

Supplementary Table 2: Generated coding framework for Key informant interviews on facilitators and barriers (Determinants) to consumption of Indigenous fruits and vegetables

Themes	Categorization of codes	Generated codes from responses
Understanding of Indigenous foods	Knowledge of IFS	Plants, and their produce, because a plant has the root, the stem, the leaf and the fruit that have not been engineered, corrupted in any way
		Food that has been planted from seed, either self-planted or bird-planted, natural, just the way God did create it
		Foods adapted to the local environment, locally grown
		Used over a long period of time that they have become accustomed to the users
		They are unique to given communities
		The term indigenous is changing with generations for example children of this generation will most likely grow up thinking lettuce is an indigenous vegetable
		Indigenous foods are also called neglected foods. Neglected in the sense that they are not given priority
		The food that we have grown up seeing
		Stage of harvesting affects the nutraceutical potency of indigenous foods
		It could have been brought from elsewhere, but it has stayed with us for so long that it became part of our culture and tradition
		Food varieties that are local and have not been adulterated by genetic modifications
		These are foods that have been naturalized, neglected and not so much commercialized
Knowledge of cardiometabolic diseases	What are they?	Diseases that affect the heart and vascular system
		Diabetes, hypertension
	What causes them?	High fat intake
		Diets devoid of fruits and vegetables
		Low physical activity. Don't want to work out
		Consumption of western diets (the so-called good feeding to us)
		Children are consuming lots of sugars and sweets
	How can they be prevented	Reduce fat intake
		Include vegetables on your plate
		Increase fruits in the diet
		Avoid eating food without vegetables
		Increase in physical activity
Link between IFV and cardiometabolic health	IFS especially for cardiometabolic health	Pomegranates, soursop, yams, avocado seeds, bitter leaf, hibiscus flower, Bidden pilosa, moringa, guava, lemon peels and garlic, tamarind, jambula,

Themes	Categorization of codes	Generated codes from responses
	Phytochemical composition of IFV	turmeric, solanum species, nakati, spider plant, gooseberries, mpafu, empirivuma, Matungulu, Malakwang, cherry tomatoes
		No knowledge
		Have anti-cholesterol agents
		Flavonoids, Phenolics, thiocyanates,
		Blood vessels, heart
		Hibiscus can cause low blood pressure
Food safety concerns	Fear of safety of indigenous foods products	Changes in color of stool due to too much hibiscus intake
		Uncontrolled use of chemical preservatives
		No strict market monitoring of the products by the regulatory authority
		Need to control health claims and false marketing of IFS products
		Uncontrolled intake of hibiscus can cause low blood pressure
		Concerns over pesticide residues on some IFV.
Food skills	Methods of preparing indigenous foods	Storage of dry leaves and powders e.g., hibiscus may attract mycotoxins and aflatoxins
		The phytochemical composition could be affected by food preparation and processing
		steaming
		Boiling
		Maceration
		Infusing
Convenience	Ease of storage	Boiling may endanger most of the heat labile compounds for example the cyanide group, anthocyanins, carotenoids
		The phenols tend to increase upon processing... boiling
		Drying, making powder,
		Indigenous fruits are less perishable
		Vegetables are quite perishable and need cooling systems
		Not easy to prepare in a way that is palatable
Accessibility	Ease of preparation	Low food skills
		Quest for ready to eat foods
		Living alone prompts eating out of home
		Peer pressure
		Emotional satisfaction derived from eating in fast food outlets
		Long working hour and no time to prepare home meals
Household size and composition	Busy schedules	Proximity to outdoor food markets; markets are quite far away from the residences
Finances	Ease of access	Large family size the focus is on providing energy dense carbohydrates
		Little money to spend on food
		Increase income prompts unhealthy food choices

Themes	Categorization of codes	Generated codes from responses
		IFS come at high prices due to their scarcity
		Indigenous foods have been highly commercialized
Social environment	Peer Influence	People don't know the benefits of indigenous foods they simply learn from others through recommendations
		In boarding schools, children do not eat indigenous fruits and vegetables
	Influence of other house members	Meals are prepared according to what children want
		Children don't like IFV because of their taste
Outcome expectations	Health considerations	Indigenous fruits and vegetables are immune boosters
		Desire to cleanse the blood of free radicals and cholesterol to control diabetes and heart diseases
		Diet alone cannot treat diseases, but it is a secondary treatment
		Before people run to hospitals, they first try out indigenous foods as herbs some people actually consume them as medicines and not food
		People who are becoming more nutritionally aware are likely to eat indigenous foods
		Indigenous foods considered as an alternative to mainstream medicine
		Understanding the nutritional value of vegetables prompts more intake
Information	Source information about IFS	Herbalists
		The elderly
		Media (radio, TV, Print)
		Social media
Sociocultural barriers	Social misconceptions and myths	People in urban areas not likely to eat indigenous foods
		Indigenous foods are for poor people
		For the youth, consumption of fast foods from KFC, etc. is considered trendy
		Indigenous foods are less trendy so not enticing to the young generation
		Associated with witchcraft and superstitions
	Cultural perception	Food for old people
		Terminally ill people especially cancer, HIV patients
		Indigenous vegetables are only considered a side dish
	IFS are not tasty and no visual appeal	Fast foods are mostly enticing
		IFV have a poor taste
		GMO foods and exotic varieties are tastier and more visually appealing than their indigenous counterparts
Accessibility	Ease of access	Limited availability of IFS, increasingly markets are full of exotic varieties
		Not available in supermarkets, often sold in roadside markets
		Easily accessible in the village
		Not branded as exotic varieties
		IFV are seasonal

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		Proximity to outdoor food markets; markets are quite far away from the residences
	Commercialization	Indigenous foods have been heavily commercialized
Food and nutrition knowledge	Knowledge Gaps	Considered as weeds
		Lack of scientific evidence about the purported cardiometabolic health benefits
		Loss of knowledge of IFV from one generation to the other
		Nutritional knowledge is lacking
		Don't the health benefits we just eat
		Widespread adverts promoting fast foods-
		Parents speak ill about indigenous foods in front of their children instead of encouraging them
Physiological expectations	Need for food with high satiety	Manual jobs require energy dense foods, IFV are said to be light foods
Cultural perspectives	Women's influence	Culturally women cook, men don't so women decide what to cook and how to cook it
Seasonality	Seasonality	Not commonly found in markets; are quite scarce
Food safety concerns	Safety	In the markets, IFV are only available early mornings or late evening
		Pesticide residues
		Mycotoxin infestation of dry vegetables and powders
		Metal debris in milled vegetable powders
		Microbial safety concerns in the ready to eat fruits and vegetables (fresh cuts)
	Genetic modification	Many indigenous varieties have been altered leading to loss of the indigenous sensorial properties for example, indigenous bitter berry is bitter but now you have varieties that are not bitter
Diversity of IFV	Sources of IFS	Roadside markets, outdoor food markets
		Own farm
		Near riverbanks
		In the farrowing land
	Causes for the loss of diversity of IFS	Exotic varieties are favored because they have better agronomy, better yields,
		Children don't like IFS
		They are not economically sound
		Some of the indigenous vegetables are considered as weeds
		They are not given priority in terms of promotion, production, and funding from the government
		Promotional adverts are only in favor of the exotic varieties
		Lack of planting materials for indigenous foods and sometimes issues with viability of seeds.
		Population growth, people encroach on marginal lands
		Lack of deliberate efforts to preserve the indigenous seeds

Themes	Categorization of codes	Generated codes from responses
	What can be done to control loss of diversity	Indigenous foods are quite tolerant to drought
		Teaching children the benefits of indigenous foods
		Need for widespread sensitization using the small groups approach and not the mass communication models
		Plant these foods at own farm
		Making attractive food products out of the IFS, will make them attractive to the people for example a soft drink packaged well
		Creating recipes where IFS can be blended with other foods
		Promote indigenous foods as food and not medicine
		Climate change
		Growing population and encroachment on marginal lands
		Dietary concepts should be integrated in the school curricula
		Can make a cocktail of juices from indigenous fruits and vegetables to improve taste and satiety
	Dietary changes over time	Desire for fast foods
		Increase in cardiometabolic risks
		Many packaged juices based on indigenous foods but there's skepticism about their originality.