Ethiopian National Food Composition Table
Updating and Revision

January 14, 2016
Background

• In 1958 the American Interdepartmental Committee for Nutrition in National Defense undertook a nutrition survey in Ethiopia in a period of a few months.

• In the report form the committee a limited number of food analysis were tabulated partly original but also taken from an earlier report.
• In the first agreement signed between the Ethiopian and Swedish governments in 1962 one of the programs was a detailed chemical and biological values of the Ethiopian food material and diets was rather limited.
• Food composition table for use in Ethiopia I
  – Number of items included 210
  – Analysis result for
    • Proximate composition
    • Minerals such as P, Ca and Fe
    • Vitamins such as β-carotene, Thiamine, Riboflavin, Niacin and Tryptophan
• Food composition table for use in Ethiopia II

  Compiles Amino acid content and biological data on protein in Ethiopian foods

Analysis result for amino acid

  • 18 amino acid profile except
  • Number of items included 99

Analysis results for biological data and chemical score

  • Level of protein
  • Growth per week
  • Protein efficiency ratio
  • Chemical score
  • Number of items included 266
Background

• Food composition table for use in Ethiopia III
  – Number of items included 620

Analysis result for

• Proximate composition
• Minerals such as P, Ca and Fe
• Vitamins such as β-carotene, Thiamine, Riboflavin, Niacin and Tryptophan
Background

- Food composition table for use in Ethiopia IV
  - Number of items included 305
  - Analysis result for
    - Proximate composition
    - Minerals such as P, Ca, Fe, Zn, Cu, Na and K
    - Vitamins such as β-carotene, Thiamine, Riboflavin and Ascorbic acid
Basic principles for assembling, management and updating of a food composition table
Introduction

• The Ethiopian Public Health Institute, Food Science and Nutrition Directorate is the organization from where food composition activities are managed, coordinated and driven in Ethiopia.

• Other role-players, e.g. universities, research organizations and the food industries are increasingly becoming involved.

• The focus of the Ethiopian National Food Composition data system is to collaborate nationally to compile a country – specific food composition data base.
Objectives in updating and revision of FCT

- To serve the requirement of the potential users
- Work cost-effective and with timeframe for editions
- Consultation with all interested parties and users
- Provide continuous access of all users to the output
Without food composition data countries cannot:

• Analyze the nutrient intake or develop nutrient requirements and safe upper limits
• Carry out epidemiological research on nutrient intake and disease
• Produce accurate food labels
• Formulate institutional and therapeutic diets
• Promote nutritionally important plants and animals to improve health or for breeding
• Inform consumers about good food choice
Food composition programs need

- Motivated people
- Standard procedures, in line with international guidelines
- Integrated in international network (Afro diet)
- Steering committee between users, stakeholders and coordinators
- Government support
- Funding for data generation, compilation and dissemination
Food composition program

- Administrative frame
- Data generation (analytical, calculated or estimated data)
- Data dissemination (to users through internet or printed materials)
- Data use (by knowledgeable professional)
Food composition data users

- Nutritionist, dieticians
- Researchers, epidemiologists
- Economists
- Program coordinator
- Food analysts and technologists
- Food and nutraceuticals manufacturers
- Agriculture planners
- Food safety
- General public
Use of Food composition data

• **Nutrition and Health related**
  – Dietary and Health assessment
  – Food guide pyramid
  – Daily calorie and nutrient requirement estimation
  – Clinical diets
  – Nutritional policies
  – Epidemiological research on relationship between diet and disease, example chronic disease
  – Devising emergency food supplies
Use of Food composition data

- Trade
- Nutrition labeling
- Food regulation
- Consumer protection
- Plant breeding
Limitations in use of FCT

- Variability in composition of foods
- Partial or limited coverage of foods
- Partial or limited coverage of nutrients
- Limitations of methods for measuring food intake
Thank you