

# Recurring supplier hazard control verification procedure for cacao mass as under FDA Foreign Supplier Verification Program (FSVP) for small importer

At TrueTech Inc., ensuring the safety and quality of our products is of paramount importance. To uphold this commitment, we have established rigorous and continuous verification procedures to ascertain that our suppliers are diligently implementing appropriate hazard controls in alignment with the outcomes of hazard analysis.

These verification processes encompass a range of meticulous assessments, audits, and evaluations that scrutinize every stage of our cacao mass suppliers' operations, from sourcing to shipping. By employing these ongoing verification measures, we ensure that our cacao mass supplier is consistently maintaining the highest standards of food safety and hazard control, safeguarding the integrity of our products and the well-being of our valued customers.

### **Preventative Controls**

The following verification steps aim at assessing the integrity of the preventive controls put in place to mitigate the risk of hazards introduced throughout the entire process of preparing roasted cacao mass, from harvesting to shipping.

Implementation at critical control points

### Harvesting

Hazard	Туре	Prob abilit y	Sever ity of Illnes s or injury	Preventive Controls	Critical Limit	Verification
Microbial Contamination (salmonella)	Biologi cal	Mediu m	Medium	We only harvest mature and perfect fruit directly from the tree.  We utilize Garra tool to handle the fruit to ensure against	Harvested mature fruit does not have broken skin which will allow contamination to happen.	Photo should be taken and sent to us via WhatsApp for acknowledgment



				broken skin which is a vector for contamination.		
Insect Infestation	Biologi cal	Low	Low	For organic cacao, natural organic insect repellents are used.  When the environment is balance insect infestation is unlikely	NA	NA
Foreign objects like rocks, dirt, or debris from the field	Physic al	Low	Low	When fruits are harvested and broken and the beans are extracted. But the actual removal of this foreign objects are done at the later stage during drying	NA.	NA

### Fermenting

Hazard	Туре	Prob abilit y	Sever ity of Illnes s or injury	Preventive Controls	Critical Limit	Verification
Microbial Growth (salmonella)	Biologi cal	Mediu m	Medium	This hazard is controlled during the roasting critical control point	NA	NA
Undesirable Fermentation	Biologi cal	Mediu m	Medium	There are three traditional organic measures for this  Measure 1: Smell test. Ensure there are no traces of putrefy smell  Measure 2: Ensure PH is below 6. The batch cannot be too alkaline. 4.8 to 5.8PH is ideal  Measure 3: Professional taste test.	Ensure there are no traces of putrefy smell  Measure to ensure the PH of completed needs to be between 4.8 to 5.8PH  Professional taste tester will indicate during tasting	Photo of report should be taken and sent to us via WhatsApp for acknowledgment
Inclusion of non-cacao materials in fermentation containers	Physic al	Low	Low	Fermentation is done in a wood box in the house of fermentation.  Nothing else is allowed in the house besides the cacao almonds to be fermented	Only cacao beans should be allowed to be placed in fermentation containers.  No foreign objects will be allowed in the house of fermentation.	Photo should be taken and sent to us via WhatsApp for acknowledgment



Contamination from pesticides or chemicals used in cacao plantations	Chemic al	Low	Low	The facility will be located on the farm which has been organically certified. There will be not pesticide or artificial chemicals on the premise	To ensure no pesticide or chemicals are brought on to the premise	Photo should be taken and sent to us via WhatsApp for acknowledgment
					The farmer continues to maintain organic certification for each batch of shipment. The certificate is an analysis report by CIC	

## Drying and Sorting

Hazard	Typ e	Pro babi lity	Severity of Illness or injury	Preventive Controls	Critical Limit	Verification
Mold growth due to improper drying practices.	Biologi cal	Mediu m	Medium	Turnover the beans frequently in the sun which still contain humidity often to ensure against mold.  First 2 days: When sample of cacao almonds is squeezed, if there is humidity, there is the liquid dropped  Beans will be turned over every 30 minutes in the sun  When sample of cacao almonds is hand squeezed, it cracks  3rd day: Beans will be turned over every 1 hour in the sun  4th to 7th day: 4 to 5 times a day.	No visible mold  Lab testing from CIC shall indicate mold shall not be above 3% threshold.	Photo should be taken and sent to us via WhatsApp for acknowledgment
Inclusion of foreign objects during drying and sorting process	Physic al	Mediu m	Medium	Before the dried cacao almonds are collected, they are processed through sieve	Visibility ensure there are no more foreign objects after the sieving process	Photo should be taken and sent to us via WhatsApp for acknowledgment



	1	Chemi cal	Low	Medium	The facility will be located on the farm which has been organically certified. There will be not pesticide or artificial chemicals on the premise	To ensure no pesticide or chemicals are brought on to the premise  The farmer continues to maintain organic certification for each batch of shipment. The certificate is an analysis report by CIC	Photo should be taken and sent to us via WhatsApp for acknowledgment
--	---	--------------	-----	--------	---	--	--

### Roasting

Hazard	Туре	Prob abilit y	Sever ity of Illnes s or injury	Preventive Controls	Critical Limit	Verification
Microbial Growth (salmonella)	Biologi cal	Mediu m	High	The roasting process itself will kill off the microbial growth.  The internal temperature of the cacao almonds during roasting reaches 180°C for 30 minutes.	CIC will provide certification that Mycotoxin levels in cacao almonds are below the regulatory limits	CIC certification should accompany shipment
Acrylamide Formation	Biologi cal	Mediu m	Low	Daily cleaning to ensure properly functioning equipment  Required maintenance is performed when malfunction is observed before cacao almonds are processed	Machine is cleaned everyday  Mechanics will provide certification that maintenance has been done.	Equipment cleaning and maintenance schedule should be visible
Over-Roasting	Biologi cal	Low	Low	Daily cleaning to ensure properly functioning equipment  Required maintenance is performed when malfunction is observed before cacao almonds are processed	Machine is cleaned everyday  Mechanics will provide certification that maintenance has been done.	Equipment cleaning and maintenance schedule should be visible
Foreign objects like metal fragments from roasting	Physic al	Mediu m	Medium	The stove is sealed during roasting  Regular maintenance is done	Mechanics will provide certification that maintenance has been done.	Equipment cleaning and maintenance schedule should be visible



equipment.		on the stove.		
------------	--	---------------	--	--

# Cracking and Winnowing

Hazard	Type	Prob abilit y	Severi ty of Illness or injury	Preventive Controls	Critical Limit	Verification
Particulate Contamination	Biologi cal	Low	Low	The machine is sealed.  Daily cleaning to ensure properly functioning equipment  Required maintenance is performed when malfunction is observed before cacao almonds are processed	Mechanics will provide certification that maintenance has been done.	Equipment cleaning and maintenance schedule should be visible
Cross-Contamin ation	Biologi cal	Low	Low	Clean and sanitize winnowing equipment between batches. Implement proper allergen controls to prevent cross-contact.  The facility only processes cacao almonds	No cross-contact with allergens should occur during winnowing.  Visual check to ensure undesirable ingredients are in the facility	Photo should be taken and sent to us via WhatsApp for acknowledgment
Inclusion of shell fragments or foreign materials in cracked cacao beans.	Physic al	Mediu m	Low	Use proper cracking and winnowing equipment to minimize shell fragments. Implement visual inspections and sieving to remove foreign materials.  Workers are to wear hair mesh and gloves.	Shell fragments in cracked cacao beans shall be less than 3%.	Photo should be taken and sent to us via WhatsApp for acknowledgment

## Grinding

Hazard	Туре	Prob abilit y	Severi ty of Illness or injury	Preventive Controls	Critical Limit	Verification
Metal fragments	Physic al	Low	High	Proper maintenance, metal detection	No metal fragments in cacao mass	Regular equipment and metal checks



### Processing and Packing

Hazard	Туре	Prob abilit y	Severi ty of Illnes s or injury	Preventive Controls	Critical Limit	Verification		
Mycotoxin Contamination	Biologi cal	Low	Medium	Implement proper drying and storage practices to prevent mold growth. Regularly test for mycotoxins and reject contaminated batches.  Package is sealed properly to ensure against moisture content	CIC will provide certification that Mycotoxin levels in cacao almonds are below the regulatory limits.	CIC certification should accompany shipment		
Oxidation	Biologi cal	Mediu m	Low	NA	NA	NA		
Metal fragments from processing equipment.	Biologi cal	Low	Low	Implement effective quality control measures to detect and remove foreign objects during processing. Regularly inspect equipment for signs of wear or damage.	Visual inspection that the final product should be free from foreign objects.	Photo should be taken and sent to us via WhatsApp for acknowledgment		
Foreign objects introduced during the packaging process.	Physic al	Low	Low	Implement controls to prevent foreign objects from entering packaging materials. Use metal detectors or sieves to catch any contaminants before sealing.	The final packaged cacao mass should be free from foreign objects.	Photo should be taken and sent to us via WhatsApp for acknowledgment		
Residues from heavy metals.	Chemic al	Low	Medium	Implement a rigorous cleaning and sanitation program to ensure that heavy metals are not introduced during the packing and process of cacao mass in the facilities.	CIC will provide certification that there are no traces of heavy metals.	CIC certification should accompany shipment		

# Shipping

Hazard	Туре	Prob abilit y		Preventive Controls	Critical Limit	Verification
--------	------	---------------------	--	---------------------	----------------	--------------



Humidity Exposure	Biologi cal	Mediu m	Low	The package used for shipping will be sealed and resistant to humidity.  Use sturdy and appropriate packaging materials to protect cacao mass during shipping.	Package should be well sealed. During visual inspection upon arrival of cargo, the package should not be damaged.	Photo should be taken and sent to us via WhatsApp for acknowledgment
Cross-Contamin ation	Biologi cal	Low	Low	The package used for shipping will be sealed and resistant to humidity.  Use sturdy and appropriate packaging materials to protect cacao mass during shipping.	Package should be well sealed. During visual inspection upon arrival of cargo, the package should not be damaged.	Photo should be taken and sent to us via WhatsApp for acknowledgment
Physical damage due to improper packaging or handling during transit.	Physic al	Mediu m	Low	The package used for shipping will be sealed and resistant to humidity.  Use sturdy and appropriate packaging materials to protect cacao mass during shipping.	Package should be well sealed. During visual inspection upon arrival of cargo, the package should not be damaged.	Photo should be taken and sent to us via WhatsApp for acknowledgment

### Prevention against allergens introduction

The following verification steps aim to assess the integrity of the preventive controls put in place to prevent the risk of allergen introduction and cross-contact throughout the entire process of preparing cacao mass, from harvesting to shipping.

Allergent	Probabilit y	Severity of Illness or injury	Preventive Controls	Verification
Milk	Medium	Medium	No milk products will be brought on the facility	Photo should be taken and sent to us via WhatsApp for acknowledgment
Eggs	Medium	Medium	No eggs will be brought on the facility	Photo should be taken and sent to us via WhatsApp for acknowledgment
Fish & Crustacean shellfish	Low	Medium	No fish & crustacean shellfish will be brought on the facility	Photo should be taken and sent to us via WhatsApp for acknowledgment
Tree nuts	Low	Medium	No tree nuts will be brought on the facility	Photo should be



				taken and sent to us via WhatsApp for acknowledgment
Peanuts	Medium	High	No peanuts will be brought on the facility	Photo should be taken and sent to us via WhatsApp for acknowledgment
Wheats	Medium	Medium	No wheats will be brought on the facility	Photo should be taken and sent to us via WhatsApp for acknowledgment
Soybeans	Low	Medium	No soybeans will be brought on the facility	Photo should be taken and sent to us via WhatsApp for acknowledgment

### Prevention against intentional adulterations

The following verification steps aim to assess the integrity of the preventive controls to mitigate the risk of allergen introduction and cross-contact throughout the entire process of preparing roasted cacao mass, from harvesting to shipping.

Potential Adulterati ons	Description	Preventive Controls	Verification
Dilution with Inferior Ingredients	Cacao mass could be mixed with cheaper or inferior ingredients to increase volume, which might decrease the quality and nutritional value of the product.	An integrity seal will be adhered to the package prior to leaving the facility	Regularly perform ingredient testing and analysis to confirm the quality and authenticity of cacao mass. Randomly sample batches from suppliers and test them for conformity to specifications. Document and maintain records of supplier audits and inspections.
Addition of Undeclared Allergens	Adding allergenic ingredients like nuts, dairy, or soy without proper declaration on the label can pose a risk to consumers with allergies.	All facilities will only process allergens	Regularly test finished products for the presence of allergens, both declared and undeclared. Perform line checks and visual inspections during production to ensure proper allergen segregation. Maintain records of allergen testing results and label checks.
Mislabeling Origin	Falsely labeling the origin of the cacao could deceive consumers about the source and quality of the	We will conduct a taste sampling test since the taste is very specific to the location	Regularly review supplier documentation and certificates of origin to ensure accuracy.



	product.		Conduct periodic audits and inspections of suppliers to verify the authenticity of origin claims. Maintain records of origin verification processes.
Use of Unauthorized Additives	Adding unapproved additives, preservatives, or flavors to the cacao mass could be harmful to consumers' health.	No additives are being introduced in the entire process as it is entirely organic.	Regularly review production records and formulations to ensure compliance with approved additives. Randomly sample finished products and test for the presence of unauthorized additives. Maintain records of ingredient approvals and employee training.
Adulteration with Unsafe Substances	Adding unsafe substances or contaminants that may not be detectable through routine testing can pose health risks.	No additives are being introduced in the entire process as it is entirely organic.	Regularly test incoming ingredients for contaminants based on risk assessments. Conduct periodic audits and inspections of suppliers to ensure compliance with safety standards. Maintain records of supplier verification and ingredient testing.
Contamination with Heavy Metals	cacao mass could be contaminated with heavy metals like lead or cadmium, which can be harmful if consumed over time.	CIC will provide certification that there are no traces of heavy metals.	Regularly test cacao beans for heavy metal levels, especially lead and cadmium. Maintain records of heavy metal testing results for each batch of cacao beans. Perform audits and inspections of suppliers to verify adherence to heavy metal standards.
Use of Unsanitary Processing	If the cacao mass are processed in unsanitary conditions, they could become contaminated with pathogens that may cause foodborne illnesses.	FitoSanitario certification will be provided for each shipment	Perform routine environmental swab testing of processing equipment and surfaces to verify cleanliness. Implement internal audits and inspections to ensure compliance with sanitation procedures. Maintain records of cleaning schedules, employee training, and facility inspections.
Substitution with Lower-Quality Varieties	Substituting higher-quality cacao with lower-quality varieties could affect the flavor, aroma, and overall quality of the product.	We will conduct a taste sampling test since the taste is very specific to the location.	Regularly sample and visually inspect incoming cacao beans to ensure they meet specified quality criteria. Conduct sensory evaluations of roasted cacao
Economic Adulteration	Mixing cacao mass with fillers or additives to reduce production costs while maintaining the appearance of quality.	CIC will provide certification that there are no traces of unauthorized additives within the shipment.	Regularly sample and visually inspect incoming cacao beans to ensure they meet specified quality criteria. Conduct sensory evaluations of roasted cacao



## Remote Qualification Procedure

If our supplier makes supply chain adjustments without our physical presence, they must ensure these changes adhere to the preventive controls and critical limits outlined in the previous sections.

The supplier should send us photos via WhatsApp to confirm that the necessary measures are implemented at the new facilities.

Sincerely,

Zhiwen Teh President

TrueTech Inc (EIN: 88-3411514)

admin@truesight.me +1 415 300 0019