

Supplementary Table 1: Generated coding framework for focus group discussion facilitators and barriers (Determinants) to consumption of Indigenous fruits and vegetables

Themes	Categorization of codes	Generated codes
Understanding of Indigenous foods	Knowledge of IFV	Usual foods people eat
		They are foods obtained from the wild and some are cultivated at home
		They are not planted; they grow on their own
		They are fruits, vegetables, nuts, beans, roots and tubers, creeping plants etc.
		These are foods that have been part of our culture
		Foods not externally brought to us, or they were brought externally but have been around for so long that they became part of tradition and culture.
		Food eaten during food scarcity as plan B (coping foods)
		Foods that detoxify the body
		Food that boosts the functioning of the organs
		Foods that clean the heart
Knowledge of cardiometabolic diseases	What are cardiometabolic diseases?	Diseases to do with the heart
		Diseases associated with being rich (rich man's diseases)
		Examples include blood clot, heart failure, diabetes/high blood sugar, hypertension/high blood pressure, too much fat in the blood
	Causes of cardiometabolic diseases	Bad feeding (not eating a balanced diet)
		Linked to oversitting with no physical exercise
		Too much intake of beer/alcoholic beverages
		Too much intake of pork and beef
		Too much intake of soda
		Stress e.g., money for meals, school fees, rent....
		The body responds to what we eat, so what we eat causes these diseases e.g., fried chicken, potato chips, fried eggs, Rolex, sausage all have a lot of fat, soda....
		Linked to eating genetically modified foods (GMOs)
		Linked to highly processed foods
		Smoking can cause these diseases
		False health claims made by herbalists and food processors
		Could be genetic because small people can also have these diseases
		Attitude that we shall all die at one point; this makes people lead careless lives
		Health workers don't want to do health checkups on small people because they don't believe that small people can have a risk of these diseases
		Negative attitude towards weight loss (weight loss causes loss of social respect)

	Prevention of cardiometabolic diseases	Reduce frying of food
		Carry out physical activity like walking, running, digging,
		Reduce intake of soda, pork, beer.
		Having a diet mainly of vegetables and you can't have excessive fats in your body
		More community health talks to sensitize more on CVD
Link between IFV and cardiometabolic health	IFV especially for cardiometabolic health	Bitter berries, Amaranthus, Moringa leaves, Avocado seed powder, Black night shade, scarlet eggplant, Tamarind, Jackfruit seeds, Mushrooms, Hibiscus, Onions, African spider plant, Pumpkin leaves, Hibiscus, Pomegranate, Goose berries, Pigeon peas leaves, young bean leaves, Mulberries, Soar sop, Alligator pepper, Bitter gourd, Loquat, Cherry tomato, Java plum, Wild date palm, Chayote, Taro leaves, Bush candle
		Matooke, posho, millet, yams, fish, cowpeas, sweet potatoes, cassava, G. nuts, rice, egg plants, scarlet eggplant, Amaranthus, spinach, Spider plant, mangoes, watermelons, bananas, oranges, pawpaw, fried fish
	Commonly consumed foods	A lot of hibiscuses can cause diarrhea and body weakness
		A lot of and very high concentrations of hibiscus can cause low blood pressure
		No known side effects, anyone can eat these foods
		Very bitter and can cause nausea
		Indigenous vegetables can cause weight loss
	Sources of information of IFVs	Testimonies/success stories from the previous users
		From the elderly/parents' information is passed down
		From herbalists
		From hospital when you are diagnosed with a disease
		When a family member gets a related illness
	Reliability of health claims	Media including radios, TV, print media, social media...
		There are trust issues of social media information sometimes
		No way to verify health claims relating to IFVs shared by herbalists
		Food labelling on food packages are not regulated and often are misleading
		Health claims shared by the elderly are not verifiable
Preparation and preservation skills	Methods of preparing indigenous foods	Steaming and boiling
		Sun drying, roasting, solar drying,
		Pasting for example vegetables can be pasted into g. nuts, beans.
		Vegetables are traditionally steamed on top of foods
		Turned into powder e.g., bitter berries, cowpeas, avocado seeds, hibiscus, etc. and taken as tea or sprinkled on food
		Fruits can be punched to create a multi-fruit beverage
		Tamarind is added to sauce or simply eaten with millet bread (kalo)
		Fruits eaten as fresh cuts or as salads

		Bitter berries can be chewed raw Pumpkin leaves can be blended into juice
Convenience	Ease of storage	Some indigenous fruits can stay a long time before getting spoilt
		Leafy vegetables are highly perishable
	Ease of preparation	Wild yams and related foods don't require any special form of storage
		IFV not easy to prepare
		Beans take a long time to cook as such they consume a lot of fuel
		The traditional methods of foods that suit such foods are not currently possible
	Quest for ready to eat foods	Vegetables like bitter berries, spider plant require skills to prepare in a way that makes them palatable
Time	Busy schedules	Desire for ready to eat foods, chips and fried chicken, soda...
Household size and composition	Family size	Limited time for meal preparation enhances eating out of home.
		Single-person household often consume ready to eat street foods
Finances	Affordability/Finances	Need for more satisfying foods when the family has many people to feed, indigenous foods are not the focus
		IFVs are quite costly from the market because they are not in plenty here in town while transporting them from the village is equally expensive.
		We don't have money so we can't spend on fruits and vegetables, we can only buy energy dense foods.
		Food choices are determined by affordability. Finance dictates what we choose to eat, we don't really eat what we would want.
Psychological perceptions	Taste and preferences	Taste of food (Pork tastes better than your IFV)
		Higher preference for meat and meat products over vegetables (if I have 3000 Ugx, I eat greens and beans, if I have 5000 Ugx, I eat meat)
		Bitter berries, spider plant, hibiscus.... Have a bitter taste and are not palatable
		High value attached to meat and meat products (Life is not good if you don't consume meat)
		Tasteless and some vegetables are bitter
		IFV are not visually appealing
		The fast foods have attempting visual appeal and way tastier than IFV
	Appetite	Eat according to prevailing appetite and craving
	Avoiding monotonous diets	No appetite for fruits
		Desire to eat different foods on each eating occasion
Social environment	Peer Influence	
		Consumption is triggered by the influence of people around you
		Eating out of home with friends, can't eat indigenous foods
		Learning from friends to reduce on intake of fast foods
		Copied from friends to eat boiled foods instead of frying all the time
		Learned from my neighbors to eat some fruits during breakfast
		Learned from friend's home that not to prepare food without greens
		Learned how to vary my dishes and not eat the same food all the time

	Influence of children	Children don't like such foods Children think IFV are foods for the elderly
	Women's influence	What the wife cooks is that we eat, men culturally don't go to the kitchen or plan what is cooked at home
		We learn from our mothers how to prepare IFV
		Our wives get annoyed when we talk about them preparing vegetables at home (they feel we have become so poor)
	Male involvement	Men have no say in food planning and preparation
		Culturally men don't cook or decide on what should be cooked
Outcome expectations	Health considerations	Consider a meal with all nutrients (balanced diet), carbohydrates, proteins, fats, vitamins, roughages, fruits and water
		Not use cooking oil to prepare food for purposes of weight management
		Need for food that doesn't worsen my ulcers
		Consideration for food as medicine and not just eating to fill the stomach
		Desire to have a long and healthy life
		Considerations for foods that have less sugar e.g., matooke
		Doctors recommend bitter vegetables for good health
		Eating to survive, not much attention to health aspects of food
		Only mind about health when a doctor recommends me a particular food
		IFVs are linked to prevention of CVDs and strengthen body's immunity
		CVDs are diseases for rich people, they don't affect poor people
		Choice of food depends on the growth needs for the children
Physiological satisfaction	Nature of job	High energy demanding jobs require high energy dense foods
		More fruits and juices for us athletes
		In the village we dig, so the food we choose should be that that gives us a lot of energy.
	Need for food with high satiety	Indigenous foods are only eaten as snacks and not main course
		They have a low satiety effect
		Large family size requires highly satisfying carbohydrates
Cultural norms	Social misconceptions	Indigenous foods can only be taken as tea accompaniments
		Foods are associated with poverty (IFV are foods for the poor)
		Fear to be laughed at by neighbors
		Only eaten during food scarcity
		It is not food but medicine specially for old people
		Essentially food for the elderly
		IFV are associated with backwardness and essentially for the villagers
		Such foods are not trendy
		IFV cannot be packed for children to take to school as their peers laugh at them
		Need to gain weight yet IFV don't make one fat... positive perception accorded to a large body size

	Cultural considerations and myths	IFV like bitter berries can make one lose weight, so it is not good
		IFV are only a remedy for particular ailments but not food
		Wild foods can only be consumed from the bush, cannot be brought home
		Some IFV are resting places for ancestral spirits
		Some foods act as totems for some clans so cannot be eaten
		Some IFV are linked to witchcraft
		Foods like yams cannot be eaten with meat or fish, this can cause their extinction
		Food linked to culture/tribes in some instances, some cultures/tribes are considered of lower social class by others, so they end up despising their foods as well
		Can only eat what we grew up eating
		IFV linked to special cultural occasions.
Physical food environment	Accessibility and availability of IFVs	Natural habitats of IFV like forests have been destroyed so these foods are now rare
		Regional variation in availability e.g., only available in the villages
		Proximity to the market. IFV are sold in faraway markets
		There are no ready-to-eat IFV sold around the street
		Fast foods are quite ubiquitous here
		Have to walk long distances in search of IFV
		Restaurants don't prepare a variety of IFV
		Supermarkets don't have fresh indigenous foods; they only have frozen exotic vegetables
		Commercialization of IFV
		Increased loss of diversity of IFVs
		Low value addition or processing of IFVs
	Sources of IFVs	Market, own garden, gathered as ruderals
		Sending from the village to town here
Nutrition knowledge	Food knowledge	Asking from neighbors
		Collecting from the wild
		People aren't knowledgeable about the health benefits of some foods
		People grow the vegs and sell all of it (they are so money minded)
		Consumption of so many fast foods and rise in number of fast-food outlets
Food skills	Food preparation skills	High preference for sodas compared to juice and water
		Used to consume vegetables in plenty but nowadays just spoonful
		Switch from steamed and boiled foods to fried foods
		Everything is fried nowadays
		A lot of eating out of home nowadays
		IFV were never fried but nowadays everything is fried

		Lost the traditional ways of preparing food (matooke would be steamed in banana leaves but currently it's often steamed in plastic bags and polyester sacks)
Seasonality	Seasonality	Most IFV are seasonal. Cannot be easily found off season Erratic availability of IFV in the markets Yams used to be many and accessible but no more
Food Safety concerns	Chemical safety	Residual pesticides from uncontrolled use of agricultural chemical sprays Unsafety disposal of industrial effluents into the growth habitats of indigenous vegetables
	Machine debris	Fear of metal fillings in food in food, e.g., in groundnuts, powdered bitter berries
	Microbiological safety	The microbial safety of the fresh fruits and vegetables especially the ready to eat ones maybe questionable. Vegetables grow in very unhygienic places
	Genetic modification safety concern	Some indigenous vegetables have been genetically modified e.g., new varieties of tasteless bitter berries, Amaranthus with bigger leaves....
Diversity of IFV	Causes for the loss of diversity of IFV	Natural habitats e.g., forests, swamps been destroyed Introduction of exotic crop cultivars Popularity of GMOs and foreign varieties; high yielding, Population increases leading to destruction of forests Loss of knowledge to the young generation about IFV Lack of seeds to replant IFV Soils are tired leading to crop failure Lack of sufficient space to grow IFV Climate change, there longer dry periods than before leading to crop failure Indigenous foods take years to grow, people want foods that grow fast There's belief that IFV grow by themselves and cannot be planted in home gardens Uncontrolled use of pesticides and herbicides Negative perception accorded to these foods e.g., food for the poor, elderly and villagers, bitter/tasteless foods etc.
	What can be done to control loss of diversity	Encourage/invest in backyard gardens. Sensitize mothers about the health benefits of indigenous foods especially vegetables as they are the meal planners of the homes. Undertake community sensitization Create community demonstration backyard gardens Develop community markets to allow easy access of IFV Develop different recipes to improve sensory parameters of IFV

		Encourage use of traditional pesticides instead of chemicals e.g., ash mixed with hot pepper
		Need to promote organic farming
		Encourages/teach children to love IFV
		Encourage and promote urban farming