

Nutrition Assessment from Garden to Healthy Families

Helping women make the connection

Learning Objectives



- ▶ Explain basic concepts of food security
- ▶ Explain how gardening can enhance nutrition
- ▶ List steps of nutrition counseling
- ▶ List different methods to gathering information about food intake

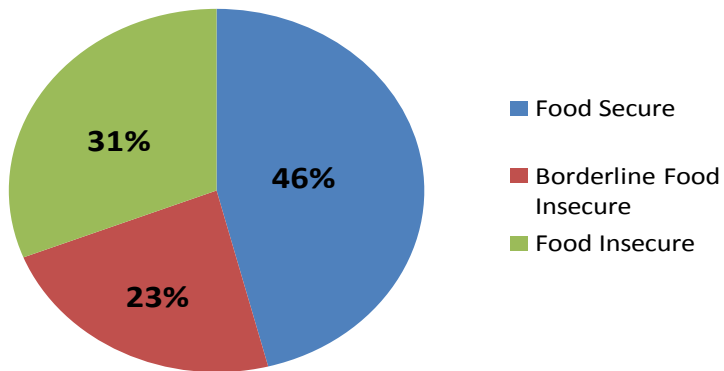
Here in Afghanistan

- ▶ More than half of Afghan children under the age of five go hungry
- ▶ Highest rate of maternal and infant mortality in the world



Food Insecurity in Afghanistan

Prevalence of Food Insecurity



46%



24%

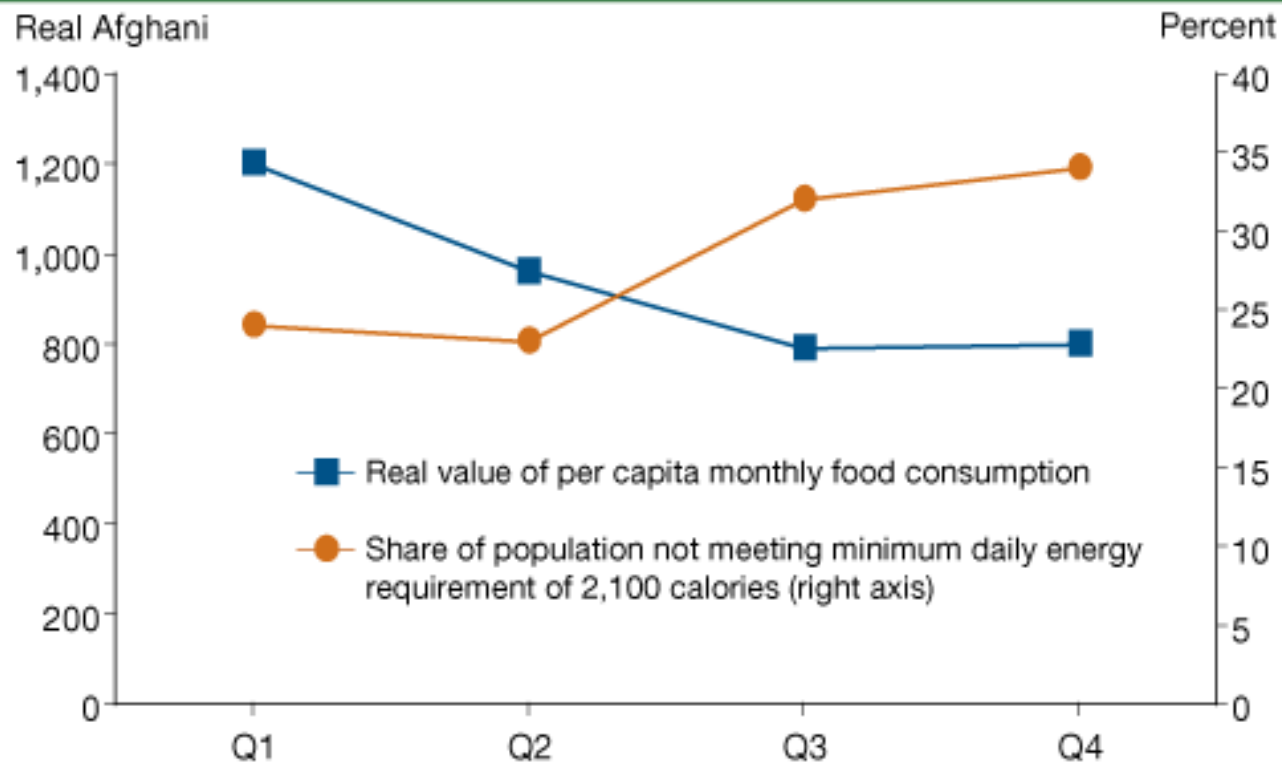


39%



- Urban
- Rural
- Nomads

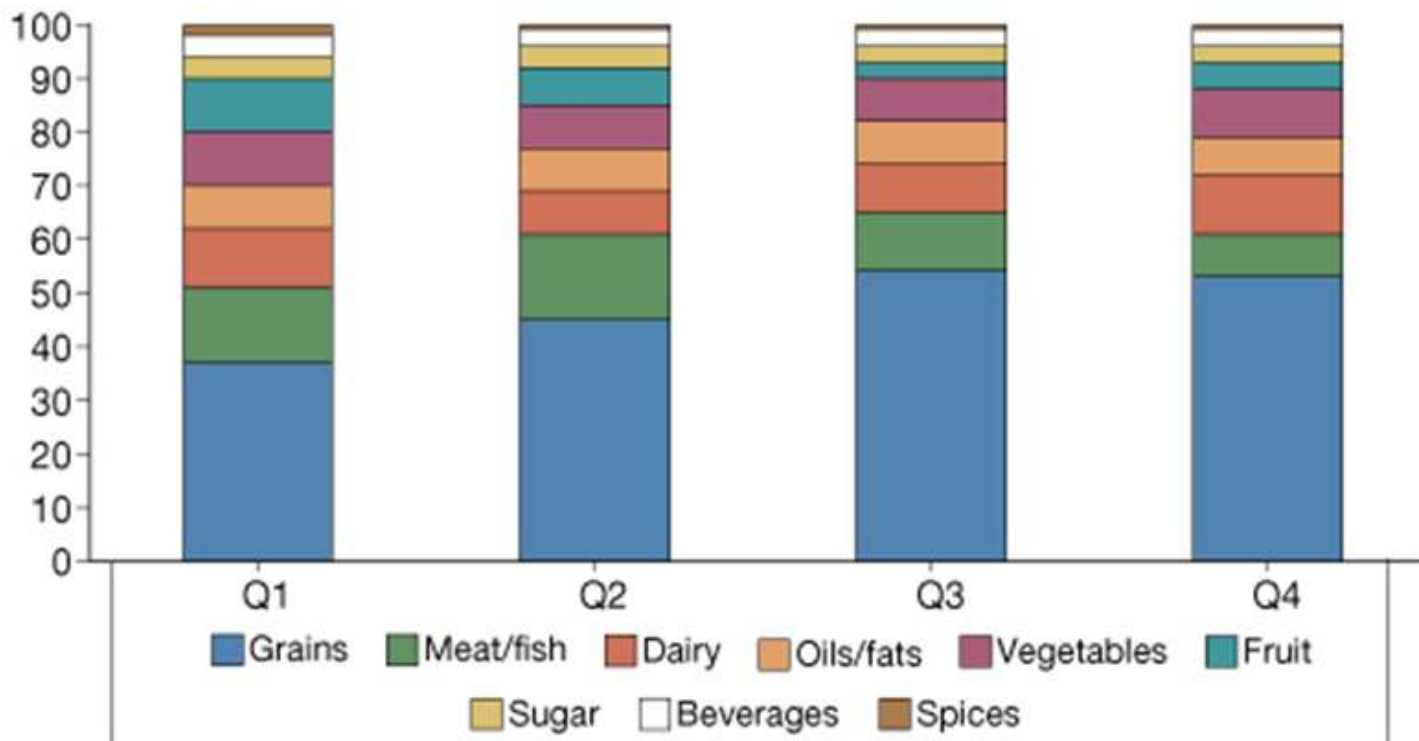
Food security in Afghanistan deteriorated between August 2007 and September 2008



Source: USDA, Economic Research Service calculations based on data from the National Risk and Vulnerability Assessment, 2007/08.

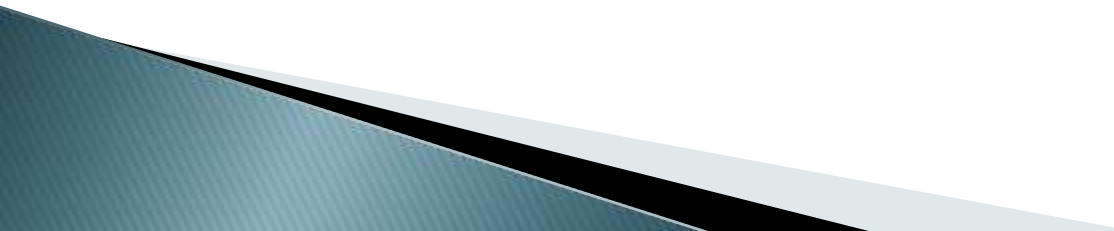
Afghan households spent more on grains and less on other foods as wheat prices increased between August 2007 and September 2008

Percent of expenditures



Source: USDA, Economic Research Service calculations based on data from the National Risk and Vulnerability Assessment, 2007/08.

Nutrition during hardship

- ▶ Quantity is chosen over quality during food shortage
 - ▶ Shift away from nutrient rich foods (meats, vegetables & fruit) to staples (wheat)
 - ▶ Less diversity
- 

Improved nutrition depends on all areas of food security



Agriculture and gardening can maximize nutrition impact



The Infant and Young Child Nutrition (IYCN) Project |
www.iycn.org Achieving Nutritional Impact and Food
Security through Agriculture |

1. Nutrition Counseling

- ▶ To help women choose healthy foods for family that are appropriate and available



2. Incorporate home gardens

- ▶ Women are usually responsible for home gardens



3. Incorporate micronutrient rich crop varieties

- ▶ Nutrient needs
- ▶ Health benefits
- ▶ Example – spinach and onions



4. Ensure that vulnerable household members consume the foods produced

- ▶ Even with adequate household food, cultural norms may prevent some from eating different types or enough foods
- ▶ Example – Ethiopia – children



5. Support agricultural tasks performed by women



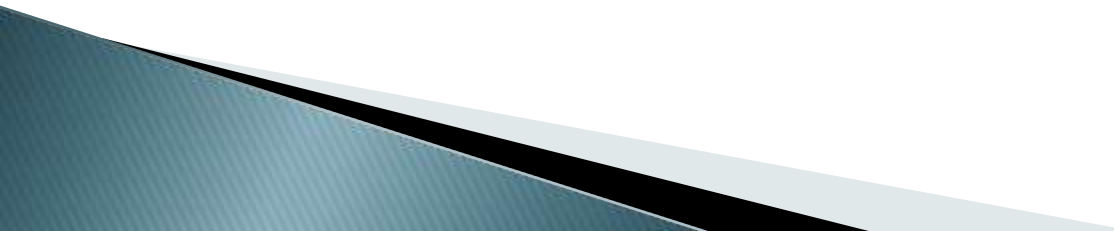
- ▶ May include weeding, harvesting, processing, and preservation
- ▶ Small gardens
- ▶ Balanced with other tasks

6. Improve health to ensure utilization of nutrients

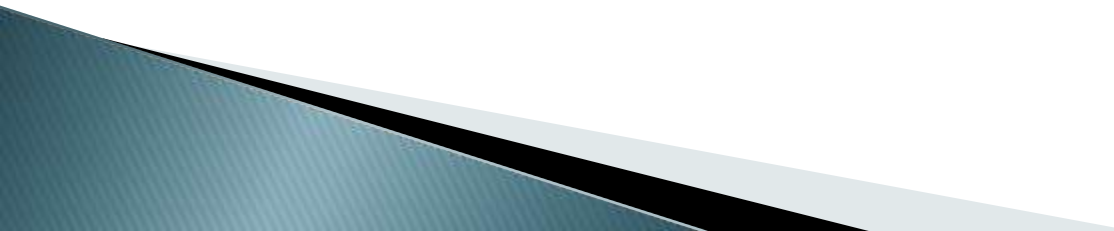
- ▶ Improved health and freedom from frequent infections ensures use of nutrients



Our project – together we can:

1. Provide Nutrition counseling
 2. Assist with home gardens
 3. Teach about micronutrient rich crop varieties
 4. Counsel that all household members consume foods produced
 5. Support agricultural tasks performed by women
 6. Look for health and hygiene
- 

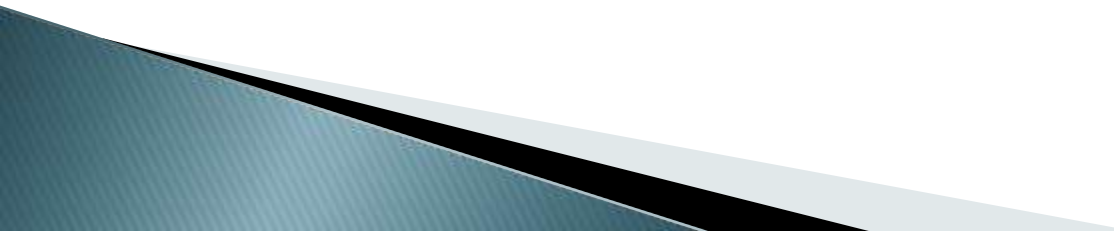
We must LEARN

- ▶ What are women or families growing?
 - ▶ What is the household/family eating
 - ▶ Who is eating what? How much?
 - ▶ Other health indicators?
 - Clean water?
 - Health care?
 - Hygiene?
 - Food safety?
 - Sanitation?
- 

Nutrition Counseling

»» Assessment first!

Nutrition counseling:

1. **Assess** quality of usual diet
 2. **Identify** areas of change needed
 3. **Discuss** and agree which changes are acceptable and feasible
 4. **Evaluate** progress
 5. Set new **targets** as needed
- 

Why?

- ▶ Understand food & nutrition problems
- ▶ Explore solutions
 - Adapt practices
 - New skills
- ▶ Improve nutrition for all household members
 - health and quality of life



Who?

- ▶ Those involved in preparation and decisions about food
 - Women
 - Mother-in-law
 - Husband
 - Other relatives/neighbors
- ▶ Community or groups
 - community participation can help modify socio-cultural beliefs that can change behavior



What to Assess



- ▶ Overall diet
- ▶ What are problems and causes?
- ▶ What issues or practices can be addressed?
- ▶ Why do women do what they do?
- ▶ What are the barriers to changing practices?

Getting the information – many ways

- ▶ Direct observation
 - Observer records
- ▶ 24-hour recall
- ▶ Food Frequency



24-hour recall

- ▶ Obtaining information on food and drink intake for the previous day
 - Start at beginning and work forward
 - Ask leading questions
 - Include EVERYTHING
- ▶ Accuracy of amounts eaten may be improved by having food models or illustrations of usual portion sizes available to make comparisons.

Assessing amount consumed

Use these “handy” guides for easy measuring:



Fist
(1 cup)



Palm
(3 ounces)



Thumb
(1 ounce)



Thumb Tip
(1 tsp.)

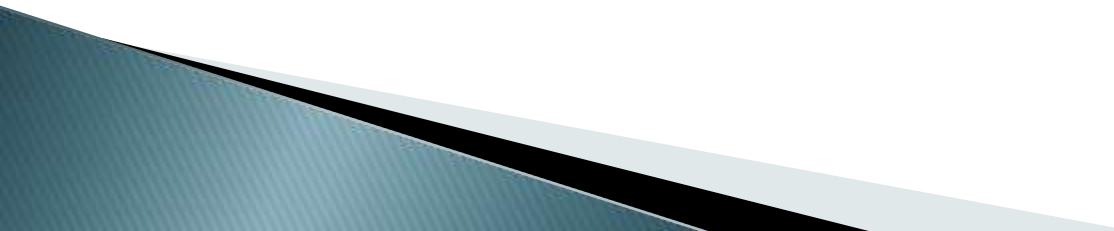


Handful
(1-2 ounces)

Food Frequency

- ▶ A list of foods or food groups
- ▶ Person answers with information on the how often each food is consumed
- ▶ Example:
 - *“How often do you and your family eat?”*
 - Meat
 - Legumes
 - Milk and yoghurt
 - Green, leafy vegetables.
 - Orange vegetables (pumpkins, carrots)
 - Fruit
 - Potatoes and rice

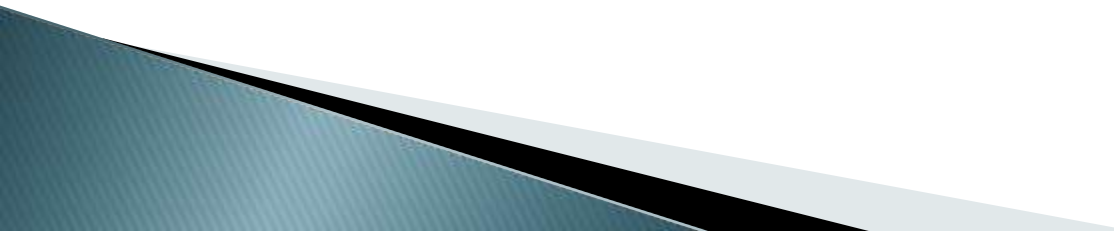
Asking the question

- ▶ Don't give answers
 - ▶ Open vs. Yes/No
 - ▶ Don't share opinion – not judgmental
 - ▶ Attentive
 - ▶ Build rapport
- 

Let's Practice!

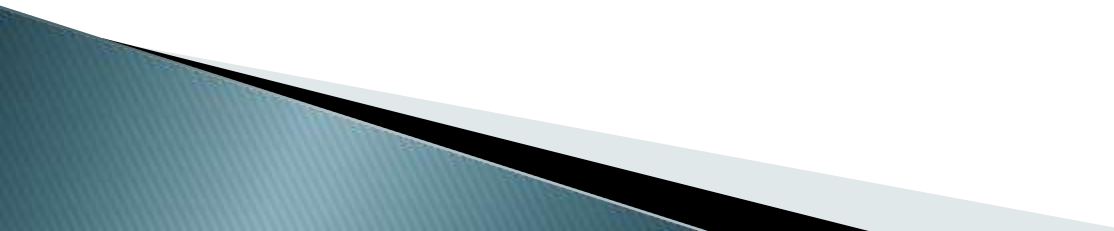
- »» Do a 24-hour recall and food frequency with your friend!

Food Frequency Practice

- ▶ Get into pairs
 - ▶ Complete Food Frequency with each other
 - ▶ Tally
 - ▶ Observations?
 - ▶ Questions?
- 

Food groups	Food item	No. of times consumed
<i>Cereals and products</i>		
<i>Roots and tubers</i>		
<i>Pulses</i>		
<i>Meat/fish/eggs</i>		
<i>Dairy</i>		
<i>Oil/fat</i>		
<i>Vegetables</i>		
<i>Fruit</i>		
<i>Cooked dishes</i>		
<i>Other foods</i>		
<i>Drinks</i>		

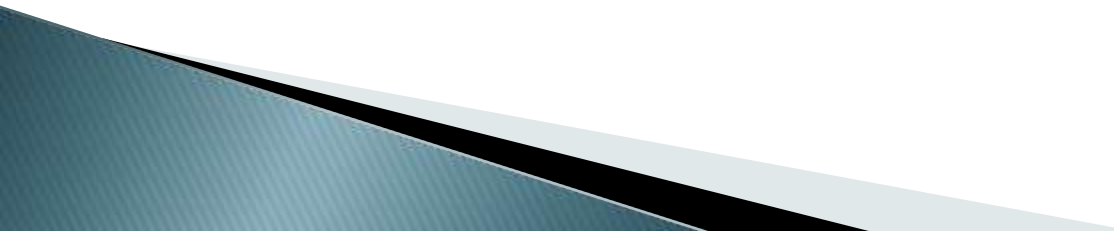
Observations?

- ▶ Food frequency questionnaires can provide some indication about dietary diversity and sources of food
 - ▶ Can be difficult to complete as some foods may fall into more than one category (e.g. how to categorise vegetable soup?) and informants may not know ingredients of food.
 - ▶ Information may be useful to provide information on dietary diversity.
- 

Giving Advice



Giving advice

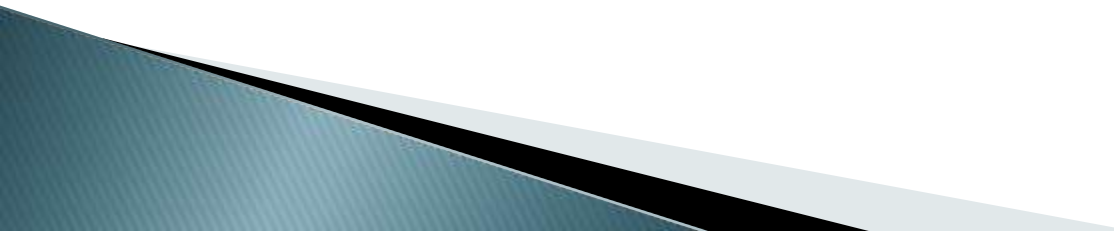
- ▶ Simple
 - ▶ Practical
 - ▶ Prioritize
 - ▶ Summarize
 - ▶ Check understanding
 - ▶ Follow up
- 

Follow up

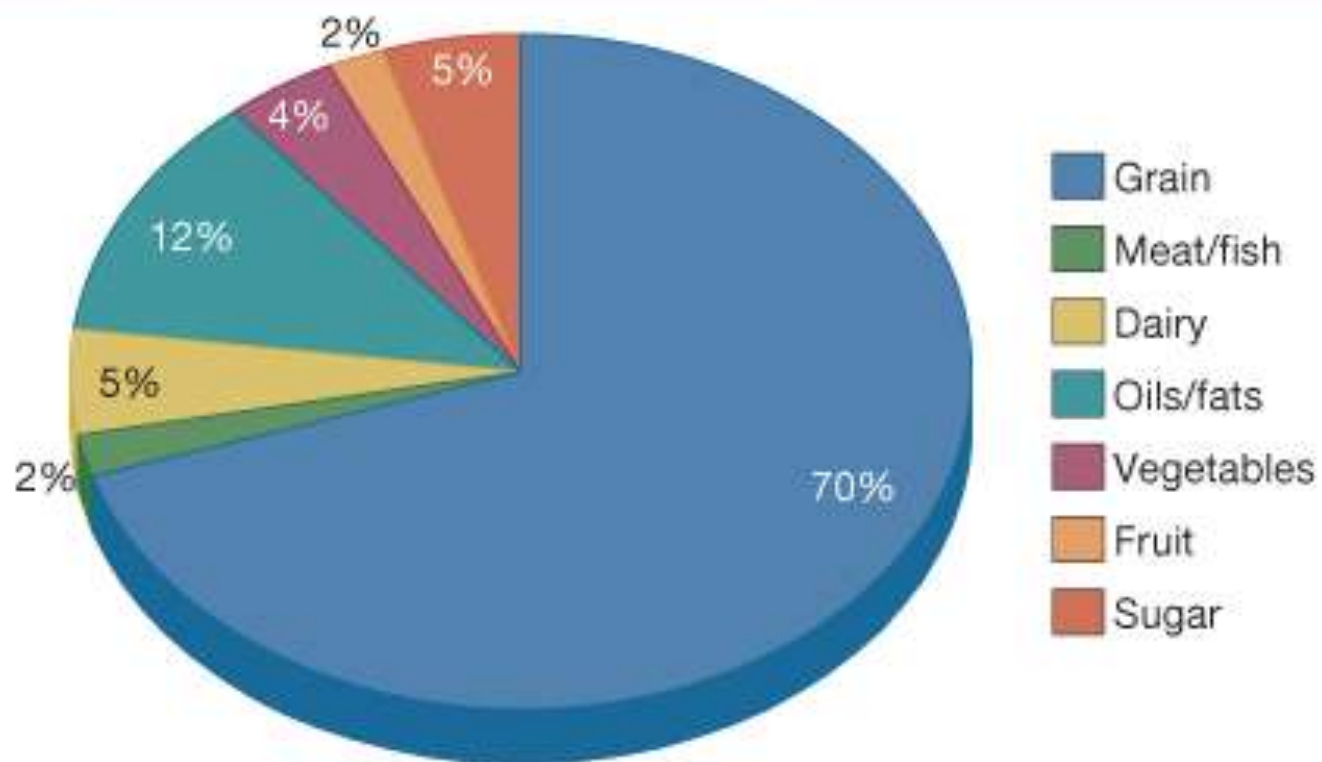
- ▶ One or two things they can do
- ▶ Record it in your notes
- ▶ Ask about it when you return



Goals of nutrition

- ▶ Improved Diversity
 - ▶ Adequate protein and dairy
 - ▶ Add Micro-nutrients (colorful vegetables and fruits)
 - ▶ 3meals /day
 - ▶ Fewer hungry days
- 

The Afghan diet: Grains make up the largest share of calories



Source: USDA, Economic Research Service calculations based on data from the National Risk and Vulnerability Assessment, 2007/08.

Diet Advice for diversity

- ▶ Family meals often lack protein, vitamins, minerals
- ▶ Encourage stews or meals that contain 3–5 different ingredients
 - protein,
 - 2+ vitamin/mineral rich vegetables
 - source of fat



Micro-nutrient rich vegetables are colorful

green

- ▶ Greens
- ▶ lettuce
- ▶ Peppers



Orange, red, purple

- ▶ Tomatoes
- ▶ Carrots
- ▶ Squash



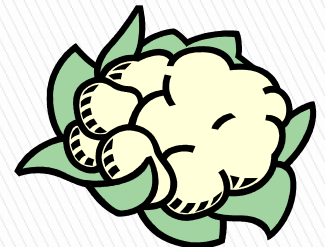
purple

- ▶ Eggplants



white

- ▶ Cauliflower
- ▶ leeks



How to add protein

- ▶ Add legume flour to porridge, milk or eggs
- ▶ Yoghurt
- ▶ Lentils and chickpeas and other beans

Make every meal count

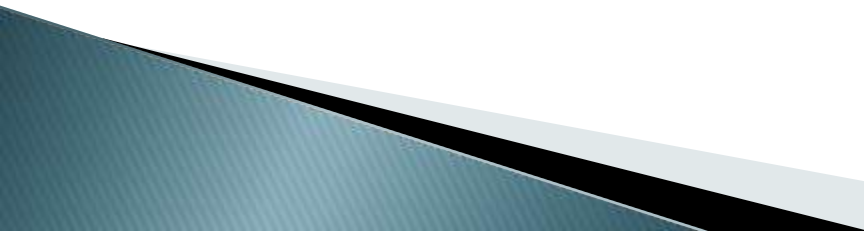
- ▶ Snacks of yoghurt, apricots, pumpkin seed for snacks for children, rather than candy or tea



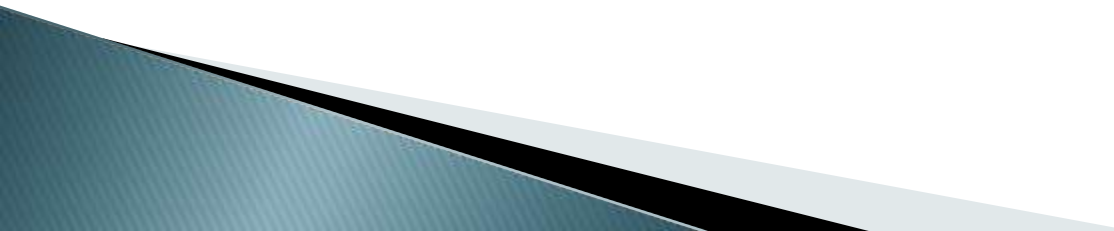
Special groups

- ▶ Pregnant (& lactating) women
 - Need more protein, calories, vitamins, minerals (calcium, iron) – 25%
 - More frequent meals
- ▶ Transition from breast-feeding to food
 - focus on nutrient value
- ▶ Young children
 - need 3–5 meals/day

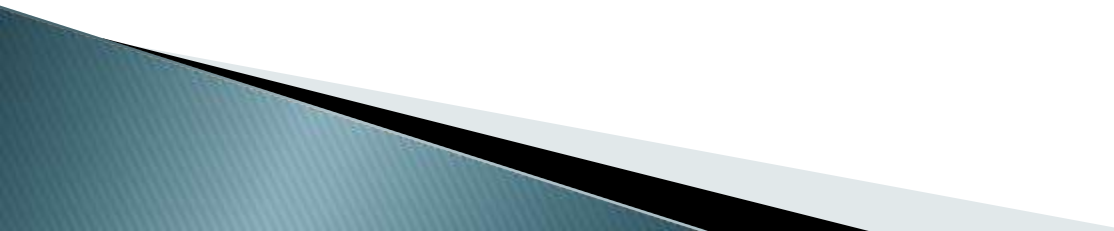
Case Study #1

- ▶ Ara has a garden plot and grows onions and potatoes. She sells some to a local shopkeeper but finds it is hard to get a good price, and the money runs out quickly. Thankfully, potatoes store well, and they eat potatoes much of the year. However, her family's diet is limited to only a few foods, especially during the winter months.
 - ▶ What are questions you would ask?
 - ▶ What advice would you give?
- 

Case Study #2

- ▶ Fila has 6 children and a very small income. Two of her children are malnourished and two more are not thriving. She lives in an urban area and rents a small home. She has a difficult time providing enough food for them, especially in the winter when prices are high.
 - ▶ What questions would you ask her?
 - ▶ What are 2 simple things you would recommend for her?
- 

Case Study #3

- ▶ Samira has a small farm in a rural area. She grows tomatoes and other vegetables in the spring and summer. Her family eats well during the harvest, but from February – April, there is very little money for food and nothing from her garden.
 - ▶ What questions would you ask her?
 - ▶ What are some recommendations you would give her?
- 

A story



Summary

- ▶ As extension educators, YOU can help women in Afghanistan
 - Grow quality foods
 - Feed their family quality foods
 - Improve food security
 - Increase income
- ▶ Thank you for all you do!