-cakes compete unsuccessfully with biscuits because of the price sector. Over the last five years, refrigerated mini-cakes – requiring a cold chain - have been launched in Europe with very positive results in Italy and France.



Refrigerated merendine



In Spain, a product branded as Bollicau has been remarkably successful in combining low cost and consumer acceptance. Bollicau is a simple mini-cake that is cheap to produce, being a plain milk-bread filled with chocolate cream.



Milk bread

6. SALTED SNACKS – TRENDS – INSIGHTS – CONCLUSIONS

Salted snacks are fast becoming the most important category in the bakery-confectionery-snacks market, due to a growing preference among young consumers for salted rather than sweet. As happens in the biscuit market, segmentation is driven by demographics, with specific products for children and teenagers. Basically, the market is made up of the following segments:

- Potato chips – Lay's, Ruffles, or Pringles type;
- Extruded – Cheetos or Fandango type;
- Pellets – Baconzitos type;
- Oven products – in different forms – technically similar to biscuit technology;

Extruded

Extruded products are extremely cheap and easy to produce, requiring low investment and little know-how. In all developing countries they are a popular consumer choice due to low price. In most of countries they account for more than 60% of the entire salted snack market.



Extruded snacks



Most of the extruded snacks in the market derive from maize flour extruded in different shapes and flavored at the end of the process. It is in every respect a simple technology to handle, with no entry barriers other than distribution. Extruded snacks are mainly targeted at children and use cheese or pizza flavors.

Chips

Chips enjoy high acceptance all over the world by both children and teenagers. Chips are expensive to produce, with direct costs double those of extruded products. They require a large quantity of edible oil (chips absorb an average 40% of their weight) and special potato breeds such as Atlantic or Lady Rosee would be difficult to grow in Iraq.

Potato chips also have a limited shelf life, with rancidity developing after 35-40 days from production.

Pringles are prohibitively expensive for developing countries because of the packaging line requirements. Pringles are molded and reconstituted chips made from potato flour. They absorb only 25% of their weight in oil during the frying process and are therefore considered healthier than other chips. The minimum investment for a Pringles production line is well above \$10 million.



Pringles potatoes

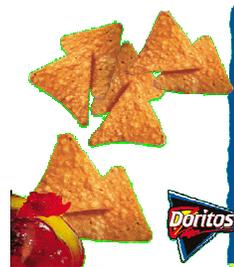


Potato chips



Baked, Biscuit-like Snacks

Baked, biscuit-like snacks are one of the most attractive categories in developing countries due to the fact they require a low investment, are well accepted by consumers, and are easy and cheap to produce. All of the products in the photos below seem suitable for the Iraqi market with the exception of *Doritos*, highly prized by teenagers but expensive and complicated to produce.



Salted biscuit like snacks

Pellets

Pellets are different from extruded products, though most consumers are unable to differentiate between them. Unlike extruded products, they are expensive to produce. Pellets are derived from pasta technology. They require an extrusion at the beginning of the process, and then a second phase of expansion using hot air or by frying.



Pellets have become popular in wealthy countries because of their better nutritional values. They utilize ingredients based on a cereal mix. At this stage of market development in Iraq, they should be categorically discarded for their high cost, high investment, and the complexity of the technology. The only exception are the *Baconzitos* pellets, cheap and easy to produce, and one of the best selling products of Pepsico Inc. in South America. *Baconzitos* concept seems to have potential in Iraq but probably with a different flavor and brand name.

7. CHOCOLATE CONFECTIONERY AND SNACKS

Chocolate based products should be analyzed critically and carefully before considering them for Iraq because of climate – related constraints. As a general rule, pure chocolate is not viable, being more sensitive to high temperatures than compounds obtained from hydrogenated fats. Price is also a constraint affecting demand and product consumption. Multinational companies segment the chocolate confectionery market as follows:

- Bars;
- Candy bars;
- Spreads;
- Bits and others;

Tablets

In all the low-medium purchasing power countries of South America and Asia except Brazil, consumption of chocolate tablets is extremely low. Pure chocolate is almost a luxury product, bought only on special occasions. In most of the low purchasing power countries, chocolate tablets are produced by mixing pure cocoa butter with cheaper

hydrogenated fats or - utilizing a practice forbidden in the EU25 - using compound exclusively.



Chocolate bars



Candy bars

Candy bar is the most popular term in the U.S for confectionery, usually packaged in a bar or log form, often coated with chocolate, and sized as a single-portion snack. The rubric bar includes a wide variety of products, ranging from confections with multiple layers or mixtures of ingredients such as nuts, grains, marshmallow, caramel, cookie, and fudge. Consumers find candy bars to be as attractive as chocolate, but they are cheaper to produce, having little chocolate content. The big disadvantage of candy bars is that they require expensive, inflexible, mono-product production lines. This means that a large investment is required in order to have an adequate range.



Candy bars



In the poorest countries, the most popular candy bars consist of cream-filled wafers, covered in an outer layer of chocolate (*Kit-Kat* type). This product combines a low direct cost – being mainly a wafer – with a reasonable product line investment, especially if wafer products are already in the portfolio and only a chocolate coating machine is required.



Wafers-chocolate coated



Bis



Sem parar by Nestle

In Brasil, the brand *Bis* is enormously popular - even at the level of \$1,800 income per capita - by offering a 150g tray of 20 single usage, individually packed portions. The concept has been copied by many competitors in South America, including Nestle, who launched in 2004 a “me-too” product named *sem parar*.

The alfajores are conceptually similar to the wafer-chocolate coated with the only difference being that they replace wafers with dry biscuits. They generally enjoy good acceptance among consumers but have higher direct costs and require higher initial investment than coated wafers.³

The main constraint on chocolate-coated products in Iraq is the melting of the outer layer of chocolate at temperatures above 26°C, leading to poor product appearance and fingers meddling.



Alfajores snacks



Spreads

Spread “chocolate” creams have always been successful in poor countries. Small single portions – 15-20g – should be the priority for the small disbursements they imply, but also because they minimize product separation side effects.⁴ Spreads - Nutella type cream - are cheap to produce and manufacture and do not require a cold chain. The product does not require refrigerators. Nutella’s only expensive ingredient is hazelnut paste which - at 13% in the original version - is not considered a plus by consumers anywhere but in Italy. In poor countries, spread creams are widely perceived by consumers as good-value-for-money chocolate substitutes.



Chocolate cream

³ The Argentinean confectionery company ARCOR successfully export alfajores to the Middle East.

⁴ With product separation occurring at high temperatures, oils float to the surface.

Bits and Other Chocolate Snacks

Chocolate confectionery contemplates a fascinating, dynamic world with thousands of products available in the market. Despite significant local variations some global trends are also visible: Chocolate eggs (Kinder in the photo below) have enjoyed worldwide success, the only constraint being low resistance to hot temperatures.

The chocolate melting problem is totally solved in the Rogo concept (photo below), where the chocolate ingredient is inside and has no contact with the consumer's fingers. The "cialda" fingers - chocolate filled Rogo - are highly prized in poor countries by both children and teenagers.



Other chocolate snacks

In hot climates, Rogo-type products represent a viable alternative for chocolate lovers. The only potential constraint is the low productivity of the "cialda" machines.⁵ On the other hand, products like the Saray 530, originally launched by *LU-Danone*, show the negative global trend of diminishing attractiveness among young consumers.

8. BREAD AND BREAD SUBSTITUTES

In most of the low-purchasing-power countries, industrial bread consumption – as opposed to fresh baked bread – is disappointing and confined to urban areas. As far as Iraq is concerned, our market research only shows potential for hot dog buns. Buns seem to have relatively high consumption in Iraq, where sandwiches are a popular option for meals, and for snacks consumed by children and teenagers at school. An industrial bun with longer shelf life (at least 1 month) could therefore find considerable acceptance in Iraq and be perceived as a great convenience, since products currently in the market have a shelf life of only two days on average.



Buns



⁵ Rolled wafer.

9. CONCLUSIONS

The recommended product line should cover three distinct consumer targets, each with different requirements:

- Children, often chocolate lovers;
- Teenagers;
- Salted snack lovers;

Based on consumer research conducted in Iraq, on global market trends, and on market data, our recommendations would be the following:

Products mainly targeting children:



Spread cream Nutella type in 15 -20 g with no hazelnut paste



Extruded from maize flour, cheese flavored in flow pack bags 50 - 60g



Cream filled biscuits in package of 50g, chocolate and vanilla



Mini cake dough mix white-brown, 40g

Çeşit / Item 257.2
40gr. x 40

Products mainly targeting teenagers:



Cialda, chocolate cream filled fingers, 30g

Wafer biscuits, bits or fingers 50g, chocolate and vanilla



Wafer biscuits, chocolate-compound coated, 38g

Products targeting salted snack lovers:



**Baconitos type pellets 50g.
A new flavor other than bacon should probably be tested**



Flavored round crackers, 40 - 50g, pizza and cheese flavored and with sesame seed



Fried “pastelinhos” wheat flour, 50g, cheese flavored



In particular:

1. All products offered in a portion size – biscuits \pm 50g, mini-cake 40-50g.
2. Avoid the “flavor-of-the-month” syndrome with initial range of only two or three flavors (chocolate-vanilla cream and possibly strawberry).
3. A mini-cake item such as Saray Ref. 257.2 is a good compromise if the range has to be limited to only one variant: brown-white dough mix usually works well across the spectrum (children-teenagers-adults). A specific product with filled chocolate cream could also be developed, targeting children.
4. An alfajor such as Saray Ref. 111 should only be considered after the launch of a wafer chocolate coated product.