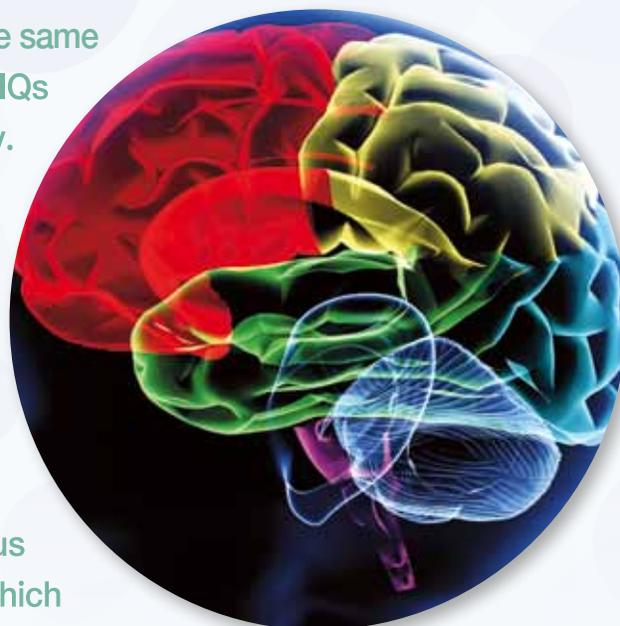


10 Health Issues

Falling IQs Among Thai Children : Time for More Educational Reform

Both the WHO and UNICEF came to the same conclusion that Thai children's low IQs are due mainly to iodine deficiency.

This conclusion is in agreement with an educational achievement survey which found Thai children failing all standard criteria and the national health survey of all Thai nationals (2008–2009) which showed that around a quarter of Thai children have IQs lower than the standard of 90. All these results point to the failure of the previous educational reform and child upbringing which affects Thai children's intellectual development.



<http://fedgeno.com/images/brain/colored.jpg>

When Thai children have low IQs

In early 2010, Dr. Somyos Deerasamee, the Department of Health Permanent Secretary, reported the results of a survey on the level of intelligence and age-appropriate development among Thai children during the previous 12 years (1997–2009). The report showed that children's average IQs fell steadily over the period from 91 to 88—lower than the WHO standard range of 90–110.

“What is more shocking is that an average Thai child spends 9,800 baht per year on snacks and 3,024 baht per year on education.”¹

The future of Thai children's health, which seems to hang on a bare thread as revealed by this data, is also reinforced by the explanation of Dr. Narong Saiwong, Vice President of the Nutrition Association of Thailand, who said that.

“At 8–10 years old, malnourished children will have smaller statures and lower intelligence and academic results. When they reach adulthood, they will have a lower level of intelligence and income-generating potential than those who have received age-appropriate nutrition. In addition, child malnourishment problems also cut the country's income by 2–3%.”²

The result of the Age-appropriate Development Survey in Children under 5 years old by the Department of Health points to a similar conclusion that Thai children's degrees of development decreased from 72% in 2004 to 67% in 2007. In addition, Thai households' access to quality iodized salt was found by the 2009 survey of Department of Health to be 77%, lower than WHO standard of at least 90%.³

In addition, Dr. Wichai Akepalakorn, Director of the National Health Examination Survey Office, revealed the results of the 4th Thai National Health Survey (2008–2009) of 9,000 Thai nationals in 21 provinces, conducted through interviews and health examinations. In the area of intellectual development, it was found that approximately a quarter of the sample group of children aged 1–14 had IQs lower than the average standard of 90.

*“The initial results of the survey showed that poor environment, education and food all contributed to their decreasing IQs. These data should be incorporated into a plan to improve and stimulate child development from birth. We can help increase their IQ’s through the change in the environment, food and educational curriculum.”*⁴

Soon after these shocking numbers were revealed, And emphasising the importance of food to Thai children’s development, 6 agencies (the Nutrition Association of Thailand, the Ministry of Public Health’s Department of Health, the Ministry of Interior’s Department of Local Administration, the Office of Basic Education Commission, the Bangkok Metropolitan Administration and the Thai Health Promotion Foundation) announced a 3–year collaborative pilot project to develop systems and mechanisms to give Thai children age appropriate nutrition in 10 provinces. The project aims to provide local administrations with capacity to educate pre–school children and school–age children in the community, nurseries and school with the right eating behavior so that they eat sufficient, well–balanced and nutritious food everyday.⁵

“Stupid–Idiotic–Retarded–Low IQs” were common headlines around that time. Dr. Wiyada Jaroensiriwat, who heads the innovative project to “provide sustainable local solutions to the problems of mental retardation and iodine deficiency” at the National Institute of Health, said that “It is a serious crisis which is more threatening to Thai society than the burning of Bangkok (in the May 2010 riot.)”⁶

More Iodine, Higher IQs

As both UNICEF and Thai Children’s IQ Survey point to iodine insufficiency among Thai adults and children, the cheapest and most efficient remedy is iodization.

As the Ministry of Public Health is at the frontline to respond when it comes to the health of Thai people, Public Health Minister Churin Laksanawisit launched a campaign to persuade Thai people to increase iodine intake in order to promote IQ increase, especially among 3 at–risk groups, namely:

- (1) *Pregnant Women* Babies of mothers with iodine insufficiency may be born with disabilities or mental retardation. Beginning in October 2010, health care facilities began distributing free tablets combining iodine, iron and folic acid to those seeking prenatal care as well as postpartum mothers.
- (2) *Newborns* Low levels of thyroid hormone in newborns can affect intelligence and general development as thyroid hormone is directly connected with iodine. If the condition is found by blood test, treatment should be sought immediately.
- (3) *Young Children and General Population* Iodine is essential for everyone, regardless of age or sex. Children with iodine insufficiency are at risk of low IQ’s.⁷

Furthermore, the Ministry of Public Health took the initiative of implementing a long–term solution for iodine insufficiency among Thai people by amending the Ministerial Notification No. 153 (1994) on table salt to extend to cover all salt used in food industry. All these products are now required to contain a minimum of 30 milligrams of iodine per gram. All table salt manufacturers in Thailand must add iodine into their products and label it as “iodized table salt”. This helps ensure that all products with salt will also contain iodine whether they be soy sauce, fish sauce, seasoning sauce, instant noodles or snacks. The Ministry also issued the logo “Increase

Iodine Increase IQ” to be displayed on product packaging. For these initiatives, the International Council for the Control of Iodine Deficiency Disorders and WHO applauded the Thai government’s effort to address iodine deficiency and cited Thailand as an example on this important issue.⁸

In addition, in 2011 the Department of Health and related networks made a 6–point strategic plan to control and prevent iodine deficiency covering 76,000 villages in all 75 provinces nationwide. The plan requires:⁹

- 1) Manufacturing and distribution of quality iodized salt with sustainable, continuous supply and Management
- 2) A system for surveillance, project monitoring and evaluation
- 3) Capacity building for local administrations, relevant organisations and network to elevate their participation in the project
- 4) Public relations, campaigning and social marketing to promote continuous consumption of iodized salt
- 5) Sustained research
- 6) Stop–gap and other measures with collaboration of all network members in all sectors, government and non–government.

But no matter how enthusiastic the Ministry of Public Health is in addressing low IQs among Thai children, the problem involves causes other than iodine insufficiency.

Dr.Siraporn Sawasdivorn, director of Queen Sirikit National Institute of Child Health, said *“An important cause of Thai children’s falling IQs and worsening health is social change. Most children now are raised in nuclear families where both parents work and leave their children to be raised by technology because they think it’s safer than allowing them to*

*play outside. This negatively affects the children’s physical development.... So please don’t attach more importance to money than to your children.”*¹⁰

Dr. Udom Petchsangharn, Deputy Chairman of Rak–Look Group, said at a press conference of the *“Thai Children’s Brains Can’t Wait”* project that, *“Iodine can only help with the hardwares of Thai children, but they also need softwares which come in the form of playing, learning and so on.”*¹¹

Will Thai children make it?

Thai children’s falling IQs are not only a public health concern but also lay bare the failure of Thailand’s educational system. Education Minister Chinnaworn Bunyakit said, according to the Office of the Educational Council Report, that Thailand’s world competitiveness ranking stayed at number 26 in 2010 (the same as in 2009) among 58 economies and below 5 other Asian countries, namely Singapore, Hong Kong, Taiwan, Malaysia and South Korea. These rankings compiled by the International Institute for Management Development provide a useful index for educational policies and development plans.¹²

In addition, the Program for International Student Assessment (PISA) found in 2009 that 15–year–old Thai children’s capacities in mathematic literacy, science literacy and reading literacy were below the Organisation for Economic Co–operation and Development’s (OECD) standards. The alarming survey result, placing Thailand at number 50 from 65 countries, was dubbed as the ‘PISA shock’ by those in the country’s educational system.¹³

The Trends in International Mathematics and Science Study 2007 (TIMSS 2007) also placed Thailand’s eighth graders below international median.¹⁴

Scholastic achievement assessment over three years showed that Thai twelfth graders scored less than 50% in all subjects and the scores showed a declining trend over the years.¹⁵ In 2009, the Educational Quality Assessment for Quality Assurance by the Office of Basic Education Commission found that Thai third graders were failing arithmetic and reading standards.¹⁶

Thai teachers are not in much better shape than their students. When the Office of Basic Education Commission tested mathematics and science high school teachers across the countries, it found that the majority of teachers in computer science, biology, mathematics, physics, chemistry, geology and astronomy failed in the subjects they taught.¹⁷

The academic decline similarly affected monk's education. Venerable Dharmakittiwong pointed out that *"It is embarrassing that monks now cannot write Pali... Lately, some novice monks were also found to be illiterate in the Thai language which unavoidably affects their Pali education. Some monks passed the highest-level test of Buddhist studies but are not fluent in reading and writing Thai, so they cannot give sermons or lectures."*¹⁸

These embarrassing numbers reflect the failure of Thailand's education system to the point that most people no longer remember that Thailand has already gone through a round of educational reform and is in the middle of the second round (2009–2018). This is a very challenging and difficult issue for Thai society.

Time for another educational reform

The more data pointing out Thailand's educational crisis, the more important and necessary the second round of educational reform becomes. Prime Minister Abhisit Vejjajiva, as chair of the Educational Reform Board, said "Education must be bipartisan. It's

not an issue for the government or the opposition because this is the most important thing for the development of the country and democracy."¹⁹

Three key factors of the educational reform are:

Students must be intelligent, well-behaved, happy, proud of Thainess and aware of happenings in the world.

Teachers must be given training and capacity building to become 'new breed' teachers with skills, determination and professionalism.

Good management can be achieved through decentralisation so that educational institutions are responsive and independent. Transparency and good governance are also important.

As the second round of educational reform is under way, there are other crises that must be overcome also. The combined amount of teachers' debts now stands at over one trillion baht, leaving some teachers with only 10 percent of salaries after credit payments. Corruption is rife in many projects. Drugs are rampant in schools. The shortage of vocational students is choking the industrial sector.

Laying out the vision of the second-round educational reform aiming at quality life-long learning, Dr.Prawase Wasi, as a member of the Thailand Reform Board, wrote in his book "To a Society of Learning" that "When education becomes a good learning process, it will help solve all problems in our lives and society."²⁰

The success of educational reform will depend on inviting those outside the educational system to take a role, in particular the family, the community and Thai society at large.

