

Nutritional Problem of Children and Youth from a Pediatrician's Perspective

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A pediatrician is responsible for child health care, from babies to teenagers of around 15 years of age. However, the Royal College of Pediatricians of Thailand has now decided to extend this to 18 years of age. It is an important period in human development and provides a good opportunity to develop the quality of the country's most valuable resources to its full potential, thereby enhancing the development of the whole nation. During my 40 years in child development, I have witnessed many changes in disease prevention and improvements in health care. There are now fewer child sicknesses and deaths from traditional infections and there is a marked improvement in nutrition, while the standard growth chart to evaluate child growth, shows improvements in both weight and height of children. Twenty years ago, a child would grow to an average height of 155 cm for a woman, and 165 cm for a man. Today, the average height for a woman has increased by 3 cm to 158 cm, and by 5 cm for a man to 170 cm, while a woman's weight has increased from 47 kg to 49 kg, and a man has increased from 54 kg to 58 kg. These increases indicate improvements in nutrition, medication, health care and quality of life. Children now consume more fat. A recent survey revealed that there is less food deficiency, but more fat children.

Statistics from the Ministry of Public Health revealed that in 1962, the average Thai consumed only 18 grams of fat per day, or only 8.9% of calories absorbed in one day. From 1986 to 1999, the average Thai consumed 42 to 45 grams of fat per day, or 22 to 26% of all energy absorbed in one day. The daily consumption of protein and fat, 1,800-2,000 calories per day, did not increase at all from 1962.

The research data from the Research Institute of Population and Society, Mahidol University, in 1998,

showed that Thai youth, between the ages of 15-24, spent their free time 30-40% playing video games; 10-12% listened to the radio; while 22% of female and 8.8% of male, never did any physical exercise; and only about 1 in 3 did any exercise on a regular basis.

The main factor accelerating obesity in children is the change in the way of life. The increase in consumption of fatty foods and sweets has caused the rate of fatness among Thai children to accelerate faster in comparison to children in the United States, Italy and Japan.

The pediatric endocrine team of Faculty of Medicine, Siriraj Hospital, Mahidol University had studied 77 fat children between 3 and 19 years, at Siriraj Hospital, where 40 of them were male and 37 female. They found unusually high levels of cholesterol, triglyceride and LDH-C of 45.45%, 46.75% and 33.77% respectively. Of the group, 46.75% showed low HDL levels while 88.3% began to record higher than usual levels of insulin, with impaired glucose tolerance test. The study revealed 33.77% suffered from Type II diabetes and 2.6% of the fat children showed signs of diabetes, inducing metabolic changes and high fat levels in blood vessels. Children's food consumption should be controlled and their weight reduced to appropriate levels.

Doctor Chittiwat Suprasongsin found that 39 fat children treated at Ramathibodhi Hospital in 1999 had either fathers, or mothers, with Type II diabetes. The children had darker colored necks and after impaired glucose tolerance tests for diabetes, twelve of them had early abnormal symptoms and 7 had diabetes, although they had not shown any symptoms before. The complications associated with obesity, including Type II diabetes and high fat levels in blood vessels, might also lead to high blood pressure, early puberty, ovary and menstrual disorders, mental problems, bone and joint problems.

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A more prominent problem is that Thai children now consume more sweet products, causing increased fatness and a higher rate of tooth decay, which themselves reflect changes and trends in higher consumption of sugar among all Thais throughout the country. The Dental Council of Thailand together with all its associates in campaigning for a reduction in the consumption of sugar among children, quoted the following statistic:

The rate of consumption of sugar by Thai people has been increasing at a high rate over the past decade, from 12.7 kg per head in 1985, to 27.9 kg per head in 1998-an increase of over twice the original in only 13 years. The high increasing trend of sugar consumption in the form of sweetmeats, sweets and drinks, including sugar put in various foods, is prominent among the new generation of children whose standard of consumption changes to the tune of advertising and the environment. The situation matches the increasing health problems in children with excess food consumption, especially in city areas, and is correlated with diabetes formerly found mainly in grownups, but now becoming more prominent among Thai children.

Other than causing obesity, consuming too much sugar is hazardous to health in many respects. Excess sucrose and fructose increase the levels of fat, glucose, insulin and uric acid in the blood, major factors in clogging arteries, causing diabetes and early indications of high levels of fat in the blood.

Tooth decay is also a major hazard from excess sweet consumption, which can occur over a short period and can be discerned clearer than other dangers. During the past 20 years, the ratio of people with decayed teeth has been on the increase in both cities and rural areas. Research on the oral health of children between 5-6 years for the period 1984-2001, found an increase in tooth decay from 74% to 87%, reaching over 90% in certain provinces. The average decayed teeth per person increased from 4.9 teeth to 6.0 teeth. In the Northeast, where formerly records for the lowest rates of tooth decay occurred, the decay average has jumped by three-fold. Tooth decay has become a major health problem for Thai children. Unfortunately, a large number of parents still do not recognize the seriousness of the problem, even though it may also cause other life endangering complications.

An addiction to sweetness can be created early in life, since by nature, the development of the sweetness receptacle gland is faster than others, children have an inclination to prefer sweet food.

However, small children do not select food by themselves and therefore parents and grownups who take care of them, are the ones who create the initial addiction to sweetness in children. The consumption habit in children is well established within their first year from milk and food supplements lovingly pampered upon them. As they grow up and are able to choose their own food, these children continue to select sweet foods with ever increasing levels of sweetness. Their brains then excrete Opioids, which make them feel satisfied only when consuming sweet food. Once addicted to sweetness, children also tend to eat oily and high calorie food, thus leading finally to obesity. Too much sugar makes them feel full and cuts short their consumption of other nourishing food, necessary for the good health of their bodies, so that in the long run their health is affected. A reduction in sugar consumption in children, while creating a new venue for them and their parents in nurturing healthy consumption habits, should therefore be the target in reducing harmful elements to children's health. It will also prevent the consumption habit, which will cause serious health problems in their adult years.

Trends in consuming sweet food in Thai children

Thai children are conditioned to sweet foods from babyhood. Breast-fed children have less chance of becoming addicted, as a mother's natural milk causes less tooth decay, compared to reconstituted milk with its added sweeteners, or honey, which will start the addiction and cause increased tooth decay.

The basic principles of nutrition state that it is not advisable to add sugar or other sweeteners to milk, as it does not add any nutritional value. On the contrary it will induce addiction to sweetness and eventual obesity and children will reject other more nutritional foods without a sweetness content. Children should either be breast-fed, or bottle-fed with natural cow's milk without any additives, otherwise they may suffer from tooth decay, even in their first milk teeth.

At present, there are changes in business and marketing concepts concerning children's products through advertising and promotional campaigns. Children see both milk products and crunchy confectionery often on television and these images are retained vividly in their minds. Now, with the power to choose, unlike in the past when parents bought things for them, they therefore call the choice and demand what they want. If they do not get what they choose, they will ignore the alternative provided

- a reason why they refuse to drink it. Some even carry the milk home for use at home, as their friends also refuse to drink it.

Within their own small society, children from kindergarten, through to primary and secondary schools, show a spirit of give and take among friends, by distributing sweets on birthdays. They also eat cakes on birthdays, confectionery before going to school, some sweet, or salty snacks, with lunch at school, followed by desserts, plus ice-cream, before going home. On reaching home they have tidbits from their refrigerators, eating while watching television. Sweetmeat consumption is our children's way of life. Staple foods also become less important for children whose parents do not pay sufficient attention to them.

In short, today's children eat tidbits and sweetmeats much more than children of past generations who ate cereals, fish, vegetables, fruit, etc., while sweetmeats were usually only available at festivals. A work team, campaigning under the theme of "Thai children do not eat sweet food" did a study tour at a school in the suburbs of Nonthaburi province. Teachers were asked to collect confectionery packages deposited in wastebaskets. In one day they could collect three basketfuls of packages - enough to cover three large poster boards! The confectionery was found to consist mainly of flour, sugar oil and salt. Children eat them in large quantities, under many brand names with high sweetness levels, causing tooth decay, which with the high levels of oil and salt will lead to high blood pressure and diabetes in the future.

My analysis is, therefore, that Thai children have gone too far in consuming useless food that causes health problems. We have spoiled our children for too long. It is now time to analyze and speedily return to the Thai way of life and eat nutritional food, properly prepared by Thai wisdom, as of yore, before it is too late!

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ปัญหาโภชนาการของเด็กและวัยรุ่นไทย

ชนิกา ตูจันดา

ในปัจจุบันเด็กเป็นโรคจากการติดเชื้อน้อยลงแต่มีปัญหาจากโภชนาการเกิน เพราะเด็กกินไขมันมากเกินไป จาก 18 กรัมไปเป็น 42 กรัมต่อวัน และทุกวันนี้พบว่าเด็กร้อยละ 8-22 ไม่ออกกำลังกายเลย ทำให้พบว่าเด็กตัวอ้วนมากขึ้น อย่างน่าตกใจ เด็กอ้วนมักมีระดับ Cholesterol, Triglyceride และ LDL สูงกว่าปกติร้อยละ 45.5, 46.75 และ 33.77 ตามลำดับ ระดับอินซูลินก็ผิดปกติด้วย เด็กอ้วนเหล่านี้ร้อยละ 33.77 มีภาวะความทนต่อกลูโคสบกพร่อง มีโอกาสเป็นเบาหวานชนิดที่ 2 ในอนาคต และร้อยละ 2.6 แสดงอาการเป็นเบาหวานแล้ว ทั้งที่อายุไม่ถึง 18 ปี เมื่อเด็กอ้วนเป็นเบาหวาน มีไขมันมากก็มักมีความดันโลหิตสูง ไขมันสูงในเลือด โรคของหลอดเลือด โรคหัวใจ และปัญหาอื่น ๆ ของเด็กอ้วนคือ เป็นหนุ่มสาวเร็วขึ้น มีปัญหาทางสติปัญญา กระดูก ข้อ และฟันผุ ถ้าเป็นเด็กผู้หญิงก็จะมีระดูผิดปกติด้วย

ทั้งนี้เป็นเพราะเด็กไทยปัจจุบันตั้งแต่เกิดจนอายุ 18 ปีกินหวานจนชิน ตั้งแต่ปี ค.ศ.1985 ถึง 1998 คนไทยมีการบริโภคน้ำตาลเพิ่มขึ้นจาก 12.7 กก./คน/ปี ไปเป็น 27.90 กก./คน/ปี พฤติกรรมการกินของคนไทยเปลี่ยนไปชอบของหวาน ลูกอม ของขบเคี้ยว เครื่องดื่ม และใส่น้ำตาลในอาหารเกือบทุกชนิด

ในระยะ 20 ปีที่ผ่านมาคนไทยเป็นโรคฟันผุได้เร็วขึ้น และมีจำนวนมากขึ้นทั้งในเมืองใหญ่และชนบท บางจังหวัดประชากรเด็กร้อยละ 90 มีฟันผุ 6 ซี่ สาเหตุหนึ่งของฟันผุคือการกินหวานและไม่ดูแลสุขภาพฟัน โรคฟันผุเป็นสาเหตุของโรคภัยอื่นอีกมากที่ถูกมองข้ามไป

เด็กตั้งแต่เกิดจนอายุ 1 ปีกินหวานเพิ่มขึ้น ความหวานกระตุ้นให้เด็กชอบและต้องการแต่อาหารหวานมากขึ้น เด็กจึงเหมือนเสพติดแต่อาหารหวานเท่านั้น พ่อแม่บางคนนิยมให้เด็กกินนมหวานเพื่อจะกินได้มาก ๆ ความหวานไปกระตุ้นสมองให้หลั่ง OPIOIDS ทำให้เด็กกินนมได้มาก อิ่มเร็ว พลอยไม่กินอาหารอื่น ๆ ที่จำเป็นต่อการเจริญเติบโต และมีประโยชน์ต่อร่างกาย

มีการโฆษณาและการตลาดหลายวิธีที่เข้าถึงจิตใจเด็ก ทำให้เด็กเกิดความอยากและเอาให้ได้ตามที่ถูกชักจูงที่เป็นผลิตภัณฑ์จากนมและของขบเคี้ยว ตัวอย่างที่เห็นได้ชัดคือ การจัดงานวันเกิดต้องมีเค้ก, ไอศกรีม ในชีวิตประจำวันเด็กกินขนมสำเร็จรูปที่ทำจากโรงงาน กินทั้งเช้า เย็น เย็น และตลอดเวลาที่ดูทีวี เด็กติดอาหารเหล่านี้มากกว่าจะขอกินข้าว ปลา ผัก หรือผลไม้ จึงถึงเวลาที่พ่อแม่และผู้ดูแลเด็กจะต้องช่วยกันรณรงค์ป้องกันภัยจากความหวาน และโรคอ้วนด้วย
