

NAURU EYES WINDFALL FROM GENETIC RESEARCH

by Kalinga Seneviratne

SYDNEY, Sept. 5 (IPS) – While many developing countries have denounced the Western practice of using their people as “guinea pigs”, the tiny Pacific nation of Nauru has signed an agreement on human genetic research with an international scientific institute.

The agreement signed last month between the Republic of Nauru and the Melbourne-based International Diabetes Institute (IDI) was hailed as a model for medical research involving citizens of developing countries. Royalties from any discovery as a result of the study and which would later be made available to the market will be shared with the Nauru government, he said.

In announcing the agreement, Nauru's President Kinza Clodumar said it “will set new standards for population research, particularly in developing countries.”

Nauru is an isolated, coral-capped island of 21 sq. km. in the Central Pacific Ocean. The world's smallest republic, it has a population of 5,000 people.

Virtually free of diabetes until 1954, Nauru has the world's second highest prevalence of the disease today. More than 32 percent of Nauruans above 20 years of age suffer from diabetes, which is nearly eight times that for populations in Europe and Australia.

“A major reason for the high rate of diabetes in Nauru has been the change in lifestyle from the former traditional one,” said Professor Zimmet, head of IDI and medical advisor to the Nauru government since 1975.

“The changes in Nauru mirror those throughout the Pacific as former traditional living populations become urbanized and modern-

ized with more Western diet—of refined carbohydrate and high saturated fat—less physical activity and increasing obesity,” he added.

Nauru has not been able to develop an organized agricultural economy due to the poor quality of its soil and lack of water catchment areas. Large-scale phosphate mining this century by Western powers has also killed any chance of developing agriculture activity in the island.

After suing Australia for damages in the World Court, Nauru signed an out-of-court agreement with Canberra in 1993 in exchange for US\$78 million over the next 10 years to fix the environmental damage caused by phosphate mining.

Before mining operations began in Nauru in 1906, the islanders' traditional diet consisted of coconut products, fish and pandanus, with birds, mainly black noodles, providing extra protein.

But eating habits gradually changed to a low-fiber Western diet of imported food. It started with German traders opening a small store on the island in the early 1920s, selling canned salmon, sugar, rice, biscuits, beer and tobacco in exchange for copra.

These products were affordable to many Nauru citizens, since royalties from mining gave the country the world's highest per capita income by the '70s.

“The increase in diabetes and other ‘Western diseases’ in populations such as Nauru's has to be seen in the context of globalization of world economies,” argued Zimmet. He describes the global diabetes epidemic as “the New World

syndrome” and criticizes health agencies for giving less priority in tackling the problem of diabetes, compared to the money poured in for combating AIDS and the Ebola virus.

The global diabetes epidemic is just the tip of a massive social problem now facing developing countries, as well as the poorer sectors of the developed world, Zimmet warned.

Very high rates of obesity, diabetes, hypertension and cardiovascular diseases, coupled with cigarette smoking and alcohol abuse, are just part of the “Coca-colonization” process, he noted, referring to the Western consumerist culture foisted on native people.

The professor believes that changes in diet and more exercise alone will not prevent diabetes, but that improvement in the socio-economic situation and cultural status of the people in the developing world is necessary.

Thus, Zimmet argues that the agreement his institute signed with Nauru recognizes such a process. It is in no way designed to use the people of Nauru as “scientific guinea pigs,” he said.

“The agreement with Nauru seeks to ensure that if any discovery is made from samples from surveys, the people of Nauru will benefit”, he told IPS.

Many of the major diseases of Western life are due to genetic factors or mutations of genes, Zimmet explained. “A disease like diabetes may be due to abnormalities at several different metabolic sites in the body which may be determined by different genes. Genome studies seek to find the gene or genes responsible for diseases such as diabetes.”

These studies could lead to the discovery of testing methods to prediagnose diabetes. By locating genetic abnormalities, it may be possible to develop special drugs which target the metabolic reactions causing diabetes, he said.

Zimmet is confident that IDI’s research will yield positive results in Nauru in five to seven years. Success would mean the ability to not only help tens of millions of diabetes patients around the world, but also give Nauru—which is fast exhausting its phosphate deposits—a financial boost.

Source: Inter Press Service, 5 September 1997.

Genital Powders and Sprays: Greater Cancer Risk

A recently-released U.S. study suggests that women who routinely use genital powders and sprays could be at a greater risk for ovarian cancer.

Researchers indicated that even a modest increase could have a significant effect on the incidence of ovarian cancer since, in the U.S.A., one-fourth to one-half of all women use powder in the genital area. However, the researchers did admit the findings were clouded by the lack of specific brand of information and details about how much powder was used.

The study surveyed 313 women, ages 20 to 79 and living in three western Washington counties, who had ovarian cancer. They were compared with a control group of 422 women with no history of the disease. The researchers examined cornstarch, talcum powder, baby powder, deodorant powder and scented bath powder, and four ways of using it: in genital sprays, by direct application after bathing, by storing diaphragms in powder and by applying powder to sanitary napkins.

Women who routinely powdered after bathing had a 60 percent increased risk. No risk increase was noted among those who applied powder to sanitary napkins or who stored their diaphragms in powder. Women who used genital sprays were found to have a 90 percent increased risk. However, some sprays did not contain powder and the study noted that unidentified chemical substances and not the powder itself may be at fault. The study also calculated a 50 percent increase in risk for women who use one or more of the methods in combination.

Epidemiologist Linda Cook indicated that at least six other studies have come to similar conclusions.

“I certainly find the results of this study suggestive, but they’re not conclusive,” Cook cautioned, explaining that the study considered a woman a powder user regardless of how often she used it or how she applied it.

Other researchers and specialists stressed the need for larger, better-documented studies and criticized the use of qualitative analysis. While he warned against jumping to conclusions, Dr. Gregory Sutton, at the Indiana Cancer Pavilion, didn’t hesitate to add: “If I were a woman, I’d have second thoughts about using any of these products. What harm does it do to not use them?”

Source: The Associated Press, “Genital Powders, Sprays Cause Ovarian Cancer,” 5 March 1997. The study by the Fred Hutchinson Cancer Research Center and the University of Washington is reported in the 1 March 1997 issue of the *American Journal of Epidemiology*.