VITAMIN & MINERAL DEFICIENCY

The Republic of Moldova is planning for more bold action to overcome large-scale losses of national health, brainpower, energy and productivity

A Damage Assessment & Protection Audit for MOLDOVA 2006

LEADERSHIP BRIEFING
Chisinau, December 2006
VM deficiency: Damage Assessment for MOLDOVA 2006

Data on VM deficiency are imperfect and the seriousness of the problem demands better monitoring. Nonetheless, estimates of its overall impact are essential for national decision-making. Using best available data from a variety of sources, impact calculations have been made for more than 90 nations.

If no action would be taken to overcome VM deficiency, the damage inflicted on the people and the nation of Moldova can be estimated as follows:

- More than 30% of Moldova’s 6-to-24 month-old children are at risk of disrupted brain development. **Cause: iron deficiency**

- An estimated 75 - 100 infants each year are at increased risk of death in the period immediately after birth. **Cause: severe anaemia in mothers**

- The deaths of several young Kyrgyz women every year in pregnancy and childbirth. **Cause: severe iron deficiency anaemia**

- Approximately 50 severe birth defects annually, including infantile paralysis. **Cause: folate deficiency**

- Suspected increase in deaths among adults from heart disease and stroke. **Cause: folate deficiency**

- In Moldova, more than 5,000 babies are born each year with intellectual impairment. **Cause: the mother was iodine deficient during pregnancy**

- Lowered productivity of the adult work-force. Losses to Moldova estimated at US$ 21.4million each year, or 0.7% of GDP. **Cause: iron and iodine deficiency**

- A significant but unmeasured burden on health services and educational systems, and on families and society caring for children left disabled or mentally impaired
VM deficiency: Protection Audit for MOLDOVA 2006

Estimation of the benefits obtained from actions to address VM deficiency is not perfect. Nevertheless, it is important to assess and share results of national actions that are already underway, and thereby stimulate a sense of achievement and resolve. Using best available data from a variety of reports and sources, the following progress calculations have been made for Moldova.

Benefits gained from the known and affordable strategies of food fortification, vitamin & mineral supplementation and public education among the people and in the nation of the Republic of Moldova are estimated as follows:

- Two out of every three babies born each year in Moldova are protected against intellectual impairment caused by the brain damage of iodine deficiency. Reason: Use of iodized salt in the household during mother’s pregnancy

- Approximately 10% of the nation’s 6-to-24 month-old children are protected against disruption of their brain development. Reason: Their households have started using fortified food products voluntarily

- Some unmeasured, but limited, reduction of severe iron deficiency, leading to less death risk among infants and young women during pregnancy and around childbirth. Reason: Iron/folate supplements

- Annual losses in GDP from lowered productivity of the adult work-force are being reduced. Reason: The Republic of Moldova is planning steadfast progress in actions to fortify all salt and wheat flour, which benefits the entire population

- The beginning of a dent in the burden on health services, educational systems, and on families and society caring for children left disabled or mentally impaired. Reason: A planned, coordinated strategy to address VM deficiency is gaining acceptance in the Republic of Moldova

IRON DEFICIENCY ANAEMIA

The Moldova Demographic Health Survey of 2005, conducted by the National Center for Preventive Medicine and covering more than 11,000 households throughout the country, reports that 32% of young children and 26% of women of reproductive age have anaemia. International experience predicts that at these levels of anaemia in the most vulnerable groups, iron deficiency affects virtually the entire population. Thus, addressing the problem will require a universal solution.

IODINE DEFICIENCY

The finding of goiter (neck enlargement) in 37% of schoolchildren in 1996 was confirmation that iodine deficiency threatened the brain development of newborns and infants in Moldova. The above-cited Demographic Health Survey in 2005 found adequately iodised in 59% of the households in Moldova. Very recently, a specialised national survey conducted by the National Center for Preventive Medicine has found that more than two out of three households in Moldova are now consuming adequately iodised salt.

VITAMIN A DEFICIENCY

Thanks to the widespread consumption of fruits and vegetables, complemented by an occasional amount of milk and eggs, it is not likely that vitamin A deficiency is a public health issue in young children of Moldova.
A MESSAGE TO LEADERSHIP

This Leadership Briefing is offered to national political leaders, to major print and broadcast media, to food industry CEOs, and to leading figures in health, education, and consumer affairs. No permission is required for the wider distribution of this report by print or electronic means.

VM DEFICIENCY – THE BREAKDOWN

Iodine deficiency is the leading cause of preventable mental impairment in the world. It significantly reduces mental capacity and work potential. In pregnancy, it causes babies to be born dead, physically disabled, or with severe brain damage.

Iron deficiency reduces activity levels and productivity in whole populations. In children 6 to 24 months, it disrupts normal brain development. Effects on children include stunting, sickness, poor school attendance, and lower levels of concentration and memory. Severe anaemia also causes higher death rates in childbirth.

Folate deficiency before and during early pregnancy is a major cause of serious birth defects. In adults it is associated with a higher rate of deaths from heart disease and stroke.

A problem not only for the poor:

Iron deficiency still affects up to 10% of the population in Western Europe and the United States.

Iodine deficiency remains a matter of concern in countries like Germany, Spain and the United States.

Folate deficiency is still causing birth defects in Europe, where flour is not fortified with folic acid.

SOME NATIONS MOVING RAPIDLY

Damage assessment reports have been issued for more than 90 individual nations. Some of these nations are now moving rapidly against VM Deficiency:

- 49 nations in the developing world have already passed the 75% mark for salt iodization.
- 39 developing countries are reaching 75% or more of their young children with vitamin A supplements.
- 51 nations, including the USA and Canada, now require the fortification of flour with iron.
- 40 nations, again including the USA and Canada, are fortifying flour with folic acid.

This Damage Assessment and Protection Audit report was developed for:

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