EGYPT
NATIONAL PLAN OF ACTION
For NUTRITION

1994

Follow-Up ICN

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Introduction:

According to the ICN declaration and plan of action, the GOE has taken the following positive steps:

1. Formulation of Interministerial Committee:

By the ministerial decree No. 1287 in 1993 issued by the deputy Prime Minister and Minister of Agriculture, the committee includes senior staff and scientists from the concerned ministries, Agriculture, Health, Education, Information, Planning and Supply. Also specialized institutes; Nutrition Institute, National Institute of Planning, and University Professors.

2. Establishment of Nutrition Unit within the Ministry of Agriculture to work in cooperation with Nutrition Institute (MOH).

After several meetings of the committee, four working groups were formulated. Each group includes selected persons from the concerned ministries and/or professors and headed by interministerial committee member. The responsibility of each group was clarified and the time for the work to be finished was fixed.

A workshop was then held to discuss the achievement of the working groups covering the nine themes. Each one includes the problem and its magnitude, objectives, action, resources, and time needed for implementation. Editing committee was chosen for preparing the paper in the final form.

On September the 18th, 1994 a seminar was held and attended by deputy prime minister and minister of Agriculture, and ministers of Health and Supply. Selected persons from different ministries, universities and research centres were invited to participate in the discussion of the Egyptian plan of action for improvement of the nutrition situation of the country. Highlights raised by different ministers stressed on cooperation between ministries to ensure food safety by strengthening inspection capacity and enforcement of the law. Subsidy for bread and enrichment of flour, with the needed micronutrients. Nutrition education and consumer awareness.

The political committment of the government to consider nutrition as an important factor towards health and to prevent malnutrition among vulnerable groups was shown through an immediate action by the deputy prime minster to allocate an extra L.E. 20 million for feeding young school children.

The mechanism of implementation of the plan of action was discussed. The Interministerial Committee will supervise the implementation process. Continuous working groups will be formulated for translating the plan of action into detailed applied programmes. After adoption of the proposed programmes, financial resources will be sought either from the Government or from international Agencies.

Cooperation between different ministries was found to be very positive.

Theme No. 1: INCORPORATING NUTRITIONAL OBJECTIVES, CONSIDERATIONS AND COMPONENTS INTO DEVELOPMENT POLICIES AND PROGRAMMES.

Problem:

Food and nutrition in Egypt is not the responsibility of one single Ministry or sector. Therefore, these groups of different disciplines are confined with their own responsibilities, and lack of coordination between them is clear. In addition they are too narrow to accomplish the goals and objectives of food and nutrition policy which are based on broader considerations. In addition, socio-economic five years development plans give much efforts to solve the problem of supply/demand imbalance of food over the problems of vulnerable groups.

Government policies with effects on food consumption and nutrition:

1. **Cheap food:**

   Overvalued exchange rate for imported food has resulted in reducing food prices for all consumers. Food concessional sales under the umbrella of PL (480) enabled the Egyptian government (GOE) to make this target possible for years.

2. **Food subsidy programme:**

   The Egyptian ration card was initially designed to shield the entire population from the high cost of production and from possible shortages of supply. Approximately 90 % of the entire population obtain either green or red ration cards. The system is defected with its high leakage to non-qualified beneficiaries because of no means test.

3. **Guaranteed employment:**

   From 1962 up to 1984 the GOE was committed to provide full employment for its citizens new graduates employment.

4. Wage policies:

Wage policy in Egypt has been used not only to improve the supply and demand conditions in the labor market but also to attain social goals by eliminating wage differentials and helping employees face successive price increase.

Food and nutrition interventions in Egypt:

1. **Food interventions:**

   a. **Targeted:**

   - School feeding programmes for certain segment of students.
   - Feeding workers in certain hard jobs.

   b. **Non-targeted:**

   - Food-Ration cards.
   - Food production inputs subsidies (fertilizers, credit, seeds, machinery).
   - Balady bread subsidy for all population.

2. **Nutrition intervention:**

   a. **Targeted:**

   - Preventing micro-nutrient deficiency (iodized salt for the population).
   - Nutrition education programmes.

b. **Non-targeted:**

- Promotion and protection of breast-feeding.
- Public utilities intervention (water, sewage).
- Health care facilities for prevention and control of malnutrition.

Action:

1. Strengthening the technical and managerial capacities at both the community and intermediate levels for identifying and solving nutritional problems.

2. Incorporating nutritional considerations into the objectives of all sectors would ensure that their efforts are nutritionally beneficial.

3. People's participation in selecting and implementing projects, so that it becomes more responsive to their own needs.

4. Given more emphasis on gender planning and woman empowerment issues in order to decrease the gender gap especially among rural underdeveloped regions and thus alleviate poverty.

5. Nutritional issues should be on the agenda of concerned ministries, where the focus of attention aims at the improvement of the nutrition situation, especially among vulnerable groups.

The above mentioned measures have to be translated into programmes and projects with nutritional components to be implemented by different ministries. The analysis of these projects will include requested funds to be provided by different financing agencies (Governmental, International) to be used in improving the nutritional status of different population groups according to their assigned roles.

Time elapse till action:

According to the proposed programmes presented by the Interministerial Committee and after adoption by the government, time is calculated according to what is proposed in each programme.

Time for action:

Continuous

Mointoring and Evaluation:

Use of nutritional status indicators through the proposed nutrition surveillance system.

Theme No. 2: IMPROVING HOUSEHOLD FOOD SECURITY

Problems:

1. Employment Levels:

Labor force (as % of total population) estimated at 27.8 in 1986 compared with 30.7 % in 1976.

The percentage of females in labor force reached 10.9 % compared with 8.9 % in 1976. According to 1986 population census 35.7 % of total labor force were occupied in agriculture, 18.2 % in industry and 46.1 % in services.

2. Changes in real wages and purchasing power:

Data on real wage trends during the period (1973-1992) by economic sector shows that wages have not kept up with the consumer price index for both rural and urban areas.

In the government sector there is a substantial decline from a base value of 100 1973 to 58.1 in 1992. This implies a reduction by nearly one-half of the welfare levels of these governmental employees. In the case of the private sector real wage levels are slightly above those in 1973.

As % of total population, poor persons were estimated at 33.9 % in 1990, while ultra poor were accounted to 7.6 %.

3. Dietary energy supply:

Egyptian wheat imports represents about 50 % of wheat requirements. Also Egypt imports sugar and oils. At the same time Egypt exports rice, vegetables and fruits in addition to cotton.

Average daily caloric per capita supply amounted to 3700 calorie / day or (135 % of requirements according to food balance sheet).

Cereals which is the main source of per capita energy supply in Egypt provided 70.7 % of daily calorie per capita. Inequity of food distribution at community and household levels affects food security.

4. Market prices:

The implementation of economic reform policy in Egypt since 1987 and the liberalization of the agricultural sector, have negatively affected low income groups. A recent survey conducted by the Nutrition Institute shows that increase in food prices has affected consumers in two ways:

- Shift from rich foods to less expensive foods (Legumes .... roots) irrespective of nutritive vale.

- Reduction of rich foods and its frequency.

5. Rural - urban gap is the main cause of rural migration to urban cities which adds an extra burden to big cities over and above its carrying capacity and results in slum areas.

Action:

The root cause of household food insecurity is low incomes and poverty. The implementation of successful integrated socio-economic development plans will result in higher income shares of lowest income groups. Currently, the GOE is launching economic policies and programmes aiming at increasing employment opportunities and income levels. On the other hand, increasing food production to bridge food gap. In addition liberalizing price, marketing, land and credit policies as well as improving rural infrastructure can improve household food security in a significant way. Also, some policies are recommended to achieve food security.

1. Rural development: Integrated rural development is an effective approach to assault rural poverty and improve household food security (HFS).

2. Increasing employment opportunities: Social development fund can play an important role in financing youth projects. Also, public works programmes can reach the food insecure population by giving priority to the less developed regions. (Upper Egypt and border governorates).

3. Giving credit to poor households provide liquid money for the development of small projects to raise their income (chicken farm, dairy production ... etc) also for personal consumption. Poor women head of household should be given equal access to credit facilities exactly as men.

4. Increasing household nutritional awareness which results in improving nutritional levels and intra-family food distribution, with emphasis on mothers and children.

Authorities responsible for action:

All concerned ministries and NGOs.

Time elapse till action:

One year.

Time for action:

Continuous.

Monitoring and evaluation:

- Number of families benefited from income generating projects.
- Demand and supply indicators, in terms of quantities of available food versus needs and net import need versus import capacity (self satisfaction indicators).
- Indicators of nutritional status through the proposed nutrition surveillance system.

Theme 3: PROTECTING CONSUMERS THROUGH IMPROVED FOOD QUALITY AND SAFETY

Problem:

1. There are more than eight agencies responsible for the food quality and safety. There is overlapping in responsibilities between government agencies which complicate the work and make it more expensive.

2. There are different regulations through many laws, ministerial decrees and standards which define the responsibilities of different agencies and requirements for different food commodities. Some of these laws and decrees are very old not matching with the governmental new policy.

3. Egypt imports large quantities of food commodities (Table 1). The process of importation passes through different channels in different concerned agencies.

4. Food processing is gaining an increasing importance in the industrial sector in Egypt. Contamination and adultration of processed food could occur through poor production methods, bad handling, poor packaging and illegal or excessive levels of food additives. Food processing also suffer from lack of efficient quality control system particularly those produced by small private sector plants.

5. Uncontrolled use of chemicals such as pesticides, fertilizers, and growth promoters is still one of the major problems inspite of the positive measure taken by the Ministry of Agriculture for reducing the use of pesticides (Table 2, 3).

Goals:

1. Ensuring that the health conditions and nutrient composition are retained during the food chain i.e production, post harvest techniques, storage, handling, processing, packaging and preparation.

2. Raising consumers' awareness against being offered foods that are injurious to health, unfit for human consumption or are nutritionally or economically debased.

Objectives:

1. Preventing and controlling 50 % of biological and chemical contamination of food in the field before year 2000.

2. Promoting hygienic practices throughout the food industry by establishing codes and standards. A strong committee for standardization should be established within six months.

3. Training of 30 % of food processing and handling personnel in two years.

4. Promoting a safe and honestly presented food supply by 50 - 60 % requiring composition and nutrient information on food labels within three years.

Action:

1. Institutional restructuring:

Formulation of food safety council. The council can lead the coordinating task of different concerned agencies. Different specific working groups could be formulated by the council including technical persons from different concerned agencies, business people from the food industry and non governmental organizations (NGOs). The council can refer to the interministerial committee for decision makers.

2. Reviewing and updating legislation:

Legal advisers of different concerned agencies should cooperate with technical key persons and work together for updating laws and regulations clarifying the responsibilities of each agency.

3. Monitoring and information system:

Programmes of routine collection of samples from the market could reflect the present status and help the council to take the quick suitable actions in due time.

4. Quality assurance in food processing and quality control:

Industry should be aware of the different elements of quality assurance system and its application to prevent contamination of foods during production, processing and storage.

Build a partnership between different kinds of laboratories in the area of standard and quality assurance of the analytical and administrative topics.

5. Good agricultural practices:

Continuous educational programmes for farmers to protect the food crops from being contaminated with different types of contaminants and also to keep the quality and nutritive value of different food crops.

Advanced post harvest techniques should be developed.

6. Establishing a monitoring system for food born diseases.

7. Promotion of consumer awareness:

An effective food control infrastructure must include effective educational programmes. These programmes should cover food quality, safety and nutrition in an integrated fashion. Such programmes should be designed to assure that consumers have sufficient information on how to feed themselves adequately and safely and protect themselves against food related problems.

The programmes should also be evaluated to determine how effective they have been in achieving their goals.

In Egypt, appropriate measures have already been taken in concerned ministries:

Ministry of Education	(MOE).
Ministry of Information	(MOI).
Ministry of Agriculture	(MOA).
Ministry of Health	(MOH).

All these programmes are implemented without coordination. This could be one of the important tasks of the working groups.

8. **Design a programme for upgrading the street food vendors sector.**

9. **Encouraging the role of the consumer protection society.**

10. **Supply of safe water.**

11. **Participation of the country in Codex to food safety has to be strengthened.**

Authorities responsible for action:

- Ministry of Agriculture (MOA).
  - Central Department for Plant Protection and Quarantine.
  - General Organization for veterinarian Services:
    - Animal Abattoirs.
    - Animal Quarantine.
  - Animal Health Research Institute.
    - Food Hygiene Research Section.
  - Central Laboratory For Food and Feed.
  - Quality control.
  - Nutrition Unit.
- Ministry of Health (MOH).
  - Central Department for Food Safety and Control.
  - Public Health Laboratories.
  - Nutrition Institute.
- Ministry of Industry (MO Industry).
  - Egyptian Organization for Standardization and Quality Control.
  - General Organization For Industrial Control.
- Ministry of Economy and Foreign Trade (MOEFT).
  - General Organization for Import and Export Control.
- Atomic Energy Organization.

- Ministry of Supply (MOS).

- Ministry of Education (MOE).
  - Department for Basic Education.
  - School Feeding Programme.

- Ministry of Information (MOI).
  - All means could be used for consumer awareness in collaboration with other Ministries.

- Universities and Research Centres.

Time elapse till action:

- 6 months.
  According to each item.

Time for action:

- Formulation of food safety council within 3-5 months.
- Reviewing and updating legislation within one year.
- Educational programmes for farmers and consumers will be continuous.
- Setting the monitoring and information system will take 6 months and then work continuously.

Resoruces:

- MOH.
- MOA.
- MO Industry
- Private Sector.
- NGOs.
- Interested International and Bilateral Organizations.

Legislation:

Available:

- Laws and ministerial decrees defining the job of each ministry for consumers' protection.

Needed:

The recent economical reform of the Egyptian policy led to more freedom in marketing. Such new policy of free trade needs:

- An adequate food quality and safety legislation.
- Reviewing and updating the already available legislations.
- Introduction of strong enforcement measures.
- Application of penalties for violation of the laws and regulations.

Monitoring and evaluation:

- Check samples from the market will be taken and analysed in an irregular basis and report will be submitted to decision makers.

- Inspection of processing plants and processed food on regular base.

- Regular visits to storage plants every three months.

Table (1): Quantity of Food Commodity Imported during year 1993/94.

Commodity	*Quantity/tons*	*Commodity*	*Quantity/tons*
Wheat	3,946,478	Luncheon Meat	338
Flour	405235	Poultry	3450
Sugar	224500	Turkey	38
Tea	58863	Frozen fish	131693
Corn oil	10278	Tuna	6033
Palm oil	129610	Milk Dried	7845
Soybean oil	127724	Skim Milk	14508
Palm Kernel oil	94040	Ghee	15989
Sunflower oil	136980	Butter	30603
Coconut oil	5131	Cheese	20367
Olive oil	209	Tomato Sauce	893
Frozen Meat	154163	CaCaO	3816
Frozen Kidney	2450	Cinnamon	163
Frozen liver	30706		
Sheep alive	22025/head	Cumin	1718
Cows alive	240931/head	Sesame	14264
Green Coffee	5992	Black Pepper	3540
Milled Coffee	37	Cloves	239
Corn beef	1181	Beans	57882
Canned beef	298	Lentils	83004

Table (2): Yearly agricultural consumption

Year	*Total amount of pesticide, metric tons*
1981/82	18778
1982/83	14368
1983/84	16315
1984/85	16378
1985/86	23461
1986/87	20718
1987/88	17152
1988/89	17997
1989/90	15099
1990/91	11700
1991/92	5393

Table (3): Example of Pesticide Consumption used for cotton, imported by the government.

Year	*Amount tons*
87/88	4389
88/89	4832
89/90	3145
90/91	3088
91/92	3380
92/93	2288
93/94	-

It is important to be noted that there was no importation of pesticides during the year 93/94.

Amounts imported by private sector:

Year	*Amount tons*
78/88	6604
88/89	3591
89/90	3242
90/91	1404
91/92	2892
92/93	3329

Theme 4: PREVENTING AND MANAGING INFECTIOUS DISEASES

Problem:

Infections prevalent in our communities include:

1. Diarrheal Diseases:
   Diarrheal diseases is an important cause of child morbidity and mortality in Egypt. As regards morbidity, studies revealed that the child has at least 3 attacks of diarrhea in average per year. As mortality, diarrhea is responsible for about 30 % of child mortality "under 5 years".

2. Acute Respiratory Tract Infections "ART".
   ART is considered the 2nd cause of child morbidity and the leading cause of child mortality "under 5 years".

3. Vaccine Preventable Diseases:
   As T.B, measles, diphtheria, whooping cough, poliomyelitis, tetanus and infective B hepatitis. These diseases are nowadays uncommon due to compulsory immunization and the high rate of immunization coverage. There are other infections prevalent in our communities as enterica, streptococcosis and others.

4. Parasitic infections as amoebiasis, giardiasis, Ascariasis, Bilharziasis and others.

Goal:

To improve the nutrition status of the population through prevention and control of infectious diseases.

Objective:

To reduce both morbidity and mortality rates from infectious diseases particularly among infants and young children by 50 % "by year 2000".

Action:

a. **General Measures:**

- Sanitary environment: potable water supply, proper sewage disposal, food control in addition to improvement of the infrastructure.

- Proper feeding and adequate nutrition including breast feeding for health promotion.

- Health education as regards mode of transmission, immunization and other measures for prevention.

b. **Specific Measures:**

- Increase immunization coverage for the vaccine preventable diseases.

- Early detection and prompt treatment of infectious diseases.

- Appropriate dietary management of the case during illness. Rehydration in diarrhea and Vit. A supplements to cases of measles, ART, and acute diarrhea.

- Control measures of communicable diseases should be conducted for cases, contacts, carriers and environment.

- Disease surveillance.

Authorities responsible for action :

- Ministry of Health with all its concerned facilities.
- Ministry of Education schools, universities.
- Ministry of Information.
- Agency for Environmental Affairs.
- Veterinary service organization.

Resources:

All responsible ministries and agencies mentioned are available resources. Extra funds are needed to strengthen the ongoing and suggested activities.

Legislation:

Compulsory immunization (already implemented).
Control measures for infectious diseases (already implemented).
Control of zoonosis (already implemented).
Updating legislation for food safety.

Time elapse till action:

It is an ongoing process.

Time for action:

Continuous.

Monitoring and evaluation:

- Morbidity and mortality rates from infectious diseases particularly among infants and young children.

- Immunization coverage rate.

- Percentage of population provided by pure water supply, proper disposal of sewage etc.

Theme 5: PROMOTING BREAST FEEDING.

Problem:

- Late initiation of breast feeding and introduction of prelacteal feeds.
- Ignorance of many mothers about benefits of colostrum and advantages of breast milk.
- Mass media and commercials announcing advantages of breast milk substitutes.
- Low rate of exclusive breast feeding which does not exceed 8 %.
- Adoption of bottle feeding.
- Mother employment.
- Lack of maternal preparation for breast feeding during antenatal care.
- Poor guidance and support of the lactating mother.
- Difficulties of breast feeding with debilitated mother or debilitated newly born.

Goals:

- Protecting and promoting breast feeding.
- Improving the nutritional and health status of infants, pregnant and lactating mothers.
- Increasing social and health awareness about the importance of breast feeding.
- Implementation of the components of the international code and follow up its continuity in breast feeding and other health care facilities.

Objectives:

- To maintain and supporting B.F. practice rate to be over 90 % by year 2000.

- To increase exclusive B.F rate in the first four months to be 50 % by year 2000.

- To ensure the implementation of the Egyptian version of the international code of marketing breast milk substitutes within one year.

Action:

- Upgrading the performance of health care facilities by training of human resources in the field of B.F. and provide them with training curriculum, training materials and equipments. Trained staff should be of an adequate number, under constant guidance, supervision and evaluation.

- Creation of popular awareness towards importance of B.F. by:

  - Formulation of local committee for B.F. in all governorates.

  - Disseminating the national B.F. policy to all governorates.

    - Formulating mass media messages on benefits and advantages of B.F.

    - Establishing new branches of Egyptian Breast Feeding Friends Society in governorates.

    - Community participation through mother support groups.

    - Decreasing the market impact on distribution and consumption of milk substitutes.

    - Increase the free paid maternity leave from 3 months to 6 months with full or partial salary "at least 4 months" by legislation.

- Completing the activities of baby friendly hospital initiative in PHC units and other health care facilities.

- Issuing measures to control milk distribution through the Egyptian code of marketing breast milk substitutes.

- In the field of information:

  - Preparation of a nation wide information programmes in the field of B.F.

  - Health education programmes on B.F. in PHC units and other health care facilities.

  - Advertising campaign to disseminate the national policy of B.F. promotion and protection.

legislation:

- Issuing laws and legislation which allows the working mother to have the right of promotion and protection of B.F.

- Egyptian code of marketing breast milk substitutes.

Authorities responsible for action:

- MOH.
  - Nutrition Institute
  - National steering committee "B.F." and local committee.
- MOE.
- MOI.
- MOSA.
- MOA.
- MOL.
- Supreme council of mothers and children.
- NGOs and Syndicates.

Resources:

Funds are needed for:
Training, Audio-visual Aids and messages, booklets and posters, transportation for supervision and monitoring. Maintenance of MCH cards and information system. Researches.

This could be obtained through:

- MOH budget.
- Grants and loans from international agencies.
- MOH and other related ministerial man power and equipments.
- NGOs.
- Private sector resources.

Time elapse till action:

Already started.

Time for action:

Continuous.

Monitoring and evaluation:

- Rate of exclusive B.F.
- Rate of B.F. till end of 1st year.
- Rate of B.F. till end of 2nd year.
- Rate of bottle feeding.
- Percentage of milk distributing companies.
- Medical team knowledge, attitude and practice towards breast feeding.

Theme 6: CARING FOR THE SOCIO-ECONOMIC DEPRIVED AND NUTRITIONALLY VULNERABLE

Problem:

In Egypt, the national nutrition survey conducted on 1976 and updated on 1986 revealed that nearly 50 % of children under 5 years suffer from PEM and 38 % suffer from anemia.

For women in the child bearing period, pregnant and lactating women were found to suffer from anemia at a rate of 22 % and 25 % respectively. In nonpregnant, non lactating, 17 % were found to suffer from anemia. Among school children a good proportion suffer from retardation of growth and anemia particularly those in rural areas. Iodine deficiency disorders is highly prevalent in New Valley and occurs to a lesser extent in 9 other governorates.

Other nutritionally vulnerable groups include the ultrapoor, the elderly, the unemployed as well as the disabled and the displaced exposed to environmental hazards as earthquakes, floods and others.

Goals:

- To promote the nutritional status of vulnerable groups particularly infants, young children, pregnant and lactating mothers and combating all forms of nutritional deficiency disorders.
- To reduce low birth weight resulting from maternal malnutrition.
- To promote the health status of vulnerable groups by adequate health care.
- To ensure that adequate nutrition and safe diet is a basic human right. Measures should be taken to help the socio economically deprived people have access to adequate nutrition.

Objectives:

- To decrease infant and child mortality rates by 50 % by year 2000.
- To decrease low birth weight (LBW) by 50 % by year 2000.
- To decrease prevalence of nutritional deficiency diseases by 50 % and IDD to be eliminated by year 2000.

Action:

A. Infants and young children:

i. Adoption of breast feeding policy.

ii. Proper child feeding and weaning practices through an appropriate nutrition education programmes at MCH centres, Agriculture Extension services, formal and non-formal education and mass media.

iii. Health care services to be provided to infants and young children to ensure proper growth and development. This includes growth monitoring, immunization, health education, provision of supplements, treatment of infections and parasites and nutrition rehabilitation for the undernourished.

B. Mothers:

i. Antenatal care, provision of supplements during pregnancy and lactation, health and nutrition education as well as family planning services.

ii. Social support of women to cope with stressful situations, through various safety nets, help them with income generating activities and with access to training and credit.

iii. Recognizing the rights and needs of women in education, employment, earning income, decisions making and protection from heavy work load.

C. School children:

- School feeding programmes should cover all primary school children specially those in rural areas.

- Health care should be provided as well to ensure proper growth and development, well being and productive life later on.

D. Other groups:

- Encourage all forms of community participation to eliminate hunger and malnutrition particularly in rural areas through proper organization of agricultural, social and income earning activities.

- Integration of health care services for elderly people into system of PHC to combat nutritional disorders among them.

- The disabled should be supported and helped to cope with disabilities and skills training.

- Identification and Social.
- NGOs can play an important role in identifying and supporting the nutritional vulnerable groups and families.

Authorities responsible for action:

- MOH.
- MOE.
- MOI.
- MOA.
- MOSA
- MO Interior & MO Defence "Schools".
- Governorates and local government.
- NGOs.

Resources:

All responsible ministries and agencies mentioned are available resources. Extra funds are needed to strengthen the ongoing and suggested activities. Other resources include private sector resources, grants and loans from international agencies.

Legislation:

- To increase the maternity leave to six months or at least four months.
- To enforce the Egyptian version of the International Code of marketing breast milk substitutes.
- Nutrition programmes can be tied to the convention on the rights of the child.

Time elapse till action:

Most of activities are ongoing programmes.

Time for action:

Continuous.

Monitoring and evaluation indicators:

- The use of morbidity and mortality rates.
  - o Infant mortality rate (IMR).
  - o Preschool mortality rate.
  - o Mortality from diarrheal diseases.
  - o Prevalence of malnutrition diseases.

Theme 7: PREVENTING AND CONTROLLING SPECIFIC MICRONUTRIENT DEFICIENCIES

1. Iron

Problem:

- Many studies were done to investigate iron deficiency anemia among high risk groups (preschool age children, schoolers, pregnant and lactating women).

- Results revealed that prevalence of iron deficiency anemia among preschoolers was 38 %, lactating women 25 %, pregnants 22 %, nonpregnant non-lactating mothers 17 % and school children 40 %.

Goal:

Prevention and control of iron deficiency anemia among high risk groups.

Objective:

To reduce prevalence of iron deficiency anemia by 30 % in mothers and preschool age children before year 2000.

Action:

- Supplementation of high risk groups for prevention & treatment

- Prevention & control of infectious diseases (viral, bacterial and parasitic).

- Fortification of flour with iron.

- Nutrition education considering the following:

  1. Promote consumption of iron, vitamin C and protein rich sources.

  2. Reduce consumption of tannins and phytic acid sources which decrease absorption of iron.

Authorities responsible for action:

Ministry of Health (MOH) supported by WHO and UNICEF.

- Nutrition Institute (NI).
- Primary Health Care Centres (PHC).
- Preventive Health offices.
- Pharmaceutical companies.

Ministry of Agriculture (MOA).
Ministry of Supply (MOS).
Ministry of Information (MOI).

Resources:

- The needed supply for iron capsules.

- Equipments needed for diagnosis and follow-up as well as iron fortification of flour.

- Training of personnel for the required activities.

Legislation:

Needed for iron fortification of flour.

Time elapse till action:

- 1 year for iron fortification of flour and strengthening for other ongoing activities.

Time for action:

- Continuous.

Monitoring and evaluation:

- Hemoglobin determination for high risk groups through nutrition surveillance in PHC.

II. Iodine

Problem:

- A National Survey was done during 1992 including all governorates except Aswan, Gharbia, Red Sea, and North Sinai. This study was done by NI in collaboration with WHO. It was revealed that prevalence of total goitre rate (TGR) was more than 5 % in 9 governorates: New Valley, Kafr El-Sheikh, El-Sharkia, Matrouh, Sohag, Dakahlia, Alexandria, Domietta and Cairo. In the New Valley the problem was severe (around 80 %) as found by other 2 indepth studies.

Goal:

- Prevention of iodine deficiency among vulnerable groups.

Objectives:

- To ensure National Iodization of salt before end of 1995.
- To eliminate IDD before the year 2000.

Action:

- Fortification of salt with iodine at the national level for both human and animal consumption.

- Prevention and treatment of target groups in areas of severe affection using iodized oil orally which gives 1-2 years protection.

- Nutrition education to promote use of iodized salt, consumption of iodine rich food sources (fish-milk-egg and dairy products) and avoidance of goitrogenic foods (cabbage - onion).

Authorities responsible for action:

Ministry of Health (MOH) in collaboration with WHO & UNICEF.
- Nutrition Institute (NI).
- Primary Health Care (PHC).

Ministry of Industry (MOI).
Ministry of supply (MOS).
Ministry of Information (MOI).

Resources:

- The needed supply for industries and companies for national iodization of salt and for follow-up evaluation.
- Cost of oral iodized oil.
- Cost of training of primary health care staff with needed supply.

Legislation:

- Law or ministerial decree to indicate that iodized salt is the only salt to be used for human and animals all over the country.

Time elapse till action:

- 1 year till fortification of salt with iodine.
- Oral iodine therapy and nutrition education should start immediately.

Time for action:

- Continue oral iodized oil till universal use of iodized salt.
- Continuous nutrition education and treatment of target groups till eradication of the problem.

Monitoring and evaluation:

- Follow- up through urinary iodine in a group of individuals living in the affected areas (not less than 40 individuals). The urinary iodine should exceed 10 μg/ml in 50% of the sample or more.

- Clinical examination for TGR which should not exceed 5 % in primary school children age 6-8 years or it is a public health problem.

III. Vitamin A

Problem:

- In the National Survey conducted by N.I in 1978 affection with Bitot spots was 0.04% so vitamin A deficiency was not considered a public health problem.

- Studies conducted during 1985 - 1987 showed that almost 40 % of studied individuals (toddlers, schoolers, mothers and fathers) didn't get their RDA of vitamin A.

- A study (1987) in an urban slum within preschoolers with diarrhea, 20 % had eye signs, and 75 % did not cover their RDA of vitamin A.

- There is no recent data about the situation of vitamin A in Egypt. Is it a public health problem or not?.

Goal:

- Prevention of vitamin A deficiency and its complications in the high risk groups (preschool age children 6 M.- 6 Y., pregnant and lactating women).

Objectives:

- To assess the present situation regarding vitamin A status in Egypt.

- To reduce vitamin A deficiency by 50 % within 3 years and eliminate before year 2000.

Action:

- National survey on children aged 6-72 months to determine magnitude of vitamin A deficiency problem in Egypt.

- Supplementation of vitamin A capsules to high risk children (6 Months 72 Months) and to lactating women.

- Nutrition education in the primary health care centers and mass media for dietary diversification to promote of vitamin A intake according to RDA, from available sources in the community.

Authorities responsible for action:

Ministry of Health (MOH) and support of WHO and UNICEF.

- Nutrition Institute "N.I".

- Primary Health Care Centres (PHC).

- Pediatric clinics in hospitals.

Ministry of Agriculture (MOA) through its respective sectors.
Ministry of Information (MOI).

Resources:

- The needed supply for chemicals, equipments and training of personnel needed for survey.

- Supply of vitamin A capsules through MOH and the support of WHO and UNICEF.

- Supply needed to train the personnel in PHC and Agriculture Extension Agents for nutrition education.

Time elapse till action:

6 months

Time for action:

- Six months for National Survey for vitamin A assessment.
- Supplementation by capsules should continue till the magnitude of the problem is recognized through national survey.
- Nutrition education is continuous.

Monitoring and evaluation:

Nutrition surveillance in areas of high rate of affection for:

- Vitamin A deficiency signs.
- Blood samples for vitamin A "retinol" level every 6 months for 2 years. Levels below 10 μg/dl denote deficiency.

Theme 8: PROMOTING APPROPRIATE DIETS AND HEALTHY LIFE STYLES

I. CARDIO-VASCULAR DISEASES

Problem:

A. ISCHAEMIC HEART DISEASES: (IHDs):

The prevalence of IHDs was 5.7 % among urban population and 1.5 % among rurals in the age group 20-60 years in 1976.

Diet is one of the major factors associated with development of ischaemic heart diseases in Egypt.

In 1981 it was found that the IHDs patients under 50 years old and over consumed higher energy and higher animal fat than their controls; 118 and 103.5, 130 and 108 of energy % RDA respectively.

The coronary heart disease patients reported higher percentage of animal fat intake as compared to their controls.

B. HYPERTENSION:

Health profile of Egypt (1988) showed that the prevalence rate of systolic hypertension was 11.35 % for the total sample, being slightly higher among females than males and among urban than rural. The prevalence rate of hypertension increased steadily with advance of age.

The prevalence of diastolic hypertension was 4.7 % for the total sample. and took the same trend as systolic hypertension.

Unlike systolic hypertension, residency has a slight effect on the prevalence of diastolic hypertension, being 4.9 % for the urban sample and 4.6 % for the rural sample.

A national hypertension project has been initiated in Egypt in 1993 to study the prevalence of hypertension in samples of adult population. The preliminary results reported suggested the highest rates ever documented in the region.

II. OBESITY

From several national studies in the period 1978-1986, it was found that the prevalence of overweight and obesity starts at the age group from 12-15 years (16.2 %) & steadily increased by increasing age, to reach its peak among mothers (63.1 %).

A recent study carried out in 1993 by the Nutrition Institute to Compare two communities of different social and economic status revealed that the overall prevalence of obesity among adults > 18 years was 39.7% from the low socio-economic community and 50.9% from the high socio-economic community. Obesity among males was 17.5% and among females was 65.5%.

III. DIABETES MELLITUS

From several studies carried out in Egypt in the period 1976-1988, it was found that the prevalence of diabetes mellitus ranged between 3.19 % - 4.8 %. The prevalence of diabetes mellitus in the desert population (1 %) is much less than rural and urban population (4 % and 5.5 % respectively) in 1993.

To find out the role of diet in development of diabetes mellitus a study was carried out in the Diabetic Centre of Health Insurance in Alexandria (1981). Results revealed that newly diagnosed diabetics had higher, energy, protein, fat and carbohydrates intake than their non diabetic siblings.

Screening for diabetes among representative sample of Alexandria school students representing primary, preparatory and secondary schools revealed that the prevalence of glucosuria was 0.7 % out of those 0.13 % were diagnosed as diabetes mellitus.

From a study carried out through the Health Profile of Egypt (1988), the prevalence of glucosuria among total population was 10.2 %.

The most recent study carried out by the Diabetic Institute in Cairo (1993-1994) revealed that diabetes was much more prevalent among Urban population than rural population (15 % and 5 % respectively).

The available data indicates difference in the prevalence of glucosuria and diabetes and suggest an increasing trend in recent years.

Goal:

To develop a comprehensive strategy for the primary prevention of diet related non-communicable diseases. The prevention should start in early childhood and continue throughout. youth in order to avoid the emergence of established risk factors in adults.

Objective:

To reduce the prevalence of chronic non communicable diseases by 50% before year 2000.

Action:

1. Early detection of hypertension by routine measuring of blood pressure in outpatient clinics, preparatory and secondary schools, universities when they first join and annually. The same thing might be done among governmental and private sector employees particularly, at risk groups.

2. Early detection of diabetes by routine urine analysis in schools, universities and among employees and in particular pregnants to avoid maternal complications and perinatal complications in infants of diabetic mothers.

3. Initiate action for appropriate management to prevent long-term complications of diabetes such as vision - threatening retinopathy and end-stage renal failure.

4. Preparation of dietary guidelines to advise people, based on:

   - Reduction of cholesterol intake below the average 300 mg for adults.

   - Reduction of saturated fat in diet by its replacement with mono and poly unsaturated fat.

   - To have fat energy ratio between 20-30 %.

   and emphasize the following:

   - Reduction of salt used in cooking.

- Not to use canned foods and eat only fresh meats, vegetables and fruits.

- Encourage eating white meats only. If red meat is used, it should be lean meat.

- To increase consumption of complex carbohydrate derived from vegetables, fruits, whole grains and legumes which are high in fibre.

- Prohibiting smoking in all governmental premises, hospitals, clinics.

- Encourage exercise for children and young adults and continue for all age groups which can play an active role in prevention and control of over weight, high blood pressure, hyperlipidemia and non-insulin dependent diabetes.

- Promotion and protection of breast-feeding.

- Controlling obesity as it is considered a major risk factor for the occurrence of non-insulin dependant diabetes.

5. Disseminate information through:

    - T.V spots & drama.

    - Local newspapers.

6. Family health file for every family including all the health details of each member of the family.

7. Food labelling with nutrition information.

Authorities responsible for action:

- MOH.
    - o Nutrition Institute (NI).
    - o PHC.
    - o Hospitals.
    - o School health.
    - o Health Insurance.
- MOA.
- MOE (formal & informal education).
- MOI.
- MOI. (Industry).
- MOSA.
- Private sector (Syndicates and NGOs).
- Interested international and bilateral organizations to provide technical and financial support.
- Universities and Research Institutes.

Resources:

- Fund for preparation of dietary guidelines.
- Fund for printing learning materials to be distributed in diabetic clinics, obesity clinics and CVDs clinics in hospitals and private clinics and hospitals.
- Fund for training health workers or social workers from different sectors (PHC, schools ... etc.).

Legislation:

- Legislation to enforce periodic examination of the employees at private and governmental sectors.

Time elapse till action:

- Two years.
  According to each item (maximum 2 years).

Time for action:

- Continuous.

Monitoring and evaluation:

- Measuring blood pressure regularly, mainly of late adulthood, old age and married females.
- Determination of cholesterol level among over weight and obese individuals.
- BMI.
- Determination of glucose in urine.
- Morbidity rate, for chronic non-communicable diseases.
- Specific mortality rate.

Theme 9: ASSESSING, ANALYZING AND MONITORING NUTRITION SITUATIONS

Problem :

Several nutrition surveys were carried out starting 1978, covering only special groups.

The demographic and health survey of 1988 and 1992 includes information on nutritional and health status and also some qualitative food intake data. This is not a regular system of nutrition surveillance. However a study conducted by FAO and Egyptian Ministry Of Agriculture in last two years in two governorates can serve as a base for establishing a nutrition surveillance system.

Goal:

To establish a nutrition surveillance system based on the regular activities and information collected by PHC teams and Agriculture Extension Agents regarding nutritional status of the population and its determinants.

Objectives:

- To establish the nutritional surveillance system in 6 governorates within 2 years.
- To expand the system gradually to cover the 26 governorates within 10 years.

Action:

* Study the results of the previous nutrition surveillance project conducted by FAO and nutrition unit of the Ministry Of Agriculture to be modified for setting the national surveillance system.
* Target groups:
  - Newly born.
  - Infants and preschool children.
  - School children.
  - Mothers particularly pregnant and lactating women.
  - Young adults particularly military recruits.

* Choice of representative sample.
* Collection of regular information:

A. Nutritional status information:

- Weight, length/height.
- Positive clinical deficiency signs.
- Hb concentration.

B. Determinants of nutritional status:

- Food availability.
- Food consumption.
- Food prices.
- Economic information.
- Infrastructure (non targeted nutrition intervention e.g water supply and sanitation).
- Morbidity rates of infectious diseases.
- Rate of breast feeding.
- Availability and utilization of health care facilities including rate of immunization coverage.

* Choice of indicators:

- Percentage of newborn with birth wt. < 2.5 kg.
- Percentage of under -5 children with wt/A <- 2 S.D.
- Percentage of under -5 children with ht/A <- 2 S.D.
- Percentage of adult males and females with BMI > 25.
- Percentage of targets with systolic blood pressure >140.
- Percentage of targets with diastolic blood pressure > 90.
- Prevalence rates of nutrition deficiency diseases.
- Percentage of preschoolers and pregnants with Hb <11gm %.
- Percentage of nonpregnant mothers with Hb < 12 gm%.
- Percentage of young adults with Hb < 13 gm%.
- Percentage of targets with glucosuria.
- Dietary indicators (minimum food basket).

* Establishment of sentinel surveillance units in representative governorates in the suitable place mainly PHC units and Agriculture Extension units both working together in the assessment of nutrition situation. This should be connected to a central surveillance unit via the district and governorate levels.

* Formulation of a steering committee to administer the surveillance system from the Ministry Of Health and Ministry Of Agriculture and nutrition experts from universities and research centers.
The steering committee will refer directly to the interministerial committee for proposals to decision makers. Feedback to the peripheral level is essential.

Resources:

1. The Nutrition Institute including the Computer Unit and Training Unit.

2. A wide network of health facilities including Computer Units at governorate level. Computer center at Ministry Of Health "MOH" linked with all governorates.

3. Computer Center within the Ministry Of Agriculture "MOA" linked with all governorates.

4. Training Center with all needed training requirements and accommodation facilities, restaurants...etc. at MOA.

5. Well equipped training centers within MOH in selected governorates.

6. The Nutrition Unit of Ministry Of Agriculture and other related units.

7. A wide network of Agriculture Extension services and training units.

8. Nutrition experts in Universities and Research Institutes.

9. Training facilities within Universities and Institutes e.g Center for Social and Preventive Medicine, Cairo University.

Funds are needed for upgrading the already available resources (equipment, training ...etc).

Authorities responsible for action:

MOH:

- Nutrition Institute (NI).
- MOH primary health care units; MCH, school health and health insurance.

MOA:

- Nutrition Unit.
- Agriculture Eextension units and training units in different governorates.

Collaboration between the two Ministries is important.

Time elapse till action:

Start January 1995.

Time for action:

This should be a continuous process.

Monitoring and Evaluation:

- Improvement of the indicators already stated.