#### 201 DECREE

# On the approval of measures to reduce by 2017 disorders determined by iron and folic acid deficiency

Based on articles 6, 7, 9 and 38 of the Law no. 10-XVI of 3 February 2009 on state supervision of public health (Official Gazette of the Republic of Moldova, 2009, no. 67, art. 183), articles 9 and 18 of the Law no. 78-XV of 18 March 2004 on food stuffs (Official Gazette of the Republic of Moldova, 2004, no. 83-87, art. 431), as well as to protect people's health, the Government DECIDES:

- 1. To approve
  - 1) The national program to reduce sicknesses determined by iron and folic acid deficiency by 2017, according to Annex 1
  - 2) The plan of actions for the implementation of the national program to reduce sicknesses determined by iron and folic acid deficiency by 2017, according to Annex 2
  - The modification of the Classified list of goods of the Republic of Moldova, according to Annex 3
- 2. To create the Council for the coordination of the national program to reduce sicknesses determined by iron and folic acid deficiencies by 2017 to consist of 18 persons and to approve
  - The nominal composition of the Council for the coordination of the national program to reduce sicknesses determined by iron and folic acid deficiency by 2017, according to Annex 4
  - 2) Regulation of the Council for the coordination of the national program to reduce sicknesses determined by iron and folic acid deficiency by 2017, according to Annex 5
- 3. It is established that, in case members of the Council resign/are dismissed from their positions, their tasks within the framework of the Council shall be exercised by persons newly appointed to these positions, without a new Government Decree.
- 4. It is established that wheat flour of superior, first and second quality and durum wheat flour, imported or produced by the local milling enterprises, designed for use in food industry, shall be fortified with iron and folic acid.
- 5. The actions provided for in the above mentioned Program shall be covered financially from and within the limits of the allocations approved yearly in the national public budget, as well as from other sources, according to the legislation.
- 6. Ministries and other central administrative authorities shall ensure, within the limits of the attributed competences, the execution of the present decree and the actions provided for in the Program, submitting yearly reports to the Ministry of Health that shall generalize data by 1 February and shall forward the integrated report on the implementation of this decree by 1 March.
- 7. It is recommended to the local public administrative authorities:
  - 1) To develop, based on the national program approved by this Decree and approve, in the course of two months, territorial programs to reduce sicknesses determined by iron and folic acid deficiency by 2017

- 2) To examine yearly the implementation of territorial programs to reduce sicknesses determined by iron and folic acid deficiency and undertake measures to fulfil the objectives that are set forth.
- 8. The Ministry of Health shall be responsible for controlling the execution of this decree.

Prime-minister	Vladimir FILAT
Countersigned:	
Deputy prime-minister,	
Minister of economy	Valeriu Lazar
Minister of health	Andrei Usatii
Ministry of Agriculture and Food industry	Vasile Bumacov
Minister of Finance	Veaceslav Negruta
No.171 Chisinau, 19 March 2012	

Annex 1 to Government Decree no. 171 of 19 March 2012

#### **National program**

#### to reduce disorders determined by iron and folic acid deficiency by 2017

#### I. Introduction

- 1. The national program to reduce sicknesses determined by iron and folic acid deficiency by 2017 (hereinafter the Program) is a mid-term planning paper for policies aimed at reducing the impact of iron and folic acid deficiency on public health in the Republic of Moldova.
- The program has been developed in accordance with the provisions of the Law no. 10-XVI of 3 February 2009 on the state supervision of public health, Law no. 78-XV of 18 March 2004 on food stuffs, Law no. 295-XVI of 21 December 2007 on the approval of the National Development Strategy for 2008-2011, National Health Policy approved by Government Decree no. 886 of 6 August 2007.

#### II. Problem identification

- 3. Iron deficiency has adverse functional consequences in all ages. It affects physical development, cognitive performance and behaviour in children, reduces the body immunity in all age groups, and diminishes physical capacity and work performance in adults. Anaemia caused by iron shortage increases perinatal risks for mothers and new-born babies, as well as general maternal and infant mortality.
- 4. Folic acid plays an important role in preventing pathological sicknesses and processes, having a major impact on public health. One of the main roles of the folic acid is to prevent malformations of the neural tube in the fetus.
- 5. There is high prevalence of anaemia in the Republic of Moldova, over 70% of them being caused by iron deficiency. Prevalence of anaemia, according to the demographic and health study conducted in 2005, was of 52% in children of 6-11 months, 32% in children younger than 5 years and 28% in women of childbearing age.
- 6. Congenital malformations, such as defects of the neural tube, represent one of the main causes of decease in the perinatal period, of children up to 1 year and from 1 to 14 years old. Congenital malformations accounted for 32.1% in the making up of the infant deaths in 2008.
- 7. Iron and folic acid deficiency impacts not only the human health, but also the economy of the country. The mean value of the missed earning, determined by the affected cognitive capacities, limited productivity of the workers which fulfil medium or hard manual works, conditioned by iron deficiency is 0.9% of the yearly Gross Domestic Product. Neural tube defects in fetus are one of the main causes of decease of babies in pre-natal and post-natal periods and of disabilities throughout the life, which have not only an economic, but also a social impact.
- 8. Strengthening of wheat flour is an efficient, simple and non-costly strategy for supplementing the diet of a large segment of population with iron and folic acid. Over 50 countries have approved national strategies for mandatory strengthening of wheat flour with iron and folic acid.

## III. Use of wheat flour and food supplements fortified with iron and folic acid

- 9. In accordance with this Program, all bakeries, pastry shops and other enterprises in food industry which use flour as food ingredient (hereinafter food industry), shall use wheat flour adequately fortified with iron and folic acid in their production beginning with 2013.
- 10. Wheat flour of superior, first and second quality and durum wheat flour (hereinafter wheat flour) designed for the use in food industry, shall be fortified with iron and folic acid.
- 11. Milling enterprises shall ensure adequate and homogenous fortification of wheat flour with iron and folic acid.
- 12. Preparations with iron and folic acid on the list of medications compensated from the funds of mandatory healthcare insurance shall be provided to all pregnant women for free in doses recommended by the national reference documents.

## IV. Purpose and objectives

- 13. The purpose of the Program is to improve the health condition of the population by reducing the impact of iron and folic acid insufficiency on the population of the Republic of Moldova in line with the Millennium Development Goals.
- 14. The objectives of the Program are as follows:
  - Prevalence of iron deficiency anaemia reduced by the end of 2017 by at least 30% in pregnant women and children up to the age of 5 years and by 20% in other groups of population and of the rate of defects of the neural tube in new-borns by at least 20% by introducing and long-term maintenance of fortification of wheat flour with iron and folic acid and by ensuring pregnant women with preparations with iron and folic acid
  - 2) Ensured fortification with iron and folic acid by 2013 of all flour, imported or produced by the local milling companies and designed for use in all food industry enterprises, as well as preserving the long-term use of this practice
  - 3) Ensured use, by 2013, of wheat flour fortified with iron and folic acid by all food industry enterprises, as well as long-term use of this practice
  - 4) Ensured use, by 2014, of 100% of bread and baked products fortified with iron and folic acid in all education institutions and 100% of wheat flour fortified with iron and folic acid in at least 80% of education institutions, as well as long-term use of this practice
  - 5) Level of awareness of pregnant women of the need of supplement the intake of iron and folic acid increased up to at least 80% and the level of intake of preparations with iron and folic acid in the recommended dosage and duration increased up to at least 70%
  - 6) An effective Program management, coordination, monitoring and evaluation system set up by 2017

## V. Actions to be undertaken to implement the Program

15. To ensure the decrease in the prevalence of iron deficiency anaemia by at least 30% in pregnant women and children up to 5 years old and by 20% in other categories of population and the rate of defects of the neural tube in the new-borns by at least 20% by the end of 2017 by introducing and

maintaining the long-term fortification of wheat flour with iron and folic acid and by ensuring pregnant women with preparations with iron and folic acid, the following directions of action are envisaged:

- Ensure the fortification of wheat flour designed for use in food industry with 30 mg of iron (in case ferrous fumarate (C<sub>4</sub>H<sub>2</sub>FeO<sub>4</sub>) is used as fortifying substance) or 60 mg of iron (if elementary iron is used (reduced carbonyl + electrolytic + hydrogen)) per each kg of wheat flour and 1.4 mg of folic acid per each kg of flour. To fortify wheat flour with iron and folic acid, premixes that contain ferrous fumarate and folic acid or elementary iron and folic acid shall be used
- 2) Provide pregnant women with free preparations with iron and folic acid on the list of medications compensated from the mandatory healthcare insurance fund in dosage recommended by the national reference documents
- 3) Promote health benefits of consuming bread and baked products and other foodstuffs produced from wheat flour fortified with iron and folic acid
- 4) Promote healthy eating principles, measures to reduce and eradicate nutritional deficiencies recommended by the World Health Organization and Codex Alimentarius Commission
- 16. To ensure the fortification with iron and folic acid by 2013 of all wheat flour imported or produced by the local milling companies and designed for the use in food industry, as well as for long-term maintenance of this practice, the following actions are envisaged:
  - 1) Study the internal market for the production, distribution and imports of wheat flour
  - 2) Identify, during 2012, three pilot milling enterprises that would represent the Northern, Central and Southern regions and implement the process of wheat flour fortification with iron and folic acid (provide with dosing machines and premixes)
  - 3) Modify and complete Technical regulations "Cereal flour, semolina and bran", approved by the Government Decree no. 68 of 29 January 2009, by introducing the notion of fortified what flour, components by means of which the flour will be fortified, the doses and other specific requirements referring to wheat flour fortified with iron and folic acid and provisions on quality assurance
  - 4) Put forward proposals for amending and completing legislation in force to promote the imports of micro-dosing machines and premixes for the fortification of flour with iron and folic acid
  - 5) Develop and approve, according to the requirements, the Good practices guidelines for producing wheat flour fortified with iron and folic acid
  - 6) Test the ways to preserve wheat flour fortified with iron and folic acid within the limits of its shelf life
  - 7) Implement the process of fortification of wheat flour with iron and folic acid at the milling enterprises, including:
    - a. Purchase premixes which contain ferrous fumarate and folic acid or elementary iron and folic acid
    - b. Purchase and mount the dosing machines for the premixes
  - 8) Train the millers and other staff at the milling enterprises on the process of fortifying flour and assuring its quality
  - 9) Monitor and evaluate the application of the procedure for the fortification of local wheat flour with iron and folic acid at the milling enterprises
  - 10) Monitor wheat flour flows on the domestic market

- 11) Monitor the quality of the wheat flour fortified with iron and folic acid that is locally produced, as well as imported
- 12) Monitor the quantity of the wheat flour fortified with iron and folic acid and non-fortified which enters the market of the Republic of Moldova
- 17. Ensure the use, by 2013, of wheat flour that is fortified with iron and folic acid at all food industry enterprises, as well as long-term use of this practice, shall be achieved by means of the following streamlines of activity:
  - 1) promote the use of wheat flour that is fortified with iron and folic acid by all food industry enterprises
  - 2) monitor the quality of wheat flour used at the food industry enterprises
- 18. To ensure the use, by 2014, of 100% of bread and baked products fortified with iron and folic acid in all education institutions and of 100% of wheat flour fortified with iron and folic acid in at least 80% of education institutions, as well as to keep this practice for the long term, the following streamlined activity is provided for:
  - 1) Promote the health benefits of the consumption of bread and baked products and other foodstuffs made with wheat flour fortified with iron and folic acid through training and education programs in the above mentioned institutions
  - 2) Monitor the quality of wheat flour used in all education institutions and of bread and baked products that are consumed in the above mentioned institutions
- 19. Increase, by 2017, the level of awareness of pregnant women on the need to supplement the diet with iron and folic acid up to at least 80% and the level of use of preparations with iron and folic acid in the doses and for the recommended duration at least at 70%, shall be ensured by conducting the following actions:
  - 1) Ensure information and awareness raising of women of childbearing age and pregnant women of the benefits of the intake of preparations with iron and folic acid in removing nutritional deficiencies and their consequences
  - 2) Build the capacities of the human resources in the primary healthcare assistance and the Service of state supervision of public health
- 20. To set up, by 2017, an effective Program management, coordination, monitoring and evaluation system, the following streamlined actions shall be carried out:
  - 1) Ensure the implementation of the method for testing folic acid in fortified foodstuffs and disseminate it;
  - 2) Ensure the implementation of the methods for testing homocysteine and folates in blood and disseminate them ;
  - 3) Ensure the adjustment of the system for monitoring congenital malformations, especially the defects of the neural tube, in line with the European system for monitoring congenital anomalies (EUROCAT);
  - 4) Ensure the conduct of a national survey on the assessment of the status of iron and folic acid in women of childbearing age, sicknesses determined by iron and folic acid deficiency, consumption of foodstuffs made of wheat flour that is fortified with iron and folic acid, of knowledge, attitudes and practices of using iron and folic acid preparations by pregnant women;
  - 5) Build capacities for monitoring and evaluating this Program

#### VI. Expected outcomes

- 21. The implementation of this Program will contribute, in the long run, to reduced number of sicknesses determined by iron and folic acid deficiency in the population of the Republic of Moldova, firstly, in the most vulnerable categories of the population, as well as in women of childbearing age and in children.
- 22. The outcomes expected by 2017 are as follows:
  - 1) Reduced prevalence of iron deficiency anaemia
    - a. In women of childbearing age by at least 20%
    - b. In pregnant women by at least 30%
    - c. In children up to the age of 5 years by at least 30%
  - 2) Reduced rate of the defects of the neural tube in new-borns by at least 20%.

## VII. Indicators

- 23. To assess the extent to which the outcomes have been achieved, the following indicators shall be used:
  - 1) Rate of anaemia in pregnant women
  - 2) Rate of anaemia in women of childbearing age
  - 3) Rate of anaemia in children up to 5 years old
  - 4) Rate of pregnant women which took preparations with iron during at least 4 months
  - 5) Rate of pregnant women which took preparations with folic acid during at least 4 months
  - 6) Rate of pregnant women who know of the benefits of additional iron intake
  - 7) Rate of pregnant women who know of the benefits of additional folic acid intake
  - 8) Rate of milling enterprises which fortify wheat flour with iron and folic acid
  - 9) Rate of food industry enterprises which use wheat flour that is fortified with iron and folic acid
  - 10) Rate of fortified wheat flour used in food industry
  - 11) Number of analyses of the contents of iron in fortified flour
  - 12) Number of analyses of the contents of folic acid in fortified flour
  - 13) Number of conducted monitoring reports

# VIII. Overall cost estimation

- 24. Overall cost estimation for implementing the Action Plan on implementing the National program to reduce sicknesses caused by deficiency of iron and folic acid by 2017 (hereinafter Action Plan) has been made based on the priorities and identified and formulated activities. Cost-benefit methodology has been used along with taking over and adjusting the international experience in order to establish the main costs for implementing the Program.
- 25. Estimated cost of the Program is 101.585 million lei and is detailed for each year, depending on the source of funding and in line with the activities of the Program.

# IX. Implementation risks

- 26. The following constraints can be identified along the implementation of the Program:
  - 1) Resistance of certain milling enterprises to purchase and mount dosing machines for premixes, as well as machines for preparing the premixes, which can be cleared away by means of awareness

raising and information actions, as well as through attracting additional resources in cooperation with the international development partners

2) Limited resources in the state budget, which, nevertheless, can be rationally used by more efficient earmarking of financial resources designed for the implementation of the Program, as well as through attracting additional resources from external donors.

## X. Monitoring, evaluation and reporting proceedings

- 27. In the course of the implementation of the Program, on-going monitoring of the actions and achieved outcomes will be conducted in order to make the necessary changes in the promoted policies and in the undertaken actions.
- 28. The goal of the monitoring is to correlate the objectives and actions in the Action Plan for the implementation of this Program with the Program's expected outcomes, so that, subsequently, to assess, as correctly as possible, how the Program is conducted and its impact on people's health.
- 29. The monitoring and evaluation process will particularly contribute to the analysis of the current situation and the trends in the implementation of Program objectives, to the analysis of the implementation of the Action Plan and correct evaluation of the final results.
- 30. The Program will be coordinated by a Council that shall be set up by this Government Decree. Monitoring and evaluation of the results of the implementation of the Program will be made by the Ministry of Health.
- 31. Monitoring procedures will provide for on-going supervision that will be ensured by the State Public Health Supervision Service and for research through studies.
- 32. In the course of the monitoring process, progress reports will be worked out. They will include data on the implementation of the actions provided for in the Action Plan. The Ministry of Health in cooperation with the Ministry of Agriculture and Food Industry will work out reports every 6 months (August and February) and will include information on the implementation of the actions provided for in the Action Plan. At the end of each year of implementation, the Ministry of Health in cooperation with the Ministry of Agriculture and Food Industry will work out the Program evaluation report that will include information on the achieved results according to the objectives set forth in the Program and which will be submitted to the Government in March each year.
- 33. In the middle of the term of Program implementation an intermediary evaluation will be conducted. The final evaluation will be conducted at the end of the Program implementation. The intermediary evaluation will take place in 2014, when the progress in achieving expected outcomes and the impact of the Program on people's health will be analysed. Based on the conclusions of the evaluation report, if needed, proposals to adjust the objectives and/or expected outcomes, as well as to identify new actions, depending on the situation, will be made.

## XI. Authorities responsible for the implementation

- 34. Authorities responsible for the implementation of each action in part are provided for in the Action Plan in Annex 2 to this Government Decree.
- 35. In the course of the implementation of the Program, responsible authorities will cooperate with other central and local public administration authorities, Academy of Sciences of Moldova, non-governmental organizations, as well as with international development partners.