He said, “The knowledge is already here for Thailand to move towards universal coverage.”

Mr. Carrin made the point in conjunction with a forum, jointly organized by WHO and ILO, for national and international experts to discuss universal coverage.

He showed support for the government’s possible move for administrative merger of the National Health Insurance Fund, Social Security Fund, and the Civil Service Medical Benefits, under the National Health Insurance Bill. There could be different health care schemes working for universal coverage, he said, but they should have certain connections under one umbrella.

He said, “The advantage of funds grouping is that it will allow fund holders to discuss future policy, future benefit packages, or even see how the richest fund can contribute in a small way to the low-income’s fund.”

Mr. Carrin also praised the use of the capitation system to implement the 30-baht (US$0.71) health care scheme as a “wise decision” by the government. The system has certain advantages to give more power to hospitals to decide on their own management.

However, it also opened doors to budget mismanagement, and a monitoring mechanism by fund holders and complaint mechanism for patients to check on cost-effectiveness and quality of the services are needed.

The capitation amount should be adjustable due to the needs in each area. He said, “Universal coverage is a matter of balancing, to balance medical benefits and to balance the pros and cons of capitation.”

Sheep Genome Project Begins

Australia has begun the first work on a A$15 million (US$7.95 million) sheep genomics project with the potential to deliver tests to identify parasite-resistant sheep, better disease tests and controls, and deliver meatier lambs.

Meat and Livestock Australia (MLA) will spend producer levies and matching Federal Government funding of A$3 million (US$1.59 million) a year over the next five years on the project.

MLA Southern Production Research manager Dr. Hutton Oddy said that the potential return to industry from basic research in this area of functional genomics is “enormous.”

Dr. Oddy said, “Our priorities will be to identify gene markers for parasite and disease resistance, markers for different muscle traits and on reproductive technologies to improve lamb survival and weaning percentages.”

He said, “Intestinal parasites cost the sheep industry A$280 million (US$148.4 million) in 1995 in chemical treatments and lost production, and this is predicted to grow to A$1 billion (US$530 million) by 2010. The savings from the ability to identify sheep with parasite-resistant genes alone is huge.”

Knowing what particular genes do opens the potential to improve disease diagnostic tests and develop more effective controls, and to develop breeding programs for improved production efficiency and meat quality.

The five-year project will bring together a mix of scientists from different fields, including geneticists, cell biologists, animal physiologists, veterinarians and others.

It will also draw on research already underway in the area of sheep functional genomics in New Zealand, the US and the EU.

Genetic Discovery Sheds Light on Anorexia

Ms. Ruth Urwin, from the department of psychological medicine at the Children’s Hospital, Westmead, Australia, and her team have found a previously unidentified piece of DNA in a gene that regulates a brain chemical, norepinephrine, already linked to anxiety and compulsive behavior.

The DNA was taken from anorexic young people and their parents in a study of 101 families from across the country. It was
found that 42 of the parents had passed on a longer version of the DNA to their anorexic offspring, compared with 20 who passed on a shorter version.

Ms. Urwin said that this provides strong evidence that the gene is implicated in the development of anorexia. Anorexia affects up to one in 200 young women and about one in 2000 men.

She also said that it is probable that life events also shape a person’s likelihood of developing the illness. She said that many non-anorexic people also have the long DNA version and for some it might manifest itself only as perfectionism in activities such as cleanliness or tidiness. But if it appeared as a compulsion to control weight, these people are more likely to persist in dieting until they threaten their health.

Previous genetic work in anorexia had focused on regulation of the brain chemical serotonin, which affects mood and is the main target of the newer antidepressant drugs such as Prozac or Zoloft.

Ms. Urwin said that the latest results suggest that another drug, Efexor, might be more promising. The findings also suggested it is important to reduce stress for people prone to anorexia.

Dr. Pierre Beumont, professor of psychiatry at the University of Sydney and a co-author of the study, said that the gene variation looks to be a sufficient cause for anorexia.

The discovery could change the way in which people looked at anorexia nervosa, which had previously been considered psychological in origin and under the control of patients who could change their behavior if they wished.

Prof. Beumont, who specializes in eating disorders treatment at Royal Prince Alfred Hospital, said that newer theories hold that anorexia might be a brain disease with a unique pathology, in common with schizophrenia or manic depression, rather than a psychological illness such as depression. The gene discovery fits these theories.
Chinese Scientists Diagnose Cancer through Urine Tests

Chinese scientists has recently said that urine can be used as a medical specimen for diagnosing malignant tumors. Dr. Xu Guowang, from the Chinese Academy of Sciences who is undertaking the research, said that urine is cheaper, more sensitive and much easier to extract and preserve than other kinds of specimens. Frequent urine checks could ensure that malignant tumors are detected as early as possible.

According to Dr. Xu, once cancer cells start to grow, a regular component of the nucleic acid in urine and blood also rises drastically. As this component cannot be degraded by metabolism and is ejected only through the urine, the diagnosis is much more accurate.

So far, Dr. Xu’s research team has conducted urine checks on over 700 patients and more than 300 healthy people. Some 70 percent of patients suffering malignant tumors showed positive signs of disease in test results.

As scientists have not yet found ways to cure malignant tumors, Dr. Xu said that earlier diagnosis can provide valuable support for later treatment.

China Succeeds in Artificial Memory Alloy Trachea Transplant

A 48-year-old woman farmer has fully recovered after receiving an artificial memory alloy trachea transplant in China in April this year.

Prestigious Chinese chest surgeon Prof. Xin Yuling cited the successful operation a major historic breakthrough in the development of artificial trachea technology.

Mrs. Mi Aiyun, from central China’s Henan province, has attended a press conference in Beijing recently, where she talked freely and laughed heartily, thanks to the restoration of her breathing and speaking abilities.

Moreover, she said that she even could do farm work as before. Mrs. Mi, who suffered trachea cancer for eight straight years, received the transplant at the Beijing Jiangong Hospital in April this year.

Artificial trachea technology has bewildered international medical circles for over half a century. In the past, trachea cancer patients had to endure life-long pains resultant from the removal of a trachea after operation, which severely impaired their speaking and breathing abilities.

Medical experts all over the world have tried various transplants of trachea, including silica gel trachea, but all ended in failure because of technical reasons.

Prof. Zhao Fengrui, who carried out the operation, said that doctors first embedded a memory alloy net under the skin of the patient’s neck, and then removed the tumor and made the memory alloy net into an artificial trachea to replace her original trachea.

Prof. Zhao noted that he has spent more than 30 years of painstaking efforts to study the technology and perform numerous related experiments on animals.

Experts have suggested that an artificial trachea technology center should be set up as soon as possible to promote and carry forward Prof. Zhao’s medical achievements.

China Aims Growing Human Organs by Cloning

It is said that China has cloned hundreds of human embryos, but Chinese scientists said that they aim at cloning human organs for transplant, not produce cloned babies.

Prof. Chen Xigu, a leading cloning scientist at the Zhongshan Medical University in Guangzhou, who has cloned 109 human embryos, said that it could take 10–15 year to achieve the aim. He said that most of Chinese scientists would eschew research into cloning human fetuses, even if it is legal. In fact, cloning human being is strictly prohibited under the Chinese law.

Prof. Jerry Yang, head of the Transgenic Animal Facility at the University of Connecticut,
said that there is “blossoming” of human embryonic cloning research in China. The research is mainly conducted at national and elite university laboratories. For example, the Shanghai No. 2 Medical University and the Xianya School of Medicine in Changsha have made much progress in the field.

Scientists elsewhere have also cloned human embryos but none have survived as long as the Chinese ones. In China, the embryos have grown beyond the 200-cell stage, large enough for the harvesting of embryonic stem cells (ESCs), while the others, for example, the Massachusetts-based Advanced Cell Technology made a similar attempt recently but failed as its embryos were only able to divide into a few cells.

However, no Chinese scientist has yet been able to harvest a cell line, noted Prof. Dou Zhongying, director of the Shanxi Province Stem Cell Engineering Research Center.

Theoretically, such lines can be developed into transplant tissue and eventually into entire organs. Prof. Dou said that Chinese scientists are expecting major breakthroughs in forming ESC lines within a year or two.

After ESC lines, the next step for scientists is cell “differentiation” to form different human organs. Scientists said that this will need lots of international cooperation and the success can be expected in at least five to ten years’ time.
Silicon Chip to Genotype Chinese Medicinal Plants

A team of researchers at Hong Kong University of Science and Technology (HKUST) has recently integrated into a single silicon chip the micro processes of amplification and analysis of genetic material (DNA) to demonstrate the genotyping of Chinese medicinal plants.

HKUST is the only research institution in Hong Kong using the silicon chip in the development of genechip-based technology for the identification of traditional Chinese medicines. The research combines advanced aspects of molecular biology and microfabrication.

The team’s novel approach of combining the polymerase chain reaction (PCR) amplification of genetic material with consecutive analysis is a further step toward the creation of a “lab-on-a-chip” technology.

The work is led by Dr. Nikolaus Sucher, Assistant Professor of Biology and member of the Biotechnology Research Institute at HKUST. It has been supported by grants from the Innovation and Technology Commission and the Hong Kong Jockey Club.

Methods that are currently in use in sample preparation for analysis of genetic material are relatively slow and require manual liquid transfer, which proves to be difficult when conducted in small volume.

Dr. Sucher said, “The integration of sample preparation with analysis in a single silicon-based device is of great value, both scientifically and commercially, because the technology enables rapid identification of genetic materials in products such as traditional Chinese medicine.”

The technology also has the advantage of obtaining sequence data for identification and analysis, thus providing genotyping capabilities.

HKUST is the only research institution in Hong Kong using the silicon chip in the development of genechip-based technology for the identification of traditional Chinese medicines.

HK Study Shows Zadaxin Beneficial for Hepatitis B Patients

SciClone Pharmaceuticals Inc., a global specialty biopharmaceutical company, has recently announced that a study led by Dr. George Lau at Queen Mary Hospital in Hong Kong showed Zadaxin helps clear the hepatitis B virus in the immune-tolerant phase of the viral infection.

The study reported that at the end of the 26 weeks of therapy and 52 weeks of follow-up observation, 15.6 percent of 32 hepatitis B immune-tolerant patients demonstrated a complete response to a combined Zadaxin and nucleoside analogue famciclovir therapy.

There were no responders among the 32 patients of each group that received either famciclovir monotherapy or a placebo. A sustained seroconversion of hepatitis B e-antigen (loss of HBeAg and the development of antibody to HBeAg) and the disappearance of hepatitis B viral DNA indicates a successful response.

Dr. Lau said, “Our study supports the use of combination therapy of an immunomodulatory agent and a nucleoside analogue in enhancing the rate of seroconversion in immune-tolerant patients.”

Over 350 million people worldwide are infected with the hepatitis B virus, primarily in Asia, where the virus is often transmitted from mother to child at birth. Since the child is born with the virus, the immune system does not recognize the hepatitis B virus as foreign and does not mount the proper immune system response.

Treatment of hepatitis B patients in the immune-tolerant phase is important because it may eradicate the virus from the body before significant liver damage is caused by inflammation when the body’s immune system attempts to clear the virus. Therefore, the hepatitis B virus can replicate for 20 years or more in this immune-tolerant phase before it manifests itself in damaging inflammations of the liver and makes later treatment more difficult.

Until now, no treatment has been able to effectively cure hepatitis B when the patient is in the immune-tolerant phase.
ES Cell International and the National University of Singapore (NUS) have recently achieved the world’s first record of growing human embryonic stem (hES) cell line entirely without exposure to mouse cells.

The research is due to be published in the September edition of Nature Biotechnology.

The new hES cell line has been derived and propagated on human feeder cells and animal-free human based culture media (cell nutrients).

Mr. Robert Klupacs, CEO of ES Cell International, said, “Derivation of animal-free hES cell lines is the requisite standard for any future therapeutic product. Even if stem cell technology offered a means to cure a patient with diabetes today, we could not have used our existing stem cell lines in the treatment.”

All of the 78 stem cell lines listed on the National Institutes of Health (NIH) Stem Cell Registry are supported by animal feeder layers, generally mouse fibroblasts (connective tissue cells), and will not be able to be used in clinical trials.

The new stem cell line was derived by a team lead by Prof. Ariff Bongso at the NUS. The work, funded by ES Cell International, is a major breakthrough in the development of the field of stem cell research.

The system developed by Prof. Bongso overcomes a number of disadvantages associated with hES cell lines supported by animal based products, most importantly the potential risks of transmission of pathogens from the animal feeder cells to the hES cells.

Prof. Bongso described the research as “an exciting example of scientific proof of principle which will lay the foundation for taking this technology from bench to bedside”.

He said, “The new line will be used as a research tool and the methodology used to derive and develop it will be refined with the Food and Drug Administration (FDA) in the US, for the creation of additional cell lines for clinical application.”

From a commercial perspective, the development of these and future hES cell lines using the new technology means that ES Cell International has overcome a significant obstacle in progressing hES cells into clinical trials.

Mr. Klupacs said, “This latest research is a monumental breakthrough in overcoming the bottleneck existing in the progression of stem cell based technology, and will reduce the lead-time to commencement of clinical trials.”

He said, “ES Cell International is committed to
Grows hES Cell without Animal Input

developing therapeutic products from human embryonic stem cells, and will utilize this technology to derive new lines which will become the cornerstone of cell therapy based regenerative medicine."

Major Breakthrough

Prof. Ariff Bongso became the first researcher in the world to isolate embryonic stem (ES) cells in 1994. However, he was concerned that the ES cells were unable to grow beyond two generations on a human feeder system, the base layer on which the cells are grown.

Now, the Sri Lankan-born researcher who came to Singapore in 1986 and his team have finally solved the problem.

Prof. Bongso’s first major breakthrough was in 1991, when he developed a method known as co-culture to help infertile couples conceive, a method used widely today. This was followed by his 1994 success with isolating ES cells.

His latest achievement was driven by comments from the US Food and Drug Administration that it was not comfortable about the current method of growing cells with animal input.

The National University of Singapore (NUS) researcher said, “If the existing system is animal-based and someone comes up with a method to grow pancreatic cells for diabetes, it is useless, because it cannot go on to clinical application.”

In 2000, with funding from ES Cell International, he and his team started to use fallopian tubes, as well as muscle and skin from both adults and fetuses, to grow different human feeders.

They also worked on human nutrients, derived mainly from blood serum and plasma. The nutrients are a cocktail of protein, insulin and other ingredients to furnish the right mix of liquid to cover and nurture the cells.

The team tried various combinations before getting a mix that ensured the stable growth of ES cells.

One finding by the team was that the human ES cells needed to live in colonies. Their earlier experiments failed because they used single cells.

Another problem was that when grown on human feeders, the very thin layer of ES cells tear very easily. The thicker layers grown on mouse feeders are more hardy.

The researchers had to be very gentle when dividing the cells to form smaller colonies. These were then placed into fresh dishes to grow the next generation of cells. In the end, the human feeder and nutrient combination proved to be far superior to the animal equivalent.

The ES cells remained undifferentiated for nine days, instead of the normal seven, giving four times as many cells per generation.
India’s Stem Cell Research Making Big Stride

India’s research on adult stem cells in hematopoietic (blood cells) and limbal (eye tissue) areas has made promising strides.

For example, according to Dr. V. K. Vinayak, adviser at the biotechnology department of the Hyderabad-based L V Prasad Eye Institute, the institute has successfully demonstrated direct applications of limbal tissue to treat visual disorders in humans.

Whereas the National Center for Brain Research in Delhi, which looks into neuro-degenerative disorders, is conducting research on converting adult animal stem cells to nerve cells and would make further endeavor in the field of embryonic stem cells.

Meanwhile, the National Center for Cell Science (NCCS) in Pune has undertaken research on human embryonic stem cells.

Dr. Nibedita Lenka of NCCS said, “Scientists at NCCS have been successful in devising technology used for cryo-preservation of cord blood stem cells and are extending their expertise to hospitals for possible therapeutic exploration and setting up stem cell banks.”

Other research works undertaken at NCCS include use of hematopoietic stem cells in gene therapy and culturing fetal hepatocytes for preparing bio-artificial liver support device in case of acute and chronic liver failure.

The Christian Medical College at Vellore has ventured into the field of haematopoietic cells, with a special focus on CD34 variety of blood cells useful in treating thalassemia.

Dr. Vinayak said, “These cells would be isolated, improved and preserved so that they can be used as and when required.”

There has recently been a growing interest in India in authentic human embryonic stem cell lines. This came to limelight with the National Institutes of Health of the US short-listing institutes around the world, including Reliance Life Sciences and the National Center for Biological Sciences of India, eligible for research grants from the US.

Japan to Establish Human Stem-cell Bank

Japan’s Education, Science and Technology Ministry will launch a five-year project to establish a human stem-cell bank to create a foundation for regenerative medicine.

Regenerative medicine involves the use of cells, genes and other biological building blocks to repair or replace tissues and organs damaged by aging, illness or injury. While a stem-cell bank for the treatment of leukemia — using blood from the umbilical cords of newborn babies — already exists in Japan, the bank will be the first to be established for the purposes of regenerative medicine.

Embryo stem cells have attracted attention in regenerative medicine because they can be grown to replace the heart, the lungs, the nervous system and other body parts.

However, since the cells are produced from fertilized ovum, ethical questions have been raised over their use. The ministry hopes the bank will avoid such issues by utilizing cord blood.

According to the ministry, the bank will retrieve hematopoietic (blood) stem cells, neural stem cells and other stem cells from collected cord blood and attempt to develop a technology to increase the amount of such stem cells for use in medical treatment.

The stem cells produced will be given to medical institutions.

Hemopoietic stem cells already have been discovered in cord blood. The Institute of Medical Science of Tokyo University has also discovered stem cells in the placenta that form nerves and bones, and similar cells are expected to be found in the blood of umbilical cords.

The ministry plans to collect 20,000–30,000 cord-blood samples. It also intends to devise a technology to produce stem cells that will not cause adverse reactions.

The project will be conducted as a joint research program involving universities and pharmaceutical companies, led by the Institute of Physical and Chemical Research’s Center for Developmental Biology in Kobe.
3M Korea’s New Antibiotic Dishtowel

3M Korea’s latest invention, the antibiotic dishtowel, effectively prevents the breeding of germs and self-indicates when it should be thrown out. The towel is treated with antibiosis and maintains hygiene without having to be boiled or sterilized on the side.

When the antibiosis weakens, the antibiotic sign printed on the dishtowel disappears, indicating it is time for a change.

The effectiveness of 3M’s dishtowel is demonstrated by an antibacterial test, in which an ordinary towel and 3M’s towel were both cultured with 35,000 germs for 24 hours. The ordinary towel showed 100,000 to one million of germs bred while 3M’s actually reduced the number of germs to less than ten.

3M’s dishtowel costs 2150 won (US$1.79) and is now available at all department stores throughout Korea.

New Zealand

Faulty Brain Gene Makes Abused Boys Prone to Violence

A team of researchers from Britain, the US and New Zealand have studied 1037 children born in 1972 in Dunedin, New Zealand of whom 442 were boys. They reported that 85 percent of the boys who were abused and had a flawed brain chemical gene turned to criminal or antisocial behavior as adults.

The brain chemical gene examined controls the production of an enzyme called monoamine oxidase (MAO) A. This enzyme breaks down neurotransmitters or message-carrying chemicals linked with mood, aggression and pleasure, and is the target of one group of antidepressant drugs called the monoamine oxidase inhibitors (MAOIs).

Boys with low activity levels of MAO A when abused become significantly more likely to exhibit symptoms of antisocial behavior include persistent fighting, bullying, lying and stealing during adolescence. As adults they may have repeatedly broken the law and show no remorse for their actions.

The participants’ life histories were recorded regularly since birth and the researchers asked friends, family members and the boys themselves about their behavior, and also checked police records in New Zealand and Australia.

Dr. Terrie Moffitt, one of the study’s researchers and a professor of psychiatry at King’s College in London and the University of Wisconsin, said that no one knows specifically how the enzyme affects behavior, but it may act as a reset button in stressful situations.

The gene’s effects are more difficult to study in girls, because it is found on the X chromosome. Females have two X chromosomes, while males have an X and a Y. Thus, in girls, the version of the gene found in one of their X chromosomes could cancel out the effects of the other. The researchers said that may help explain why females in general are less prone to violent and criminal behavior.

The researchers said that it may be possible someday to screen for people whose genes protect them from the trauma of stress or tragedy, perhaps to recruit them as police, firefighters or soldiers.

Singapore

New Surgery for Degenerative Eye Disease

Surgeons at Singapore’s Tan Tock Seng Hospital have successfully carried out a high-risk operation that could save the sight of patients who suffer from wet macular degeneration.

Blood and fluids leaking from abnormal vessels in the back of the eye cause the condition, which has no cure. The sight of sufferers will gradually deteriorate over time, until they cannot read, drive or recognize faces.

Most of the patients are aged over 60, although the disease can be sparked off by severe shortsightedness in younger people. It is the second major cause of blindness in Singapore after diabetes.

The relatively new operation is called macular translocation, which has also been carried out in the US and Japan.
The surgeon moves the fovea — the portion of the macula, or central part of the retina, which allows humans to see details — away from the abnormal blood vessels. These vessels are then burnt off.

However, this operation is not suitable for everyone. It works only in new cases where damage has yet to become severe. Furthermore, there are risks involved in the surgery, as about ten percent of cases end in failure or blindness.

Pigs Used in Drug Studies

The Animal Technology Institute of Taiwan has recently created cloned pigs whose milk can dissolve blood clots. Two months ago they engineered pigs whose milk can aid hemophiliacs.

The specific breed of swine, whose milk is used to aid hemophiliacs, was engineered using genetic material from both human and pig cells. Building a factory to do the same work would cost billions of dollars.

Ms. Elizabeth Green Sah, director of Primasia Bioventures in Taipei, said, “This is cutting-edge research, and there is not much cutting edge research in Taiwan.” She believes that a number of foreign companies might be interested in working with the institute on the project.

Dr. Yang Tien-Shuh a researcher at the institute, said that the key is not the animals themselves so much as the process by which they are created. He said, “Pharmaceutical companies can bring whatever they want to us and we can try it in the model. Not just proteins, but other molecules can be developed.”

Dr. Yang credited fellow researcher Dr. Wu Shinn-Chih with making the breakthrough.

To pass inspection by the US Food and Drug Administration, the institute will need to prove that the proteins are exactly reproducible in every single batch. So far, the researchers have been unable to do this.

The institute hopes to find a private company to transfer this technology to, and has already won a four-year government grant to continue the research. Dr. Tu Ching-Fu, another researcher at the institute said, “This is the first year of development; it will take four years to fully develop.”

Genetically engineered pigs that produce milk rich in a protein that can keep other pigs from getting diarrhea, a common problem in farms across Taiwan, has already been developed by the institute.

Researchers Identify Suicide Risk Factors in Bipolar Illness

Dr. Shiang-Ying M. Tsai of Taipei Medical University in Taiwan and his team have recently reported that adults with bipolar disorder are at high risk of attempting to commit suicide in their early 30s, usually within 7–12 years of the onset of the mental illness.

The researchers followed 2133 Chinese patients in Taiwan who were diagnosed with a mood disorder, and identified 41 with bipolar disease who committed suicide over the next 16 years. The patients were matched with 41 bipolar patients who did not commit suicide but were relatively similar in age, gender and date of admission to a hospital for the disease. The researchers then analyzed the differences between the two groups.

The investigators found that those who committed suicide were more likely to have had a first-degree family member who had also committed suicide. They were also more likely to have made more than one previous suicide attempt in the past seven years.

Dr. Tsai’s team also pinpointed the time in their lives when patients were most likely to commit suicide, with the most vulnerable times being two years following a hospital admission, 7 to 12 years after the onset of the disease, and before age 35.

Past studies conducted in Western societies have been muddied by the fact that people with bipolar illnesses in these societies often abuse drugs and alcohol, which may be a contributing factor in suicide.

For example, while studies have found that about 30 percent of people in the West with bipolar illness abuse drugs or alcohol; in the current study about 15 percent of the people who had committed suicide also abused drugs or alcohol.

Westerners with bipolar illness often live alone, another risk factor for suicide, while most Chinese with the disorder live with their families. Dr. Tsai and his colleagues point out the fact that Chinese patients are less likely to have the risk factors for substance abuse and solo living makes it easier to identify other risk factors.
Thailand

Thai Study Finds Mercury in Shark Fins

Thailand’s researchers have recently found that a Chinese delicacy, shark fins, bought from the country’s Chinatown to be contaminated with mercury.

Chula Uniresearch, a Chulalongkorn University laboratory, reported that 15 of 45 shark fins bought randomly from shops contained a higher level of mercury than the standard set by the Thai Food and Drug Administration. The amount of contamination varied from a few milligrams over the standard of 0.5 milligram per one kilogram of sample, to as much as seven times the standard.

Mr. Piamsak Menasvate, the research chief, said that the public should be careful about eating shark fins because excessive amounts of mercury could damage the brain and other body parts. The mercury build-up in sharks is said to result from living close to seabed where contaminants are collected.

Mr. Piamsak also urged authorities to be stricter on imported food as the tested shark fins are imported. Many of the fins sold on the Thai market originally came from Hong Kong.

The Chula Uniresearch report is in line with the findings of a wildlife organization, WildAid’s report showing that seven in ten shark fin samples are contaminated with mercury.

Mr. Kraisak Choonhavan, a senator and WildAid Foundation Thailand president, said that shark fins have little nutritional value and could pose a threat to health. Also, continuing to eat shark fins condones the killing of an endangered species.

Australia

Warning Label on Baby Low-fat Milk

Australian milk producers will be forced to print warning labels on some products after research found they could retard growth and cause chronic diarrhea in children under two.

The government is expected to sign off on a proposal by Australia and New Zealand’s food watchdog to put an “advisory statement” on the products.

Low fat, evaporated and dried milk products, as well as soy and rice beverages with a fat content of no more than 2.5 percent, will have to carry the warning.

But Food Standards Australia New Zealand (FSANZ) stopped short of forcing milk producers to print a set warning. They will be allowed to use their own words to get the message across.

The National Health and Medical Research Council found reduced-fat milk products and milk alternatives could cause “growth failure and non-specific diarrhea” in children less than two years if used as a main source of milk.

Some reduced-fat milk products had previously carried warning statements but only for infants aged less than 12 months.

The Australian Dairy Corporation and Nestle strongly opposed the new regulations, claiming there was a lack of evidence relating to numbers of children consuming reduced fat-milks. Nestle also claimed there was no evidence labeling statements worked.

An external advisory group, which included representatives of the dairy industry and consumer groups, recommended a “positive statement” be drafted to prevent parents from avoiding all milk products and turning to soft drinks and fruit juice to feed children.

FSANZ manager of labeling, Ms. Margaret Curran defended the labeling changes. She said that only producers with foods that pose a “known health risk” would be forced to include a warning statement.