

Nutrient deficit hits IQ: study

UNITED NATIONS: The brainpower of entire nations has diminished because of a shortage of the right vitamins, and slipping nutrients into people's food seems to be the only solution, a new UN report says.

To fight the problem, the United Nations is prescribing a whole pantry of artificially fortified foods: soy sauce laced with zinc, "super salt" spiked with iron, cooking oil fortified with vitamin A.

Deficiencies in these vitamins are having alarming effects in developing countries, even ones where people generally have enough to eat, according to the report issued on Wednesday.

A lack of iron lowered children's IQ by an average five to seven points, the study said. A deficiency in iodine cuts it another 13 points, according to Venkatesh Mannar, president of the Micronutrient Initiative, which produced the report along with UN children's fund. Birth defects increase when mothers don't get enough folic acid, and a shortage of vitamin A makes children 25-30 per cent more likely to die of disease.

"So ubiquitous is vitamin and mineral deficiency that it debilitates in some significant degree the energies, intellects, and economic prospects of nations," the report said.

The study looked at 80 developing countries representing about 80 per cent of the world's population. It found:

□ Iodine deficiency has lowered the intellectual capacity of almost all of the nations by as much as 10 to 15 percentage points. It causes 18 million children a year to be born mentally impaired.

□ Iron deficiency in adults

↳ **So ubiquitous is vitamin and mineral deficiency that it debilitates in some significant degree the energies, intellects, and economic prospects of nations** ↲

-UN report

is so widespread that it lowers the productivity of work forces — cutting the Gross Domestic Product in the worst-affected countries by 2 per cent.

□ Deficiencies in folic acid — a nutrient needed for tissue growth, especially in pregnant women — causes about 200,000 severe birth defects every year in the 80 countries.

□ About 40 per cent of the developing world's people suffer from iron deficiency; 15 per cent lack adequate iodine; and as many as 40 per cent do not get enough vitamin A.

In most Western countries, governments have fought the problem by lacing foods with additives: iodine is sprayed on to salt before packaging; vitamin A is added to milk and margarine; and flour is enriched with niacin, iron and folic acid.

But that does not work in countries where governments are weak, food

is not processed in big mills and diets are based on a single starchy staple like rice or corn.

Mr Mannar said the effects on health and intelligence, were huge. "In many countries, the children are very slow to react, and it's due to these deficiencies," he said.

Other health experts said the UN findings echoed other studies showing the link between intelligence and nutrition.

"This is absolutely happening," Ronald Waldman, a professor of clinical health at Columbia University, said. "Vitamin deficiency is a disease, and when people have this disease they don't reach their ideal mental potential." While some deficiencies, like lack of vitamin A, could be corrected, "If you grow up and your IQ has suffered from iodine deficiency, it's not going to be reversible," he said.

Furthermore, things were getting worse in some countries, the report said. The percentage of salt that was iodised had slipped toward 25 per cent in some Central Asian countries and 50 per cent in India, the country with the largest number of iodine-deficient people.

Getting vitamins to people other ways just doesn't work, researchers say. In the United States, most people ignored government pleas to take more folic acid, a nutrient found in nuts — until the government started putting it in flour in 1998. The result: cases of spina bifida and anencephaly, two serious birth defects, dropped by at least 20 per cent.

"It becomes an issue of compliance — if people have to eat a vitamin pill every day, a lot of them won't do it," Mr Mannar said.

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