Tarac Technologies’ Food Product Improves Heart Health

Vin life™, a natural antioxidant, grapeseed extract and functional food ingredient developed by Barossa-based Tarac Technologies, was recently found by Australia’s Commonwealth Scientific and Industrial Research Organization (CSIRO) to have a positive benefit on aspects of heart health when incorporated into food.

Designed for use in food as diverse as breakfast cereals, cracker biscuits and fruit juices, Vin life™, when incorporated into yoghurt over a four week period, was found to improve the ability of the arteries to expand in response to a need for greater blood flow.

Although Vin life™ is yet to be made a commercially available food product in Australia, Tarac is working with a number of major domestic and international food and beverage companies keen to leverage its potential as Australia’s newest functional food ingredient.

Tarac’s managing director Mr. Grahame Tonkin said that improving the health benefits of food is an important driver of innovation in the Australian food industry.

Tarac was founded in 1929 when founder, Mr. Alfred J. Allen, experimented in his backyard garage. His pilot plant, to recover tartrate salts and residual grape alcohol from fermented winery by-products, developed into an Australian industry. By the early 1960s, Tarac had expanded its research and development to concentrate on the related technology of distillation and soon became the largest “service distiller” to the Australian wine industry.

Tarac now owns and operates four strategically located distilleries and processes up to 80 percent of Australia’s fortifying grape spirit and about half of Australia’s bulk brandy requirements. Tarac has diversified into wine and spirit maturation, food technologies, research and development.

Prana Scientists Publishes Novel Therapy for Parkinson’s Disease

Prana Biotechnology Ltd., the Australian biotechnology company, has recently announced that the prestigious scientific journal Neuron has released scientific findings by the Buck Institute for Age Research collaborating with Prana Biotechnology’s Dr. Ashley I. Bush, the Harvard University based winner of the 2003 Potamkin award, and a group of internationally renowned scientists including Prana’s Dr. Robert Cherny of the University of Melbourne.

The paper, Genetic or Pharmacological Iron Chelation Prevents MPTP-Induced Neurotoxicity in Vivo: A Novel Therapy for Parkinson’s Disease, discusses the work in Parkinson’s disease and cites the work being undertaken by Dr. Bush and colleagues on other neurodegenerative disorders, including Alzheimer’s disease.

Prana’s scientists have long recognized the pivotal role of the interaction between metals and proteins in neurodegenerative disorders. Whereas in Alzheimer’s disease the metals zinc and copper interact with the protein Beta-Amyloid, in Parkinson’s disease the metal iron interacts with the protein Alpha-Synuclein. In layman’s terms, the article demonstrates the potential therapeutic benefit of attenuating the interaction between metals and proteins in neurodegenerative diseases.

The article postulates that the presence of excess iron in the brain is associated with, and may aggravate, oxidative stress.

“Several pharmaceutical companies are interested in accessing the patented group of Prana’s Metal Protein...
Company News

Attenuating Compounds (MPAC), which are currently under development as therapeutics for Alzheimer’s disease. This paper supports Prana’s research and drug development strategy to continue to develop its MPAC platform technology for application in other neurodegenerative diseases,” added Dr. Murdoch.

Prana Biotechnology Ltd. is focused on commercializing research into Alzheimer’s disease and other major age-related degenerative disorders. Its mission is to develop diagnostic and therapeutic drugs to treat the central disease pathways that cause degeneration of the brain as the aging process progresses.

About Parkinson’s disease

Parkinson’s disease occurs when certain nerve cells, or neurons, in an area of the brain known as the substantia nigra die or become impaired. Normally, these neurons produce an important brain chemical known as dopamine.

Dopamine is a chemical messenger responsible for transmitting signals between the substantia nigra and the next “relay station” of the brain, the corpus striatum, to produce smooth, purposeful muscle activity. Loss of dopamine causes the nerve cells of the striatum to fire out of control, leaving patients unable to direct or control their movements in a normal manner.

Studies have shown that Parkinson’s patients have a loss of 80 percent or more of dopamine-producing cells in the substantia nigra.

Elan Bio and Meditech Form Scanner Joint Venture

Elan Bio, based in Queensland, and American company Meditech Pharmaceuticals Inc. have established a new joint venture company in the US.

The new company intends to focus on commercializing and marketing both companies’ technologies in the US and international markets.

Elan Bio has developed a prototype scanner that provides an instant, non-invasive detection of pathogens and poisons, including aflatoxins, anthrax, smallpox and other harmful chemical and biological agents.

The company’s scanning technology is the result of a A$10 million (US$6 million), ten-year research program. The technology uses a wavelength of light to identify hazardous biological and chemical agents. It evolved from an agricultural application used to test for aflatoxins and other carcinogenic substances in natural produce.

Aflatoxins affect about 80 percent of the world’s food crops every year. The peanut industry alone loses tens of millions of dollars annually in eradicating aflatoxins from the food chain.

The scanner can be inserted into mailroom conveyor belts, cradled in the hand of the user in a wand the size of a mobile phone, or placed into a water supply, and is capable of scanning air particles for hazardous biologicals.

Elan Bio is based in the town of Beerwah on Queensland’s Sunshine Coast. The company’s purpose is to develop new equipment and methodologies using the electromagnetic spectrum for non-invasive analysis and prediction.

China

AstraZeneca Establishes Clinical Research Center in Shanghai

AstraZeneca, the third largest pharmaceutical giant worldwide, has recently established a clinical research center in Shanghai. In its first year of operation, AstraZeneca intends to invest US$4 million into the construction of the center.

The Shanghai clinical research center is an integrative part of AstraZeneca’s worldwide research network. All data received from mainland China, as well as from Hong Kong, Taiwan, and South Korea will be processed there.

Thus it provides a direct link between the Chinese market and the international market, and is expected to shorten the product launch time in China as compared to other countries.
The center will also cooperate closely with Chinese medical institutions and organizations in drug clinical trials. Forty-two professional staffs are expected to join the center.

About AstraZeneca

AstraZeneca, one of the world’s leading pharmaceutical companies, provides medicines designed to fight disease in areas such as cancer, cardiovascular, central nervous system, gastrointestinal, infection, pain control and respiratory.

Its product portfolio includes drugs for treating cancer (Casodex, Arimidex, Faslodex and Iressa), gastrointestinal disease (Nexium), asthma (Symbicort), hypertension (Atacand), migraine (Zomig) and schizophrenia (Seroquel).

The company spends over US$11 million every working day on research and development. Its total R&D spending in 2002 was US$3.1 billion. There is a number of significant innovations in its R&D pipeline.

AstraZeneca’s corporate HQ is situated in London, R&D HQ in Södertälje, Sweden and has a strong presence in the key US market. It has active worldwide sales in over 100 countries, manufacturing activities in 20 countries and major research centers in five countries.

New Product Launches and AIDS Tie-Up for Serum Institute

The Pune-based Serum Institute of India has lined up a few new product launches for this year, including vaccines and a plant-based drug for benign prostate hypertrophy (BPH). It is also expected to announce an association with the Bill and Melinda Gates Foundation for developing an AIDS vaccine.

The company recently launched a BCG vaccine, and plans to introduce a rabies vaccine derived from human cells in the country in the second half of the year. The rabies market, valued at around Rs100 crore (US$21 million), is dominated by German firm Chiron Vaccines’ Rabipur.

The company’s plans were disclosed at the news conference at the launch of Pyginal, a plant-derived medicine for BPH, a prostate gland problem that occurs in older men.

Pyginal is extracted from the bark of *Pygeum africanum*, a tree found in south and central Africa. Serum International, a wholly-owned subsidiary of Serum Institute, will import the bulk drug, which is the key ingredient, from Italian company Indena, and market the finished product to doctors as a prescription drug.

Serum expects sales from Pyginal to touch Rs11 crore (US$2.3 million), or 20 percent of the BPH drug market in the first year of launch. Its hepatitis B vaccine, launched last year at a discount price, has accumulated sales of around Rs10 crore (US$2.1 million) so far. The company is now investing to expand its manufacturing facilities to accommodate the newer vaccines.

Dabur Recalls its Honey Brand in Canada

Ayurveda company Dabur has started a voluntary recall of “Dabur Honey” in Canada, as the food regulator there has warned it may contain traces of anti-bacterial chloramphenicol.

Chloramphenicol is a potent anti-bacterial used in the treatment of illnesses like meningitis, anthrax and typhoid. It can be administered to animals to combat certain infections.

Canada has banned the use of this drug in food-producing animals, including bees, because it has been found to be associated with a blood disorder called aplastic anaemia — a condition where the body fails to produce all types of blood cells.

The Canadian Food Inspection Agency (CFIA) issued a warning to all consumers, advising them not to consume Dabur Honey. However, there are no reported
cases of illnesses associated with the consumption of Dabur Honey as yet.

A Dabur India spokesperson said that the company was concerned with the warning since Dabur Honey was put through rigorous checks at various levels, including the Bureau of Industrial Standards and Export Promotion Council of India.

“We are in touch with the Canadian Authorities for obtaining the details of the suspected consignment so that all quality proof relating to that batch can be made available to them,” the spokesperson said.

He added that since the exports of the product were small, there would be no financial impact of the move on the company. He also added that since the CFIA only “suspects” the presence of the drug, the warning should be treated with caution.

Last year, Chinese honey was also found to contain the anti-bacterial, and the CFIA took similar steps, including advising manufacturers to discontinue the use of honey from China and to contact their suppliers regarding its disposal.

Reports in the Canadian media suggest that the CFIA has been continuously monitoring the quality of cheap honey imports from countries with “limited drug regulations,” a fact that has indirectly benefited local producers, hit by cheaper imports.

Different countries have advised their consumers to act differently. The UK, for instance, advised its consumers to continue eating the Chinese honey that they had bought, irrespective of country of origin. CFIA itself revised its warning to consumers to exclude products that contained honey — like baked goods — since the levels of the drug would be extremely low in these products.

Japan already has some OTC drugs that help people relax, making it easier for them to sleep, but the SSP pill is the first to actually induce sleep.

SSP, which is 57.2 percent owned by unlisted German drugmaker Boehringer Ingelheim, said that it would target 600 million yen (US$5 million) in sales for the new pill, called “Drewell”, in the first year of availability and 1.5 billion yen (US$12.7 million) in the third year.

“Our goal is rather conservative. The sleeping pill market in the US is estimated at 14 billion yen (US$118 million) and the potential demand in Japan is seen to be quite large,” said Mr. Takashi Yamashita, vice president of SSP.

The company’s research showed that out of 1000 participants aged 20–60, 80 percent had experienced some sort of sleeping difficulty while 20 percent said that they had experienced serious sleeping problems.

Japan’s second biggest maker of over-the-counter (OTC) drugs, has recently announced that it would release the country’s first true sleeping pill in April in a move to widen the firm’s product line-up.

The company is taking advantage of a plan mapped out by Japan’s health ministry in November to expand the OTC drugs market by approving more OTC medicines for a wide range of illnesses as the nation copes with increasing medical costs. Japan already has some OTC drugs that help people relax, making it easier for them to sleep, but the SSP pill is the first to actually induce sleep.

Mr. Yamashita said that the health ministry’s decision to promote a wider range of OTC drugs helped it win quick and smooth regulatory approval. He added that, SSP, which earns 80 percent of its revenue from OTC drugs, plans to develop other OTC products such as drugs for the treatment of hay fever.

The Japanese OTC drug market is underdeveloped compared to other industrialized nations, accounting for only 12 percent of the overall drug market, well below the 25 percent share in the US.

This is due in part to the nation’s healthcare system, which offers non-OTC drugs at reasonable prices, and regulations banning pharmacists from giving advice to customers. However, with the recent policy change, the OTC market is expected to grow gradually.
Merck and MerLion Pharma Announce Drug Discovery Alliance

Merck & Co. Inc., based in New Jersey, and MerLion Pharmaceuticals Pte. Ltd. (MerLion Pharma), a Singapore-based drug discovery company, has recently announced the signing of a research collaboration agreement to discover and develop novel drugs from natural sources.

Under the terms of the agreement, MerLion Pharma will screen its extensive natural product collection using a wide range of assays provided by Merck.

Merck will undertake the progression of lead compounds through the pre-clinical and clinical stages of development. It will also be responsible for worldwide marketing of any products that may result from the alliance.

MerLion Pharma will receive research and clinical milestone payments from Merck, together with royalties for any marketed products. MerLion will retain rights to selected drug discoveries that Merck does not select for development.

“Our alliance with MerLion Pharma allows Merck to access an outstanding diversity of naturally occurring chemistry and has the potential to provide drug candidates for treating a wide range of important diseases,” said Dr. Bennett M. Shapiro, executive vice president for worldwide licensing and external research at Merck.

“We are very pleased to be working with Merck, who have had such a successful history of discovering important drugs from natural sources,” said Dr. Tony Buss, CEO of MerLion Pharma.

“The collaboration is a demonstration of the continuing value of natural product-based drug discovery and also to the credibility of MerLion Pharma’s high throughput screening and chemistry capabilities,” said Dr. Buss.

About MerLion Pharma

MerLion Pharmaceuticals Pte. Ltd. is a privately held Singapore based company, focusing on the discovery and development of new drug candidates from natural sources. The company has an outstanding natural product sample collection, advanced high throughput screening technology, assay development and medicinal chemistry capabilities.

It collaborates with leading pharmaceutical companies and research institutes to identify and develop drug leads in a wide range of therapeutic areas. The company’s other current collaboration partners include Abbott Laboratories, Fujisawa Pharmaceutical, Genome Therapeutics, Johns Hopkins (Singapore), KuDOS Pharmaceuticals and the National Cancer Centre (Singapore).

About Merck

Merck & Co. Inc. is a leading research-driven pharmaceutical products and services company. Merck discovers, manufactures and markets a broad range of innovative products to improve human and animal health, directly and through its joint ventures.

Restriction on AIDS Human Tests Stays

China has recently reiterated its ban on human drug trial testing for AIDS vaccine.

Although foreign pharmaceutical and research institutes may work in conjunction with domestic institutes on research into AIDS vaccines, any human drug trial testing in China is illegal without the approval of the State Drug Administration (SDA).

Foreign research institutes are banned from conducting AIDS vaccine drugs trials on people in China, according to the SDA, which is the only authority in China eligible to give approval for such tests.

The number of HIV cases in China had reached more than one million by the end of 2002, a figure which is increasing at an annual rate of more than 30 percent. There are about 100 000 people suffering from AIDS, the majority of whom live in poverty and cannot afford the high price of HIV/AIDS medicines.

The Chinese Center for Disease Control and Prevention has organized a special task force to