

Food security is defined as a condition that 'exists when all people, at all times, have physical, social and economic access to

sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life' (FAO 2010).

The SA Basic Food basket

Food group for diet diversity score >6

- Animal Protein
- Bread and cereals
- Vegetables
- Fruit
- Dairy
- Eggs
- Fats and oils
- Bean products
- Coffee and Tea

Stats SA, 2013

Basic Food Basket

Min R 680/ person/ month

- Canned fish
- Chicken breasts
- White / Brown bread
- Tomatoes, cabbage, onions
- Oranges
- Full cream milk
- Eggs
- Sunflower oil
- Peanut butter
- Coffee and tea

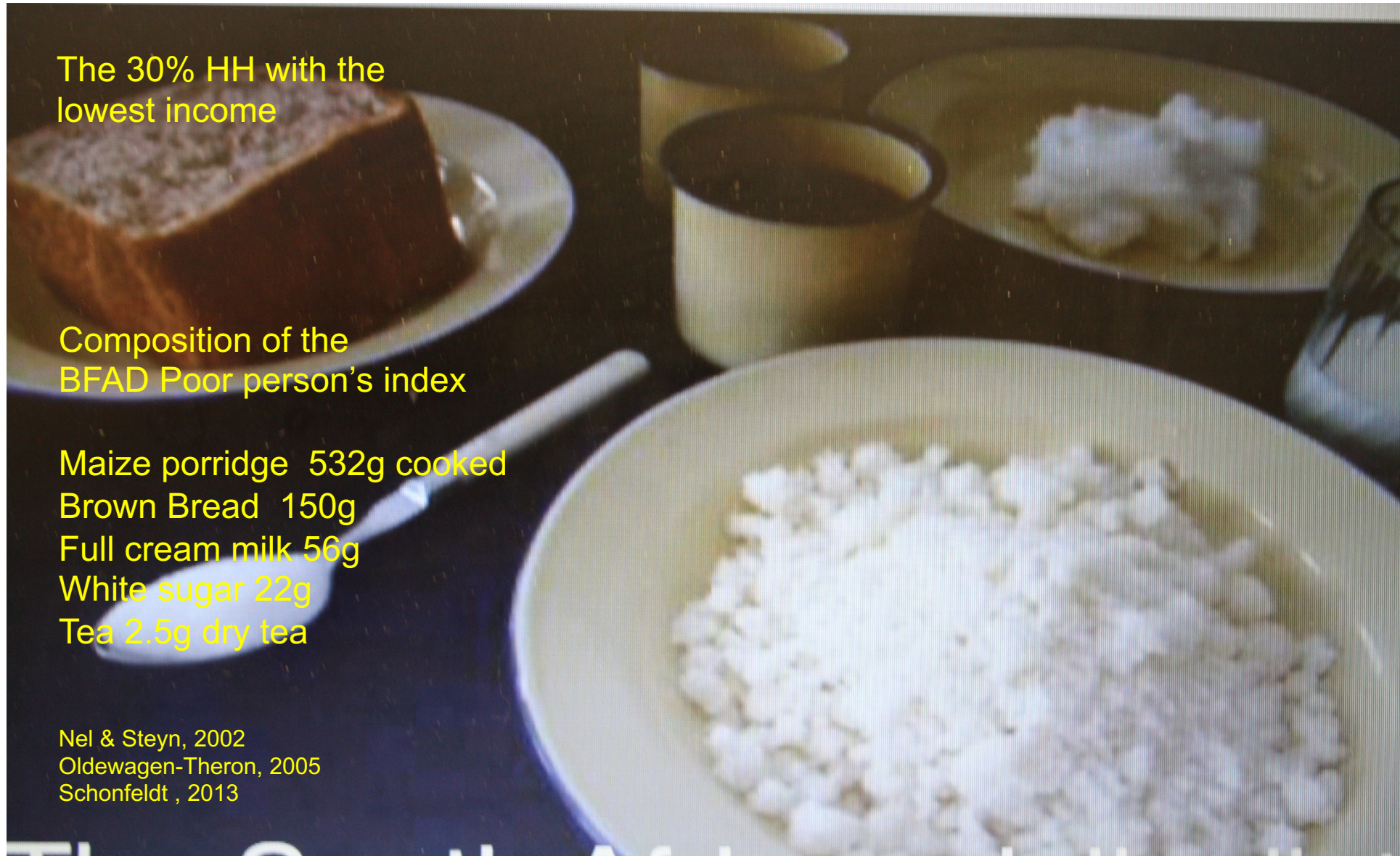
The real 'food basket' of 30% of SA households

The 30% HH with the lowest income

Composition of the BFAD Poor person's index

Maize porridge 532g cooked
Brown Bread 150g
Full cream milk 56g
White sugar 22g
Tea 2.5g dry tea

Nel & Steyn, 2002
Oldewagen-Theron, 2005
Schonfeldt, 2013



The dilemma: What is there to eat?



What is a household food security garden? We are 2.5 years 3 years and 5 years old. Our caregivers have a well established garden, fruit trees and chickens. The 5 year girl is stunted, like 25% or more of children in South Africa and eats from her bowl of dry porridge. Household gardens with a diversity of nutritious plants, animal foods and nutrition education are important for household food security.

More than 60% people are food insecure, 20% experience moderate hunger and 25% severe hunger (average from latest studies)

- Macro nutrient deficiency
- Micronutrient deficiency
 - Protein
 - Vitamin A
 - Iron
 - Magnesium
 - Zinc

Lack of fruit and vegetables may have adverse nutritional consequences with resulting micronutrient deficiencies such as vitamins A and C, folate, magnesium, calcium, zinc and iron, as well as a suboptimal intake of dietary fibre.

Lack of nutrition sensitivity in agriculture

In the past agriculture focused on energy provided by food, 2100 kcal per person – national food security

Provision of energy is provided without the intake of critical nutrients

- Increase weight without length – stunting
- Promote fat gain and obesity
- Restricts and retard physical development
- Restricts and retard cognitive (mental) development

Retarded development and high incidence of obesity manifests as prominent social and economic burdens

A shift needed from quantity to quality
a variety or diversity of foods
available, accessible, **utilised**
and available all year

CONTINUITY AND DIVERSITY

Introduction of nutrition concepts to community groups

No longer calorie and nutrient based

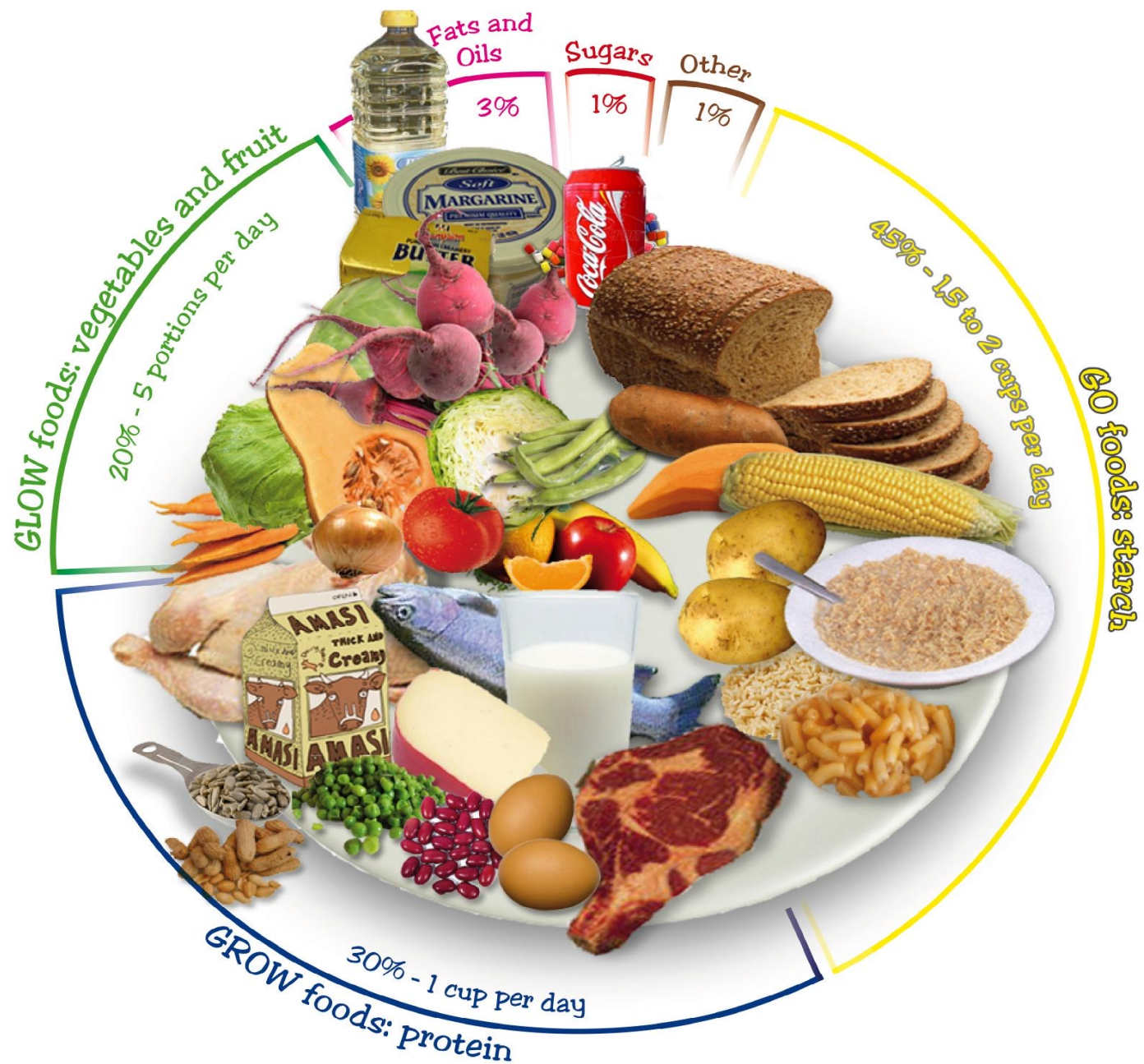
Work with 5 food groups and or

Food based dietary guidelines

Work within cultural food habits and preferences

Focus on diets of small children 0-5years

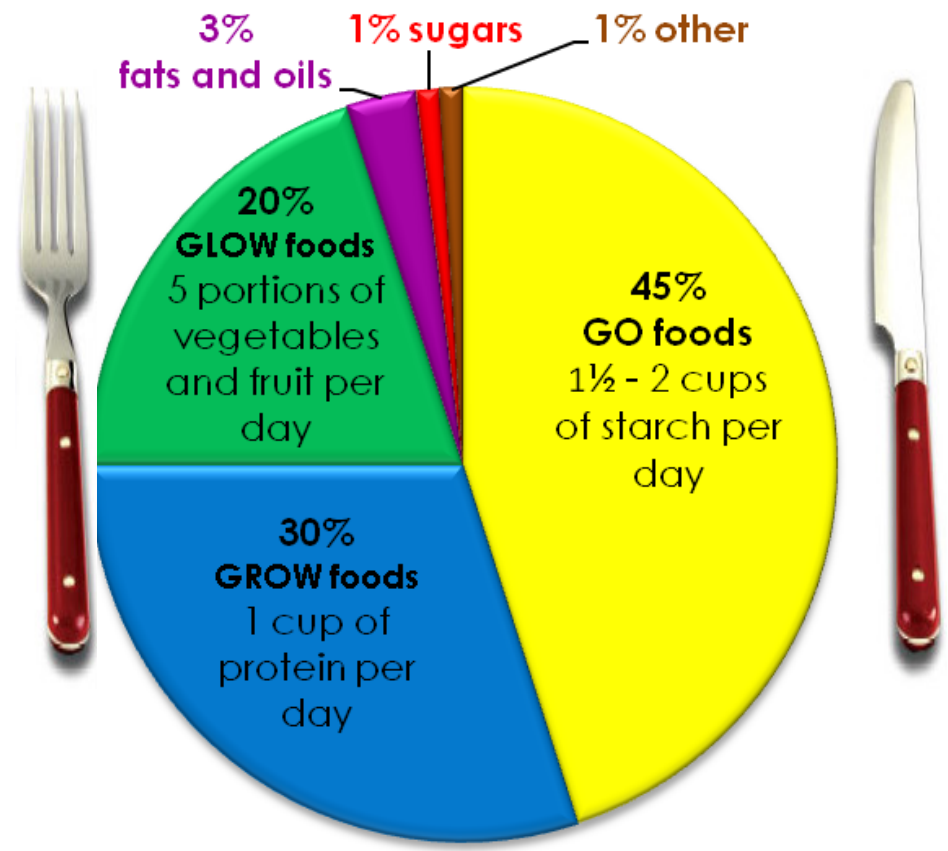
Focus on special dietary needs of common chronic conditions; High blood pressure, diabetes and HIV/AIDS



Food based recommendations: Eat per day

1/2 green dishes	Vit A, Fe, Zn	spinach, cabbage, parsley, spring onion, green peas,
1/2 yellow	Vit A,C, Fe, Zn, Protein	yellow sweet potato, pumpkin, carrot,
3 dishes	Starch	maize, rice, bread,
1 table spoon	fats	oil, butter, margarine

On my plate – what I should eat each day.



Dietary Guidelines

These have been developed at a national level as the nutrition related messages that need to be considered and are called the 10 food based dietary guidelines.

- Enjoy a variety of food for more nutrients
- Balance food intake and energy used
- Be active (exercising, walking, working in the garden and sweat)
- Eat regular meals (do not skip meals especially breakfast)
- Make starchy food the basis of most meals (white vs brown/wholewheat)
- Eat plenty of vegetables and fruit daily, they are very rich in many nutrients
- Eat beans, peas, lentils and soya regularly
- Meat, chicken, fish, milk or eggs can be eaten daily (fatty vs lean or processed meat; take aways; deep fried meat)
- Use fats sparingly- animal vs plant oil, hard vs soft
- Use less salt, too much salt can lead to heart problems
- Drink clean safe water. Water replaces water lost (i.e. sweat, urine) during exercise.
- If you drink alcohol, drink sensible- don't give children/don't send children to buy alcohol

Vitamins

- A range of vitamins and minerals are required for optimum health (Vit A, B's, C, D, E, K)
- Minerals :Calcium, Iron, zinc, selenium,.....
- Trace elements: Iodine and fluoride
- Macro and micronutrient malnutrition
- Micronutrient deficiencies are very common – chronic malnutrition and stunting rather than severe malnutrition and wasting. (Look at National food consumption survey results)

Nutrition Gap analysis

Participants are divided into groups of 7-10 members. They discuss and record for report back in plenary (the larger group) the following topics:

- What we eat every week
 - What we rarely eat
 - What we would like to eat but do not have access to and
 - What we feed the young children (ages 1-5yrs)
 - Special foods for sick and old people
-
- Participants analyse their selection of different food groups and look at what they eat regularly. They then offer suggestions of where they may be missing food types that may provide them with a more balanced diet.
 - A list is made of the food types people would like to try and grow to augment their present range of food types. Each individual puts their name against the food type they would like to include in their homestead systems

Growing a healthy diet in an intensive home food garden

The Nutrition workshop

Stretching the benefits:

Food preservation, storage and preparation



The Nutrition Workshop:

- 1 Local food habits, choices and nutrition conc
- 2 Compare it to the guidelines for good nutrition
This creates discomfort when there are significant deviations.
- 3 Ideas how households can improve their situations through their gardening practices and their food preparation, preservation and storage processes.
4. The outcome of this process is a list, generated with the households, of additional crops, fruit and livestock production options to fill the nutrition gaps.

My child needs a variety of foods: Vegetables and fruit to eat with foods rich in protein. I can grow these crops to add to our daily maize porridge staples.

Highlights:

Nutrition w/s

continued



List of foods needed to provide a more balanced diet (especially for children < 5years).

This list was prepared by the participants:

- Amadumbe (taro)
- Indlubu (jugo beans)
- Amatongomane (peanuts)
- Sweet potatoes
- Carrots, beetroot, spinach
- Lettuce, tomatoes
- Garlic, onions
- Eggs
- Meat: beef and chicken
- Fruit: apples, oranges, lemons, pears, grapes, plums, peaches