

# [Analysing the chronology of cocoa commerce essay](https://assignbuster.com/analysing-the-chronology-of-cocoa-commerce-essay/)

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* Decision

## 1. INTRODUCTION

In 2, 000 B. C the chronology of chocolate began, chocolate played a cardinal function when the day of the month attributed by historiographers to the oldest imbibing cups and home bases that have of all time been discovered in Latin America at a little small town in the Ulua vale in Honduras. Cocoa was one of the chief merchandises in Mayan Agriculture and faith in 200-900 AD. They are utilizing chocolate as a gift to asleep very important persons as their funeral ceremonials and as currency ( Barry Callebaut, 2008 ) . The word chocolate tree is derived from the Olmec and the subsequent Mayan linguistic communication ( kakaw ) and the chocolate-related term cacahualt is Nahualt ( Aztec linguistic communication ) derived from Olmec/Mayan etymology. The chocolate tree was named Theobroma chocolate tree which refers to the fabulous background of the tree literally means “ chocolate, nutrient of the Gods ” in 1737 ( T. L. Dillinger et. al, 2000 ) . Harmonizing to Barry Callebaut many parts of Theobroma chocolate trees have been utilized, viz. cocoa beans prepared as cocoa, chocolate bark, chocolate butter, chocolate flower, chocolate mush, and chocolate foliage. In 1505, Spanish had brought chocolate to Europe and it is used as a medical specialty instead than delightful grocery. Chocolate was recognized as exciting the healthy map of the lien and other digestive maps. In the 17th and eighteenth century, cocoa was on a regular basis prescribed or mixed into medicine for all kinds of complaint and diseases from colds and coughing, to advance digestion, birthrate, reinforce mental public presentation and as an anti-depressant.

Millions of people in over 50 states in Africa, Latin America, the Carribbean, and Asia makes chocolate as their supports. For the major states, chocolate production become the income of around 2. 5 million little manufacturers and their households ( Cocoa Market, 2002 ) . In this 20th century, universe production of chocolate increased quickly prompted by lifting demand, as is illustrated in Diagram 1 ( LMC International Ltd, 2001 ) . From one-year production of less than 125, 000 metric tons in the early 20th century, one-year planetary end product rose to make record 3. 1 million metric tons in the 1999/00 chocolate twelvemonth ( October to September ) – an one-year mean groth rate of 3. 5 % .

## Diagram 1. 1: World Cocoa Production, 1900/1901-1999/00

In Malaysia, chocolate planting has evolved from the usage of loanblends to ringers. So, the Malaysian Cocoa Board ( MCB ) uninterrupted engendering research plan with the aim of developing improved ringers and focused on the development of clonal planting stuffs in its long term. MCB released five new chocolate ringers for commercial planting based on the consequences of a comprehensive chocolate engendering plan. The new ringers are MCB C1, MCB C2, MCB C3, MCB C4 and MCB C5. The ringers were officially launched by The Honorable Deputy Prime Minister of Malaysia, Dato ‘ Sri Mohd. Najib Tun Abdul Razak on the 15thJuly 2005 in-conjunction with the Malayan International Cocoa Fair ( MICF 2005 ) in Kuala Lumpur.

The Malayan chocolate industry started its commercial planting in early 1950. In the 1970s and 1980s, the growing of our chocolate industry was accelerated by high monetary values of chocolate. However, in 1990 the relentless low monetary values started and have seen the worsening in hectareage particularly in the plantation sector. In 2007, the chocolate cultivated country has reduced by 10 % to 28, 209 hectares, as compared to 31, 326 hectares in 2006. The cultivated country under the smallholding sector besides is estimated to cut down by 5. 3 % or 1, 355 hectares, to 24, 076 hectares as compared to 25, 431 hectares in 2006. The entire chocolate seting country for smallholders is 85. 3 % . While, the estate sector is estimated to go on to worsen to 4, 133 hectares in 2007, as compared to 5, 895 hectares in 2006. Sabah is still the major cocoa-growing Centre accounting for 62. 7 % or 17, 703 hectares of the entire countries followed by Peninsular Malaysia, 6, 144 hectares ( 21. 8 % ) and Sarawak, 4, 362 hectares ( 15. 5 % ) ( Malayan Cocoa Board, 2011 ) .

## Diagram 1. 2: Malaysia – Cocoa Production, 1975/76-1999/00

Harmonizing to Malaysian Cocoa Board, the production of chocolate beans in Malaysia follows the tendency of the chocolate cultivated country. In 1990, after making the extremum at 247, 000 metric tons, the production of chocolate beans started to take down following the tendency of the chocolate cultivation country. However, the production of cocoa beans increased somewhat in 2006 and 2007 although the hectareage continued to worsen. As compared to 31, 937 metric tons in 2006, the production of cocoa beans increased to 35, 180 metric tons ( 10. 2 % ) .

Based on Malaysia Cocoa Board in 2007, the export net incomes of chocolate beans and chocolate merchandises were estimated at RM 2. 588 billion, 24. 5 % higher as compared to RM 2. 078 billion in 2006. Japan was the chief export finish of Malayan chocolate beans and chocolate paste, accounting for 37. 2 % of the entire chocolate beans exported, every bit good as 31. 8 % of the sum of chocolate paste exported. USA remains the major importer of chocolate butter ( 22. 8 % of the entire export ) , every bit good as unsweetened chocolate pulverization ( 9. 6 % of the entire export ) . The entire value of chocolate beans and chocolate merchandises import in 2007 was RM 2. 962 billion. The major beginning of chocolate beans import is Indonesia ( 70. 1 % of the entire sum ) . Other chocolate beans providing states were Ghana ( 13. 3 % ) and Cote d’Ivoire ( 8. 9 % ) . Besides, New Zealand was the major beginning of cocoa import ( 12. 8 % from the entire cocoa import ) , followed by USA ( 12. 6 % ) and Australia ( 11. 6 % ) . All the statistics were taken from official web site of Malaysia Cocoa Board.

As we can see from the statistics, United States of America ( USA ) involves majorly in both export and import chocolate for Malaysia. Malaysia and USA have their ain ordinance to export or import chocolate to other state that needs to carry through. Here we would wish to compare both state ordinances and cognizing the impact to Malaysia Food industry.

## COMPARISON BETWEEN MALAYSIA AND UNITED STATES ( US ) Regulation

## Processing AND COMPOSITIONS

## 2. 1. 1 Chocolate spirits.

Comparing the US chocolate ordinance for cocoa spirits with the Malaysia ordinances stated that ; chocolate spirits contains non less than 50 per centum nor more than 60 per centum by weight of chocolate tree fat ( US Food Regulations, 2011 ) . However in 276 ( 1 ) Malaysia ordinance stated that, chocolate paste, chocolate mass, chocolate slab or chocolate liquor shall be the solid or semi-solid mass produced by crunching chocolate nibs. It shall incorporate no less than 48 % of chocolate fat ( Malaysia Food Act and Regulation, 2009 ) .

For add-on substances added into cocoa spirits, Malaysia does non hold ordinances stated about the substances added into cocoa spirits interim for US ordinances, they have stated some ordinances that need to cognize by importers and could be opportunities for importers to heighten nutrient merchandises ; Chocolate spirits may be spiced, flavored, or seasoned with one or more of the ingredients listed.

The undermentioned safe and suited ingredients may be used ( US Cocoa Regulations, 2009 ) ;

Cacao fat and chocolate ( breakfast chocolate, chocolate, or lowfat chocolate ) ;

Alkali ingredients. Ammonium, K, or Na hydrogen carbonate ;

carbonate, or hydrated oxide, or Mg carbonate or oxide, added as such, or in aqueous solution ;

Neutralizing agents. Phosphoric acid, citric acid, and L-tartaric acid,

added as such, or in aqueous solution ;

Spices, natural and unreal flavorers, land whole nut meats, land java, dried malted cereal infusion, and other flavorers that do non either singly or in combination impart a spirit that imitates the spirit of cocoa, milk, or butter ;

Butter or milk fat ; or

Salt.

## 2. 1. 2 White cocoa

There are several differences between US and Malaysia ordinances bout white cocoa severally. Based on the US ordinances, the finished white cocoa contains non less than 3. 5 per centum by weight of milk fat and non less than 14 per centum by weight of entire milk solids while, Malaysia ordinance had stated ; white cocoa non more than 5 % of milk fat or comestible vegetable fat other than cocoa butter.

While Malaysia ordinances had stated some ordinances about permitted flavorer substance and permitted nutrient conditioner which are ;

Lecithin in a proportion non transcending 0. 8 % ;

Monoglycerides and diglycerides in a proportion non transcending 0. 5 % and ;

Polyglycerol polyricinolate, in a proportion non transcending 0. 5 % if the entire emulsifier content of the cocoas does non transcend 1. 5 % ;

Meanwhile, for US ordinances stated ; spices, natural and unreal flavorers, land whole nut meats, land java, dried malted cereal infusion, salt, and other flavorers that do non either singly or in combination impart a spirit that imitates the spirit of cocoa, milk, or butter ; are suited and safe ingredients to be used without any sums mentioned upper limit or minimal use.

## 2. 1. 3 Milk cocoa

While US ordinances stated that the finished milk cocoa contains non less than 3. 39 per centum by weight of milkfat and non less than 12 per centum by weight of entire milk solids, Malaysia ordinance had mentioned milk cocoa shall incorporate non less than ;

2 % of milk fat ; and

10. 5 % of milk solids on a nonfat footing.

## Food safety for Cocoa And Cocoa Merchandises

## 2. 2. 1 Pesticide

Pesticide is a wide term that covering a scope of merchandises that are used to command pest. Pesticide is frequently referred harmonizing to the type of plague they used against. A few illustration of common pesticide is insect powders, weedkillers and insect repellants. A general defition of pesticide is any substance or mixture of substance that we used to forestalling, destructing, driving or extenuating any plague ( epa. gov, 2011 ) . Pest can be insect, works pathogens, weeds, mollusk, birds, mammals, fish and others.

In USA, three organic structures are responsible to modulate the pesticide. The first bureau is Environmental protection Agency or ( EPA ) . This EPA reviews the scientific information on all pesticide merchandises before they can be registered or licensed for commercial usage.

The 2nd bureau that regulates the pesticide is the Food and Drug Administration ( FDA ) where they are responsible in implementing tolerance on all nutrients except for meat, domestic fowl, and certain egg merchandises which is monitored by USDA. FDA is cooperate with the other bureau like EPA to put the action degree or enforcement guideline for residue of pesticides that can impact the environment even after we no longer utilize it.

The last bureau that related to pesticide is US section of Agriculture ( USDA ) that their occupation is to proctors and implement the meat, domestic fowl, some egg merchandise, plus state-level monitoring.

When a state like Malaysia want to exported our merchandise, the samples will be collected at the point of US commercialism which is normally at the port or airdrome. If the sample contains illegal residues, it will be rejected from come ining US. There are certain factor to find trying which include available foreign pesticide use informations, dietetic significance of the nutrient, volume of imported nutrient, beginning of imported nutrient and chemical feature and toxicity of the pesticide used.

US FDA will analyze and the chocolate beans without shell utilizing mult-residue methods which is up to 100s of pesticide per analysis. The finished cocoa or confectionery or other merchandise sampling does non let dilution factors because the same chemical tolerance degree applies to both the chocolate beans and the finished merchandise.

Other range of sensing is finished merchandise supervising where they use FDA`s Total Diet Study. The nutrients that are prepared table-ready for ingestion. Typical diet “ market basket ” stand foring about 300 nutrients each. This Entire Diet Study ( TDS ) , is FDA plan that determines the degrees of assorted contaminations and foods in nutrients. FDA use this information to analyte the dietetic consumptions by the U. S population. It is used to supervise for radioactive contamination of nutrients TDS has grown to make extra analytes, including pesticide residues, industrial chemicals, and toxic and alimentary elements. Unique facet of the TDS is that nutrients are prepared as ready to eat anterior to analysis, so the analytical consequence will supply footing for realistic estimations of dietetic consumption of these analytes. This trial is stand foring regional bases. It is more sensitive methods where it up to 0. 1 ppb. This is non a ordinance but can take to probe.

## 2. 2. 2 Contaminant

Food taint is refer to the presence of harmful chemical or micro-organism in our nutrient which can do consumer unwellness. So the contamination here possibly from the chemical resource or from the micro-organism. From the FDA studies in 2000, there are several contaminant related to the chocolate and chocolate merchandise.

The first 1 is the content of Benzene Hexachloride ( BHC ) in chocolate beans which can non be more than 0. 5 ppm. Following one is the DDT ( DDT ) , dichlorophenyldichloroethylene ( DDE ) , Tetrachlorodiphenylethane ( TDE ) for all three of the substance above, the action degree is 0. 05 ppm. Last one is for the Lindane content which can non be more than 0. 5 ppm.

BHC or Hexachlorobenzene is an carnal carcinogen and is considered to be a likely human carcinogen. After its debut as a antifungal in 1945, for harvest seeds, this toxic chemical was found in all nutrient types. Hexachlorobenzene was banned from usage in the United States in 1966. Then is DDT, a book by American Biologist Rachel Carson suggested that DDT and other pesticides may do malignant neoplastic disease and that their agricultural usage was a menace to wildlife, peculiarly birds. The publication of book is a novice of the environmental motion, and resulted in a big public call that finally led to DDT being banned in the US in 1972.

DDE in some surveies have indicated that DDE is an endocrinal disruptor and contributes to breast malignant neoplastic disease, but more recent surveies provide strong grounds that there is no relationship between DDE exposure and chest malignant neoplastic disease. What is more clear is that DDE is a weak antiandrogen. Other surveies found that exposure to DDE is linked to Alzheimer ‘ s and Parkinson ‘ s disease in worlds. Animal surveies show that organochlorine pesticides-such as DDE-are neurotoxic, cause oxidative emphasis, and damage the encephalon ‘ s dopaminergic system.

From a research, TDE is found out that it is a likely human carcinogen. This is based on an increased incidence of lung tumours in male and female mice, liver tumours in male mice, and thyroid tumours in male rats. Further footing is that DDD is so similar to and is a metabolite of DDT, another likely human carcinogen. And in conclusion for Lindane, it affects the nervous system, liver and kidneys, and may be a carcinogen.

The other contamination found in chocolate and chocolate merchandise is lead taint. Manufactured chocolate merchandises often have high lead concentration than other nutrients, even though chocolate beans, the chief ingredient, have low leads degree in any natural nutrient. Lead taint in confects has been recognized from the 1820, when a British survey found the toxicant spread in London confectionary merchandises. In current survey, the research studied the lead isotopic composings of chocolate beans and shells from six farms in Nigeria`s top three bring forthing province to find if dirt or farm beginnings might be the cause of lead taint. The squad took bean and deposit samples and homogenized them to do complexs for dirts, beans, and chocolate beans shells from each farm. From this research, they conclude that while chocolate beans shells may be one beginning of lead, most taint occurs during transporting or processing of the beans and in fabrication.

## Table 2. 1: US Tolerence For Cocoa Beans

## Type of Cocoa

## Type of Contaminant

## Max. Limit

Cocoa

Carfentrazone-ethyl

0. 1 ppm

Cocoa bean & A ; roasted bean

Chlorantraniliprole

0. 08 ppm

Cocoa bean

Glyphosate

0. 2 ppm

Cocoa bean

Paraquat

0. 05

Cocoa bean, cocoa & A ; chocolate pulverization

chloratraniliprole

1. 5 ppm

Cocoa bean, dried

Pyriproxyfen

0. 02 ppm

Cocoa bean, dried

Oxyfluorfen

0. 05

Cocoa bean, dried

Phospine

0. 1 ppm

Cocoa bean, roasted bean, postharvest

Cryolite ( fluorine compounds )

20 ppm

Cocoa bean, roasted bean, postharvest

Inorganic bromidw residues ensuing from fumigation with methyl bromide

50 ppm

Cocoa bean, roasted bean, postharvest

Pyrethrins

1 ppm

Cocoa bean, roasted bean, postharvest

Sulfury fluoride

0. 2 ppm

Cocoa bean, roasted bean, postharvest

Piperonyl butoxide

8 ppm

Cocoa bean, dried bean & A ; chocolate pulverization

Propylene oxide

200 ppm

Cocoa bean, dried bean

Chlorothalonil

0. 05 ppm

( Beginning: NCA, 1884 )

## GENERAL REGULATION

## 3. 1 Food Safety Modernization Act

Based on Food Safety Modernization Act regulated by President Obama in January 4th 2011 indicate that nutrient manufacturer from any states who want to export chocolate and cocoa merchandise must beef uping their nutrient safety systems.

“ This jurisprudence helps us take the critical stairss toward beef uping the nutrient safety systems that is critical to wellness and security for American people ” ( FDA Commissioner Margaret A. Hamburg, 2011 )

The Centers for Disease Control and Prevention ( CDC ) estimates that 48 million of foodborne unwellness instance occurs in the United States every year. A At least 128, 000 Americans are hospitalized, and 3, 000 dice after eating contaminated nutrient ( Center Disease Control, 2010 ) . A While most foodborne unwellness instances go unreported to wellness sections, and are therefore of unknown beginning, the CDC estimates that 9. 4 million of the unwellnesss are caused by 31 known foodborne pathogens, and that 90 % of all unwellnesss due to cognize pathogens are caused by seven pathogens: Salmonella, norovirus, Campylobacter, Toxoplasma, E. coli O157: H7, Listeria and Clostridium perfringens.

The jurisprudence besides gives FDA of import new tools to keep imported nutrients to the same criterions as domestic nutrients and directs FDA to construct an incorporate national nutrient safety system in partnership with province and local governments ( FDA, 2011 ) . Major proviso include in this jurisprudence that related to cocoa and cocoa merchandise industry can be divided into 5 which is Registration and Inspection, Hazard Analysis and Preventive Controls Plans, Imported Foods, Recordkeeping and Records Access ; Traceability and Fees.

## Registration and review

Based on subdivision 414 ( a ) ( 21 U. S. C. 350 vitamin D ( a ) all the nutrient installations required to reassign chocolate and cocoa merchandise must be registry with FDA and all new information sing on exportation must included in the enrollment such as blessing to allow FDA review of the registered installation, reach individual and subdivision where the installation held. For illustration, chocolate beans that is fumigation prior to processing and the port installations from beginning states where the chocolate beans fumigated and so stored before transporting must register with FDA.

## Hazard analysis and preventative control

The proprietor of the installations must place and measure jeopardy associated with the installation, action needed and besides written preventative control program to guarantee that nutrient is non adulterated under FD & A ; C Section 402 or misleader under FD & A ; C Section 403 ( tungsten ) ( allergen labeling ) . The type of jeopardy include biological, chemical, physical and radiological jeopardy every bit good as natural toxins, pesticide, drug residue, parasite, allergen and colour additives. The preventative control that must be follow by proprietor of chocolate and chocolate merchandise is Sanitation processs for nutrient contact surfaces and utensils, Supervisor, director, and employee hygiene preparation, An environmental monitoring plan to verify the effectivity of pathogen controls in procedures where nutrient is exposed to a possible contamination in the environment and etcetera. ( Olsson, 2011 )

Bioterrorism Act 2001 is act to better the ability of United States to forestall, fix for and react to biological terrorism and other public wellness outgrowth ( FOA, 2002 ) . Cocoa beans are a high hazard nutrient due to salmonella and extra of peanut to the chocolate merchandise during fabrication because peanut is a hypersensitivity and can lend unwellness when consumed.

Bioterrorism Act 2001 is a one up or one dorsum traceability demand already in topographic point for all registered installations. NCA will work with FDA to minimise load to cocoa industry.

## Foreign Supplier Verification Program

This is new demand for importer. The full nutrient manufacturer who wants to export nutrient to USA must fall in this plan. This plan is used to verify whether the nutrient import is produced in conformity with the demands of Section 418 ( hazard analysis and preventative controls ) or Section 419 ( bring forth criterion ) and is non adulterated under Section 401 or misbranded under Section 403 ( tungsten ) ( allergen labeling ) .

This demand will go effectual 2 old ages after the day of the month of passage, so cocoa bean and cocoa importers should be in conformity by the terminal of 2012. Type of activities in Foreign Supplier Verification plan is each importer must supervise record of cargo, enfranchisement, one-year on-site review, look into the jeopardy analysis and etc.

## Labeling on specific merchandise

## White cocoa

White cocoa is a nutrient that from standardised cacoa merchandise in portion 163 ( 21 CFR parts 163 ) . This merchandise is produced without fat-free constituents of land chocolate nibs but it ‘ s incorporate the fat ( cocoa butter ) expressed from land chocolate nibs. This merchandise may hold safe and suited chocolate nibs. FDA stated that white contain less than 20 % chocolate butter, non less that 1. 4 % of entire milk solid, non less than 3. 5 % milk fat and non more than 55 percent alimentary saccharide sweetenings ( FDA, 2002 ) . Based on Peraturan 281 nutrient act Malaysia stated that white cocoa must incorporate 2 % milk solid, 10. 5 % solid milk without H2O and 3 % chocolate paste without H2O and fat ( Akta Makanan 1983 ) . The name of “ White Chocolate ” creates confusion to consumer because the term of cocoa used. Merchandise of term cocoa necessitating tha merchandise be prepared by finely crunching chocolate nibs ( Section 163. 111 ( degree Celsius ) but the white cocoa do non hold definition and criterion for cocoa because does non incorporate the fat-free part of chocolate nibs. All the exporter of white cocoa must use for TMP.

This permits needed to separate the white cocoa from standardised cocoa. The term cocoa merely use to standardise nutrient that contains chocolate derived ingredients specifically chocolate spirits ( Sec 163. 111 ) . These standardized nutrient include sweet cocoa ( unsweet 163. 135 ) , skim milk cocoa ( unsweet 163. 130 ) , buttermilk cocoa ( unsweet 163. 135 ) , skim milk cocoa ( unsweet 163. 140 ) , assorted dairy cocoa ( sec163. 153 ) and milk cocoa and vegetable fat coating ( unsweet 163. 153 ) .

## “ Sugar Free ” Versions of Standardized Chocolate Merchandises

To measure up sugar free a nutrient must incorporate less than 0. 5gram of sugar per labeled helping size ( 21 C. F. R. A§ 101. 60 ( degree Celsius ) ) . A non-standardized cocoa merchandise that contains chocolate spirits or chocolate as its lone beginning of cocoa flavorer can besides measure up for a “ sugar free ” claim, because the criterions of individuality for “ cocoa spirits ” and “ chocolate ” ( every bit good as those for “ lowfat chocolate ” and “ breakfast chocolate ” ) do non necessitate a alimentary saccharide sweetening. Such merchandises must be labeled suitably. If the merchandise is formulated with a sufficient characterizing sum of “ cocoa spirits ” the word “ cocoa ” may be used in the merchandise name for illustration “ chocolate saloon, ” “ chocolate sweet ” . This is because FDA considers “ cocoa ” a equivalent word for cocoa spirits ( 21 C. F. R. A§ 163. 111 ( degree Celsius ) . ) The labeling may besides include statements bespeaking the presence of cocoa for illustration “ contains cocoa, ” or “ made with cocoa ” ) . If merchandise is formulated with chocolate, the merchandise name may include with the word cocoa merely if consumers do non anticipate to incorporate cocoa.

Harmonizing to FDA, consumers expect a cocoa confect saloon to incorporate chocolate spirits ; hence, a confect saloon that contains chocolate as its lone beginning of cocoa flavorer may be called “ cocoa flavored ” or “ chocolatey. ” Ingredient in nutrient must be listed by their common or usual name but in some instances the common or usual name of ingredient may be unfamiliar to consumer and many consumer may non recognize the ingredient derive from or incorporate major nutrient allergen so the ingredient may be declared as category where the ingredient derived for illustration spices, seasoning and certain colouring.

## Cocoa nibs

When the chocolate nibs and chocolate beans from which alkali ingredients specified in paragraph the name of the nutrient shall accompanied by the “ Processed with base ” or “ Processed with base ” or “ processed with\_\_\_\_\_\_\_ ” usual name of specific alkali ingredient used in the nutrient.

## Import Certificates

There is no ground why FDA would necessitate import certifications for chocolate and chocolate merchandises. However, it is possible FDA may utilize the import certification demand as an alternate to increased foreign installation reviews if it lacks sufficient resources to increase foreign reviews. FDA if require want enfranchisement be in the signifier of cargo specific certification. Whether FDA need certification or non from nutrient manufacturer FDA shall see such factors as the known safety hazards of nutrient, the known safety hazards of the state, district or part of beginning of the nutrient, and a determination by FDA that the nutrient safety plans, systems, and criterions in the state, district, or part of beginning are unequal to guarantee safety and that enfranchisement would help FDA in doing an admissibility finding.

## Traceability, Recordkeeping, Record entree

FDA is required a merchandise tracing system within FDA to have information that improves their capacity to efficaciously and quickly path and hint nutrient that is in the United States or offered for import into the United States.

## Additional Recordkeeping Requirements for High-Risk Foods

New recordkeeping for installations for fabrication, procedure, battalion or keep high hazard nutrient ( FD & A ; C Act Section 414 ( 21 U. S. C. A§ 350c ) is required by FDA. FDA is required to print a list of bad nutrients on its web site. FDA may add or take nutrients from the list of bad nutrients by printing a notice in the Federal Register. FDA will see chocolate beans a high hazard nutrient due to the presence of Salmonella and the demand for a kill measure in the processing of beans. In the event that chocolate beans are designated as a bad nutrient by FDA, NCA would seek to relieve them from any new recordkeeping demands as “ commingled natural agricultural trade goods. ”

## Impact TO MALAYSIA FOOD INDUSTRY

## 4. 1 Improve Food Traceability

In processing and fixing chocolate nibs, harmonizing to US ordinance it must be prepared by taking the shell from cured, cleaned, dried and cracked chocolate beans. It will be prepared by heating it with alkalic ingredients and farther procedure with neutralizing agents. All this alkaline and neutralizing agents must be province in statement with ” Processed with base ” or ” Processed with \_\_\_\_\_\_\_\_\_ ” . The clean being filled in with the common or usual name of the specific alkali ingredient. Same state of affairs besides for chocolate that use neutralizing agent besides need in statement of ” Processed with neutralizing agent ” or ” Processed with\_\_\_\_\_\_\_\_ ” . The clean being filled in with the common or usual name of the specific neutralizing ( CFR, 2006 ) . While for Malaysia Regulation, besides utilizing alkaline and neutralizing ingredients but did non province in labeling of chocolate and chocolate merchandises ( Malaysia Cocoa Board, 2011 ) . By utilizing this, it can better nutrient traceability to follow the specific content and ingredient of merchandise by specific labeling.

To bettering traceability, FDA required merchandise following system to carry on at least 2 pilot undertakings that ‘ s are for processed nutrients ( butter chocolate, chocolate pulverization and chocolate spirits ) and fresh merchandise ( cocoa beans ) to describe its findings to Congress. Besides, extra information assemblage besides needs to measure the costs and benefits of several following engineerings and measuring domestic and international tracing patterns in commercial usage ( Food Safety Modernization Act, 2011 ) .

## 4. 2 Control Quality of Cocoa And Cocoa Merchandises

All the installations that use in processing of chocolate and chocolate merchandise demand and required to register with FDA biyearly. It compulsory for exporter states who want to export their merchandises and nutrient that unregistered their installations can non be export to US. FDA will make the review at least one time for every five old ages of greater frequence and domestic installations.

This demand will impact Malaysia nutrient industry in context of control the quality and execution of preventive controls programs because FDA will make the reappraisal and measure relevant informations to find foodborne contaminations at least every two old ages. Because of this, research labs need to supervise development of new public presentation criterions need to be validated to guarantee conformity with new action degrees.

To forestall nutrient quality against knowing debasement, FDA will carry on appraisal to find exposures by utilizing nutrient system. It besides can place the costs and benefits of guarding nutrient at vulnerable points and besides finding extenuation schemes in order to protect the nutrient. This passage within one twelvemonth clip was a counsel papers including a theoretical account appraisal of extenuation schemes, and specific state of affairss in which extenuation schemes are appropriate. Cocoa and chocolate merchandises need this knowing debasement because its including as bad nutrient of knowing contamination ( Food Safety Modernization Act, 2011 ) .

FDA besides require issue of shippers that authorized by Sanitary Transportation Act of 2005. FDA conducts the survey of transit chocolate and chocolate merchandise to US. It ‘ s including transit by air and an scrutiny of demands of rural countries with respect to the bringing of safe merchandise. This demand usage in transit of nutrient to utilize healthful patterns within the following twelvemonth and half.

## 4. 3 Increase Safety of Cocoa And Cocoa Merchandises

Exporter states that want to export their nutrient to US necessitate to affect in Foreign Supplier Verification Programs. These plans were needed to take stairss and verify that nutrient was safe before it can be export to US. These plans were implementing by nutrient importers that are US state. These Foreign Supplier Verification Programs was required for bad nutrients and in US, chocolate beans and chocolate merchandise was consider as bad nutrient and demand to affect this plan before it can be export. Cocoa beans are considered as bad nutrient because due to presence of Salmonella and need kill stairss in processing of beans. To guarantee that our chocolate and chocolate merchandise is produced in a conformity with the preventive control demand, produce safety criterions and others US Torahs and ordinances. It must be done within two old ages with counsel to help US in developing confirmation plans and issues the lineations the demand for confirmation plans ( Food Safety Modernization Act, 2011 ) .

US will necessitate activities including monitoring records of cargos, lot-by-lot enfranchisement, one-year on-site reviews of foreign providers, look intoing the jeopardy analysis and prevent controls programs of foreign providers and periodic sampling and testing of cargos. It besides contain website to keep current list of the names, locations, and others information about US.

From these plans, our nutrient exporter from Malaysia can corroborate and do certain our nutrient safety that conformity with US ordinance by verify the nutrient safety patterns of their supply concatenation. Besides that, it will assist Malaysia nutrient exporter to increase their cognition in handling of nutrient merchandise and guarantee nutrient safety merchandises.

Besides, nutrient safety of chocolate and chocolate merchandises can be improved and guarantee by reviews plan from FDA. From these reviews, some elements need to inspect. There are, inspect all domestic installations use in treating merchandise at least every five old ages, and inspect domestic high-risk installations at least one time every five old ages with day of the month of passage, besides inspect non bad domestic installations at least one time per seven old ages with the day of the month passage. From this review, the nutrient safety can be guaranting in safe status by utilizing the safety installations ( Food Safety Modernization Act, 2011 ) .

## 4. 4 Bettering Relationship between States

Foreign Supplier Verification Programs besides give impact in improving of partnership between Malaysia and US state. This can be turn outing by fall ining these plans that implement by US. Malaysia exporter can understand what US demand and pass on each other to collaborate in processing of exporting nutrient merchandise to US.

Besides that, relationship with rival of other state besides will be increased. Many of others state was involve in Foreign Supplier Verification plans to exporting chocolate and chocolate merchandises such as Indonesia. Because of this, Malaysia exporter will promote more and will bring forth merchandise harmonizing of US ordinance to vie with others rivals.

## 4. 5 Information about the ordinance and demands needed

By following the ordinance made by the US authorities, the trial or review, managing and processing processs, packaging, labeling, ingredient and nutrition information of the merchandises may be enforced. This will increase merchandise dependability to importer and the consumer. The merchandises will go more complex but it become more enlightening to the consumer. On the other manus, the manufacturers may lose their competitory distinction advantages as they are utilizing and sharing the same information as their rivals.

## 4. 6 Hazard Analysis and Preventive Control

All the installations used during managing and treating are required to carry on a jeopardy analysis and implement preventative controls which is established by FDA utilizing science-based criterions. Besides that it is required to develop nutrient safety program to document monitoring, rectification and confirmation of preventative controls. The installations in the nutrient safety program may be required document sanitation processs, a callback program, supplier confirmation activities and environmental trying proving. FDA will carry on reviews to these installations either bad installations or non-high hazard installations. The houses that refuse the review may non let to import their merchandises into the US. So the houses or company that intend to import their merchandises to US will invariably keep their installations harmonizing to the demands.

FDA is required to inspect the foreign installations during the first twelvemonth following passage and at least twice the figure inspected during the old twelvemonth in each of the following 5 old ages. FDA will see engagement in the Voluntary Qualified Importer Program and third-party enfranchisement. FDA will inspect harmonizing to hazard and place bad installations such as the known safety hazards of the nutrient manufactured, processed, packed or held at the installation, so they will inspects the installation ‘ s conformity history including callbacks, misdemeanor and eruptions and one of the most of import standards which is the asperity and effectivity of the installation ‘ s jeopardy analysis and preventative controls. Besides that, the review will be carried whether the installation or its nutrient have been certified by an commissioned third-party hearer and whether the nutrient manufactured, processed, packed, handled, prepared, treated, distributed or stored at the installation meet the standards precedence under FDA ( Food Safety Modernization Act, 2011 )

The US rigorous ordinance on nutrient safety and hygiene through voluntary and regulative mechanisms will beef up the bing nutrient safety direction systems. Our nutrient industry should be able to heighten bing nutrient safety programmes to forestall the debut any of risky agents into nutrient during production, processing, distribution or readying of nutrient. Enhancing the nutrient safety system can forestall nutrient terrorist act ( WHO, 2008 ) .

## 4. 7 Economic and Trade Impact

The US statute law are acquiring stringent and FDA is required to set up a merchandise tracing system for US merchandises itself and their imported merchandises to better their capacity and efficaciously path and hint nutrient ( Food Safety Modernization Act, 2011 )

Any taint of our exported merchandises may convey tremendous economic deductions to the importing state even though the incident is comparatively minor. Particularly if the incidents being reported in the media, the consumer will hold a negative premise on our nutrient safety systems and our nutrient industry. This will diminish the dependability of consumer globally to our nutrient industry and even other Malaysia industry ‘ s merchandise ( WHO, 2008 ) .

## Decision

US import demands for importing chocolate and chocolate merchandises give a batch of advantages to Malaysia nutrient industry particularly cocoa nutrient industry. US have more rigorous ordinance compared to Malaysia, so Malaysia nutrient industry will seek to accommodate and follow the enforcement by the US. This will heighten our nutrient production system in term of nutrient safety, better installations, production, transit, traceability, and storage handling.

Besides that, Malaysia will heighten the relationship with US and other states. While, heightening the quality of chocolate and chocolate merchandises, Malaysia invariably better its fight as one of the major universe chocolate manufacturer.