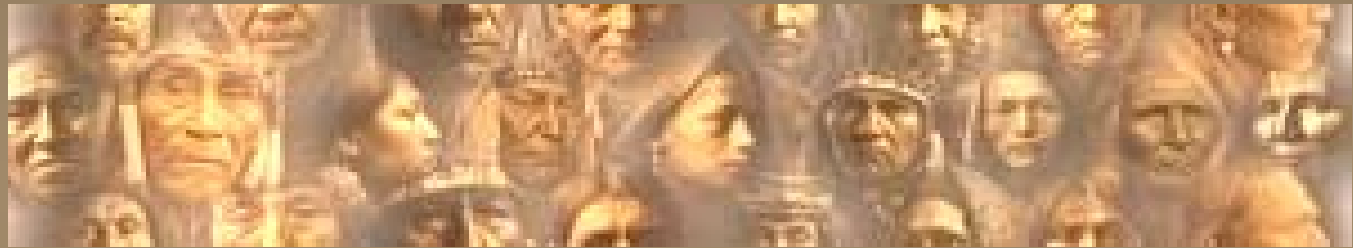


Historical & Scientific Perspectives on the Health of Canada's



First Peoples

Prepared by: Raymond Obomsawin

Pre-Contact N. American Cultures

- ▶ Many hundred Pre-Columbian nations & peoples of North America, numbering over 1 million enjoyed varied cultures & ways of life adapted to their natural environments. Thus they maintained unique:

- ▶ Languages;
- ▶ Socio-Political Systems;
- ▶ Clothing Styles;
- ▶ Shelters;
- ▶ Foods;
- ▶ Art Forms;
- ▶ Musical Styles;
- ▶ Educational Methods;
- ▶ Spiritual Beliefs; &
- ▶ Healing Practices.



Socio-Cultural Erosion

- ▶ The cultures, traditional knowledge systems & languages of Canada's first peoples were significantly eroded & weakened by officially sanctioned assimilationist policies & practices in the 19th, 20th & now 21st centuries.
- ▶ The cultural erosion occurring today is largely due to the powerful impacts of modern education, mass media & globalization.



Health in the Pre-Contact Period

- ▶ Canada's first peoples traditionally lived in intimacy with nature maintaining a system of life & healing based upon its laws. This way of life ensured balanced physical, mental & social well being.
- ▶ First Nation societies were without need for rehabilitation centers, mental hospitals or prisons. The first European contacts universally acclaimed the health, & vigour of the peoples they met.



Health in the Pre-Contact Period



- ▶ Canada's first peoples who practiced agriculture relied heavily on maize, tomatoes, beans, squashes, pumpkins, & melons of the fields, & peach orchards.
- ▶ The wild grass, seeds, nuts, fruits, roots, & products of the traps or chase supplemented their diet, or served as primary food sources for the more strictly hunter-gatherer peoples.

Health in the Pre-Contact Period

- ▶ Among Canada's first peoples there was an apparent practical knowledge of the body's needs for various vitamins & mineral elements, & how to obtain them.
- ▶ This included the employment of plant medicines, & foods rich in Vitamin C (for scurvy), Vitamin A (to prevent eye diseases), Vitamin D (for rickets), along with other nutrient supplements for increased fertility, improved gestation, & easy childbirth.

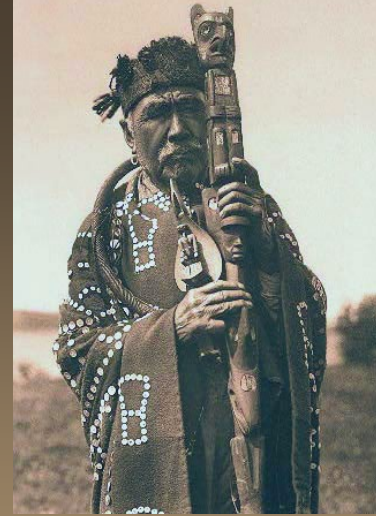


Health in the Pre-Contact Period



- ▶ Canada's first peoples recollect when: *"...there was then no sickness; they had no aching bones; they then had no high fever; ... no smallpox; ... no burning chest; ...no abdominal pain; ...no consumption; ...no headache."*
- ▶ In the 15th early 16th centuries as early explorers plied the Atlantic coast of Canada, no historical record refers to any disease or epidemics among the Aboriginal inhabitants.

National Commission Inquiry on Indian Health's Historical Findings



- ▶ Most infectious diseases were absent prior to European contact, including scarlet fever, typhoid, diphtheria, smallpox, measles, mumps, influenza, & venereal diseases.
- ▶ Infectious disease such as minor respiratory ills & intestinal parasites did not cause significant morbidity, or threaten their host's survival.

National Commission Inquiry on Indian Health's Historical Findings

- ▶ The chronic degenerative diseases, were infrequent
- ▶ Mental & neurological diseases, heart disease & arteriosclerosis were rare
- ▶ Some arthritis did occur amongst the elderly
- ▶ Cancer was very rare, if present at all
- ▶ Some eye disorders occurred, but myopia, was virtually absent



Early Historical Observations



“As my testimonies have told me, it is verie rare to see a sicke body amongst them, & they have further assured me, they never saw any man there either shaking with the palsie, toothlesse, with eies dropping, or crooked & stooping through age.”

Michel Eyquem de Montaigne
Late 16th century

Early Historical Observations



“In bodily proportions, colour, gesture, dignity of bearing, the race is incomparable. It was free from our infectious scourges, tuberculosis, & syphilis, & the resulting physical deformities & mental degeneracies. It was probably free from leprosy, scrofula, & cancer, & it is safe to say that nervous prostration was unknown to the Indian.”

**Edgar Lee Hewett - Researcher
on Pre-Columbian North America**

Early Historical Observations



“Loskiel examined a man whose face had been torn away, his rib cage crushed, limbs ripped & the abdomen disemboweled by a bear, yet had been able to crawl four miles to his village & in six months had completely recovered, except for extensive scarring. Such records could be continued almost indefinitely as all observers were so impressed by this ability to survive terrific wounds that hundreds have been reported.”

**Eric Stone – Author of:
American Indian Medicine**

Early Historical Observations



- ▶ In ancient Greece, Pheidippides famous 140 mile run (Athens to Sparta) took 46 hours. The historian Seton observed a young Cree who on foot had just brought in dispatches from Fort Qu' Appelle 125 miles distant in only 25 hours. *"I heard little from the traders but cool remarks like... 'pretty good run'. It was obviously a very usual exploit among Indians."*
- ▶ The well known Sioux chief *Running Antelope* was given this name by his people because in his youth he pursued & ran down an antelope in a *"straight-away race lasting 5 hours."*

Archeological & Paleopathological Evidence



Dental pathology is considered a trustworthy marker of “disease loads & nutritional stress.”

Archeological & paleopathological investigations show that Among North American Aboriginal peoples in the pre-contact period, on average, dental caries affected ***less than 1 percent*** of all teeth.

Archeological & Paleopathological Evidence

“The skeletal remains of... pre-Columbian date are, barring few exceptions, remarkably free from disease. Whole important scourges were wholly unknown... There was no plague, cholera, typhus, smallpox or measles. Cancer was rare, & even fractures were infrequent. There was no lepra [leprosy]... there is as yet not a single instance of... pre-Columbian syphilis. There were, apparently no nevi [skin tumors]...”

Ales Hrdlicka - Paleopathologist



Fruitless Search for Cancer



Over the course of seventy five years extending from the mid 1800s to the first quarter of the 20th Century medical missionaries, ship surgeons, anthropologists, & others were challenged to undertake a search to ascertain whether cancer existed among North America's First peoples.

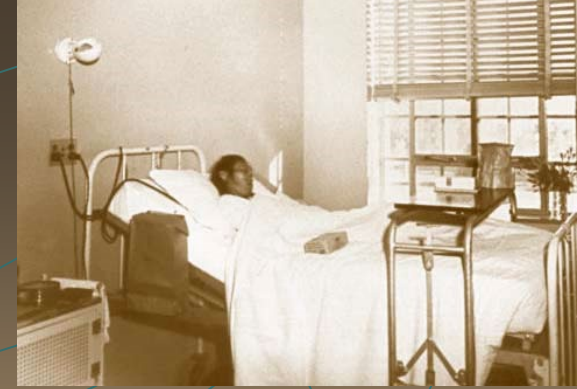
Various reports on the Alaskan Inuit, northern Athapaskans of Canada & the Indian & Inuit peoples of Labrador revealed that not a single case of cancer was observed among the tens of thousands of people studied by competent medical examiners.

Health in the Post Contact Era



- The first historically recorded outbreaks of infectious disease occurred among the Montagnais, Algonquins, & Hurons of the St. Lawrence & Ottawa Valleys between 1734 & 1741.
- Champlain's first settlement at Quebec on the St Lawrence River in the year 1608 preceded these outbreaks by well over 100 years.

Health in the Post Contact Era



It wasn't until the 1800s & into the 20th Century, that the unprecedented conditions of "smallpox, measles, influenza, dysentery, diphtheria, typhus, yellow fever, whooping cough, tuberculosis, syphilis" & various unidentifiable "fevers" became widespread among Canada's first peoples.

Health in the Post Contact Era



- ▶ Trade centres often became the nucleus for disease outbreaks & central points of diffusion of epidemics along trading routes to the hinterland. This is because they represented points of convergence between Aboriginal people & Europeans.
- ▶ Diseases struck specific populations over decades of commercial growth, gradually culminating in demographic catastrophe for Canada's First peoples.

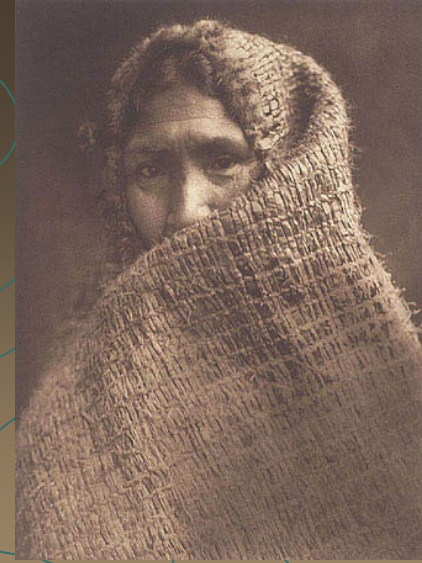
Health in the Post Contact Era



- Wide scale trading with settlers led to a rapid erosion of traditional “*whole food*” nutrition patterns & unhealthful dependency on alien disease-building foods, e.g. white sugar, white flour, white polished rice, sweetened jams, tinned milk, tinned meat, other processed goods, lard, & alcohol.
- Such radical changes precipitated a downward vicious cycle of physical degeneration, stress, immune system impairment & widespread infectious disease epidemics.

The Fear Factor in Epidemics

- During early infectious disease epidemics among Aboriginal peoples mortality was worsened by sheer panic.
- Modern science has found an intimate connection between the neuroendocrine & immune systems, showing the powerful influence of mental emotions on the onset, course, & remission of disease.
- Some medical historians believe that more people have died of the fear of dreaded diseases like smallpox, than of the disease itself.

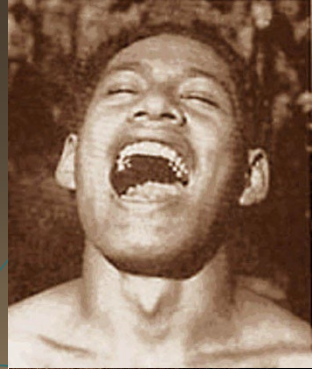


National Commission Inquiry on Indian Health's *Historical Findings*

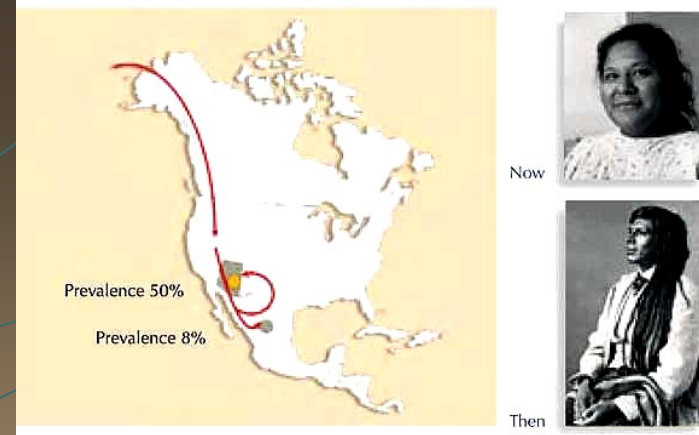


“Once refined foods became a significant proportion of the diet, disease & deformities greatly increased in incidence [including ...infections & [in time] degenerative disease, difficult labours, & birth defects.”

There is abundant historical & anthropological documentation that “the same pattern of [post-colonial] disease & physical degeneration shown by the Indian people has been exhibited by the Inuit to the north, & by indigenous peoples throughout the world.”



The Pima Experience



In recent decades the Pima Indians of the U.S. southwest have lived on highly processed & high fat foods, while following a relatively sedentary lifestyle .

- By contrast, most of their Pima cousins living in rural northern Mexico still follow a “traditional” Pima lifestyle, enjoying a diet low in animal fats, high in whole foods (complex carbohydrates), & engage in abundant daily physical activity.
- The U.S. based Pimas, have possibly the world’s highest rates of obesity & diabetes, while over 90% of Pimas in Mexico are free of these diseases.

National Commission Inquiry on Indian Health's *Historical Findings*



The overall health of Aboriginal peoples in Canada deteriorated due to:

- decline in accessibility to traditional foods & clothing sources from the land;
- the collapse of traditional economies;
- confinement to small plots of land with scarce resources & livelihood opportunities;
- limitations in natural sanitation; &
- long-standing norms, values, social systems & spiritual practices undermined or outlawed.

Transition to Allopathic Medicine



- Beginning in early post-contact period, traditional Aboriginal medicine practices were progressively suppressed & significantly weakened by Euro-Canadian society influences.
- Aboriginal groups in close contact with Euro-Canadian settlements increasingly accepted medical assistance from the now dominant society.



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- Historically this transition to dependency on a foreign culture, including its goods & “healing” system was heavily influenced by a spirit of intolerance & arrogance on the part of increasingly dominant colonial communities.
- In time policies were adopted & laws were established to systematically destroy traditional knowledge & culture systems.

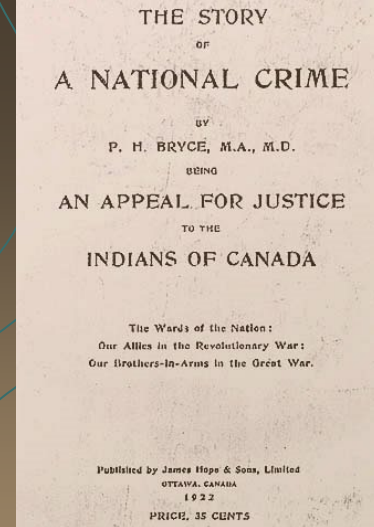
Dr. Bryce's Evaluation Findings



- Dr. Peter Bryce, was appointed in 1904 to serve as the first General Medical Superintendent in the federal *Department of Interior & Indian Affairs*. He launched a thorough examination of the status of Indian health.
- His tour of residential schools in the prairies found them to be breeding grounds for tuberculosis. He reported that in the recent 15 year period, 24% of all the pupils in the schools had died. In one school, 75% of students were dead by the end of 16 years of operation.

Dr. Bryce's Evaluation Findings

- His evaluation study on Indian health conditions demonstrated that the Canadian Indian population from 1904 to 1917 should have increased by 20,000, but instead showed a decline of 1,639 persons.
- The 1922 a publication The Story of a National Crime... documented how Aboriginal peoples were experiencing “a death rate more than double that of the general population & in some provinces more than three times.”

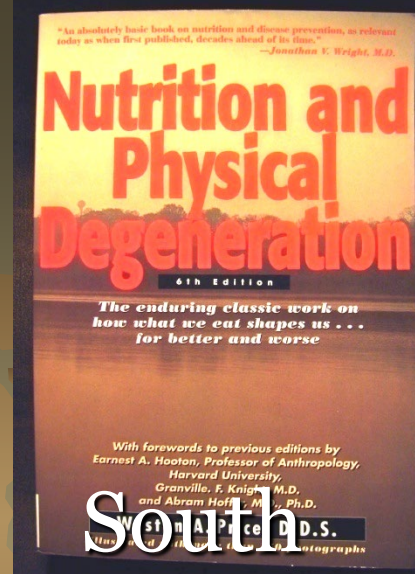


Dr. Weston Price's Global Research Findings

(Began 76 Yrs ago - Spanning Nine Years &
Covering Over 150,000 Miles)

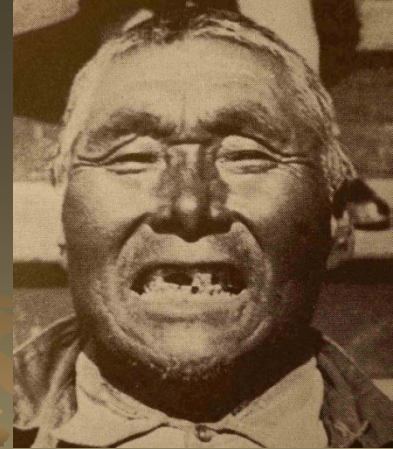
Whether indigenous North or American, Australian aboriginal, East African native, or Pacific islander wherever traditional lifestyles & dietary patterns were followed was observed:

- superb physical development;
- undecayed teeth;
- absence of physical disease; &
- markedly less mental & social disease.



Dr. Price's Research

Key Observations

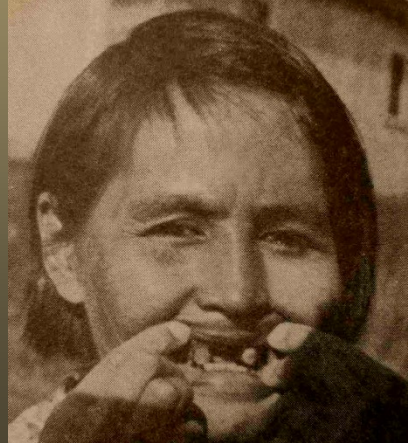
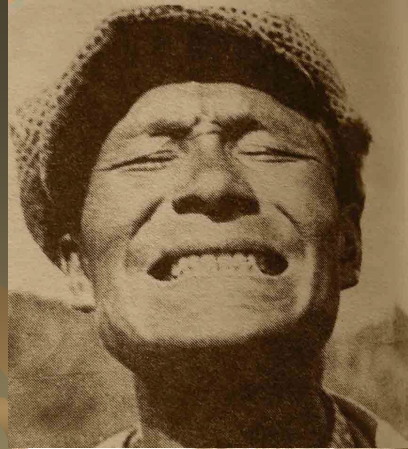


- With one or more generations living on highly processed foods (refined flour, sugars, tinned milk, etc.) a variety of infectious & degenerative diseases became prevalent, including pandemic dental decay & pyorrhea.
- Also noted was a marked increase in women experiencing complications during both pregnancy, & childbirth.

Dr. Price's Research

Key Observations

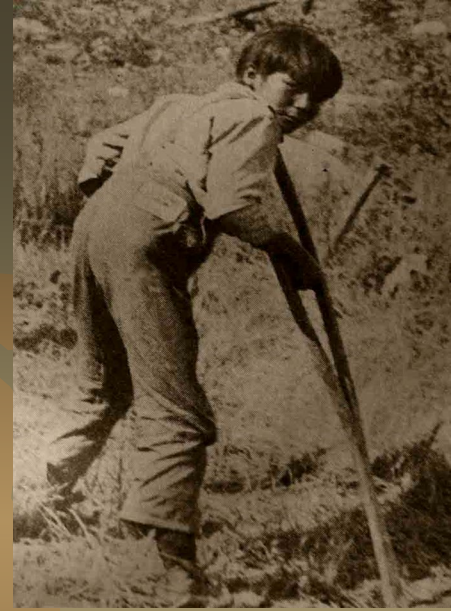
- In the Yukon's Pelly Mountain region out of 2,464 teeth of 87 Aborigines, he found only 4 teeth with dental decay, i.e. a mere 0.16 percent. Also absent were degenerative & infectious diseases.
- However, in the Stikine River region of the Yukon where there was full access to processed foods, he found decay rates of 40 percent.



Dr. Price's Research

Key Observations

- In his words “At the point of contact with the foods of modern civilization” in the Yukon serious degeneration was noted, for in visiting about “twenty Indian homes” there were “ten bed-ridden cripples”.
- At the same location he also observed that tuberculosis was taking “*a very severe toll of the children who had been born at this center.*”



Dr. Price's Research

Key Observations



- As a dental surgeon he noted major increases in congenital anomalies, & facial deformities (narrowed arches crowding the teeth, & a narrowing of both the chin & nostrils).
- It was additionally found that this disturbed heredity & quality of life is to a great degree reversible by a simple return to traditional whole food diets.

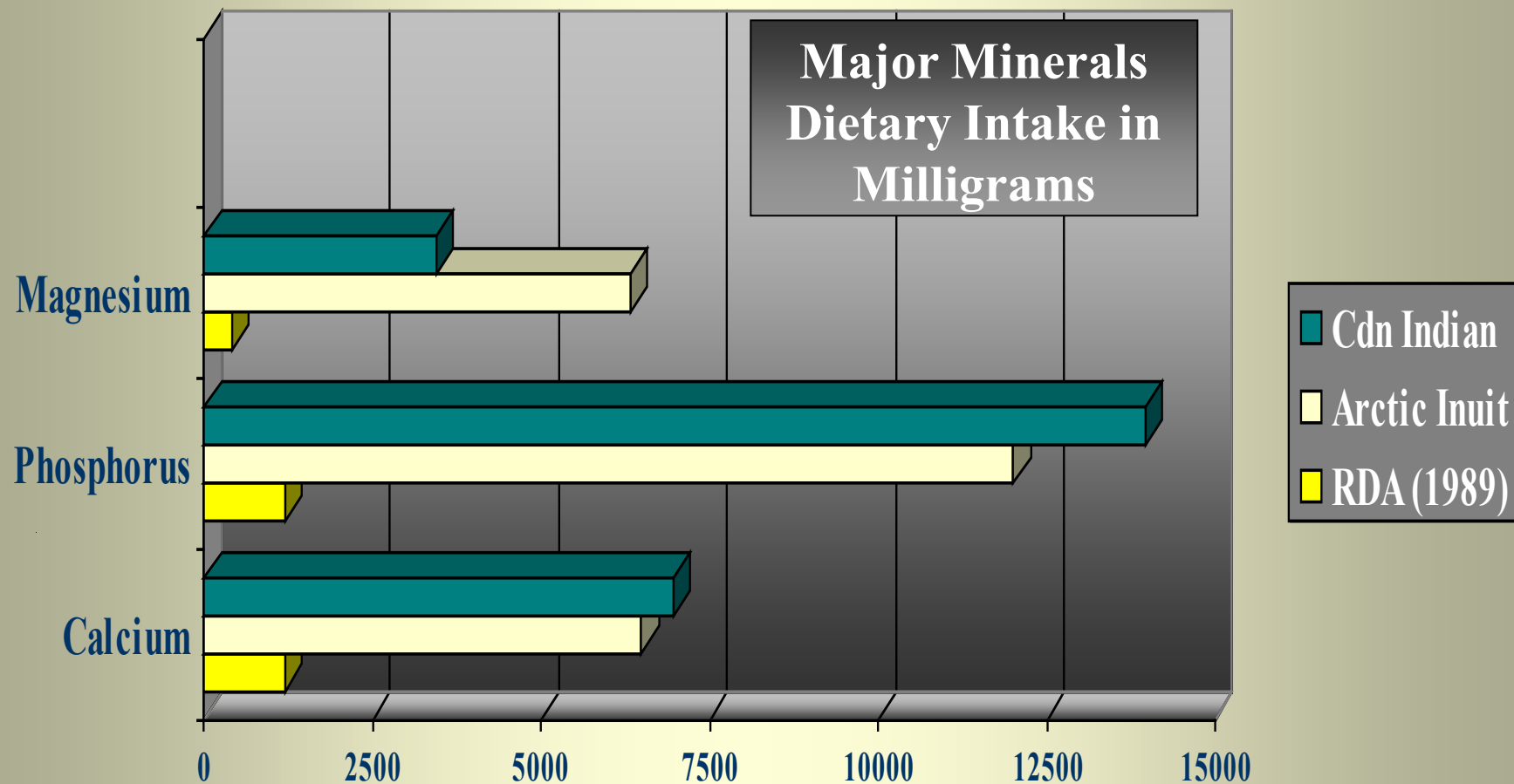
Dental & Facial Deformities



- An estimated 75 % of North Americans have distinct irregularities in the development of the dental arches & facial form, yet a 1930 study where 1,276 Inca skulls were systematically examined failed to find a single instance of dental arch deformity.
- It was concluded that this was the result of a system of living, using whole food nutrition in the early formative period, which is very closely in accord with nature's fundamental laws of reproduction.

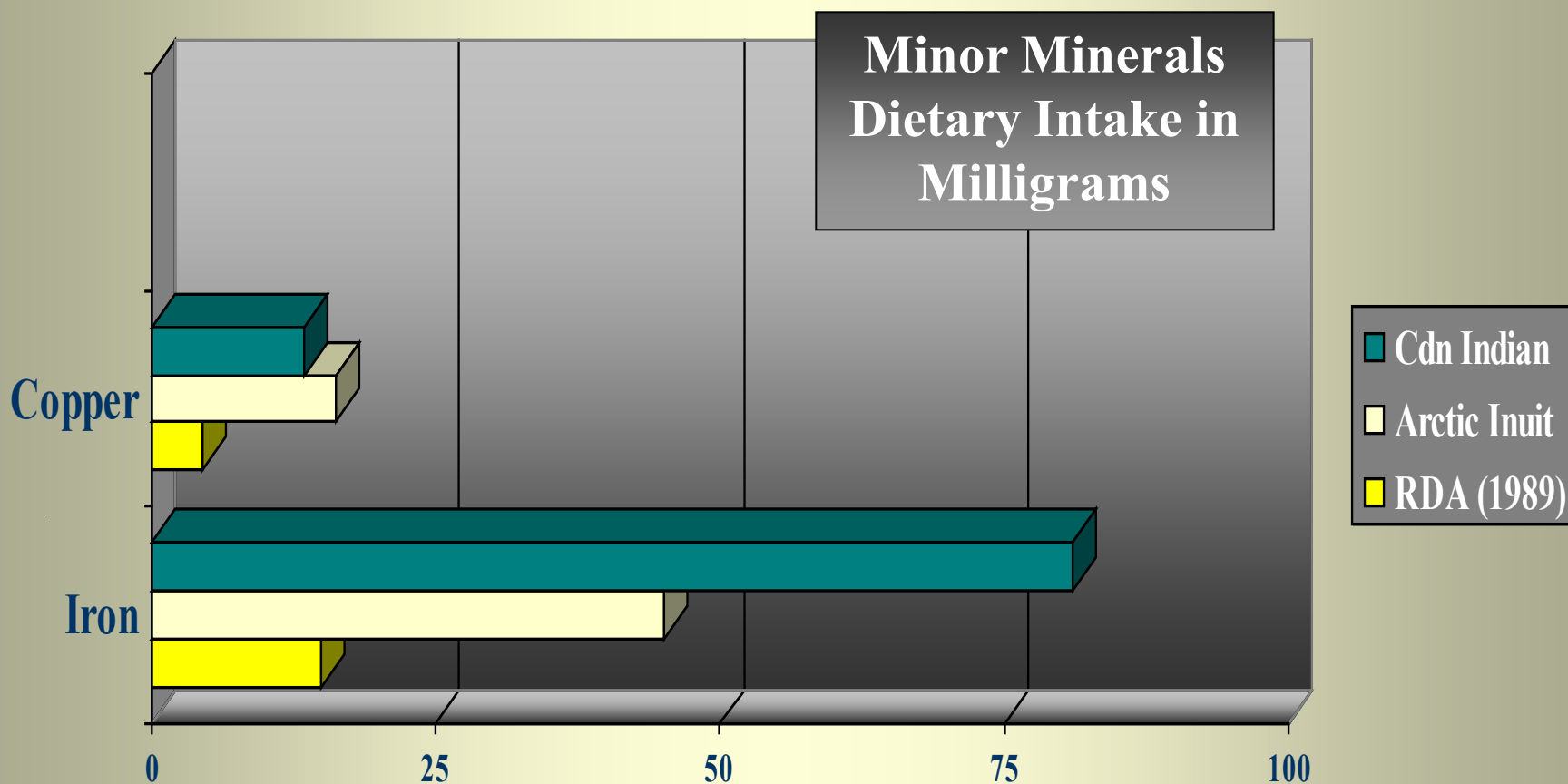
Pre-Contact Nutrient Intake

Based on field data from Price's research in remote regions of NW Canada & Alaska



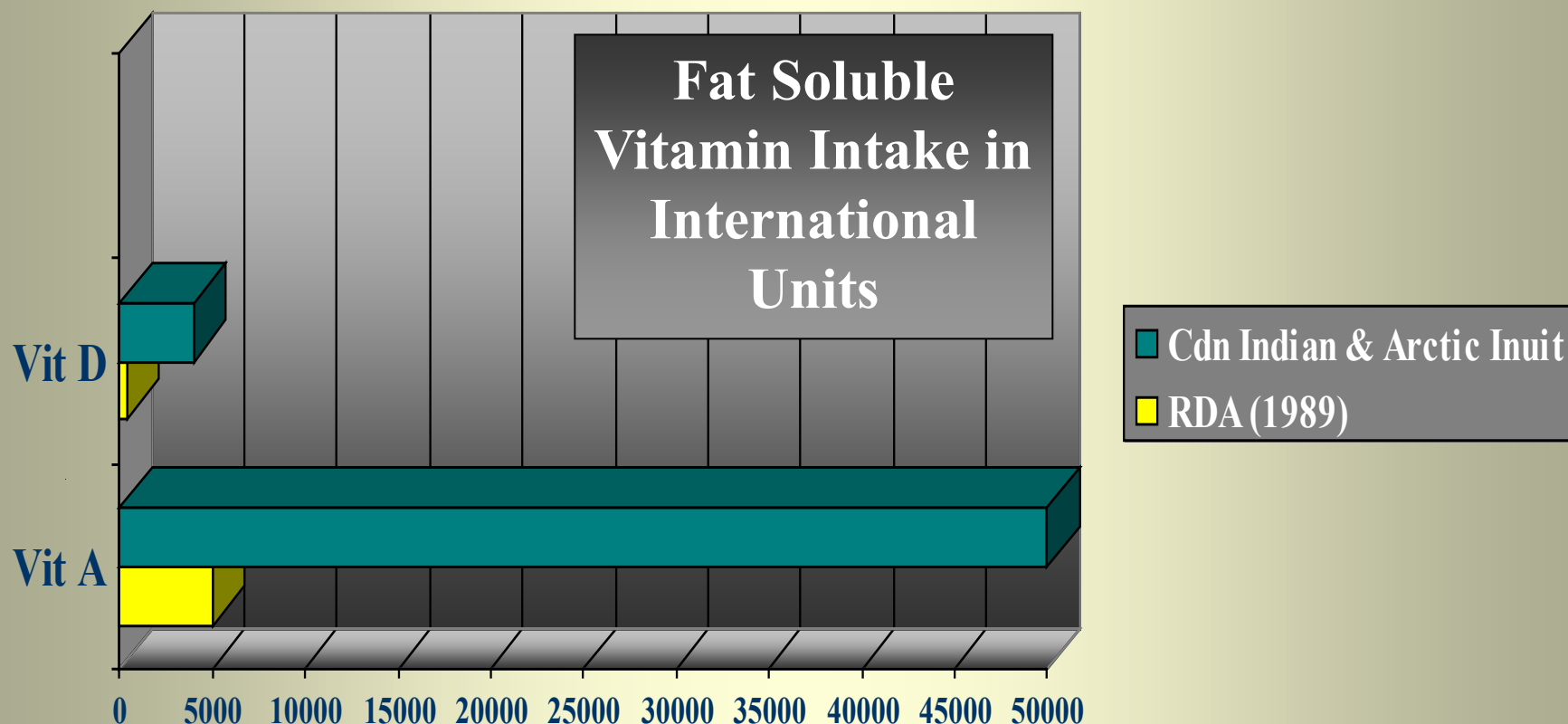
Pre-Contact Nutrient Intake

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Pre-Contact Nutrient Intake

Based on field data from Price's research in remote regions of NW Canada & Alaska



Growing Reliance on Medical Services: 1900-1950



- ▶ The first on-reserve nursing station was opened in Fisher River, Manitoba in 1930.
- ▶ In 1945, federal health services for Indians & Inuit were transferred from **Indian & Northern Affairs** to the **Department of National Health & Welfare**.
- ▶ By mid-century the department was operating a network of 33 nursing stations, 65 health centres, & 18 small regional hospitals for registered Indians & Inuit.

A Growing Epidemic of Degenerative Disease



- ▶ Nonetheless, by the **mid 20th Century** was seen the emergence of a new epidemic of degenerative diseases traditionally unknown to Aboriginal peoples.
- ▶ These degenerative conditions include: obesity, hypertension, diabetes, arthritis, peptic ulcers, gall bladder disease, heart disease, cancer, etc.
- ▶ Today these diseases are being experienced by Aboriginal peoples at even greater rates than among the mainstream population.

Medical Services Expand: 1950-1980



- ▶ In 1962 a new division called *Medical Services Branch* was established at *National Health & Welfare* with its primary mandate being Indian & Inuit Health. Federal government allocations increased until by the end of the **1960s** the budget exceeded **\$28 million** compared with **\$4 million** in the **1950s**.
- ▶ Then in the **late 1970s** the federal government announced plans to eliminate uninsured health benefits (e.g. dental & vision care), & to transfer responsibility for First Nations & Inuit primary health care to the provinces & territories.

New Federal Indian Health Policy



- ▶ In response to this crisis, the *National Indian Brotherhood* (NIB/AFN) over which George Manuel took leadership in 1970, established the *National Commission Inquiry on Indian Health*.
- ▶ By the year 1979 the Commission had influenced the federal government to maintain uninsured health benefits & to reverse its plans to abrogate its role in Indian/Inuit health care. The same year the government issued its new & historic Indian Health Policy.

Setting the Stage For Transfer of Health Care



- ▶ The overarching goal of the new federal policy was to “*achieve an increasing level of health in Indian communities, generated & maintained by the... communities themselves.*”
- ▶ Under NCIH’s leadership, the ***Advisory Committee on Indian & Inuit Health Consultation*** (headed by Justice Thomas Berger) issued its **1980** historic report which detailed a nation-wide consultative process for effecting a transfer of health services to the control of First Nations & Inuit communities.

Early Stages of the Transfer Process



- ▶ By the fall of 1989, 58 pre-transfer projects were underway, involving 212 First Nation communities.
- ▶ The same year a national conference on health transfer brought calls from First Nation delegates for streamlining the process.
- ▶ By the fall of 1990, eight transfer agreements had been signed, & some 67 First Nations were then involved in pre-transfer planning.

Continuing Role of Health Canada



- ▶ In the year 2000, the Medical Services Branch was renamed the **First Nations & Inuit Health Branch**. In the 2000-2001 fiscal year net expenditures for Aboriginal health exceeded **1.3 billion dollars**. Some key items covered by this funding were:
 - ▶ investments in Nursing Services;
 - ▶ Aboriginal Diabetes Initiative;
 - ▶ Home & Community Care Program; &
 - ▶ Safe Food & Nutrition Program.

Health & Disease Disparities American Indians



Although the *U.S. Indian Health Service* expends over three billion dollars annually for conventional medical care for American Indians & Alaska Natives they are:

- ▶ 770% more likely to die from alcoholism;
- ▶ 650% more likely to die from tuberculosis;
- ▶ 420% more likely to die from diabetes;
- ▶ 280% more likely to die from accidents; &
- ▶ 52% more likely to die from pneumonia or influenza than other citizens of the U.S.

Health & Disease Disparities

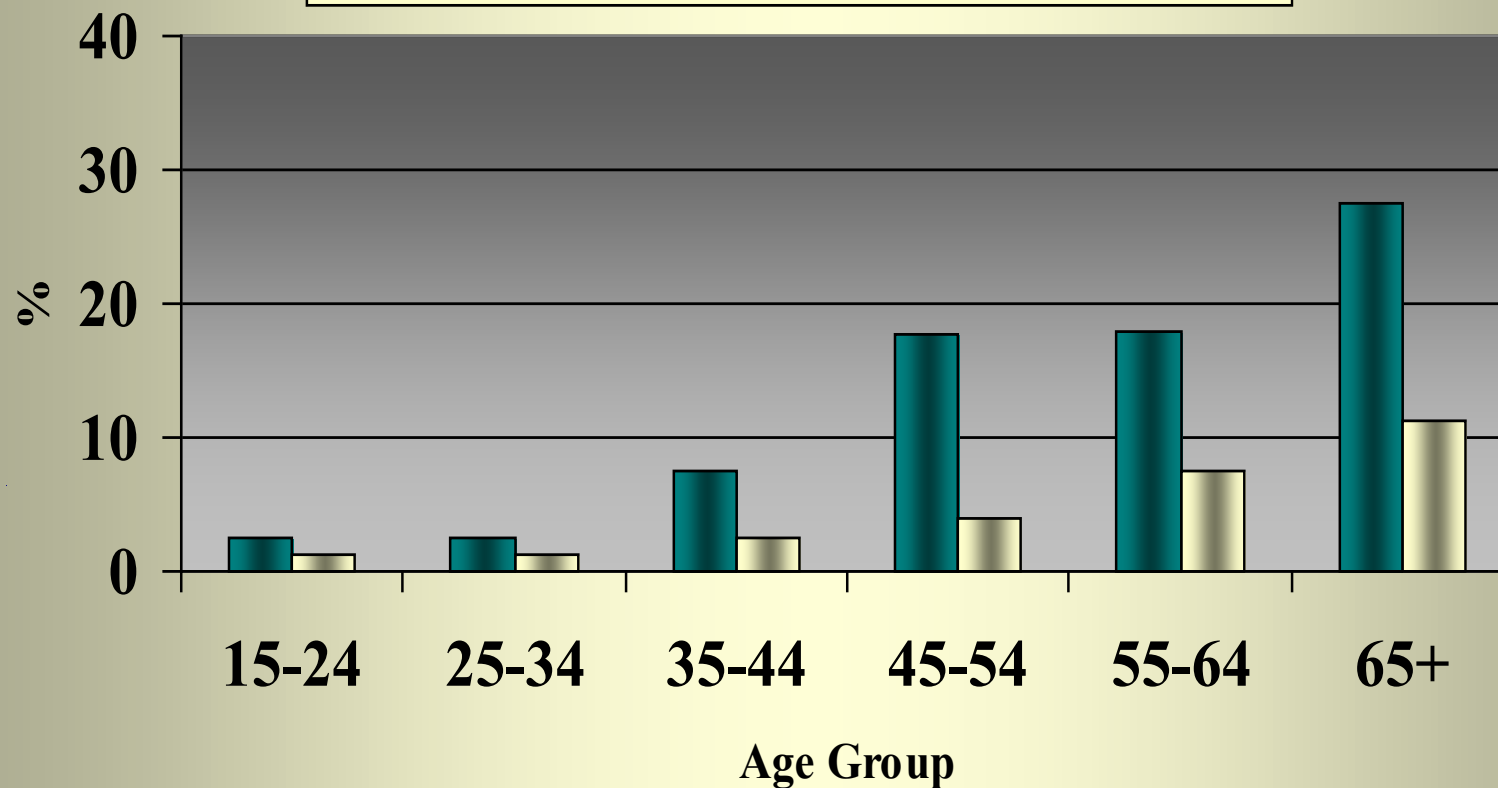


In the year 2005 Assembly of First Nations National Chief Phil Fontaine observed that:

“Our people die five to eight years earlier than the average Canadian. Our infant mortality rate is double the Canadian average... We experience a burden of infectious disease, with eight times the rate of tuberculosis & six times the rate of HIV infection. The First Nations health gap continues throughout the spectrum of diseases, with three to five times the diabetes, twice the cancer, & five times the unintentional injury rates compared to the average Canadian.”

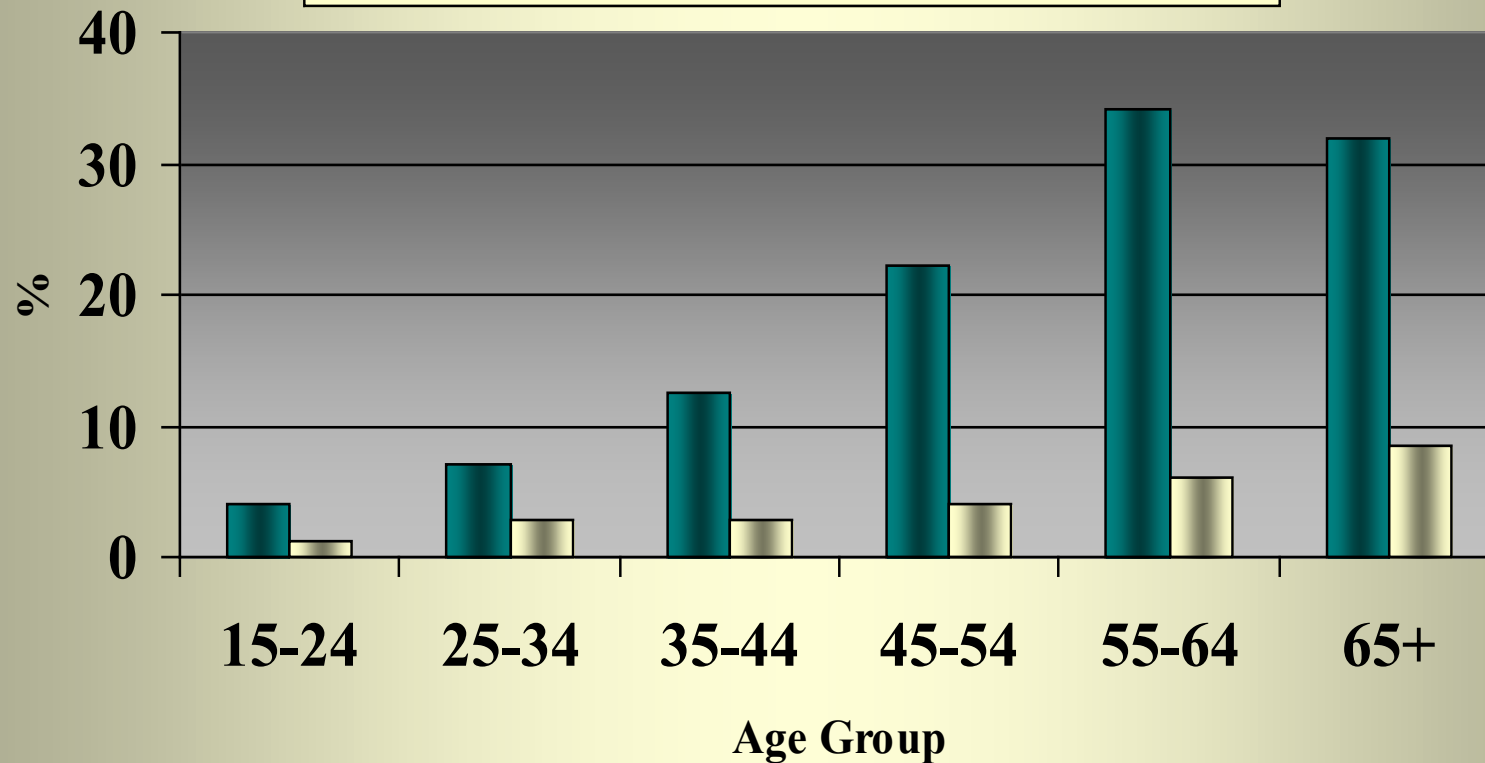
Age Adjusted Prevalence of Diabetes (Self-Reported)

■ First Nations Men (On-Reserve)
■ Canada Men



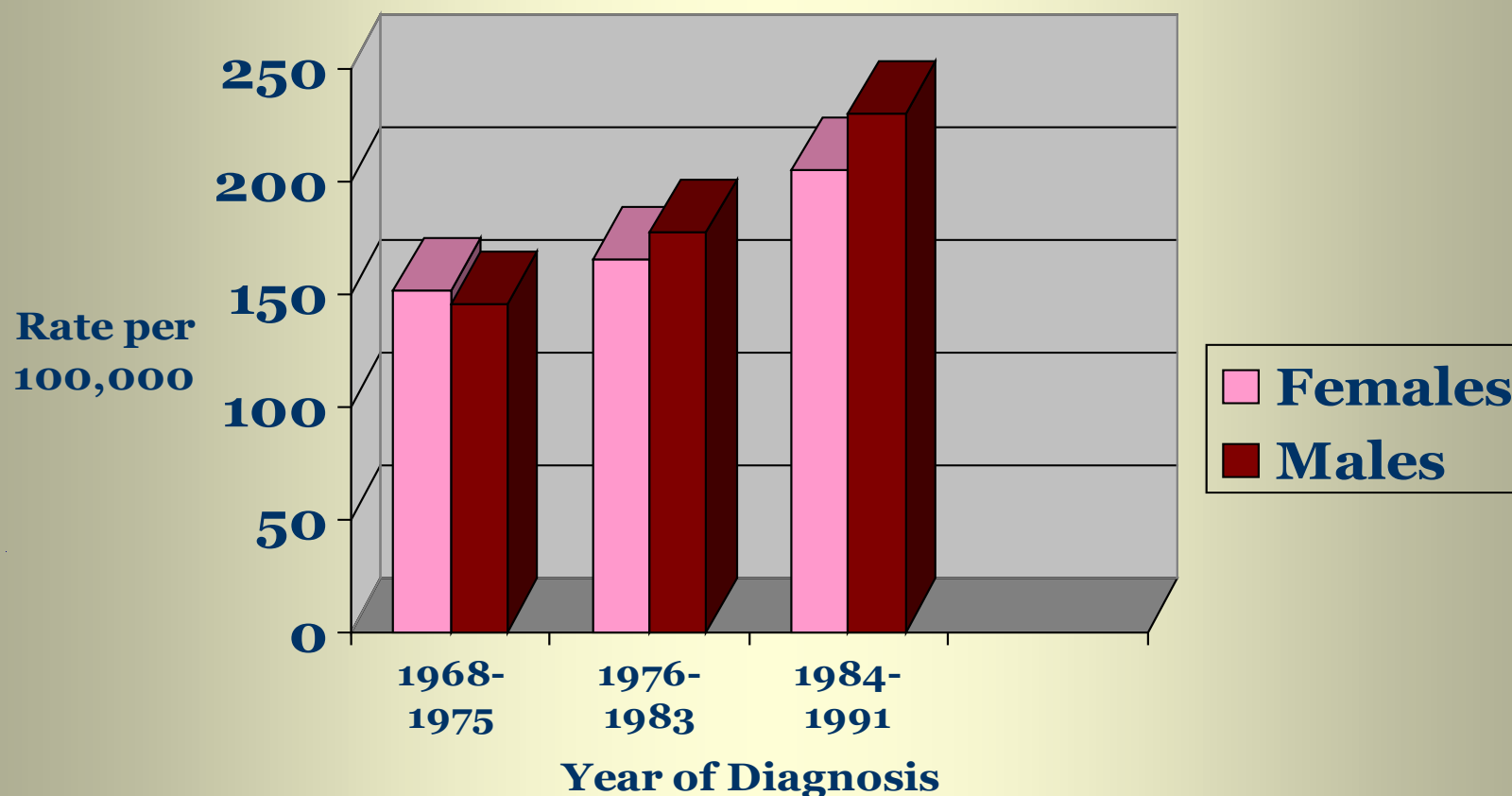
Age Adjusted Prevalence of Diabetes (Self-Reported)

■ First Nations Women (On-Reserve)
■ Canada Women

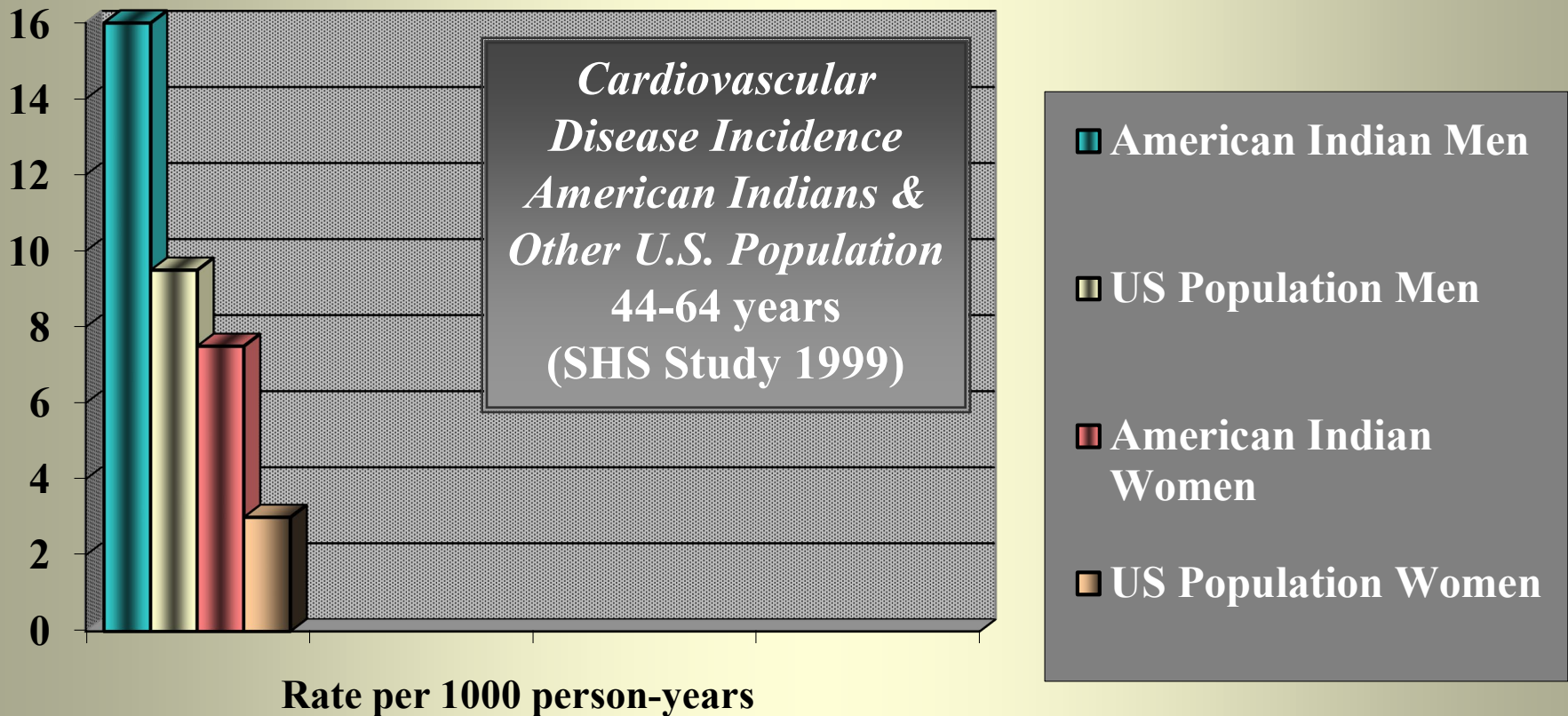


Rapid Escalation of Cancer

First Nations (Ontario 1968 to 1991)

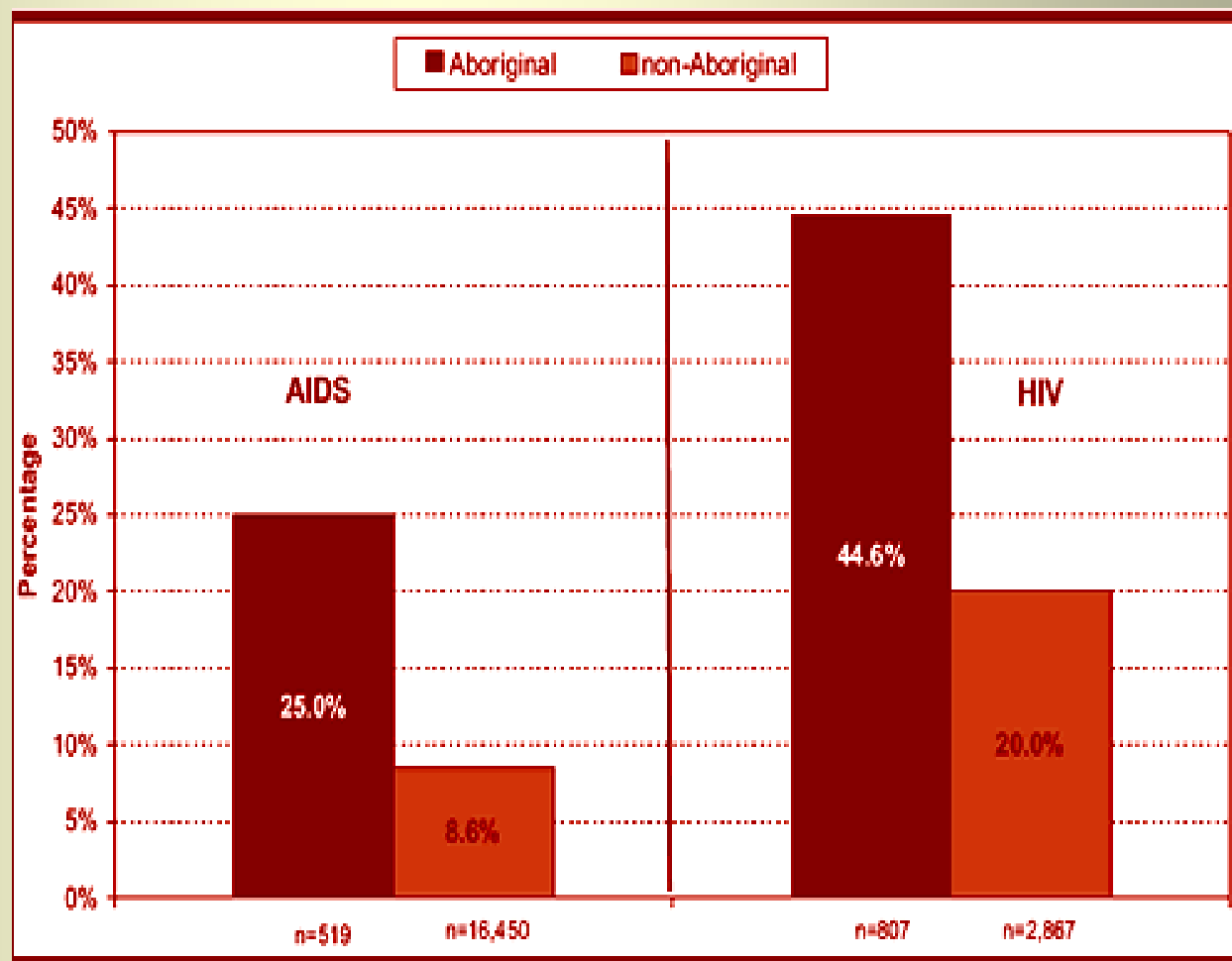


American Indian Double Rate of Cardiovascular Disease



Reported AIDS Cases & Positive HIV Tests

AIDS cases,
includes data
from 1979 to
Dec. 31, 2003.
HIV test results,
includes data
from 1998 to
Dec. 31, 2003



Health & Disease

Where Lies the Answer?



Despite the many billions of dollars already expended in the expansion & delivery of medical services to Canada's First peoples, chronically significant health disparities continue to persist, with a worsening of degenerative disease incidence.

It seems self-evident that more extensive investments in medical services is not the primary answer to preventing disease, or restoring & maintaining health.

Prescription for Disaster



In *Prescription for Disaster* Thomas Moore (Sr. Fellow - **George Washington University Medical Center**) warns that of the 50 top-selling prescription drugs, only four are “safe”. With as many annual deaths as thirty three 9/11 disasters & “...one million severely injured & another two million harmed during hospitalization, adverse reactions to drugs rank as one of the greatest man-made dangers in modern society,”

He cites adverse effects associated with commonly used medications, to include perforated ulcers, brain damage, addiction, cancer & cardiac arrest.

Medical Treatment Emerges As Leading Cause of Death & Injury

Death by
Modern
Medicine



The book *Death by Modern Medicine* affords a detailed review & organized synthesis of all of the data on adverse events occurring per annum in American medical practice. Co-Author C. Dean (MD) has documented that each year there are:

- ▶ 7.5 million unnecessary medical & surgical procedures
- ▶ 8.9 million unnecessary hospitalizations
- ▶ 20 million faulty prescriptions of antibiotics for viral infections
- ▶ 2.2 million adverse reactions to prescribed drugs
- ▶ 784,000 deaths attributable to medical practice

Disease Wars

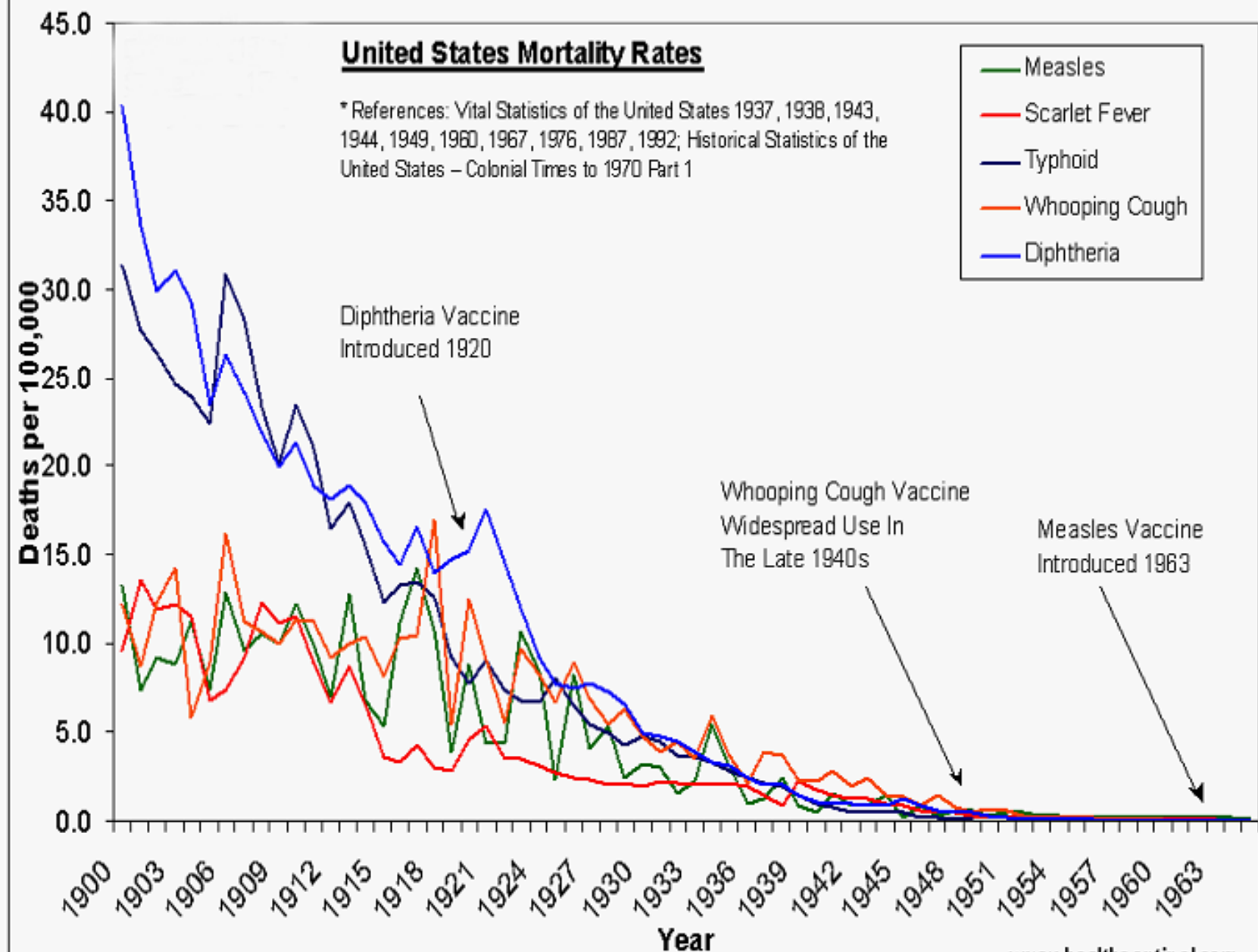


- The popularized idea that infectious disease is solely due to bacterial invasion is a medical half-truth that has historically permitted politicians & physicians to side-step more controversial issues in health & disease causation.
- As long as the “*enemy*” only a germ or virus then profitable “*disease wars*” can be launched using the costly toxicological weaponry of selective medicine, i.e. drugs & vaccines, while leaving untouched prevailing social inequities, political & economic injustices which underlie human disease.

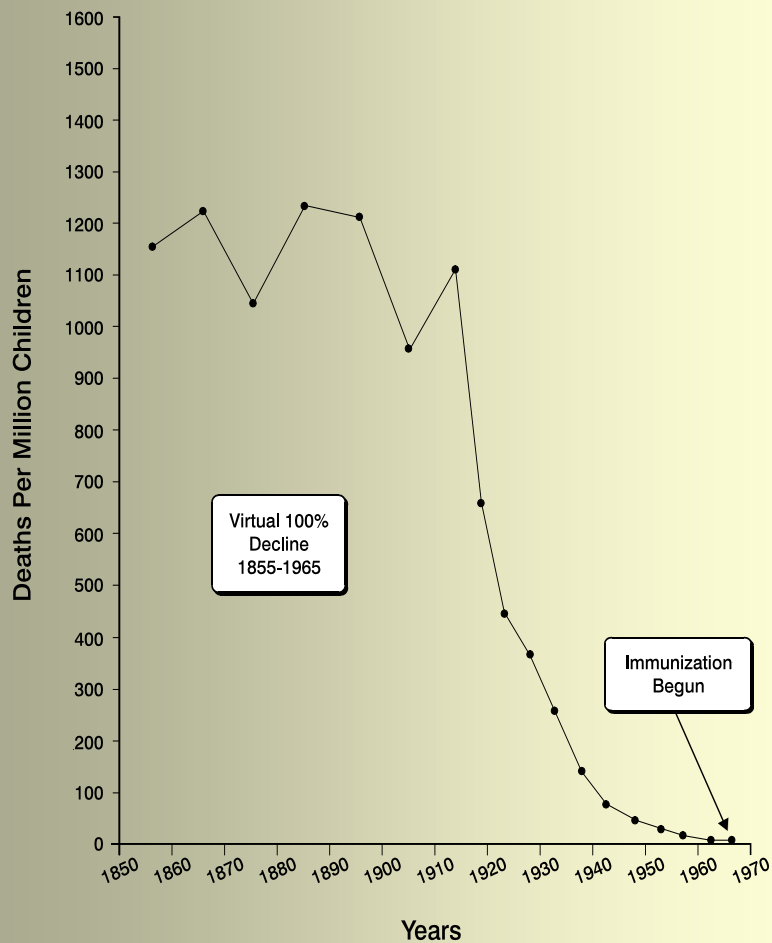
Why the High Tuberculosis Rates?



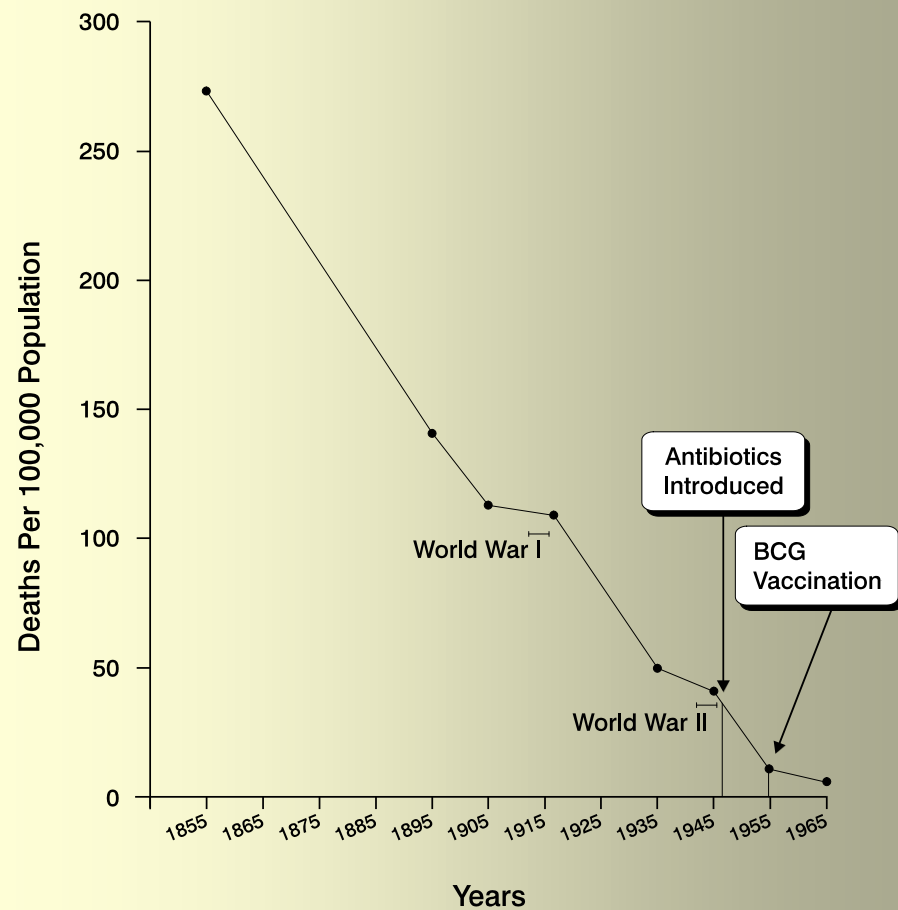
- A mid 20th century nutrition survey conducted in a northern Manitoba First Nation found an alarming Vitamin C, deficiency rate. On average dietary intake was less than **1/71** the recommended ***Required Daily Allowance***.
- The tuberculosis death rate in this community then stood at **1,400** per 100,000 in comparison to **27** per 100,000 in the mainstream Canadian population (i.e. over **50 times** the general population rate.)



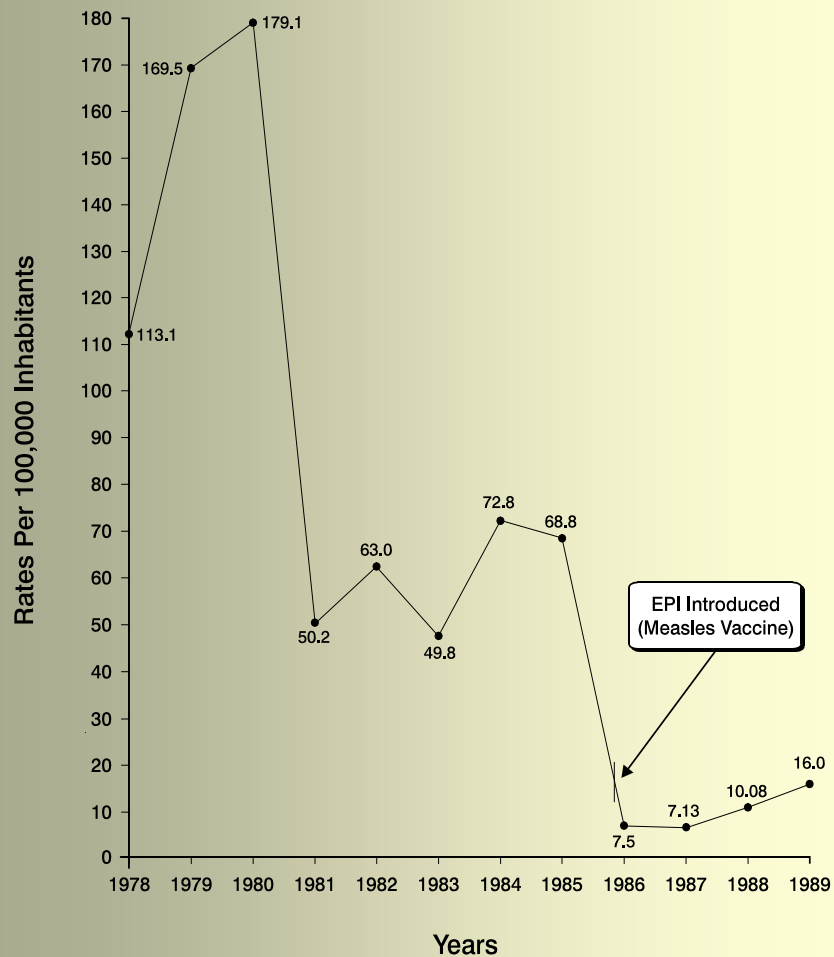
England & Wales: Mean Annual Death Rate of Children Under 15 Due to Measles



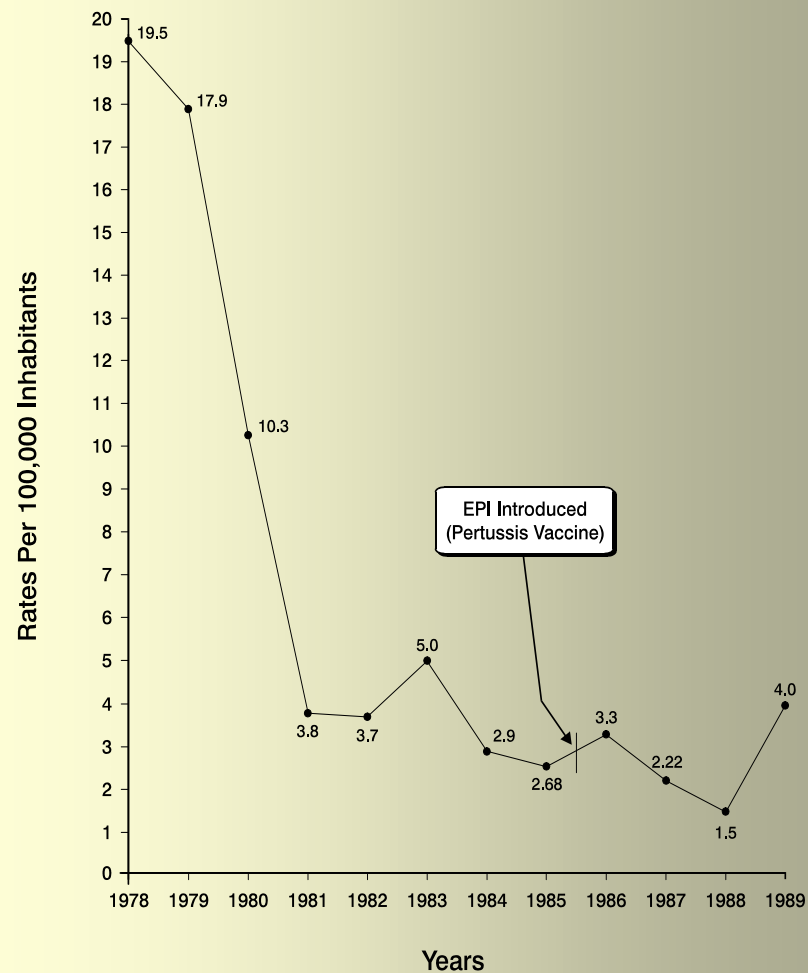
England 1855-1964: Decennial Death Rates From Respiratory Tuberculosis



Dominican Republic: Measles 1978-1989



Dominican Republic: Pertussis 1978-1989



Are Vaccines Really Working?



- In the period of 1997-2000 TB among First Nations (on-reserve) & Inuit was estimated to be “*25 times higher than the Canadian-born, non-Aboriginal rate*”. Since BCG has been widely administered to Aboriginal peoples since the mid 20th century, why are TB infection rates still excessively high, 50 years later?
- A recent study of First Nations in western Canada shows that “*Disseminated BCG infection increases mortality among children with immunodeficiency disorders.*” i.e. an increase in Aboriginal childhood deaths are occurring due to the BCG vaccine.

Documented Ineffectiveness of BCG



- A 2005 article published in the Canadian Respiratory Journal concluded that “*BCG vaccinated Aboriginal people were no less likely to have active TB from recently transmitted disease.*”
- Separate & massive multi-year trials in both South Asia & Africa found that the number of persons contracting Tuberculosis were actually higher in the BCG vaccinated groups, than in placebo, or the non-vaccinated groups.

Multiple Vaccines & Efficacy

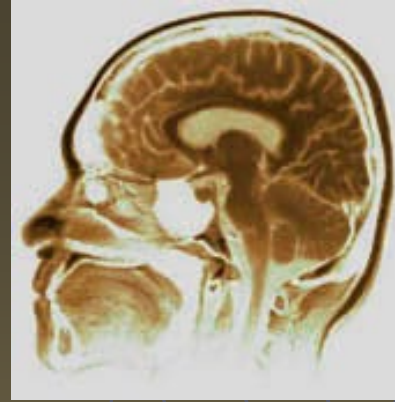


- Apart from recipients of BCG, a wide spectrum of vaccines are routinely administered to First Nations, Inuit & Metis (particularly infants & small children). These include: DPT, OPV, IPV, MMR, HBV & Influenza (flu).
- Separate research findings recently published in the *British Medical Journal*, the *Journal of American Physicians & Surgeons*, & the journal *Vaccine* (Univ. of Ottawa team) have documented that mass flu vaccine campaigns are having no impact in terms of preventing influenza.

Concerns on Administering Multiple Vaccines

- Board certified neurosurgeon Russell Blaylock (Associate Editor of the ***Journal of American Physicians & Surgeons***), notes that *“In the very young, the nutritionally deficient & the aged, overstimulating the immune system can have an opposite effect, it can paralyze the immune system...”*
- Known toxic metals placed in vaccines such as thimerosal (mercury), aluminum, & fluoroaluminum directly interfere with brain metabolism & antioxidant enzymes, causing damage to DNA & DNA repair enzymes, & triggering excitotoxicity.

Concerns on Administering Multiple Vaccines



- Recent studies reveal that vaccine antigens & adjuvants which cross the blood-brain barrier, cause secretion of cytokines & chemokines. The release of cytokines causes:
 - Confusion
 - Language difficulties
 - Disorientation
 - Seizures
 - Memory problems
 - Somnolence
 - Irritability & combativeness
 - Mood alterations
 - Difficulty concentrating
 - Varied behavioral problems
- The microglia also release large quantities of glutamate & quinolinic acid, which are destructive to brain cells & their connecting processes.

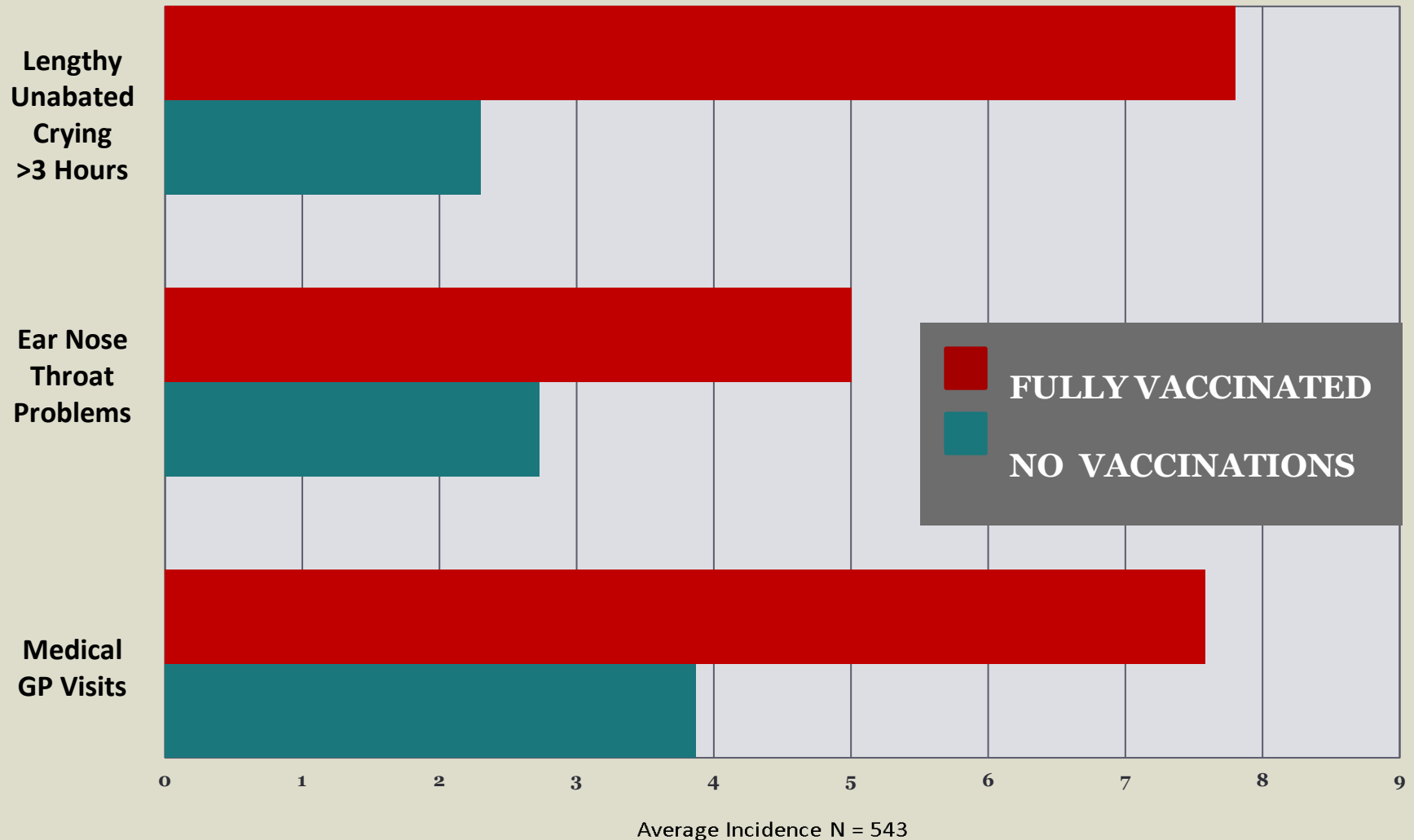
Concerns on Administering Multiple Vaccines



- ▶ Triggered neuro-degenerative processes include destruction of synaptic connections, dendrites & the onset of abnormal pathway development in the developing brain, as well as in the adult brain.
- ▶ Regarding the practice of administering numerous vaccines to infants & small children, Blaylock warns that multiple “*studies have shown **conclusively** that such a practice can lead to severe injury to the brain by numerous mechanisms. ...from the third trimester of pregnancy until age 2 years, [a child’s] brain is at **considerable risk** from this... policy.*”

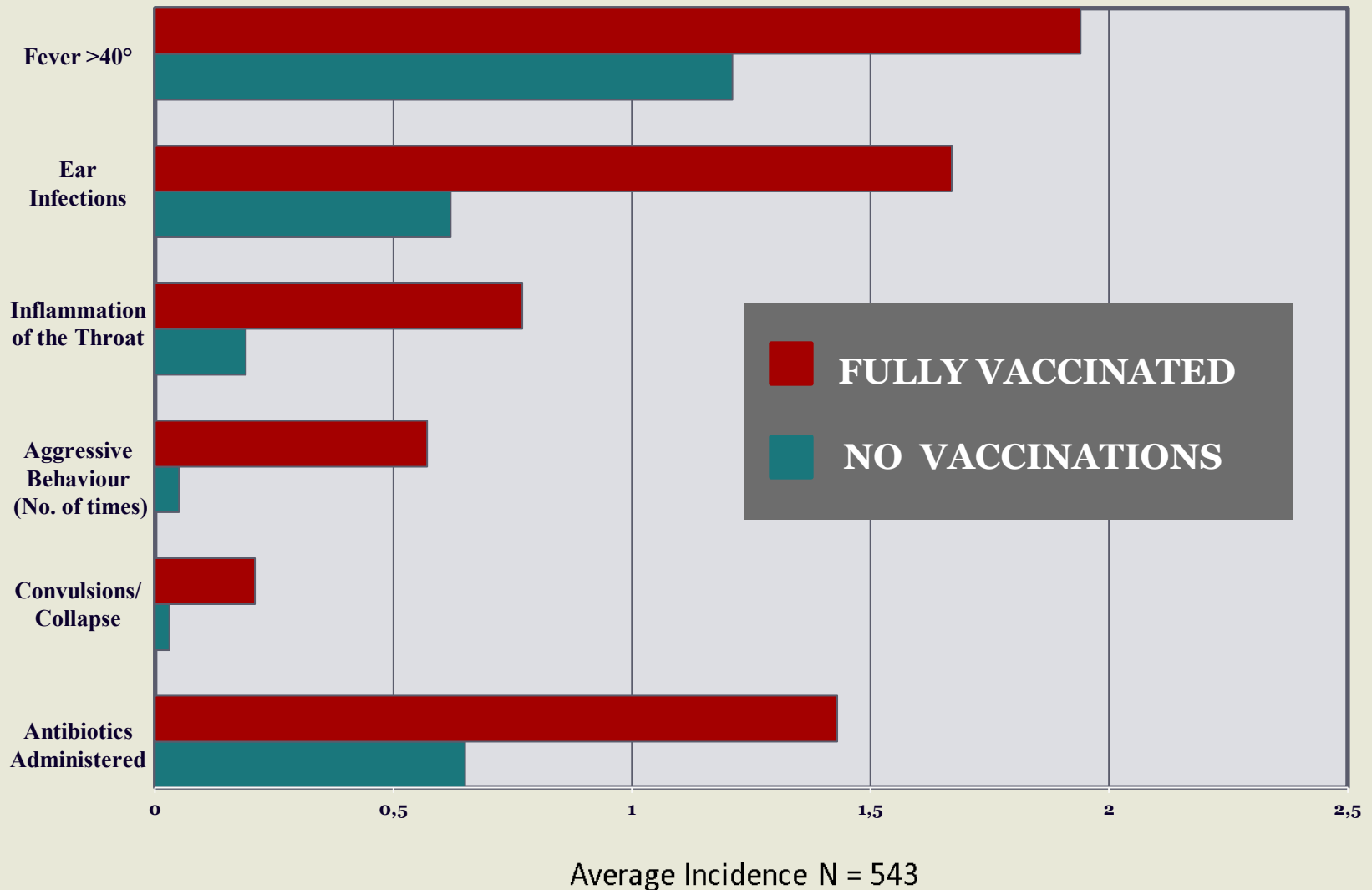
Average Incidence in First 5 Years of Life

Nederlandse Vereniging Kritisch Prikken 2004 Survey Findings



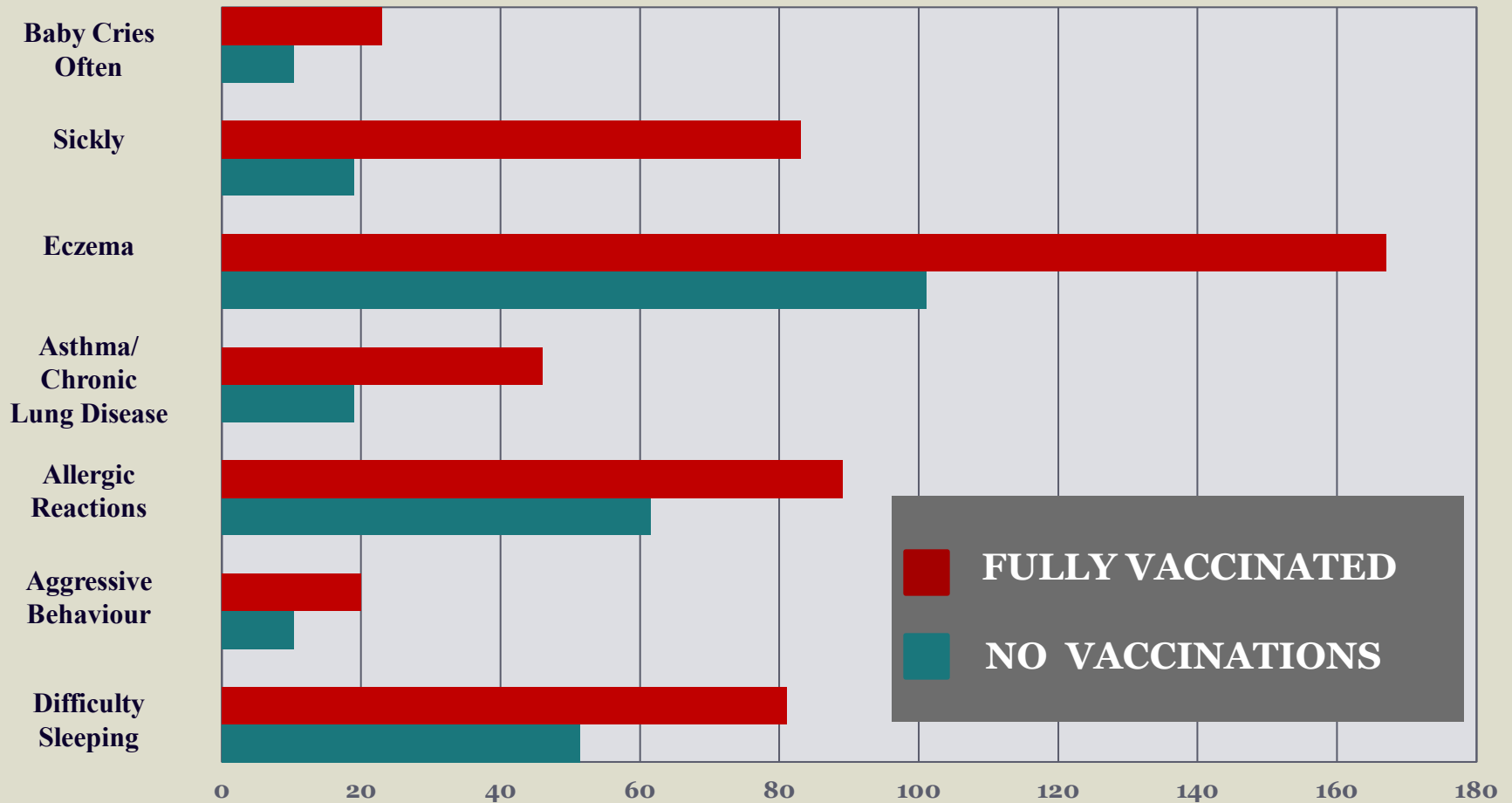
Average Incidence in First 5 Years of Life

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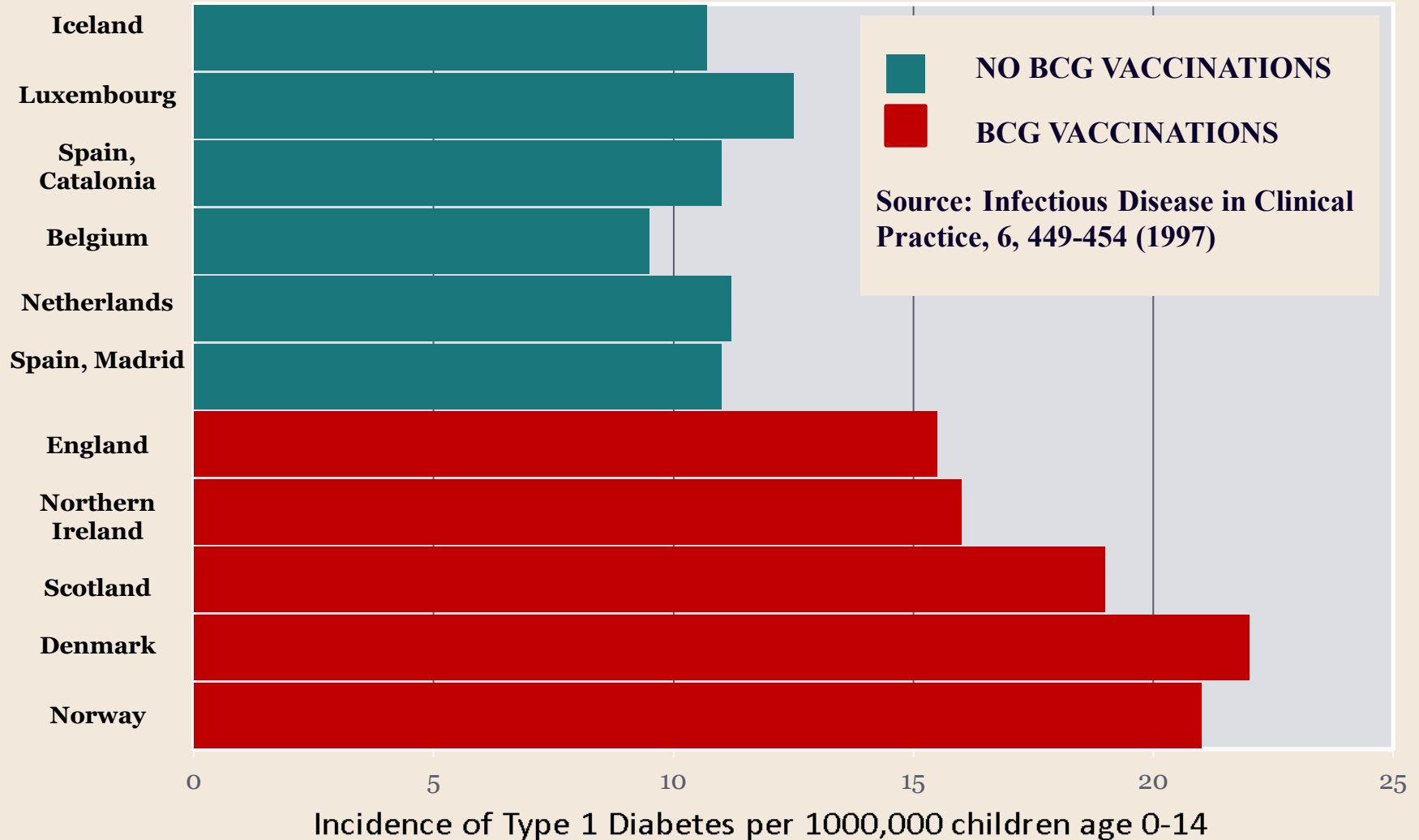
Absolute Incidence N = 543

Nederlandse Vereniging Kritisch Prikken 2004 Survey Findings



Absolute Incidence (Non-Vaccinated to Vaccinated = 231 to 312 per group respectively)

BCG at School Age Associated with Increased Diabetes Risk



Inter-Sectoral Prerequisites of Health

- Uncontaminated Natural Environment
- Outdoor Exercise
- Potable Water
- Organic Whole Foods
- Adequate Housing
- Sound Sanitation
- Practical Education of Mind, Body & Spirit
- Meaningful Employment.



Community Infrastructure Issues



The *Royal Commission on Aboriginal People* (early 1990s) found that compared with the mainstream population, homes lived in by Aboriginal individuals/families are:

- Twice as likely to be in need of major repair (19.6% versus 9.8%)
- 90 times more likely to have no piped water supply (9.4% versus 0.1%)
- 5 times more likely to have no bathroom facilities (3.2% versus 0.6%)
- 10 times more likely to have no flush toilet (5.3% versus 0.5%)

Community Infrastructure Issues



- As of 2005, across Canada in First Nation communities there existed a “housing shortage of between 20,000 & 35,000 units.” The shortfall is growing by an estimated 2,200 units a year.
- New Federal commitments over the next five years, combined with Canada Mortgage & Housing Corporation (CMHC) will fall short of even keeping up with the estimated new unit requirements.

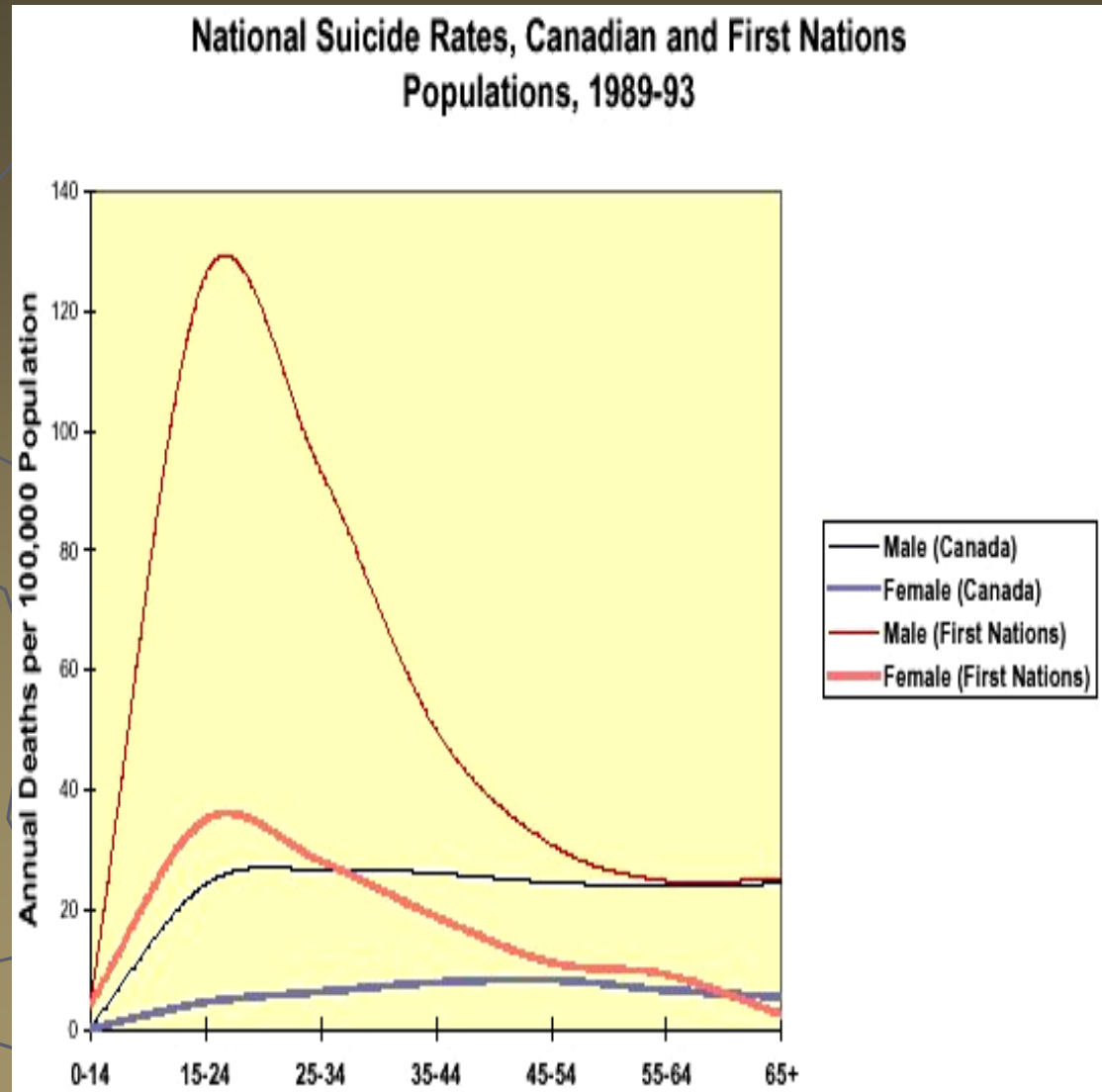
Community Infrastructure Issues



- Federal assessments in 2003 indicated that nearly 30 percent of all First Nations' water systems are at “*high risk*” to contamination & pose a “*high risk*” to human health.
- Currently, more than 100 First Nations communities are under “*boil water*” advisories.

Aboriginal Suicide

The suicide rate among Aboriginals of all ages is between three & four times higher than among non-Aboriginals. This rate is the highest reported for any culture group in the world.



Are High Suicide Rates Reversible?



Optimal nutrition appears to play a significant role in reversing behavioral pathologies.

- In a 1983 study of 3,000 incarcerated teenagers, highly refined & junk foods were replaced with natural whole foods. During the year in which the teenager's diets were changed, violent & anti-social incidents decreased significantly. This included a:
 - 75 % reduction in use of restraints &
 - 100 % reduction in suicides.

Reversing Degenerative Diseases

A major review study published in the *Journal of Applied Physiology* (2005) confirmed that basic dietary changes & moderate increases in physical exercise can prevent or markedly reverse degenerative diseases, including Type II Diabetes.

“Overwhelming evidence... over the past 20 years from a variety of sources, including epidemiological, prospective cohort, & intervention studies, has documented that... combined activity & diet interventions can mitigate progression of chronic disease & in fact reverse existing disease.”

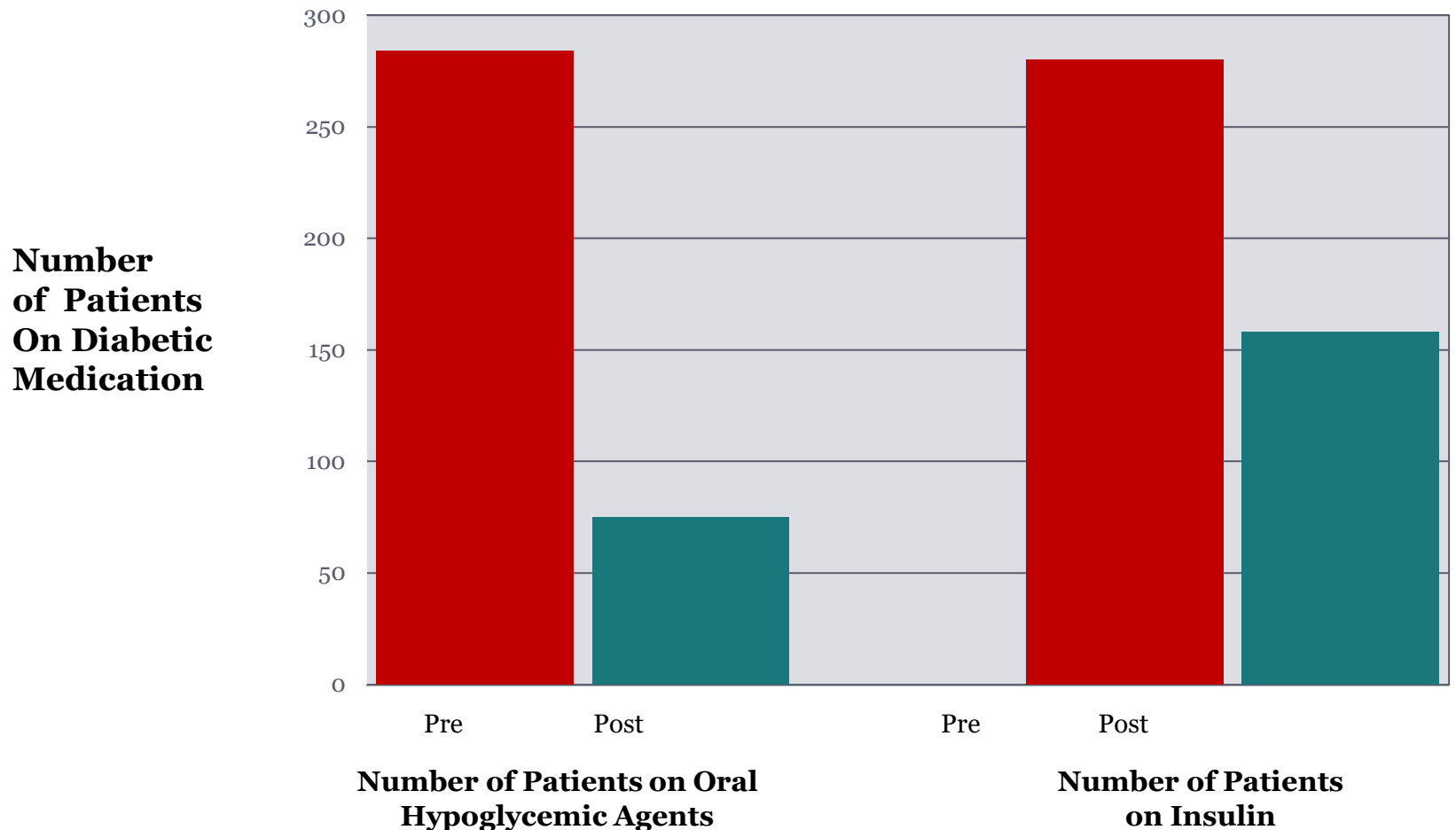
Reversing Degenerative Diseases



Thousands of chronically ill have entered **Weimar Institute**'s NEWSTART Lifestyle Medicine Program in California which combines whole food plant based nutrition & progressive exercise.

- **50%** of participants with type 2 diabetes return to normal blood sugar levels without need for medication in as little as three weeks time.
- **80%** of cases diagnosed with diabetic neuropathy experience no more pain in their hands & feet.
- **80%** of men are able to obtain normal blood pressure readings without any need for further medication.
- A drop of **25%** in cholesterol commonly occurs.
- An increase in exercise capacity of **35%** is the norm.

Reduction in Diabetic Persons Requiring Medication After 3 Weeks *Pritikan Lifestyle Intervention Program*



Heart Disease



In An Overdue Requiem for Palliative Cardiology, cardiologist Caldwell Esselstyn clarifies that the aggressive interventions of coronary artery bypass graft, atherectomy, angioplasty, & stenting, do not reduce the frequency of new heart attacks, or prolong survival except in small subsets of patients.

1. By-pass surgery does not treat the small unstable juvenile arterial plaques which are prone to rupture & actually cause over 85% of heart attacks.
2. The procedures do not treat life threatening plaques & carry risks of new heart attacks, strokes, infections, encephalopathy, & mortality.

Coronary Angiograms:
Distal left anterior
descending artery
before (left) & after
(right) 32 months on a
plant-based diet without
cholesterol-lowering
medication, showing
profound improvement.

C. Esselstyn:

http://www.heartattackproof.com/resolving_cade.htm



Nutrient Therapy in Cancer

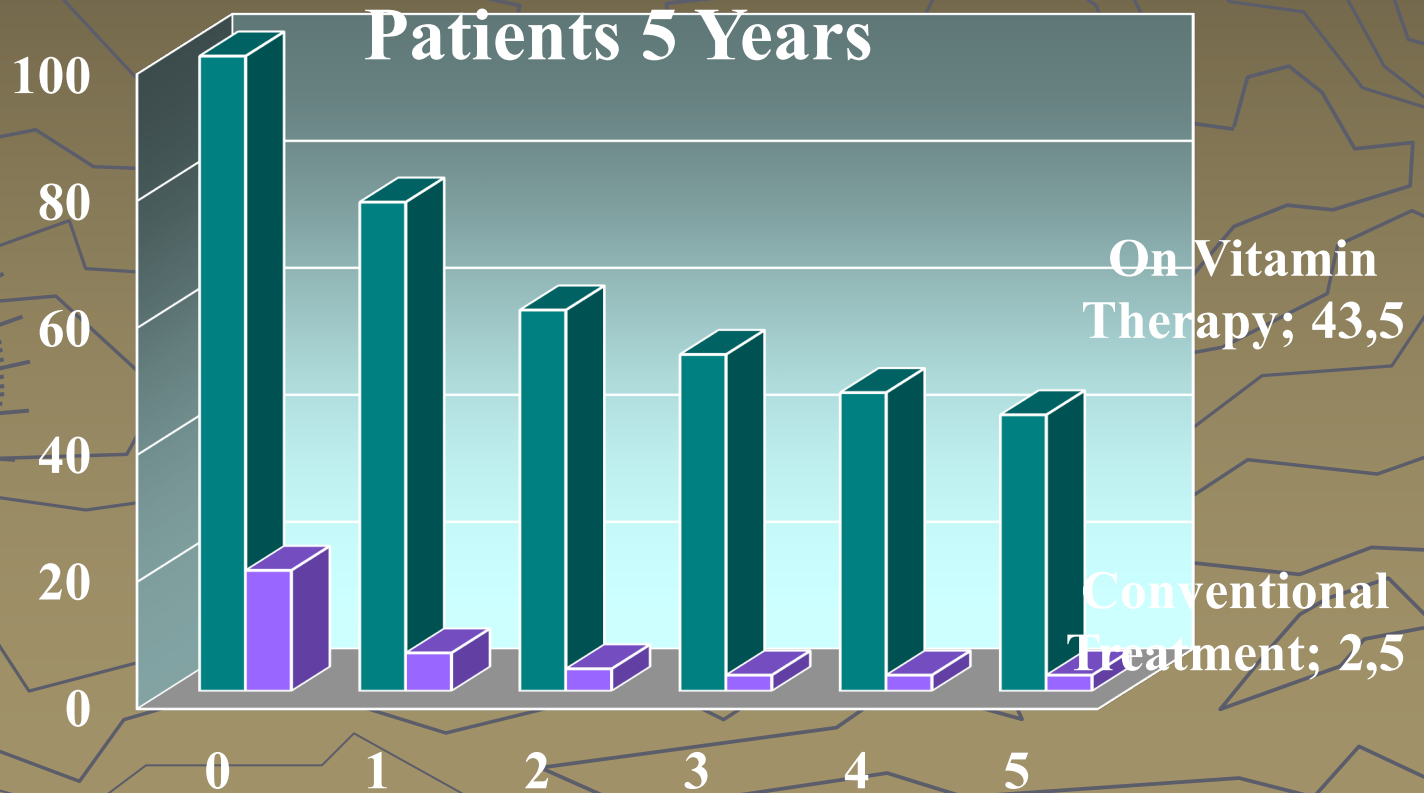


A landmark 2005 study published in the proceedings of the **U.S. National Academy of Sciences** highlights the fact that Vitamin C (ascorbic acid) should be explored as a highly safe & potent agent in the treatment of cancer.

▶ *“Our data show that ascorbic acid (Vitamin C) selectively killed cancer but not normal cells, using concentrations that could only be achieved by i.v. administration & conditions that reflect potential clinical use... Because i.v. ascorbate is easily available to people who seek it, a phase I safety trial in patients with advanced cancer is justified & underway.”*

Canadian physician Abram Hoffer conducted a clinical longevity study on 120 cancer patients with a variety of cancers. **101** received vitamin therapy (including high dosage Vitamin C) compared with **19** patients who underwent conventional medical treatments.

Effect of Treatment on Survival of Cancer



AIDS Therapy?

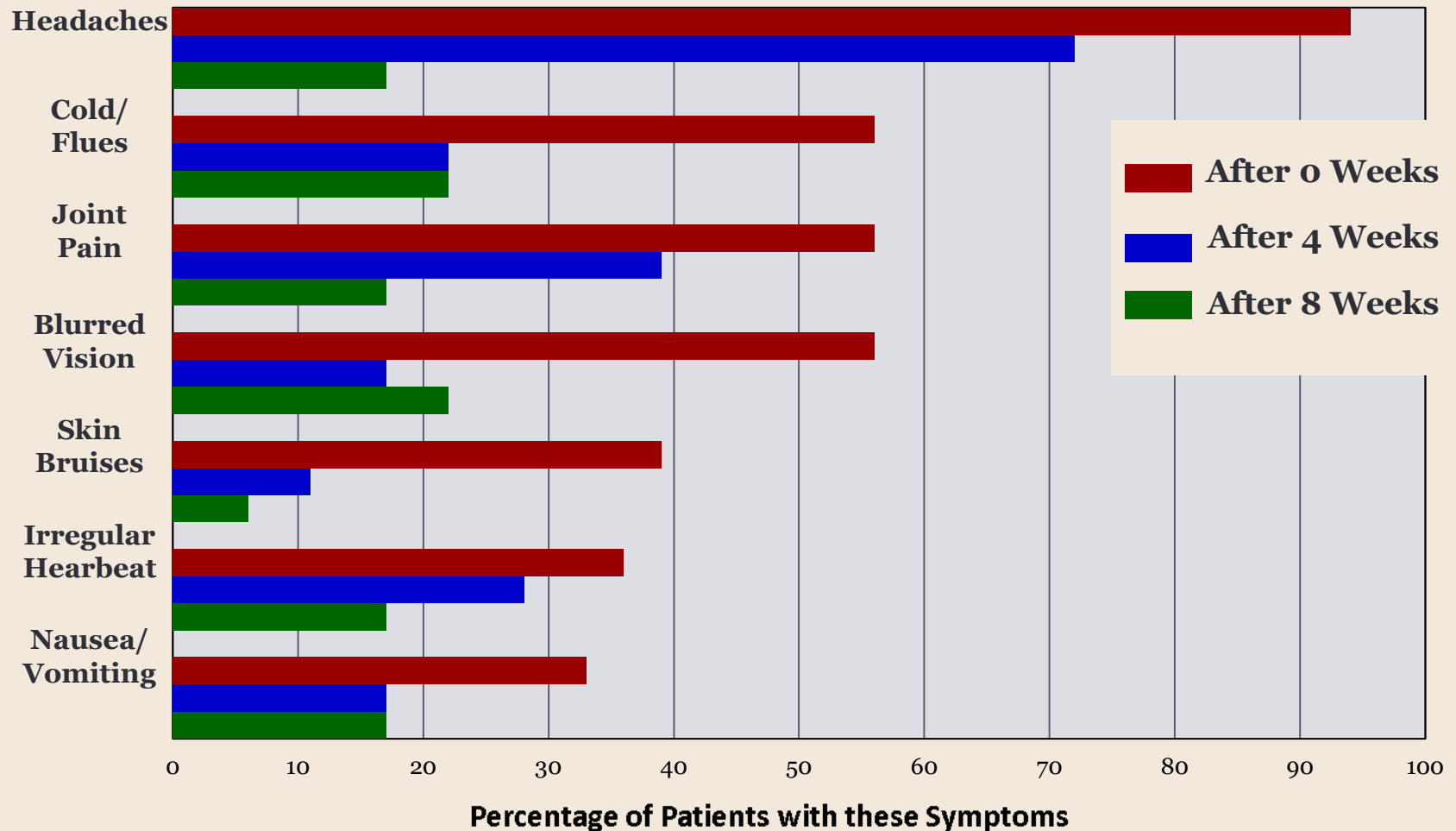


Helene Gayle, President of the **Intl. AIDS Society** & Co-Chair of the *XVI Intl. AIDS Conference* comments on *Lancet's* 2006 synthesis report on the treatment trials of hundreds of clinicians using *Highly Active Anti-retroviral Therapy* (HAART) on 20,000 previously untreated AIDS patients (1995-2003, at 12 locations in Europe & North America):

"...have further therapeutic advances for HIV translated into continued declines in disease outcomes?... The major findings are that...there were no significant improvements in early immunological response as measured by CD4-lymphocyte count [T-Helper cells], no reduction in all-cause mortality, & a significant increase in combined AIDS/AIDS-related death risk in more recent years."

South African Eight-Week Pilot Micronutrient Clinical Treatment Program *Involving 100 Advanced AIDS Cases*

Clinical Effects of Nutrient Therapy in HIV/AIDS Patients

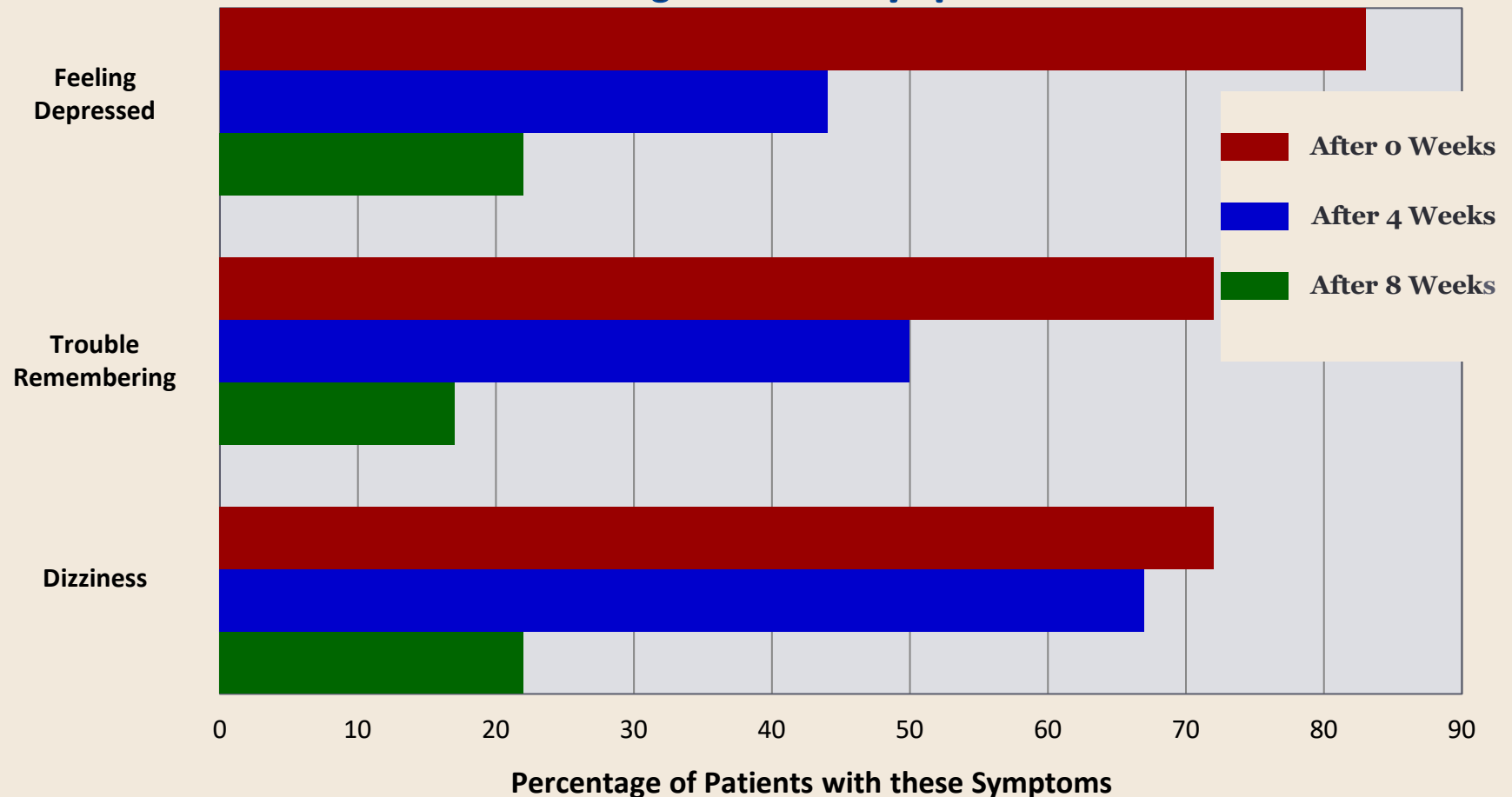


South African Eight-Week Pilot Micronutrient Clinical Treatment Program

Involving 100 Advanced AIDS Cases

Clinical Effects of Nutrient Therapy in HIV/AIDS Patients

Changes in Mental Symptoms



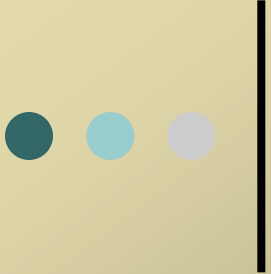


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<http://curtis.library.northwestern.edu/toc.cgi>