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Food Composition Tables - Kenya Review and update

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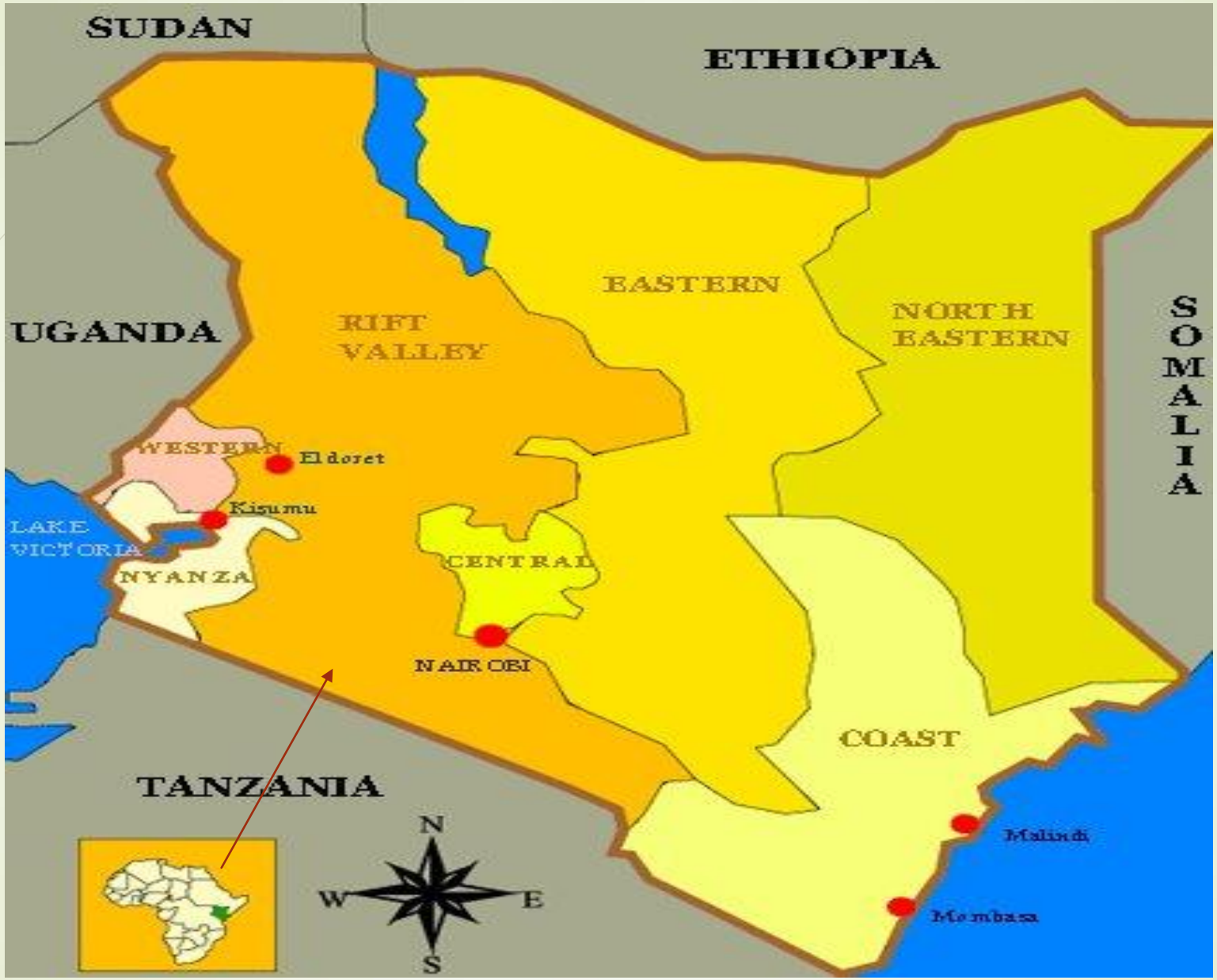

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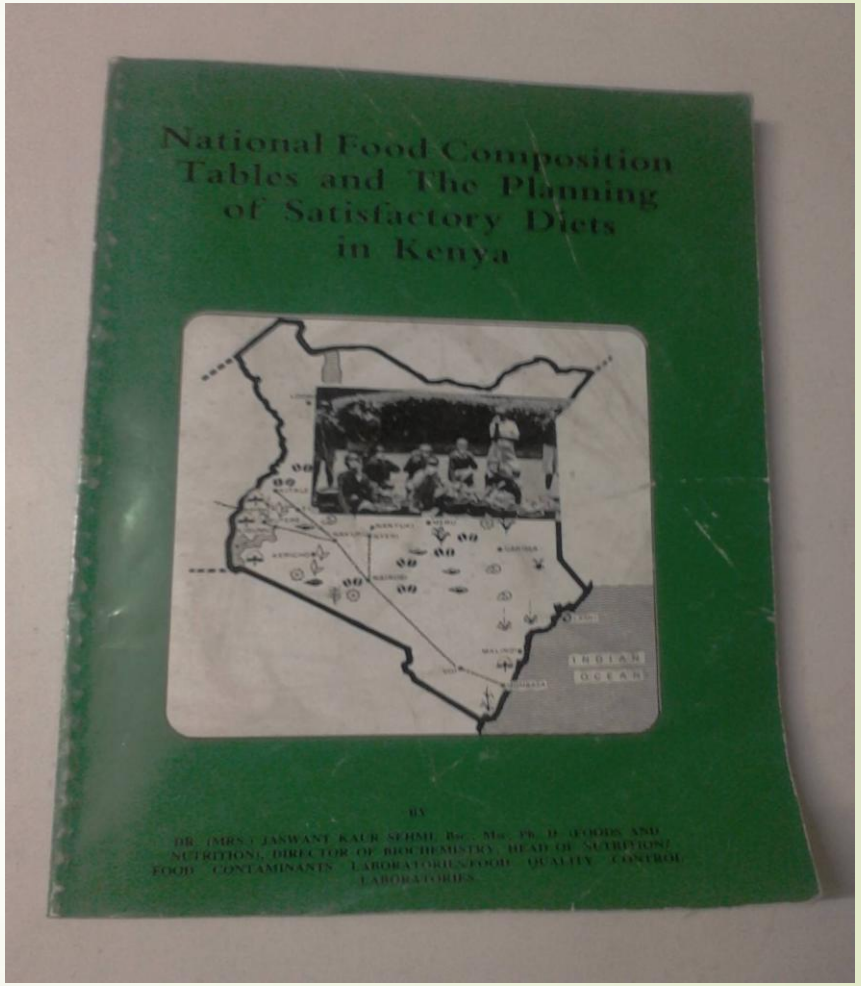
Introduction

- Food composition tables (FCT) are important guidelines in nutrition.
- The Kenyan FCT were published in 1993.
- Challenges of KFCT93-missing foods, missing components, values, some analyzed values done with old methods and documentation,
- They were therefore overdue for update.



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Objective

- To review and update the Kenya FCT.

Methodology 1/3

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a) Planning and coordination:

- A formal multi-disciplinary and cross-sectoral team of experts drawn from government ministries, universities, research institutions, NGOs formed the steering committee,
- Process led by Ministry of Health- nutrition unit & Kenya Agriculture and Livestock Research Organization (KALRO) .
- The steering committee met every quarter & facilitated the activities and made all decisions.

Steering Committee Members

Methodology 2/3

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b) Training, sampling & analysis:

- Training of county food samplers facilitated by Ministry of Health, KALRO, SGS Laboratory, Universities, FAO.
- Sampling of foods done in 10 counties of the country, by the trained county officers from Ministry of Health and Ministry of Agriculture, Livestock and Fisheries,
- Analysis done by SGS Laboratories- Kenya.

62 foods were analyzed,

28 nutrient components were prioritized for analysis

Training of food samplers

Participants at the workshop from both County and National Ministries of Health and Agriculture, FAO, academia and research institutions (KALRO, KEMRI, Kenyatta University and JKUAT)

Dr. Peter Chege from Kenyatta University making and presentation during the Workshop.

Angela Kimani from FAO, Cyprian Kabbis from SGS Kenya and John Mwai from MoH making presentations during the workshop.

Methodology 3/3

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c) Data entry, cleaning & compilation:

- Existing food composition data and analytical data from universities and research organizations in Kenya were compiled into the FAO/INFOODS Compilation Tool.
- New data were acquired by analysis of 62 foods from ten regions in Kenya
  - Analysis was either for the entire nutrient profile or selected components.
- All these data were compiled into the archival database using FAO/INFOODS compilation tool.

Food Sampling in different regions

Cont: Methodology 3/3

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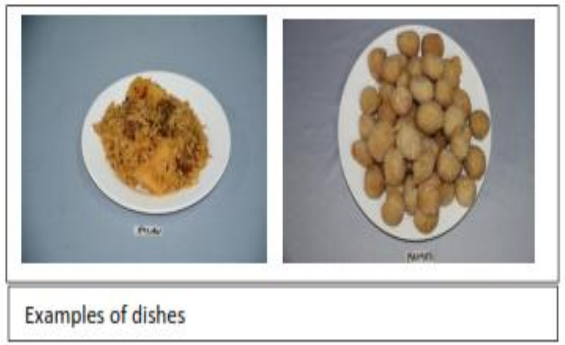
Recipe Preparation

Women group preparing to start cooking

Women group preparing Kaimati.



Examples of dishes

c) Data entry, cleaning & compilation:

- To facilitate imputing and calculating the missing values, food composition data from- USDA R28, South Africa, India, Australia, UK-CoFIDS 7, uPulse, uFish, BioFoodComp and AnFOOD were used.

Recipes

- The nutrient profile of single and multiple ingredient recipes were computed using the available data of raw foods
- Mixed recipes from different communities prepared by women groups & documentation done.
- **Whole process- Financial and technical support from UN FAO.**

Findings 1/4

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- The new composition table has a priority list of 275 raw foods.
- In 14 food groups.

Food Groups in KFCT 2017

CODE	FOOD GROUPS	No of Foods
A	CEREALS AND CEREAL PRODUCTS	39
B	STARCHY ROOTS, BANANAS AND TUBERS	17
C	LEGUMES AND PULSES	20
D	VEGETABLES AND VEGETABLE PRODUCTS	37
E	FRUITS AND FRUIT PRODUCTS	38
F	MILK AND DAIRY PRODUCTS	26
G	MEATS, POULTRY AND EGGS	25
H	FISH AND SEA FOODS	13
I	OILS AND FATS	12
J	NUTS AND SEEDS	14
K	SUGAR AND SWEETENED PRODUCTS	3
L	BEVERAGES	6
M	CONDIMENTS AND SPICES	21
N	INSECTS	4
	Total	275

Findings 2/4

- KFCT2017 contains data from 62 newly analyzed foods among others.

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Findings 3/4

- Fatty acids and amino acids are included for selected foods with complete analysis.
- Components (28 in total) and edible portion, and missing data were completed.
- The nutrient composition of cooked foods and mixed dishes calculated.

Components in KFCT 2017		
Edible Portion	Iron	Niacin
Energy (KJ)	Magnesium	Vitamin B6
Energy (Kcal)	Phosphorus	Pyridoxine
Water	Pottasium	Folate
Nitrogen	Sodium	Vitamin B12
Protein	Zinc	Viatmin C
Fat	Selenium	Cholesterol
Carbohydrates	Vitamin A	Phytate
Fibre	Carotene	Oxalate
Ash	Thiamin	Amino Acids
Calcium	Riboflavin	Fatty Acids

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Findings 4/4

- Limited local secondary data available from previous documented research,
- Challenges in local laboratories that are ISO Certified for analysis of most of the nutrients.
- The nutrient composition of cooked foods and mixed dishes calculated.
- Actual cooking of different recipes by selected communities members has been helpful in documenting how communities traditionally prepare the foods.

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Conclusion

- The process of reviewing & updating Kenyan FCT has been successful due to strong leadership from government & the commitment of partners from different sectors (through the steering committee),
- Availability of funds to undertake nutrient analysis has enabled the new FCT to have primary data,
- The updated Kenyan FCT will provide more new information for nutrition and agricultural decision making.

- The Revised Kenya FCT will be launched in January 2018.

Moving Forward

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- Need to sensitize decision makers on the utilization/translation of FCT at policy and program levels for decision making,
  - (It is one thing to have a new document, and for it to be used for its purpose),
- Need to sensitize communities on proper utilization of locally available foods(incl. cooking of food) in order to maximize nutrient retention,
- Need to sensitize/ increase interest in food analysis as an important area of teaching & work in food & nutrition- in universities, research & programming,
  - Need to build local capacities of institutions and persons to undertake food analysis,
  - Need to increase interest in publication of related scientific papers,
  - Need to raise awareness on the need to fund food analysis work & the role of food data in decision making.

Acknowledgement

- UN FAO
- GoK – MoH, MoA, NPHL,
- Universities – JKUAT, UoN, KU, Kisii, Eldoret, MoI, Egerton,
- Research Institutions – KALRO, KEMRI
- County governments
- SGS laboratories,
- ICRAF
- NHPplus
- Steering Committee Members
- Technical Team
- Food sampling team

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