

Health promotion by equilibrated nutrition

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The plan

- 1. The importance of health promotion by equilibrated nutrition.**
- 2. Official documents on the role of balanced nutrition for the state of health of population.**
- 3. Programs on the promotion of healthy nutrition.**
- 4. The role of human endoecosystem.**
- 5. Recommendations on healthy nutrition.**

I. The importance of health promotion by equilibrated nutrition.

- The main aim of health promotion in the domain of nutrition is to help people to acquire correct eating habits, taking into account the necessary nutrients, but also local cultural conditions and food resources**
- Healthy eating is very important in prophylaxis of different diseases, especially non – communicable diseases.**

I. The importance of health promotion by equilibrated nutrition(continuation)

- ***Non-communicable diseases that
depend on nutrition:***
 - **1) Cardiovascular diseases;**
 - **2) Cancer;**
 - **3) Dental diseases;**
 - **4) Diabetes, II type;**
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I. The importance of health promotion by equilibrated nutrition(continuation)

- ***Non-communicable diseases that depend on nutrition(continuation):***
- **5) Obesity;**
- **6) Anemia;**
- **7) Endemic goiter and other disorders caused by low or high quantities of iodine in the diet**
- **8) Osteoporosis.**

II. Official documents on the role of balanced nutrition for the state of health of population.

World Declaration on Nutrition

**Adopted at the International Conference on Nutrition, Rome,
December 1992**

- ***1. We, the Ministers and the Plenipotentiaries representing 159 states and the European Economic Community at the International Conference on Nutrition (Rome, December 1992) declare our determination to eliminate hunger and to reduce all forms of malnutrition. Hunger and malnutrition are unacceptable in a world that has both the knowledge and the resources to end this human catastrophe. We recognize that access to nutritionally adequate and safe food is a right of each individual.***

World Declaration on Nutrition

Adopted at the International Conference on Nutrition, Rome,
December 1992(continuation)

- *We recognize that globally there is enough food for all and that inequitable access is the main problem. Bearing in mind the right to an adequate standard of living, including food, contained in the Universal Declaration of Human Rights, we pledge to act in solidarity to ensure that freedom from hunger becomes a reality. We also declare our firm commitment to work together to ensure sustained nutritional well-being for all people in a peaceful, just and environmentally safe world.*

World Declaration on Nutrition

Adopted at the International Conference on Nutrition, Rome, December 1992(continuation)

- ***11. We recognize that the nutritional well-being of all people is a pre-condition for the development of societies and that it should be a key objective of progress in human development. It must be at the centre of our socio-economic development plans and strategies. Success is dependent on fostering the participation of the people and the community and multisectoral actions at all levels, taking into account their long-term effects. Shorter-term measures to improve nutritional well-being may need to be initiated or strengthened to complement the benefits resulting from longer-term development efforts.***

A common vision for global action to end all forms of malnutrition

(Rome Declaration on Nutrition,

(Second International, Conference on Nutrition, 19 -21 November, 2014)

1. The elimination of malnutrition in all its forms is an imperative for health, ethical, political, social and economic reasons, paying particular attention to the special needs of children, women, the elderly, persons with disabilities, other vulnerable groups as well as people in humanitarian emergencies.

2. National health systems should integrate nutrition while providing access for all to integrated health services through a continuum of care approach, including health promotion and disease prevention, treatment and rehabilitation, and contribute to reducing inequalities through addressing specific nutrition-related needs and vulnerabilities of different population groups.

A common vision for global action to end all forms of malnutrition

(Rome Declaration on Nutrition, (Second International, Conference on Nutrition, 19 -21 November, 2014)

- ***3. Nutrition policies should promote a diversified, balanced and healthy diet at all stages of life. In particular, special attention should be given to the first 1,000 days, from the start of pregnancy to two years of age, pregnant and lactating women, women of reproductive age, and adolescent girls, by promoting and supporting adequate care and feeding practices, including exclusive breast feeding during the first six months, and continued breastfeeding until two years of age and beyond with appropriate complementary feeding. Healthy diets should be fostered in preschools, schools, public institutions, at the workplace and at home, as well as healthy eating by families.***

Recommended actions for nutrition education and information
(Framework for Action, Rome, 19-21 November 2014)

- *- Recommendation 19: Implement nutrition education and information interventions based on national dietary guidelines and coherent policies related to food and diets, through improved school curricula, nutrition education in the health, agriculture and social protection services, community interventions and point-of-sale information, including labelling.*
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- *- Recommendation 20: Build nutrition skills and capacity to undertake nutrition education activities, particularly for front line workers, social workers, agricultural extension personnel, teachers and health professionals.*

Recommended actions for nutrition education and information

(Framework for Action, Rome, 19-21 November 2014)

- **- Recommendation 21: Conduct appropriate social marketing campaigns and lifestyle change communication programs to promote physical activity, dietary diversification, consumption of micronutrient-rich foods such as fruits and vegetables, including traditional local foods and taking into consideration cultural aspects, better child and maternal nutrition, appropriate care practices and adequate breastfeeding and complementary feeding, targeted and adapted for different audiences and stakeholders in the food system.**

Global targets for improving maternal, infant and young child nutrition
(Framework for Action Rome, 19-21 November 2014)

- *1. 40% reduction of the global number of children under five who are stunted.*
- *2. 50% reduction of anemia in women of reproductive age.*
- *3 30% reduction of low birth weight.*
- *4. No increase in childhood overweight*
- *5. To increase exclusive breastfeeding rates in the first six months up to at least 50%*
- *6. To reduce and maintain childhood wasting to less than 5%.*
- *7. To reduce salt intake by 30%.*
- *8. To halt the increase in obesity prevalence in adolescents and adults.*

**Ottawa Charter for Health Promotion,
Adopted at the First International Conference on Health Promotion,
21st of November 1986**

- The role of the health sector must move increasingly in a health promotion direction, beyond its responsibility for providing clinical and curative services. Health services need to embrace an expanded mandate which is sensitive and respects cultural needs. This mandate should support the needs of individuals and communities for a healthier life, and open channels between the health sector and broader social, political, economic and physical environmental components.**

**Ottawa Charter for Health Promotion,
Adopted at the First International Conference
on Health Promotion,
21st of November 1986 (continuation)**

- **Reorienting health services also requires stronger attention to health research as well as changes in professional education and training. This must lead to a change of attitude and organization of health services which refocuses on the total needs of the individual as a whole person.**

III. Programs on the promotion of healthy nutrition

- **1. The programs for different groups of population ultimately have the same goal, methods of study, endpoints will be, however, different.**
- **2. Health promotion programs about nutrition should not be isolated, but on the contrary, any such program must be carried out in complex with the participation of local administration, representatives of the food industry, trade, advertising agencies, medical institutions, education etc.**
- **3. Some programs can be individualized, specifically aimed at a particular group of generally healthy population, for example, mothers children, students, intellectuals, workers, elderly people and a. In these cases it is necessary coordination of activities with representatives of advertising agencies, working together with the objectives of producing and selling food.**

III. Programs on the promotion of healthy nutrition (continuation)

- 4. Consider individualized programs aimed at populations with health disorders caused, in particular nutrition: various hypovitaminosis, cardiovascular disease, obesity, type II diabetes and diseases of the liver and biliary tract, endemic diseases.**
- 5. Each time the composition of programs have to consider the possibility of local food consumption, social - economic status, age and last but not least, traditions.**

III. Programs on the promotion of healthy nutrition (continuation)

- **6. In preparing health promotion programs in food and nutrition at all levels (district, city, municipal, national) it required the association of certain elements:**
 - **a) Drawing up a concrete plan with real and motivated goals;**
 - **b) Staff that is not only well trained but also well acquainted with the contingent that will work, its requirements;**
 - **c) The ability of staff in the dissemination of knowledge in the field and to adapt information to specific conditions;**
 - **d) Ongoing technical and financial assistance for a long period of time, taking into account that in the food and nutrition immediate results cannot be achieved.**

III. Programs on the promotion of healthy nutrition (continuation)

- *Questions that must be clarified in advance to establish health promotion program in a community:*
- **1. The level of knowledge in the field of nutrition of the listeners.**
- **2. Knowledge of food – stuffs.**
- **3. The level of practical dexterities of the listeners.**
- **4. If anyone has participated in some programs it is need to determine these programs and their effect for the corresponding listeners.**
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III. Programs on the promotion of healthy nutrition (continuation)

- ***Questions that must be clarified in advance to establish health promotion program in a community(continuation):***
 - 5. If someone in the group will participate in future dissemination of obtained knowledge or in policy decisions on nutrition and food.**
 - 6. To reveal the interests of the listeners in dependence on profession.**
 - 7. Foods those are more readily available for community.**

IV. The role of human endoecosystem.

Colonic microflora

Nr d/r	Groups of microorganisms	Representatives of microbiocenosis	Share(%)
1.	Mandatory microflora	Bacteroides Bifidobacterii Lactobacteries E. coli Enterococci	>90% of the total number of microbes that can be cultivated
2.	Optional microflora	Peptostreptococci Clostridies Veilonella Ctafilococci Proteus Campilobacter Lees and others	< 10% of the total number of microbes that can be cultivated
3.	Transient microflora	Cl.pyocianeus Fungi Candida Pathogen Enterobacteries and others	Mustn't be present

EQUILIBRIUM BETWEEN MACROORGANISM AND ENDOECOSYSTEM

- The normal biological activity of the human organism is possible only if **the equilibrium between organism and endoecosystem** exists. Endoecosystem is presented by intestinal flora (nonsporulated forms of anaerobs and facultativ aerobes)..
- Local and systemic **functions of endoecosystem** are:
a)antibacterial, b)regulatory, c)metabolic.
- On the different factors of risk, especially, pollutants of different origin endogen flora is modified quantitatively and qualitatively causing changes of the functions and structures of different organs.
- In the result of different modifications saprophyte **flora can plays the role of initiator in the appearance and development of different diseases or existent diseases become chronic.**
- It was established experimentally and clinically that different diseases of internal organs are caused by disturbances of natural technologies. These disturbances appear in the result of disturbance of equilibrium between the whole organism and endoecosystem.

Microorganisms used as probiotics in food and pharmaceuticals

Groups of microorganisms	Species of microorganisms
Bifid bacteria	Bifidobacterium bifidum, B.infantis, B. Longum, B. breve, B.adolescentis, B. Lactis, B. Abimalis
Lactobacilli	Lactobacillus GG, L. acidophilus, L. plantarum, L.casei spp. Rhamnosus, L. brevis, L. delbrueckii
Lactococci	spp. bulgaricus, L. helveticus, L. femientum, L. lactis Lactococcus spp. cremonis, L. lactis spp. lactis
Coliform bacteria	
Enterococci	Escherichia coli
Streptococci	Enterococcus faecium, E. faecalis Streptococcus salivarium spp. thermophilus, S. faecium, S. cremoris, S. Lactis
Propionobacteries	Propionibacterium acnes
Bacilli	Bacillus subtilis
Fungi	Saccharomyces boulardii

V. Recommendations on healthy nutrition.

- *Health is a state of complete physical, mental and social well – being and not merely the absence of disease or infirmity”(WHO, 1946)*
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- Unbalanced eating is responsible in Europe for:
- *1) At least one third of premature death resulting from cardiovascular diseases;*
- *2) About 30 – 40% of all cases of cancer;*
- *3) The pan – European epidemic in obesity and consequences;*
- *4) The increase in osteoporosis and consequences;*
- *5) A large prevalence of micronutrient deficiencies (like iron and iodine)*

V. Recommendations on healthy nutrition (continuation).

- *In general, to ensure a healthy lifestyle, WHO recommends eating lots of fruits and vegetables, reducing fat, sugar and salt intake and physical exercises. Based on height and weight, people can check their body mass index (BMI) to see if they are overweight.*

12 steps to healthy eating, recommended by World Health Organization

- 1. Eat a nutritious diet based on a variety of foods originating mainly from plants, rather than animals.**
- 2. Eat bread, grains, pasta, rice or potatoes several times per day.**
- 3. Eat a variety of vegetables and fruits, preferably fresh and local, several times per day (at least 400 g per day).**
- 4. Maintain body weight between the recommended limits (a BMI of 18.5–25) by taking moderate levels of physical activity, preferably daily.**

**12 steps to healthy eating,
recommended by World Health Organization
(continuation)**

- 5. Control fat intake (not more than 30% of daily energy) and replace most saturated fats with unsaturated vegetable oils or soft margarines.**
- 6. Replace fatty meat and meat products with beans, legumes, lentils, fish, poultry or lean meat.**
- 7. Use milk and dairy products (kefir, sour milk, yoghurt and cheese) that are low in both fat and salt.**
- 8. Select foods that are low in sugar, and eat refined sugar sparingly, limiting the frequency of sugary drinks and sweets.**

**12 steps to healthy eating,
recommended by World Health Organization
(continuation)**

9. Choose a low-salt diet. Total salt intake should not be more than one teaspoon (6 g) per day, including the salt in bread and processed, cured and preserved foods. (Salt iodization should be universal where iodine deficiency is endemic.)

10. If alcohol is consumed, limit intake to no more than 2 drinks (each containing 10 g of alcohol) per day.

11. Prepare food in a safe and hygienic way. Steam, bake, boil or microwave to help reduce the amount of added fat.

12. Promote exclusive breastfeeding up to 6 months, and the introduction of safe and adequate complementary foods from the age of about 6 months. Promote the continuation of breastfeeding during the first years of life.

Food consumption in the Republic of Moldova

Nr.	The average consumption kg/year/person Groups of food - stuffs	Decision of the Gov. of the R.M. nr. 460 from 27.07. 93	Consumption of foods during 1990 -2018 years												
			1990	1992	1994	1996	1998	2000	2002	2004/ 2006	2008/ USA 2008	2010/ 2012	2014	2016	2018
1.	Meat and meat products, (calculated on meat)	78	58	46	30	25	23	24,0	29,8	32/ 37	30,7/ 117	33,7/ 38.7	43,3	47,1	55,0
2.	Milk and milk products (calculated on milk)	213,6	303,0	198	163	161	148	153,0	145,1	166/ 180,4	180,4 270	231,7 212	212	217,5	241,8
3.	Eggs, pieces	290,4	203	166	10	116	114	121	154	162 / 180	144/ 247	175,2 179,4	179,4	186	204,9
4.	Fish and fish products	13,2	12	2,3	1,4	3,0	2,2	3,5	5,8	- / 11,7	13 11	14,9/ 16,9	16,9	16,4	19,1
5.	Sugar	18,0	48,9	30,5	22,3	19,0	15,6	8,0	14,8	- / 15,4	16,3 61	16,3/ 17,2	17,2	17,6	17,6
6.	Potatoes	93,6	...	67,0	84,0	71,0	64,0	53,0	66,3	- / 50,1	51,7 56	50,4/ 46,5	46,5	47,5	44,7
7.	Vegetables and pumpkins	171,6	112,0	95,0	78,0	65,0	74,0	83,0	113,1	88/ 59,1	88,3 128	104,6 103,9	103,9	114,2	117,5
8.	Fruits, grapes (without wine)	63,6	79,0	63,0	68,0	59,0	54,0	23,8	31,2	38/ 28	29,3/ 110	42,2/ 47,0	47,0	49,3	56,8
9.	Bread and pasta (calculated on flour)	123,6	171,0	170,0	139,0	127,0	129,0	134,0	151,0	146 / 128,7	113,6 93	110,4 110,1	110,9	116,8	122,6
10.	Vegetal oil	14,4	14,1	8,5	8,0	8,2	6,2	6,4	13,8	-/ 12,3	13/ 33	12,4/ 12,7	12,6	12,8	12,6