



AFLATOXINS

WHAT ARE AFLATOXINS?

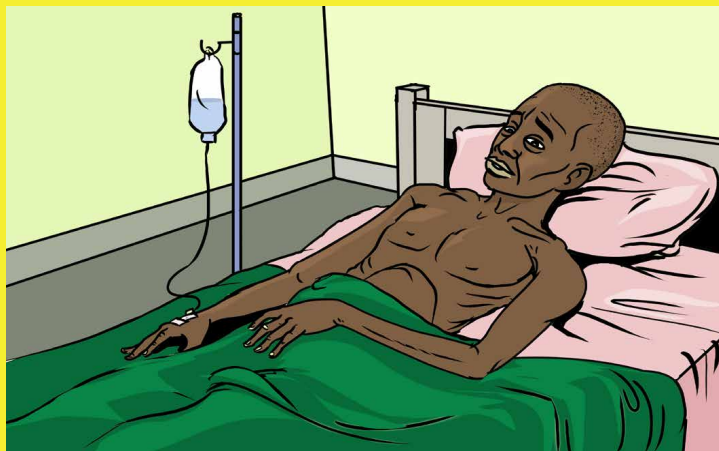
Poison produced by moulds when they attack produce which is not well-dried.



Once in food or feed, this poison is difficult to remove even by cooking or roasting.

WHY CARE ABOUT AFLATOXINS NOW!!

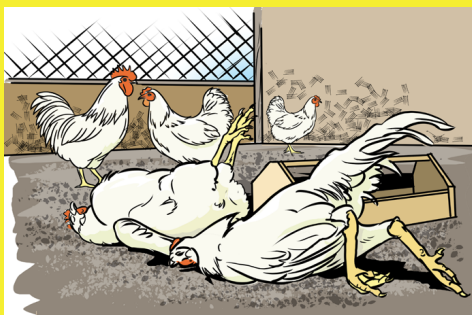
This poison affects agriculture, health and trade.



How? At high levels, aflatoxins cause death of humans and animals. It is one of the major causes of liver cancer.



In children, leads to stunting and kwashiorkor thus reduced growth. Generally, aflatoxin weakens the body immune system leading to other illnesses.



It can kill all animals when taken in higher quantities and also reduces productivity such as egg production and growth.



It affects trade, social and economic status. We lose money as we cannot sell contaminated produce in the national, regional and international markets.

Which produce are most contaminated?



Mainly produce dried at farm and their products;

- Cereals: maize, sorghum, rice, millet
- Legumes: groundnuts, soyabean
- Oil crops: sunflower and simsim or sesame
- Dry spices like chilli, ginger, turmeric
- Dried roots & tubers: cassava, sweet potato (amukeke)
- Most dried produce including fish (mainly silver fish/mukene)

Processed products;

- Animal feeds, peanut butter, flours (groundnut, maize, soya, mukene, millet, cassava, sorghum) and pressed simsim or sunflower cake etc.
- Dairy and poultry products: milk and products, and eggs when animals feed on contaminated feeds

Why are aflatoxins common in our produce?

Most people are not aware of the poison and do not apply good agricultural, handling, storage, transportation and processing practices.





AFLATOXINS

WHAT SHOULD FARMERS DO ON-FARM TO PREVENT AFLATOXINS?

When the crop is in the field, farmers should follow recommended good agricultural practices so that the crop remains healthy throughout the growth period, to resist mould infection.

YOUR HEALTH, YOUR WEALTH, YOUR LIFE!!!



Good Practices to do



Timely land preparation and planting in rows with good spacing



Timely application of recommended fertilizers



Control pests and diseases using non chemical and approved chemicals in correct doses, following manufacturers' directions for use



Good water management especially irrigation



Harvest on time as soon as crop is ready, minimising damage of produce



Bad Practices to avoid



Do not dry crops in the field especially maize and groundnuts



Do not damage produce during harvesting e.g. groundnut pods



Do not harvest late



Never place produce on bare ground during harvesting



AFLATOXINS

WHAT SHOULD FARMERS DO DURING DRYING, SHELLING AND THRESHING TO PREVENT AFLATOXINS?
YOUR HEALTH, YOUR WEALTH, YOUR LIFE!!!



Good Practices to do



If shelling has been done in the field, further dry the grains



Use appropriate shelling methods such as motorised shellers to avoid breakage



Dry produce off bareground using clean materials such as black drying sheet materials or cemented floors



Winnow and sort all the damaged, shrivelled, diseased grains and foreign material



Dry crops using faster drying technologies



Check crop dryness using the salt method or moisture meter



Bad Practices to avoid



Do not store produce before further drying



Do not Shell produce by beating or trampling



Do not dry produce on bare ground



Do not dry produce on the road or tarmac to avoid contamination with dust and vehicle fumes and oils



Do not dry good grain with bad grain



Do not allow produce to be wetted and soaked by rain



AFLATOXINS

WHAT SHOULD FARMERS DO DURING STORAGE TO PREVENT AFLATOXINS?

YOUR HEALTH, YOUR WEALTH, YOUR LIFE!!!



Good Practices to do



Clean, disinfect and repair the store



Place and store dried produce in food grade containers such as gunny, plastic or hermetic bags—drums



Place bagged produce on pallets and away from walls during storage



Bag produce when storing in a traditional silo or granary



Control insects and rodents using recommended storage pesticides



Periodically redry produce during storage



Bad Practices to avoid



Do not pile bagged produce in a store without good aeration



Do not heap unbagged produce in store especially maize



Do not place bagged produce directly on the floor



Do not mix new with old season produce



Do not store produce in torn gunny or plastic bag



AFLATOXINS

WHAT SHOULD FOOD PROCESSORS DO TO PREVENT AFLATOXINS?

IT IS NEVER TOO LATE!!



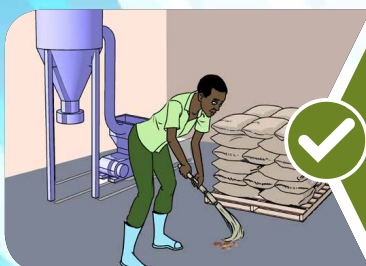
Good Practices to do



Inspect produce and processing premises regularly



Process only clean, dry, sorted produce



Maintain clean and dry working environment



Use food grade processing equipment preferably stainless steel



Do on-spot mould and aflatoxin tests in the raw produce and finished products



Acquire a Quality Mark (S or Q) from Uganda National Bureau of Standards



Bad Practices to avoid



Do not process poor quality produce (mouldy / rotten, broken, damaged, shriveled, discolored)



Do not add water to raw produce for processing



Do not store processed products in non-food grade materials



Do not store processed products in dirty, unclean environment



AFLATOXINS

WHAT SHOULD FEED PROCESSORS DO TO PREVENT AFLATOXINS?

SAVE OUR ANIMALS AND US!!!



Good Practices to do



Do on-spot mould and aflatoxin tests in the raw produce and finished products



Use feed grade processing equipment



Acquire a quality mark (Q-mark) from Uganda National Bureau of Standards



Incorporate aflatoxin binders during processing of the feeds



Bad Practices to avoid



Do not Process poor quality produce (diseased, damaged, broken/rotten shrivelled, discoloured)



Do not mix feed raw materials with impurities such as mixing silver fish and Sand



Do not mix feeds on bare ground at home or factory



Do not pack or store ingredients in poor quality materials



Do not store feeds on bare ground and in premises without good aeration



AFLATOXINS

WHAT SHOULD CONSUMERS DO TO PREVENT AFLATOXINS POISONING? YOUR HEALTH, YOUR WEALTH, YOUR LIFE!!!



Good Practices to do



Consume well dried, clean, sorted and safe foodstuffs



Store food in a clean and dry environment



Process your own clean and safe food e.g. pounding groundnuts where possible



Buy foodstuffs with a quality mark



Diversify daily dietary intake and deliberately consume fruits and vegetables



Bad Practices to avoid



Do not consume mouldy foodstuffs



Do not purchase and consume foodstuffs from unhygienic premises



Do not store foodstuffs in a dirty, disorganized environment