



COPAL COCOA *Info*

A Weekly Newsletter of Cocoa Producers' Alliance

Issue No. 231

14th – 18th May 2007

Cocoa Producers' Alliance

ICCO Daily Cocoa Prices

	ICCO daily price (US\$/tonne)	London futures (£/tonne)	New York Futures (US\$/tonne)
14 th May	2019.84	1059.67	1945.67
15 th May	2001.75	1051.00	1920.00
16 th May	2001.64	1053.67	1924.33
17 th May	1999.23	1054.33	1921.00
18 th May	2054.70	1085.33	1970.00
Average	2015.00	1061.00	1936.00

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Have you had your cocoa today?

**International Financial Futures and Options Exchange (LIFFE)
London Futures Market – Summary of Trading Activities
(£ per tonne)**

Monday 14th April 2007

Month	Opening Trans	Settle	Change	Daily High	Daily Low	Volume
May 2007	1041	1033	-6	1050	1026	2815
Jul 2007	1080	1066	-10	1084	1062	4018
Sep 2007	1072	1058	-9	1072	1050	1319
Dec 2007	1057	1055	-2	1064S	1048S	2982
Mar 2008	1058	1053	-3	1062	1047	2849
May 2008	1065	1060	-3	1065S	1057	88
Jul 2008	1071	1067	-4	1071	1071	2
Sep 2008	1081	1074	-5	1081S	1074	32
Dec 2008	1092	1085	-6	1092S	1088S	24
Mar 2009		1093	-6			0
Totals		1064				14,129

Tuesday 15th May 2007

Month	Opening Trans	Settle	Change	High	Low	Volume
May 2007	1028	1027	-6	1028	1021	623
Jul 2007	1060	1056	-10	1069	1052	4607
Sep 2007	1056	1049	-9	1067	1042	1643
Dec 2007	1053	1048	-7	1065	1041	5564
Mar 2008	1058	1046	-7	1062	1041	483
May 2008	1068	1053	-7	1068	1049	2276
Jul 2008	1068	1060	-7	1068	1068	15
Sep 2008	1082	1067	-7	1082	1067S	432
Dec 2008	1092	1076	-9	1092	1076S	432
Mar 2009		1084	-9			0
Totals		1057				16,075

Wednesday 16th May 2007

Month	Opening Trans	Settle	Change	High	Low	Volume
May 2007		N/A	N/A	N/A	N/A	N/A
Jul 2007	1055	1058	2	1067	1054	3109
Sep 2007	1048	1053	4	1062	1045	973
Dec 2007	1048	1050	2	1056	1046	799
Mar 2008	1043	1048	2	1055	1043	868
May 2008	1049	1055	.+2	1061	1049	626
Jul 2008	1055	1061	1	1055	1055	10
Sep 2008		1069	2			0
Dec 2008	1086	1078	2	1086	1083	12
Mar 2009		1086	2			0
May 2009		1086				0
Totals		1064				6,397

Thursday 17th May 2007

Month	Opening Trans	Settle	Change	High	Low	Volume
May 2007	N/A	N/A	N/A	N/A	N/A	N/A
Jul 2007	1058	1058	0	1065	1051	1953
Sep 2007	1049	1054	1	1061	1049S	638
Dec 2007	1054	1051	1	1056	1048	381
Mar 2008	1051	1050	2	1055	1046	525
May 2008	1060	1056	1	1060	1055	278
Jul 2008	1068	1062	1	1068	1068	10
Sep 2008	1076	1070	1	1076S	1069S	37
Dec 2008	1086	1080	2	1086	1078S	86
Mar 2009		1088	2			0
May 2009		1088	2			0
Totals		1066				3,908

Friday 18th May 2007

Month	Opening Trans	Settle	Change	High	Low	Volume
May 2007	N/A	N/A	N/A	N/A	N/A	N/A
Jul 2007	1057	1090	32	1094	1056	6,015
Sep 2007	1053	1086	32	1087	1052S	1,555
Dec 2007	1053	1080	29	1085	1052S	1,835
Mar 2008	1046	1080	30	1082S	1046	829
May 2008	1058	1086	30	1080	1058S	133
Jul 2008		1092	30			0
Sep 2008	1072	1099	29	1102S	1072S	112
Dec 2008	1103	1109	29	1114	1103	55
Mar 2009		1116	28			0
May 2009		1116	28			0
Totals		1095				10,534

Average for the week	1069					10209
Total for the week						51,043

New York Board of Trade
(New York Futures Market – Summary of Trading Activities)
(US\$ per tonne)

Monday 14th April 2007

Month	Open	Price	Change	High	Low	Volume
May 2007	1848 ^B 1980 ^A	1958	8	1970	1952	14
Jul 2007	1937 1939	1926	-9	1940	1908	4503
Sep 2007	1950 ^B 1960 ^A	1945	-10	1946	1922	743
Dec 2007	1970 ^B 1980 ^A	1965	-10	0	0	799
Mar 2008	0 0	1985	-11	0	0	176
May 2008	0 0	2001	-10	0	0	42
Jul 2008	0 0	2019	-10	0	0	10
Sep 2008	0 0	2040	-10	0	0	10
Dec 2008	0 0	2047	-10	0	0	15
Mar 2009	0 0	0	0	0	0	0
Totals		1987				6312

Tuesday 15th May 2007

Month	Open	Price	Change	High	Low	Volume
May 2007	1940 0	1931	-27	1940	1920	68
Jul 2007	1905 1910	1901	-25	1913	1886	5646
Sep 2007	1922 ^B 1930 ^A	1922	-23	1933	1915	613
Dec 2007	0 0	1942	-23	1942	1935	4330
Mar 2008	0 0	1963	-22	0	0	198
May 2008	0 0	1979	-22	0	0	24
Jul 2008	0 0	1997	-22	0	0	0
Sep 2008	0 0	2017	-23	0	0	0
Dec 2008	0 0	2024	-23	0	0	0
Mar 2009	0 0	0	0	0	0	0
Totals		1964				10879

Wednesday 16th May 2007

Month	Open	Price	Change	High	Low	Volume
May 2007	0 0	0	0	0	0	0
Jul 2007	1892 0	1900	-1	1920	1890	4122
Sep 2007	0 0	1921	-1	1932	1928	524
Dec 2007	0 0	1941	-1	1955	1945	837
Mar 2008	0 0	1961	-2	0	0	280
May 2008	0 0	1980	1	0	0	109
Jul 2008	0 0	1997	0	0	0	13
Sep 2008	0 0	2015	-2	0	0	1
Dec 2008	0 0	2023	-1	0	0	43
Mar 2009	0 0	0	0	0	0	0
Totals		1967				5929

Thursday 17th May 2007

Month	Open	Price	Change	High	Low	Volume
May 2007	0 0	0	0	0	0	0
Jul 2007	1900 1903	1894	-6	1912	1892	4240
Sep 2007	0 0	1918	-3	1931	1921	1885
Dec 2007	1940 1942	1938	-3	1942	1940	860
Mar 2008	0 0	1957	-4	1963	1963	354
May 2008	0 0	1973	-7	0	0	15
Jul 2008	0 0	1991	-6	0	0	3
Sep 2008	0 0	2010	-5	0	0	3
Dec 2008	0 0	2018	-5	0	0	55
Mar 2009	0 0	0	0	0	0	0
Totals		1962				7415

Friday 18th May 2007

Month	Open	Price	Change	High	Low	Volume
May 2007	0 0	0	0	0	0	0
Jul 2007	1905 1912	1947	53	1957	1905	7663
Sep 2007	0 0	1970	52	1970	1940	1286
Dec 2007	0 0	1990	52	1999	1970	628
Mar 2008	0 0	2010	53	1990	1982	256
May 2008	0 0	2027	54	0	0	0
Jul 2008	0 0	2045	54	0	0	0
Sep 2008	0 0	2064	54	0	0	0
Dec 2008	0 0	2072	54	0	0	30
Mar 2009	0 0	0	0	0	0	0
Totals		2016				9863

Average for the week	1979				10100
Total for the week					40,398

Spot Prices (US\$ per tonne)

	14 th May	15 th May	16 th May	17 th May	18 th May
Main Crop Ghana, Grade 1	2298	2273	2272	2271	2324
Main Crop Ivory Coast, Grade 1	2229	2204	2203	2197	2250
Main Crop Nigerian, 1	2201	2176	2175	2167	2220
Superior Arriba	2734	2709	2708	2677	2730
Sanchez f.a.q.	2211	2186	2185	2181	2234
Malaysian 110	1926	1901	1900	1894	1947
Sulawesi f.a.q.	1993	1968	1967	1964	2017
Ecuador Cocoa Liquor	3659	3612	3610	3630	3732
Pure Prime Press African Type Cocoa Butter	5566	5494	5491	5493	5646
10/12% Natural Cocoa Press Cake	950	938	937	903	928

Source: Cocoa Merchants' Association

News

Health & Nutrition

New Process to Make Cocoa Powder Links to Higher Amount of Healthful Compound

15/05/07 Scientists in Spain are reporting development of a new process to make cocoa powder with higher amounts of the healthful chemical compounds linked to chocolate's beneficial effects. The study is scheduled for publication in the May 30 issue of ACS' Journal of Agricultural and Food Chemistry.

Juan Carlos Espin de Gea and colleagues report that the new cocoa powder contains levels of some flavonoids 8 times higher than conventional cocoa. They achieved the higher flavonoid content by omitting the traditional fermentation and roasting steps used in the processing of cocoa beans. Those steps destroy some flavonoids, which are natural antioxidants.

Researchers used the flavonoid-enriched cocoa powder in a clinical trial to determine whether the compounds were bioavailable - in a form that humans can absorb. In the trial, six healthy volunteers consumed a milk drink made with flavonoid-enriched cocoa. The same volunteers later drank chocolate milk made from traditional cocoa. Blood and urine tests established the bioavailability of flavonoids in the enriched-milk drink, showing that people do absorb higher levels of the compounds. Based on the results, researchers suggest further clinical trials on the health benefits of flavonoid-enriched cocoa powder.

Health line

By TIMES STAFF, May 15, 2007

Good news from the lab, chocoholics: Researchers have proof that a different process to make cocoa powder yields far higher amounts of flavonoids, the natural antioxidants that provide a health benefit to eating chocolate. Spanish scientists report their version has up to eight times as much flavonoids as from the standard fermenting and roasting of cocoa beans.

New health site

Steve Case, AOL founder, has created a free online health site focused on family caregivers. RevolutionHealth.com uses input from the Cleveland Clinic, Harvard Health Publications, MayoClinic.com and the Society for Women's Health Research. Features include the Symptom Checker, to help parents learn what may be ailing their kids, and Medicine Chest, with assessments of prescription medicines.

BMI's for kids

A new study finds that many pediatricians are failing to take Step 1 in the manual of fat prevention - calculating a child's body mass index, or BMI. Researchers in Cincinnati found that pediatricians had calculated the BMI for roughly one in 20 children ages 5 to 11. The American Academy of Pediatrics has recommended that pediatricians screen all patients for risk of obesity by calculating their BMI every year.

By the numbers

- 50 Percent of women in a poll who say they've refused an invitation rather than be seen in a swimsuit.
- 18 Percent who would rather go to the dentist than wear a bathing suit.
- 83 Percent who believe they're judged by other women when in a swimsuit.

Source: Survey of 500 women, 18-49, in the June Fitness magazine.

Fighting fractures

An estimated one in four men and one in two women over 50 will suffer a fracture due to osteoporosis. Some bone-strengthening tips from GTC Nutrition: Consume a diet rich in calcium (the daily recommended allowance is 1,000mg to 1,300mg, depending on age); and exercise. It's also important to note that your body can't absorb calcium without vitamin D, which comes from diet or the sun.

On the calendar

May 23, 6-8 p.m., Treatment of Insomnia, presented by the USF Department of Behavioral Medicine, on the Tampa campus. Free; reservations required. Call (813) 974-6967.

May 24, 10 a.m.-3 p.m., free program on Alzheimer's Disease: What Caregivers Need to Know. Presented by USF Suncoast Alzheimer's & Gerontology Center; at First Baptist Church of Plant City, 503 N Palmer St. Registration is required. Call Eileen Poiley at (813) 974-4355

Chocolate Toothpaste : Extract Of Tasty Treat Could Fight Tooth Decay,

Tulane University - <http://www.tulane.edu>, 17 May 2007

For a healthy smile brush between meals, floss regularly and eat plenty of chocolate? According to Tulane University doctoral candidate Arman Sadeghpour an extract of cocoa powder that occurs naturally in chocolates, teas, and other products might be an effective natural alternative to fluoride in toothpaste. In fact, his research revealed that the cocoa extract was even more effective than fluoride in fighting cavities.

The extract, a white crystalline powder whose chemical makeup is similar to caffeine, helps harden teeth enamel, making users less susceptible to tooth decay. The cocoa extract could offer the first major innovation to commercial toothpaste since manufacturers began adding fluoride to toothpaste in 1914.

The extract has been proven effective in the animal model, but it will probably be another two to four years before the product is approved for human use and available for sale, Sadeghpour says. But he has already created a prototype of peppermint flavored toothpaste with the cavity-fighting cocoa extract added, and his doctoral thesis research compared the extract side by side to fluoride on the enamel surface of human teeth. Sadeghpour's research group included scientists from Tulane, the University of New Orleans, and Louisiana State University's School of Dentistry.

Do Cocoa and Tea Intake Effect Blood Pressure?

By: Cindy Andrews, Wednesday, May 16th, 2007

Is Chocolate good for you?

A recent study conducted by the Department of Pharmacology, University Hospital of Cologne, Cologne, Germany had some interesting conclusions regarding the intake of cocoa and tea on blood pressure. Their study included 173 subjects eating cocoa products daily for a two week period and 343 subjects drinking either black or green tea daily for the duration of 4 weeks. These dietary studies indicated that consumption of foods rich in cocoa may reduce blood pressure, while tea intake appears to have no effect.

Business & Economy

Equatorial Guinea to kick start agriculture

(AFP), 16-MAY-07

Malabo - Oil-rich Equatorial Guinea plans to kickstart its farming sector through a \$3.5mn project financed through its newly found petroleum wealth, state radio said on Tuesday. The money will also be used to revamp the Institute for Promoting Agriculture which, created in 1996, "has not achieved its goals," the radio said. According to experts, Equatorial Guinea's agricultural output only meets a third of national demand.

The former Spanish colony depended on cocoa and coffee exports to eke out a living but the discovery of offshore oil in the 1990s changed the nation's fortunes, catapulting it to become Africa's third largest oil exporter. Cocoa production in 2005 plummeted to 1993 tons against 3628 tons the previous year, according to the Malabo chamber of commerce.

Cocoa Industry Board Projecting to Export 800 Tonnes by September

KINGSTON (JIS), Thursday, May 17, 2007

The Cocoa Industry Board is projecting that it will export between 700 and 800 tonnes of cocoa by September this year. This projection is part of a five-year plan by the Ministry of Agriculture and Lands to export some 1,400 tonnes of the commodity annually. Secretary/Manager for the Cocoa Industry Board, Naburn Nelson told JIS News that in order to achieve the five-year target, a number of key strategies were being put in place to aid the process. "One of the main strategies is to ensure that the real returns to farmers are kept just above the inflationary gap and to ensure that their [farmers] real returns are worthwhile," he explained.

Additionally, he said that the organization was looking at increasing the density of cocoa plots to some 400 plants per acre. "Since we have implemented this plan, we have already distributed some 10,600 seedlings from October to April this year," he noted. To obtain sustainability of the upgraded plants, the company will be looking at providing assistance to farmers by supplying fertilizers, rat baits and offsetting the cost for labour.

"We are now working with an international organization to provide most of the funding required. We are well advanced with the discussion and we are preparing a project document to submit to the Ministry of Agriculture and Lands, so they can forward it to this international organization," Mr. Nelson pointed out.

He also noted that the cleaning of cocoa plots was another major area of concern for the organization and the Board was currently working with a number of farmers to address this problem. Work, he said, was also being done to encourage farmers to plant all cocoa trees in set plots. "We are ensuring that farmers plant in designated areas. These include the parishes of St. Thomas, St. Mary, St. Catherine and Clarendon which are the main cocoa producing areas," he added. Mr. Nelson implored farmers to use the seedlings that are grown by the Cocoa Industry Board, as these seedlings were of the highest quality. He said that the seedlings were being distributed to farmers free of cost.

Production & Quality

Chocolate gets into a sticky mess

Purists battle industry over a federal proposal to allow substitutes for cocoa butter in candy

By Michael S. Rosenwald, The Washington Post, May 13, 2007

WASHINGTON -- Rarely do documents making their way through federal agencies cause chocolate lovers to melt down. Then came Appendix C.

Accompanying a 35-page petition signed by a diverse set of culinary groups -- juice producers, meat canners and the chocolate lobby -- the appendix charts proposed changes to food standard definitions set by the Food and Drug Administration, including this one: "use a vegetable fat in place of another vegetable fat named in the standard (e.g., cacao fat)."

Chocolate lovers read that as an assault on their palates. That's because the current FDA standard for chocolate says it must contain cacao fat -- a.k.a. cocoa butter -- and this proposal would make it possible to call something chocolate even if it had vegetable oil instead of that defining ingredient.

Chocolate purists have undertaken a grass-roots letter-writing campaign to the FDA to inform the agency that such a change to the standards is not OK with them.

The Web site of California chocolate-maker and traditionalist Gary Guittard has led the counterassault (DontMessWithOurChocolate.com).

Guittard said some big chocolate manufacturers favor the proposed change in regulations because they want to use less expensive vegetable fat, which can contain trans fats. If the change is approved, products would still need to contain chocolate liquor, the ground-up center of the cocoa bean. But a confection such as PayDay Chocolatey Avalanche, which doesn't contain cocoa butter, could be called PayDay Chocolate Avalanche.

Kirk Saville, a Hershey's spokesman, told the Harrisburg Patriot-News "There are high-quality oils available which are equal to or better than cocoa butter in taste, nutrition, texture and function, and are preferred by consumers."

Nick Malgieri, director of the baking program at the Institute of Culinary Education in New York, pointed out that replacing cocoa butter would be optional. "No one is going to force a high-class chocolate-maker to add vegetable fat to chocolate," he said.

The Functional Confectionery Market: How Sweet It Is

Nutraceuticals World, By Rebecca Wright – Editor

2007-05-14 - In today's marketplace, there are three reasons companies choose the confectionery route for adding healthy ingredients. In the first case, companies firmly established in the confectionery segment are adding healthy ingredients to their brands in an effort to differentiate them—a good example would include Jelly Belly's new Sport Beans product. Also playing in the confectionery segment are companies searching for alternative delivery systems for their health ingredients—a good example would include Flintstones Vitamins, which recently launched a "gummi" version to increase its appeal to children. Lastly, there are companies seeking to exploit the inherent health benefits of their confectionery products—a good example would include the recent boom in dark chocolate. Whatever the classification, most experts agree that functional confectionery

continues to pique the interest of both companies and consumers who are looking forward to the innovative days ahead.

Sweet Revelations

According to a report released last year by Leatherhead Food International, Surrey, U.K., the driving force and most innovative area within the confectionery industry has been health. But just as functional foods make up a very small percentage of the food products out there, functional confectionery too makes up only a very small portion of overall confectionery sales. Jenn Ellek, director of trade communications and marketing, National Confectioners Association (NCA), Vienna, VA, says the breakdown of the confectionery market, a nearly \$29 billion industry, includes three major categories: chocolate (60%), gums/mints (11%) and non-chocolate candies (29%).

Currently, one of the most popular vehicles for functional ingredients is gum, which is being utilized not only for its appeal as a unique delivery system, but also as a way in which to improve the delivery of the health ingredient in question. Many studies have shown that gum can get certain ingredients into the bloodstream faster than other delivery systems like nutrition bars or functional beverages. In fact, Ms. Ellek said, Wrigley just patented a gum vehicle for Viagra for this very purpose.

Last year, Wrigley unveiled the Wrigley Science Institute to study whether chewing gum may help consumers as a tool in weight management, stress relief and increasing alertness and concentration. At the time, Wrigley claimed chewing gum was the number one snack choice among U.S. adults aged 18-54, and that new studies might provide even more motivation to chew gum. The company had planned in 2006 alone to support at least 10 studies investigating the health benefits of chewing gum. Since this announcement, however, Wrigley has issued no new information regarding outcomes of any of the studies originally discussed. In addition, no new or existing brands are touting the addition of “functional” ingredients.

Philippe Levesse, project manager, Technology & Applications Development, Roquette, Keokuk, IA, surveyed recent product launches and said the numbers are still pretty low but increasing when it comes to fortified confectionery products. He said products claiming to possess vitamins and minerals accounted for 3% of launches in confectionery, and 4% of the launches in chewing gum. He also noticed energy being touted in 5% of chewing gum launches, with most products using caffeine or ginseng as the energy source. Lastly, he said green tea is being highlighted in 6% of chewing gum launches.

Not to be forgotten are those products trying to create a “healthier” image for themselves by including less or no sugar. Within the sugar-free candy category, Ms. Ellek says gum reigns supreme. She also continues to see a lot more sugar-free lollipops, as well as candies opting to use fruit juice and fruit juice blends as opposed to artificial flavorings.

Mints and gums are becoming popular vehicles for energy. According to Ms. Ellek, this is because these types of products are much more portable than a drink and come at a fraction of the price.

A good example of a portable energy product is Shock-A-Lots, a product that consists of a coffee bean surrounded in dark chocolate and topped off by a candy coating. This product is the brainchild of Shock Coffee, which was looking for an alternative delivery system for its coffee beans. Instead of getting a buzz by drinking Shock’s coffee varieties, the company came up with a confectionery product that packs the equivalent of two cups of coffee in one 1-oz. pack of the candy-covered beans.

Another confectionery company capitalizing on the portable energy trend is Jelly Belly, Fairfield, CA. Its goal is to attract the sports nutrition crowd with a new product it calls Sport Beans. Tomi Holt, company spokesperson for Jelly Belly, says the company broke ground when it created this product by jumping the divide between energy and candy products.

One of the interesting asides is the little known background on how the product came to be. According to Ms. Holt Jelly Belly chairman Herman Rowland, a fourth generation candyman, was intrigued by the idea of a product named “sport beans.” His own experience as a swimmer in high school was that the coach gave the team honey just before they went into the water during competitions. He knew energy came from simple sugars and was helpful for athletes. He also recognized a lot of the sports products on the market used the vary same ingredients the company was using to make the candy. The company was sponsoring a professional cycling team

that was using Jelly Belly beans, and they began asking the team what else might be helpful to their performance. From there a variety of formulas were developed and tested before the official launch of Sport Beans.

Sport Beans jelly beans are formulated with electrolytes, carbohydrates and vitamins B and C to sustain and replenish energy levels during intense exercise. Further, the product is intended to maximize performance and ensure ideal portion control. Tested and endorsed by elite endurance athletes, Sport Beans are available in Lemon Lime, Fruit Punch, Orange and Berry Blue varieties.

Speaking of testing, researchers from the University of California Davis Sports Medicine Program recently found Sports Beans to be just as effective as popular sports drinks and gels in maintaining blood sugar levels and improving exercise performance among competitive endurance athletes. Sixteen cyclists and triathletes between the ages of 23 and 45 participated in an 80-minute period of moderately intense exercise, followed by a series of four 10-kilometer time trials. During the study, subjects ingested three different kinds of carbohydrate supplements (drink, gel and Sports Beans jelly beans) or water only. The athletes achieved 32-38 second faster times in the trials with the carbohydrate supplements than they did while consuming only water. In addition, the athletes completed the time trails with the highest average “power outputs”—the amounts of force applied to the bicycle pedals to go faster—with Sports Beans jelly beans. According to Jelly Belly no study had previously assessed the benefits of sports gels or Sports Beans jelly beans.

Pondering Product Positioning

One factor to consider when developing a healthy confectionery product is where to shelve these products in stores. In other words, do you shelve healthy confectionery products in the candy aisle or in the health and beauty aisle? Also, who should companies target with these products—i.e., kids or their moms? Lastly, what distribution channels make the most sense for these products, mainstream grocery or smaller venues like coffee shops or gas stations?

Until recently, according to market research firm Mintel, Chicago, IL, most functional gum and mint products have focused on close-in benefits such as cavity prevention, mouth cleaning and, most recently, teeth whitening. With the exception of smoking cessation gum—which, arguably, is viewed by consumers primarily as medication rather than gum—products with “further-out” benefits have not been met with much success. For example, Mintel pointed out, “Wrigley discontinued its Stay Alert caffeine gum and Surpass antacid gum due to disappointing performance; it turned out that heartburn relief and energy did not ‘fit’ with confections in the minds of consumers. In addition, retailers were faced with a dilemma of where to place such products—in the candy aisle or with antacids? As a result, many large companies have been hesitant to launch products with health claims.” However, Mintel believes the tide is starting to turn as functional foods and beverages grow in popularity and become more mainstream. “We are starting to see more gum and mint products offering ‘further-out’ benefits such as energy and weight loss. At the same time, these items are moving from health food stores and getting distribution in mainstream channels,” the market research firm noted in its January 2006 report, “Gums, Mints & Breath Fresheners.”

Regardless of where these types of products end up, Bob Boutin, owner, Knechtel, Inc, Skokie, IL, firmly believes there needs to be some education in place, especially since there is a health proposition attached. And because some of these products are premium priced, consumers need to know why they should spend the extra money for them. “Consumers have to be educated as to the value of these health ingredients,” he said.

Unfortunately, once ingredients hit a point of critical mass, other players will flood the market with less efficient forms. This is precisely what’s happening with zinc, according to Mr. Boutin. “Zinc gluconate is used for lozenges and sprays, but recently less than reputable companies have come out with products containing zinc chloride, which is a form that is not as bioavailable,” he said. “This is ruining the zinc market.”

Another popular functional ingredient is xylitol, which is very well known in Europe. Over 25 years of testing in widely different conditions confirm that xylitol is the best sweetener for teeth, according to Xylitol.org. “Xylitol use reduces tooth decay rates both in high-risk groups (high caries prevalence, poor nutrition and poor oral hygiene) and in low risk groups (low caries incidence using all current prevention recommendations),” the website said. “Sugar-free chewing gums and candies made with xylitol as the principal sweetener have already received official endorsements from six national dental associations.”

Xylitol continues to gain ground in the U.S., especially in the gums category. But it may wander to other confectionery categories in the future due to its low glycemic index. In fact, touting the glycemic index of products is something Mr. Boutin sees happening in the future for a variety of confections.

Globally speaking, Mark Fanion, communications manager, Fortitech, Inc., Schenectady, NY, said the U.S. and Europe definitely represent the most potential for the development of fortified confections, while Japan, France and Italy have very small confectionery markets. “Some of the more mature markets for functional confections fall within parts of Western Europe and the U.K.,” he said. “In these areas, sugar-free chewing gum with added nutrients is very popular with marketing campaigns specifically focusing on promoting oral care. In general, the global confections market should continue to grow with new research substantiating the health benefits of new functional food ingredients.”

Chocolate: Health Wonder of the Modern World

The clear frontrunner in the healthy confectionery game is chocolate, more specifically, dark chocolate. Overall, NCA’s Ms. Ellek says growth over the last two years has been steady at 9% for chocolate. She said the real superstars include premium/gourmet chocolate, organic chocolate and dark chocolate, which have grown 30% over the last two years.

It’s hard to talk about the chocolate category without mentioning the efforts of Mars Incorporated (Hackettstown, NJ) or Hershey’s (Hershey, PA), especially since they are primarily responsible for pursuing the science behind the health benefits of chocolate and actively engaging the public in their educational endeavors.

According to Mars, Inc., chocolate is made from cocoa seeds. These seeds, more commonly referred to as cocoa beans, come from cocoa pods, which are the fruit of the cocoa tree, *Theobroma cacao*. Mars claims that since chocolate is a plant-based food, it contains many of the same nutrients as other plant-based foods, including flavanols. “There have been numerous studies conducted with cocoa flavanol containing foods that have shown positive effects on blood pressure, enhanced flexibility of blood vessels, insulin sensitivity and glucose tolerance, as well as platelet function,” the company says on its website. “While these studies are preliminary in nature, they provide promising support for the concept that the consumption of flavanol-rich foods, including cocoa flavanols, may support cardiovascular health.” Indeed, to date several studies flaunting the health benefits of chocolate have already appeared in high profile peer reviewed journals such as *Thrombosis Research*, *JAMA* and the *Journal of the American Dietetic Association*.

Besides the inherent “goodness” of chocolate related to its flavanol, cocoa, fiber and antioxidant content, companies are going a step further and adding ingredients like omega 3 fatty acids to further bolster the health benefits. A recent example is Botticelli’s Choco-Omeg, which is a line of chocolate bars launched last year consisting of variations with omega 3’s, calcium and choline.

Gale Rudolph, vice president—Functional Foods, Dynamic Confections, Salt Lake City, UT, makers of Choco-Omeg, claims the company experimented with the chocolate delivery system due to saturation in the nutrition bar sector. “Our company has always been big with chocolate and hard candies, and we do a lot of contract manufacturing for other companies,” she said. “Because the bar market was so saturated we decided to move on to another delivery form.”

Ms. Rudolph says further that the company decided to go beyond the health benefits of chocolate by adding algal-source omega 3’s. “We focused on the chocolate first and then the nutritional positioning,” she commented. “I don’t think you can just go out there and tout the ingredients—you need to start with the chocolate product first. We decided to shelve Choco-Omeg in the nutrition bar section because the consumer looking for M&Ms isn’t looking for a product like Choco-Omeg, nor are they willing to pay a premium for it. We see Choco-Omeg as an evolution of the bar category and the confectionery market.”

Since launching its flagship CocoaVia product several years ago, Mars has been busy developing new variations that include everything from snacks to beverages. Its latest creations revolve around milk chocolate products that contain the same health-promoting flavanols as its dark chocolate counterparts. The new products, launched last September, include CocoaVia Milk Chocolate Bars, CocoaVia Milk Chocolate Bars with Almonds and CocoaVia Milk Chocolate-Covered Raisins. During the same time, the company unveiled its first beverage offering—CocoaVia Rich Chocolate Indulgence Beverage. Made with 70% skim milk, it contains 100 mg of cocoa flavanols—the same amount in the original dark chocolate varieties of CocoaVia.

Meanwhile, Hershey expanded its “Goodness Chocolate” portfolio in late March with the debut of Hershey’s Antioxidant Milk Chocolate and Hershey’s Whole Bean Chocolate. These chocolates join Hershey’s Extra Dark Chocolate and Hershey’s Sticks brands in offering consumers Hershey’s chocolate with good-for-you benefits.

“Consumers are very interested in the goodness benefits of chocolate, including the antioxidants found naturally in dark chocolate,” said Michele Buck, senior vice president and chief marketing officer, The Hershey Company. “This interest is driving explosive growth in dark chocolate. Now, Hershey’s Antioxidant Milk Chocolate and Hershey’s Whole Bean Chocolate bring the goodness benefits of dark chocolate to the broader milk chocolate category.”

The company claims that its Antioxidant Milk Chocolate features more flavanol antioxidants than the leading dark chocolate—260 mg of flavanol antioxidants per 40 gram serving vs. 110 mg in the leading dark chocolate. Hershey’s Whole Bean Chocolate is made with the whole cocoa bean to create a mildly sweet, smooth and delicious chocolate that is lower in sugar—40% less than the leading milk chocolate bar—and high in fiber and antioxidants. One serving of Hershey’s Whole Bean Chocolate has seven grams of fiber and 180 mg of flavanol antioxidants per 40 gram serving.

Steve Laning, director of technical services, ADM Cocoa North America, Decatur, IL, acknowledges the high interest in chocolate these days, but claims the scientific substantiation is still in its infancy. “Certain cocoa powder and chocolate products are being ‘associated’ with good health, but there are no related approved health claims. These ‘associations’ are in part the result of numerous research reports from around the globe associating cocoa and/or chocolate consumption with a variety of potentially good health outcomes, most of which are related in some way to good cardiovascular health,” he said. “While very exciting, these studies are far from conclusive and even farther from the substance required to achieve health claim status. Nevertheless, even without health claims, the news is getting out and consumers are showing their interest.”

Formulation Trends

While candy products can serve as excellent carriers for health ingredients, most formulators maintain that adding nutraceutical ingredients to confectionery applications requires a certain degree of sophistication. “Many nutraceuticals don’t lend themselves well to the manufacturing process,” said Knechtel’s Mr. Boutin, adding that the user-friendliness and stability of certain nutraceuticals will ultimately drive where most products can be successful in the future.

From a taste standpoint, Mr. Fanion of Fortitech says confections can easily cover up off-taste notes because of the added flavors and/or diversity of flavors you can get in a candy bar or confectionery product. He said, “It’s much easier to overcome the fortification taste hurdles using a gummi bear or chocolate bar compared to water, for example.”

Fortitech has taken notice of the trend in functional candies/sweets over the years and has developed several prototypes for various shows across the globe. Some of these creations have included ice creams featuring a variety of vitamins, minerals and plant extracts, topped with a fortified chocolate topping. Speaking of chocolate, the company has also showcased a variety of offerings, including a fountain of chocolate blended with more than 15 essential vitamins and minerals. The company has also developed chocolate clusters that address specific health issues, such as brain, heart and bone health. Besides strong antioxidant profiles, these clusters have also featured CoQ10, lycopene and folic acid.

In terms of formulation direction, Mr. Levresse from Roquette believes companies are working toward the area of glycemic index. Roquette offers maltitol under the Maltisorb brand name, which Mr. Levresse claims is the closest to sugar in taste and ease of processing—it is also prebiotic, low glycemic and a source of fiber. Roquette also offers Nutriose soluble fiber, which can be used to make low glycemic and reduced sugar confections.

Keys to a Successful, Innovative Future

Although opportunities in the healthy confectionery segment remain attractive, companies must keep in mind that it is still a risky proposition for some consumers who may find it hard to digest that an indulgence can actually be good for them or their children. Offering an optimistic point of view about this issue was Fortitech’s Mr. Fanion. “Consumers are always going to eat candy and chocolates, so as the word spreads of the potential health benefits of fortification, we expect consumers to purchase more fortified/ functional products. There is still some confusion, but we see this simply as part of a learning process for the general public who may not fully understand fortification,” he said. “Progress is being made and more people seem to understand how certain nutrients can benefit them—regardless of the application type.”

Opportunities aside, Mr. Fanion also emphasized the need to stress moderation with consumers. “Consumers need to be responsible for their own actions and not go out and eat a half-pound of dark chocolate assuming this will improve their cardiovascular health—just because it’s fortified with antioxidants.”

Ms. Ellek of the NCA agreed. “Functional is fine and good, but at the end of the day candy is candy. It is a product that should be consumed in moderation and viewed as a treat or indulgence,” she said.

Given the education gap and consumer confusion, would functional confectionery products benefit from building a body of research behind them? Roquette’s Mr. Levesse certainly believes so. “Look at what science has done for chocolate,” he said. “I think it would be very useful to build the science behind product applications—the more evidence there is, the easier it is to get the message across.”

Jelly Belly’s Ms. Holt assessed consumer understanding in the context of Sport Beans. “The endurance athlete really knew what Sport Beans were. With the normal consumer, however, the company really had some explaining to do,” she said. “As far as research goes, I don’t know that it’s necessary but it certainly helps.”

Mr. Fanion also discussed research as a means of education. “As more research is done on the benefits of fortification, I think people worldwide will begin to understand better what they should and should not be eating,” he said. “Functional confections represent a very specialized sector of the functional foods industry and should probably still be viewed as just a sweet treat for consumers with some added nutrition inside.”

Although confectionery manufacturers were late in visualizing the role nutraceuticals could play in this market, Knechtel’s Mr. Boutin believes a lot of these companies will welcome them as a way in which to grow their businesses. “I think companies assumed these nutraceutical ingredients would fade in popularity, but they haven’t. By and large you will definitely see the confectionery industry embrace healthy ingredients in the future,” he said.

But the adoption of healthy confectionery won’t stop there. NCA’s Ms. Ellek believes companies from several different industries will be using the candy-making process to put their items on the shelf in the near future.

Mintel believes while there has been a lot of activity in the functional arena, it remains to be seen whether functional will become a sizable segment in the gum and mints market. To date, the market research firm claims most functional gum and mint products have come from smaller companies. Bigger companies, it says, continue to struggle with adding functional benefits to existing brands, fearing that new benefits will compete with—and perhaps detract from—the brand’s core positioning. In addition, there is still a question of whether functional benefits like energy and weight management “fit” with confections in consumers’ minds.

Lastly, Mintel thinks product positioning will remain a problem—should functional candies be placed in the candy section or, in the case of weight management gum, in the diet aid section? Despite these challenges, Mintel expects the pace of functional gum and mint launches to increase in the next few years as manufacturers seek to differentiate themselves from the competition.

Labour Issues

Ghana addresses cocoa labour issues

By Catherine Boal, 15/05/2007

The Ghanaian government is continuing its investigation into labour practices in the country's cocoa industry with the publication of a report into child labour. Ghana is the world's second largest cocoa growing region and many major manufacturers have invested in the area to ensure a steady and stable supply chain. Earlier this year, Swiss processor Barry Callebaut extended operations at its facilities in the country - adding a new processing line to double production.

According to the International Cocoa Organisation (ICCO) the country's commercial crop in 2005/06 reached a record high of 646,000 tonnes. But, with cocoa growing spread across around 600,000 small farming communities, unsafe labour practices are a major concern for the Ghanaian government.

Deputy Minister with the Ministry of Manpower Akosua Frema Osei-Opare said: "Cocoa farming is part of the fabric of our nation, today as much as in the past. So, too, is the tradition of helping out on the family cocoa

farm. "As we move forward, we must preserve the rich history and traditions of cocoa farming, while ensuring that responsible, safe labour practices are used in Ghana."

According to the recently released Pilot Labour Survey in Cocoa Production in Ghana, 2.47 million children aged between 5 and 7 years are engaged in economic activities. Cocoa farming is traditionally a family business with children being taught the necessary skills from a young age, allowing them to take over from older relatives.

The study examined around 600 cocoa farms and discovered children of all ages were involved in many aspects of the growing process. The degree of involvement varied according to age and activity but typical duties were weeding, carrying water for spraying, pod gathering, carting and drying beans. Encouragingly, enrolment levels in local schools were generally high and investigators found children assisted in cocoa production mostly during the weekends and school holidays.

However, the report identified several hazards that present a significant risk to working children. Those in the 5-12 age group were particularly vulnerable to exposures to pesticides, farming related injuries, and injuries caused by carrying and walking long distances with heavy loads. The report states: "It is for this minority of children, who are usually the most vulnerable, that well planned and organised interventions should be implemented as a matter of urgency to protect them and ensure that these children enjoy their right to full development." The study was carried out as part of Ghana's National Program on the Elimination of the Worst Forms of Child Labour in Cocoa (NPECLC).

Others

Ghana: Let's Celebrate Annual Cocoa Festival

Ghanaian Chronicle (Accra), Emmanuel Adjei, 18 May 2007

IN VIEW of the enormous contributions of cocoa to the Ghanaian economy, the Assemblyman for Yawmatwa Electoral Area, Mr. Johnny Agbawu has suggested that the nation should institute an annual national festival in honour of cocoa in Ghana.

In his suggestion, the Assemblyman observed that a ceremony of this kind would enable policy makers to identify various challenges and get a vivid picture of the priorities of cocoa farmers on whose shoulders the economy depends to a large extent. "I believe that so long as the economy rests largely on cocoa, it isn't a bad idea to set up a national holiday in honour of cocoa in this country," he stressed, noting, "there should be something special like this to make cocoa farming interesting".

Mr. Agbewu said although cocoa farmers like all other farmers were honoured during Farmers' Day in Ghana, the exposure was always inadequate for the cocoa farmers considering their invaluable support to the economy and cocoa's reputation on the international market. The Assemblyman disclosed to The Chronicle that the Chiefs and people of Yawmatwa in the Bia District were planning to celebrate this festival for the first time in the country later this year, saying that, "We are waiting for the District Assembly's blessing before celebrating the festival". Bia district is one of the giant producers of cocoa in the country. Nsowaakrom, Jericho, Kaase and Pillar 34, are some of the notable cocoa producing areas in the country found in the Bia District.

Prime Minister Meets With Cocoa Association Board As Efforts Continue To Get It Back On Its Feet

18 May 2007

Completion of the transaction allowing Government to purchase the La Fortune lands owned by the Grenada Cocoa Association through assuming a corresponding portion of the Association's outstanding debt. This was among a number of matters discussed at a meeting with the board this week. The Association says the arrangement will help in facilitating the merger with the Grenada Co-operative Nutmeg Association, since the high debt of the GCA was a sticking point in the negotiations.

The meeting also discussed the provision of technical and extension services to the Cocoa Association by the Ministry of Agriculture, which was approved by Government in July 2006. It was agreed that this service will be implemented during the next month. The Board also took the opportunity to express its appreciation to the Government of Grenada for its financial support during the critical period, July – December 2006, when the association was unable to meet its financial obligations. During that period, Government took the decision to pay the salaries and wages of the Association's employees which amounted to EC\$255,000.

Although under no obligation to do so, Government, in an effort to provide as much assistance as possible, has also taken the decision to pay the severance benefits due to the workers affected by hurricanes Ivan and Emily.....This will bring Government's assistance to workers in this sector to \$500,000.00 over the last six months. The meeting also addressed the issue of broadening of the use of the \$30,000.00 facility which the Government usually makes available to farmers for the purpose of drainage. These funds can now be also be used to purchase fertilizer and for the clearing of fields.

Agriculture Minister Mr. Gregory Bowen and his Permanent Secretary Mrs. Lana Mc Phail met with the Board on Tuesday, to discuss issues pertaining to the current state of the cocoa industry.

TIT BITS

(Source: Business Recorder – www.brecord)

Brazil's cocoa arrivals rise

SAO PAULO (May 15, 2007): Brazilian 2007/08 (May/April) cocoa arrivals from Bahia and other states totalled 36,705 60-kg bags by May 6, up almost 11 percent from 32,688 bags a year ago, Bahia Commercial Association said Wednesday.

Ivory Coast cocoa arrivals seen down

ABIDJAN (May 15, 2007): cocoa arrivals at ports in Ivory Coast totalled around 1,016,000 tonnes between October 1 and May 13, exporters estimated on Monday, compared with 1,102,771 tonnes in the same period last season.

Jakarta Futures Exchange

JAKARTA (May 16, 2007): The Jakarta Futures Exchange plans to trade a cocoa contract this year to meet growing interest from the local cocoa market, its president director said on Tuesday. The contract would trade non-fermented cocoa beans from Slaws and Sumatra islands and prices will be quoted in rupiah, said Hosanna Zeon Muhammad.

New York cocoa futures slip

NEW YORK (May 16, 2007): US cocoa futures ended lower on Monday in rangebound dealings that held prices below near-four-year highs as growing conditions continued to improve in top grower Ivory Coast following a long dry spell, dealers said.

Brazilian cocoa grind falls in April

RIO DE JANEIRO (May 16, 2007): Brazil's cocoa grind totalled 17,612 tonnes in April, down 1.7 percent from 17,916 tonnes a year ago, cocoa analyst Thomas Hartmann said, citing Brazilian cocoa Industry Association data. Grindings totalled 17,570 tonnes in March.

New York cocoa falls

NEW YORK (May 17, 2007): US cocoa futures closed lower on Tuesday, with pressure from light long-liquidation and continued rain in the West African cocoa belt pushing prices to a one-week low, dealers said. "It looks like we're just getting a little bit of a correction from the move up, from \$1,750 to \$1,950.

Nigeria April cocoa arrivals drop

LAGOS (May 17, 2007): cocoa arrivals in the port city of Lagos, Nigeria's main export route, declined by 53 percent against last year to 4,000 tonnes in April, an average of estimates by exporters showed on Wednesday. The sharp decline is in line with the trend since October when the 2006/07 season began in Nigeria, the world's fourth biggest cocoa grower.

US MIDDAY: New York cocoa falls mildly

NEW YORK (May 18, 2007): US cocoa futures closed quietly lower Thursday, trading sideways for the third straight day amid a general lack of buying interest, dealers said. "The market's kind of lacking. any driving force right now," said David Hightower, a trader with The Hightower Report in Chicago.

New York cocoa ends a shade lower

NEW YORK (May 18, 2007): US cocoa futures closed slightly lower on Wednesday as the market settled down from the long liquidation seen in recent days, dealers said. "If we get a close below \$1,900 in the near term we could probably see more follow-through on the downside here," one trader said.

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