HISTORICAL AND SCIENTIFIC PERSPECTIVES ON THE HEALTH OF CANADA’S FIRST PEOPLES

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INTRODUCTION

This paper affords an overview on the health history of the first peoples of Canada, extending from the pre-contact era up to the present time. Today these Aboriginal peoples number just over 600,000 comprising First Nations (North American Indian), 45,000 Inuit, and 290,000 Métis. It presents critical scientific observations pertaining to the health history of these peoples, and challenges some of the common assumptions surrounding this history. It additionally offers practical insights on the kind of measures which will help to restore Aboriginal peoples to the high levels of health that their forbears once enjoyed. It has been prepared as background reading text for a course on Cultural Competency in Health services. Background issues related to traditional Aboriginal medicine and midwifery are addressed in a separate background paper.

The reader will find that the content is somewhat unusual and stimulating because the historical and scientific research on which it is based, as well as the conclusions reached, in some respects depart from the tenets and assumptions of mainstream thinking. It was deemed important that the reader be afforded with a wide diversity of viewpoints crossing multiple disciplines and sectors, all of which has been integrated into a traditional Aboriginal worldview. In taking this approach it is well understood and anticipated that not everyone will readily agree with all of the observations and conclusions presented. Nonetheless, every reader will benefit from having been exposed to insightful and truly challenging perspectives on the issues under discussion.
In examining the unique history of the health of Aboriginal peoples in Canada, including some highly relevant cross-disciplinary controversies in science, it was considered instructive and corroborative to also give limited consideration to the parallel experiences of Indigenous peoples who have been similarly subject to the impacts of colonization in other regions of North America and the world. As we document this unique segment of Canadian history and delve into exploring the troubling questions that it raises, there will come into view the blueprint for remaining atop the dark seas of disease and concomitant suffering that has engulfed so many. It will also be seen that it is not only possible, but imperative for Canada’s first peoples to reclaim the legacy of health and long life that they once enjoyed.

SECTION I. HISTORICAL PERSPECTIVES

1.1 THE FORGOTTEN LEGACY OF CANADA’S FIRST PEOPLES

It is axiomatic that the past has a lot to say about the present. This is particularly true when it comes to understanding issues which enfold the health of Canada’s First peoples. It has been aptly observed that there are multiple benefits to be realized when we include:

... history in public health research. First, we may learn about the impact of health changes on Aboriginal groups in the past. Second, we may better understand the origins of present day health concerns, many of which emerged out of the events of the recent or not so recent past. Finally, we may gain important insights into the nature of the disease process, and the diseases themselves, by employing the past as a laboratory. The addition of an historical approach can enhance health research directed towards First Nations... [Another] benefit provided by historical research is that it can complement contemporary enquiries by addressing the roots of some of the most pernicious or persistent health problems in Canada today. ¹

Aboriginal Health in Canada has become the primary and definitive university textbook on the health history of Canada’s first peoples. The second chapter of this book entitled “Health and disease in the pre-contact period” begins by affirming that “one of the most important questions to be addressed in any history of health and disease among Aboriginal Canadians concerns the extensive period of time before sustained European contact.” Obviously the “New World” contained fungal, parasitic and bacterial sources in the environment and food supply that to a limited extent adversely affected the well being of its inhabitants, and this is freely acknowledged. However, the very questionable conjecture is made by the authors that despite multiple studies depicting the “people of the Americas as relatively healthy and disease-free prior to European contact... there is no reason to believe that transmissible diseases were absent in the pre-

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¹
contact period or that they do not take a substantial toll of human life from time to time in various communities.”

This sweeping conclusion is reached despite the fact that “…skeletal and dental remains provided the best clues to past diseases” and “Infectious diseases such as measles, smallpox, scarlet fever, and influenza to name a few, are important infectious diseases which cannot be detected in bone.” It is also widely recognized that there is the complete absence in any historical record of initial contact with the first peoples of the Americas (anywhere in the entire western hemisphere) of there being any observable disease epidemics among them. Moreover, the textbook notes that “dental pathology” is considered a trustworthy marker of “disease loads and nutritional stress,” and goes on to observe that the “Dental health in the pre-contact period also seems to have been quite good, with dental caries affecting less than 1 percent of all teeth.” Peculiarly, the coverage given in this textbook to the pre-contact period focuses with virtual exclusivity on infectious disease, and basically ignores the vital issue of the marked absence of degenerative “civilization” diseases among Canada’s first peoples during this extensive period.

In the scale of human history it was not too long ago that the first peoples of Canada enjoyed full occupancy and free use of the land, with their individual communities enjoying the pride, integration and dignity that come from independence and self-reliance. This manner of living necessitated a close harmony with nature and a system of hygiene, nutrition and healing based upon its laws. Indeed, Canada’s early peoples possessed a way of life that ensured peak fitness and balanced physical and social development. Indeed, their societies were without need for clinics, mental hospitals, and prisons. The first European contacts universally acclaimed the health, well-being, and vigour of the native peoples they met. Well documented pre-Columbian archeological and paleopathological evidence, coupled with the reports of initial and very early historical encounters without exception portray the indigenous peoples of North America as having been exceptionally healthy and vigorous. Although these reports are partly reflective of the contrasting low health status of early European explorers, they nonetheless evidence a level of health and well being that is seldom observed in the modern world.

One of the earliest post-Columbian observations was made by the late 16th century French scholar Michel Eyquem de Montaigne who put into writing the reports of early French explorers. He wrote: “As my testimonies have told me, it is verie rare to see a sicke body amongst them, and they have further assured me, they never saw any man there either shaking with the palsie, toothlesse, with eies dropping, or crooked and stooping through age.”

A Dutch account given in the late 1770s relates that “it is somewhat strange that among these ... people, few or none cross eyed, blind, crippled, lame, hunch-backed, or limping men; all are well fashioned people, strong and sound of body, well fed, without blemish.” In French Canada,
the Baron de Lahontan reported that: “The savages are a robust and vigorous sort of people, of a sanguine temperament, and an admirable complexion ...unacquainted with a great many diseases that afflict the Europeans, such as the gout, gravel, and dropsy, etc. Their health is firm, notwithstanding that they use no precaution to preserve it.”  

Historian George B. Grinnell concluded that the “struggle for existence weeded out the weak and the sickly... and created a race physically perfect and mentally fitted to cope with the conditions which they were forced to meet, so long as they were left to themselves.”  In his examination of pre-Columbian life in southwestern North America Hewett affirms that: “In bodily proportions, colour, gesture, dignity of bearing, the race is incomparable. It was free from our infectious scourges, tuberculosis, and syphilis, and the resulting physical deformities and mental degeneracies. It was probably free from leprosy, scrofula, and cancer, and it is safe to say that nervous prostration was unknown to the Indian.”

William Wood in describing early contact with the original inhabitants of the northeastern woodlands of North America spoke of them possessing "lusty and healthful" bodies which did not experience “those health wasting diseases which are incident to other countries [such] as fevers, pleurisies, calentures, agues, obstructions, consumptions...convulsions, apoplexies, gouts, stones, tooth-aches, measles or the like.” He reported that most of them reached fifty before a “wrinkled brow or grey hair” betrayed their age and that they spun out the thread of their days to fair length, numbering threescore, fourscore, some a hundred years.

John Ross’s 1830 encounter with the Inuit in the far north was typical of the many early contact reports on North American Indians. He speaks of this people as “occupying so apparently hopeless a country, so barren, so wild, and so repulsive; and yet enjoying the most perfect vigour [and] the most well-fed health.”

Paleopathologist Ales Hrdlicka comments that:

The skeletal remains of unquestionably pre-Columbian date are, barring few exceptions, remarkably free from disease. Whole important scourges were wholly unknown. There was no pathologic microcephaly, no hydrocephaly. There was no plague, cholera, typhus, smallpox or measles. Cancer was rare, and even fractures were infrequent. There was no lepra [leprosy]... there is as yet no a single instance of... pre-Columbian syphilis. There were, apparently no nevi [skin tumors]... no troubles with the feet, such as fallen arches. And judging by later acquired knowledge, there was a much greater scarcity than in the white population of many diseases of the skin, of most mental disorders, and of other serious conditions.

Writing in the late 1800s Daniel Brinton refers to the advanced physical condition of the Iroquois people in which he says “They were unsurpassed by any on the continent, and I may say be any in the world.” This is corroborated by Grinnell who notes that out of the several hundred
thousand soldiers of the Union army in the U.S. civil war “...the five companies (500 men) recruited from the Iroquois of New York and Canada, during the Civil War, stood first on the list among all the recruits of our army, for height, vigour, and corporeal symmetry.” 13

Physician Eric Stone speaks of the incredible abilities of North American Indians to recover from severe wounds and accidents.

Suffice it, that all military and medical observers who came in contact with the Indians agree that they recovered more rapidly than the white from most wounds, and many recovered from wounds which would have been fatal to the white man ... gunshot wounds of the bladder were invariably fatal to the white, [however] the Indians seemed to suffer this accident with impunity. Loskiel examined a man whose face had been torn away, his rib cage crushed, limbs ripped and the abdomen disemboweled by a bear, yet had been able to crawl four miles to his village and 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. 14

Research commissioned by the National Commission Inquiry on Indian Health, which undertook a careful review of various studies on this issue, corroborated Hrdlicka’s findings, i.e. that pre-contact North American Aboriginal peoples were spared from most of the infectious, deficiency and degenerative diseases that have come to plague these peoples since first European contact. What follows is an overview of findings on the patterns of sickness and/or disability which evidentially occurred during the pre-contact era.

- Trauma was likely a primary cause of injury and sometimes death. The harshness of wilderness life undoubtedly involved dangerous encounters with aggressive wildlife, hunting accidents, exposure to cold, and drowning, coupled with the possibility of aggression by competing neighboring tribes.
- Acute starvation would have occurred occasionally in some geographic areas, but not as frequently as was the case during the post-contact period when unsustainable depletion of fish and game begin to occur. Nutritional deficiencies were rare, and would be limited to certain areas during times of extended drought, or other inimical climate phenomena.
- The chronic degenerative diseases, especially those usually associated with old age, would have been infrequent. Mental and neurological diseases, heart disease and arteriosclerosis were rare. Some arthritis did occur amongst the elderly. Cancer was rare, if present at all.
- Some eye disorders occurred, but myopia, now very common amongst Aboriginal people, was virtually absent.
- Most infectious diseases were absent prior to European contact, including scarlet fever, typhoid, diphtheria, smallpox, measles, mumps, influenza, and venereal diseases. Infectious disease - to the degree it existed - did not cause significant morbidity, or threaten their host’s survival. Intestinal parasites would have fit this pattern. Minor respiratory ills may have occurred as well. 15
Speaking of peoples who once pursued or still pursue their traditional lifestyles, it can be said that “relative freedom from degenerative disorders or diseases was, and still is, characteristic of all societies of hunter-gatherers… [and] in the societies of hunter-gatherer agriculturalists.” This remains true despite notable differences in plant-animal subsistence ratios of various indigenous peoples.

Canada’s first peoples who practiced agriculture relied heavily on the planted maize, beans, squashes, pumpkins, and melons of the fields, and the peach orchards. Additionally, the wild grass, seeds, nuts, fruits, and roots and the products of the traps or the chase supplemented their diet, whereas the latter nutrient supplementals served as the primary food sources for the more strictly hunter-gatherer peoples. Among all tribal peoples the knowledge of and ability to identify, gather, prepare and utilize the edible and the healing plants of the environment was commonly passed down from the parents to the children.

Through successive generations this traditional knowledge of plant varieties and uses grew and expanded. Among the agriculturists there is evidence that these peoples understood such principles of modern agricultural and plant science as crop rotation, organic fertilization and photosynthesis. Additionally in virtually all geographic regions there was an apparent practical knowledge of the body's nutritional needs for various vitamins and mineral elements, and how to obtain them. This included the use of supplemental foods rich in Vitamin C (for scurvy), Vitamin A (for xerophthalmia), Vitamin D (for rickets), along with other nutrient supplements for increased fertility and improved gestation.

With a traditional way of life closely in harmony with the natural world, the physical development of North America’s first peoples were remarkably parallel to and reflective of their social and spiritual life. It is becoming increasingly understood that man's psychological and spiritual condition forms the essential underpinning and motivating force for the integrated development and sustenance of his physical, mental and societal health. The body was regarded as a temple of the spirit and upon this truth was built a rigid system of physical training, and a social and moral code that was considered the law of life. There was aroused in children and youth a high ideal of physical strength and beauty, the attainment of which depended on strict self-control in eating and in sexual relations, together with severe and persistent exercise. He/she was required to fast from time to time and to engage in hard running, swimming and vapour bathing in sweat lodges.

For sheer physical endurance the indigenous peoples of the Americas were historically without peer, attaining a level of vigour and strength that would put to shame the strength and power of civilized man. The most famous runner of ancient Greece was Pheidippides whose record run from Athens to Sparta was 140 miles in 46 hours. Seton mentions that he saw 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 ‘a good boy,’ ‘pretty good run’. It was
Running Antelope 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 and ran down an antelope in a “straight-away race lasting 5 hours.”

Research also indicates that the Inca “Chasqui” relay runners were unparalleled. "At a time when Rome was boasting of an unheard speed in delivering messages at a rate of 100 miles a day, the Inca runners were putting fresh fish on the table of the Emperor at Cuzco 242 miles from the sea in one day. This was no level journey; the runners ran up their stair-step roads from sea level to 11,000 feet elevation.”

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It is only reasonable to conclude that as the basic requisites of life and health are provided for, uninterrupted health represents in reality humanity's normal condition.

A healthy birth, a robust and happy infancy, a joyous youth, a vigorous maturity, a calm old age, and a painless death are the normal state of man…. Every pain we feel, every distress we suffer, is evidence that some law of life has been violated. We are so accustomed to being in poor health and living in a sea of death that we have set up and accepted a false standard of health. It implies bad conditions are healthy ones. The evolution of civilization, taking directions dictated by the forces of exploitation, has taken us away from the sources of vigour and the means of health and has brought us to our present state of weakness and disease.

1.2 Loss of the Great Legacy of Health

The textbook Aboriginal Health in Canada affirms the points just covered, wherein it states that the “recollections of Aboriginal people” of the time before European contact, speak of conditions among their people where “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.” It is also pointed out that during the fifteenth and early sixteenth centuries as fisherman and early explorers plied the northeastern waters along the Atlantic coast of Canada, there is virtually no historical commentary on the existence of disease or epidemics among the Aboriginal peoples. Since the prime purpose of this early contact was to commercially exploit natural resources, any visible evidence of the physical weakness or sickness of the indigenous inhabitants would surely have excited some keen interest.
The first historically recorded outbreaks of infectious disease occurred among the Montagnais, Algonquins and Hurons of the St Lawrence and Ottawa Valleys between 1734 and 1741. Keep in mind that Champlain’s first settlement at Quebec on the St Lawrence River in the year 1608 preceded these outbreaks by over 100 years. It wasn’t really until the 1800s and onward, that “smallpox, measles, influenza, dysentery, diphtheria, typhus, yellow fever, whooping cough, tuberculosis, syphilis, and various unidentifiable “fevers” are seen as prevalent among the Aboriginal population in the historical record. 24

With the intrusions of the European settlement came the loss of traditional lands, resources and livelihoods and the consequent impositions of a foreign lifestyle. Thus the vital knowledge of and oneness with the natural world was in many respects weakened and in some cases severed. Research of the National Commission Inquiry on Indian Health observed that “Had the Indian people been able to continue their traditional life practices, the adverse effects of European encroachment would have been considerably lessened.” It was found that these traditional patterns, were instead significantly eroded beginning with the very first trading contacts. The fur trade introduced exploitative commerce to the wilderness, and while the Aboriginal economy had been based on local exchange and the sharing of wealth, Euro-Canadian activities involved exploitation and the removal of resources for distant shareholders and consumers. Aboriginal peoples were now motivated to hunt beyond their subsistence needs, in order to trade against food staples and store items that became an increasingly important part of their lifestyle. Intensive competition between Aboriginal nations arose as a result of the trading, and conflicts that had previously been only minor in nature now became more intensive. 25

By the 1820's, the combination of intensive trapping and natural calamities had largely destroyed the fur resource base of the parklands of the western interior of Canada, and in the adjacent forested territory, furs and big game populations were also dwindling. This seriously affected availability of food and the availability of skins to make clothing and footwear. Tribal peoples largely dependent upon the buffalo were not as greatly affected until the early 1870s, by which time commercial exploitation and other factors had seriously diminished their numbers. Much of the same pattern of resource deprivation was faced by the maritime and river Indians of the west coast, where the salmon fisheries were significantly depleted by the mid-1800's. In all regions, this decline in resources lead to great hardships, which served to intensify the poverty-disease cycle, especially among those groups still seeking to rely upon hunting or trapping. 26

The transformation of Aboriginal people from the state of good health that had impressed travelers from Europe to one of ill health... grew worse as sources of food and clothing from the land declined and traditional economies collapsed. It grew worse still as once-mobile peoples were confined to small plots of land where resources and opportunities for natural sanitation were limited. It
worsened yet again as long-standing norms, values, social systems and spiritual practices were undermined or outlawed.  

In the overwhelming encroachments of techno-materialistic Euro-civilization, the self-sufficient and more nature-based culture of Canada’s first peoples was largely supplanted by a new and ultimately damaging dependency on alien ways and goods. Indeed, as we trace the pages of history we find in the historical record on Canada’s first peoples a tragic transformation from a legacy of self-sufficient economies and outstanding health, to conditions of widespread dependency and infectious diseases which were to be followed in the 20th and 21st centuries by the onslaught of the degenerative “civilization” diseases.

Aboriginal Health in Canada’s chapter titled “Contact with Europeans and infectious diseases,” affords a compelling case for linking the early commercial trade centres and the trading routes with the more serious epidemic outbreaks.

Trade centres often became the nucleus for disease outbreaks and central points of diffusion of epidemics to the hinterland. This is because they represented points of convergence between Aboriginal people and Europeans and their pathogens creating conditions conducive to the spread of infection… Trade centres also attracted long-distance Aboriginal trading partners… Exchange networks, centred on trading posts, created routes for the spread of contagion… York Factory and Norway House were central to the movement of pathogens through the region. Boat, canoe and cart brigades linked these two trade centres to a large network of HBC [Hudson’s Bay Company] throughout the western interior. Both Norway house and York Factory experienced more epidemics than other, less central posts…

1.3 THE POPULARIZED CONCEPT OF “VIRGIN SOILS” RECONSIDERED

A correct perspective on and resolution of the question of what is the real cause behind human infectious disease, becomes highly relevant and timely to a correct understanding of these post-contact epidemics that proliferated among Canada’s first peoples. Is it not far more reasonable to conclude that the reason for the above noted patterns of infectious disease following the trade routes were not so much based on the transportation of microbes or “pathogens”, but rather the actual staple goods that were being exchanged for furs, and were being consumed over months and years, thus depleting the natural immunity of recipient Aboriginal peoples who were within reach of the trading activities?

In the Pacific northwest region:

Diseases struck specific populations over decades of commercial growth, gradually culminating in demographic catastrophe for native peoples… Disease
introduction did not typically result in immediate and far-reaching pandemics. Rather wave after wave of different diseases struck Pacific populations and caused varying results, and these repeated introductions increased in frequency and shifted geographically due to the steady rise in commercial activity.  

Indeed, northwest coastal peoples traced the onset of infectious disease to what became embedded into legends as “disease boats” or “pestilence canoes”. By the mid 1770s both Spanish and British seagoing vessels were engaged in trade with the Indigenous peoples along the Pacific coastal regions of what are today northern Washington and British Columbia. The first historically recorded epidemic was smallpox approximated to have occurred in the late 1770s and affecting the Tlingit, Haida, Salish Tilamooks and other groups with an estimated mortality rate of about one-third. In the years 1786 and 1787 alone, fourteen (14) British ships sailed to the Pacific northwest coast to engage in trade for furs. An early 100 ft. sailing cargo vessel was able to transport as much as 400 tons (800 thousand pounds) of goods. From the late 1770s to the late 1870s the population declined on the northwest coast region from roughly 184,000 to 37,000 due to various infectious disease epidemics.  

It was found that the sheer panic of these diseases, as over time they affected more and more groups, would in itself contribute to greater numbers succumbing. Rapidly emerging research, exploring the connections between the neuroendocrine and immune systems, is increasingly confirming “in the most modern scientific terms” the powerful influence of mental emotions on the onset, course, and remission of disease. In fact, it has been contended that historically more people have died of the fear of diseases like smallpox and plague, than of the diseases themselves.  

Research of the National Commission Inquiry on Indian Health reported that:

Some of these infectious diseases, however, when first introduced, spread amongst the Indian population without causing severe morbidity.... However, with more prolonged contact with whites, there were other factors... that began to decrease the Indian’s resistance to infections. As a result, morbidity, particularly from tuberculosis, subsequently increased. This escalation of disease continued to be reflected in the historical literature, and it is significant that in these accounts, the greatest number of disorders is reported by later observers, who saw the Indians after they had long been in contact with whites.  

A way of life that was balanced and in harmony with nature, which ensured sustained wellness and peace of mind, was devastated by the rapid loss of traditional livelihoods and lands, and
“whole food” nutrition patterns. Self-sufficiency was exchanged for dependency, and a major new reliance on disease-building foods such as white sugar, white flour, white polished rice, sweetened jams, tinned milk, tinned meat, other canned goods, lard and other processed fats, coupled with the intake of the protoplasmic poison of alcohol which became a serious addiction in many Aboriginal communities. This all served to bring about a downward vicious cycle of physical degeneration, psychological stress, and social deterioration. Both old and new world infectious disease microorganisms now found ample fertile ground and multiplied on severely weakened natural immune systems.

This of course runs counter to the commonly held view that the epidemiological vulnerability of North Americas first peoples to Old World infectious diseases was because they represented “virgin soils” with “immunologic inadequacy” or no “genetic resistance” due to lack of previous exposure to these diseases. This concept was actually popularized due largely to the writings of William McNeill and Alfred Crosby in the 1970s. In actuality though a closer examination of Crosby’s views (originally published in the *William and Mary Quarterly*) show that his ideas have been both misunderstood and misrepresented. In actuality he emphasized the likely critical role of multiple environmental factors including “malnutrition and the social chaos generated by European colonization” as the underlying reason for widespread susceptibility to the new infectious diseases. Indeed, as one prominent scholar observes, “malnutrition, exhaustion and stress... have very different implications for our understanding of what was responsible for this demographic catastrophe.” 34

Historically, the first peoples of Canada fell prey to the old world infectious diseases not upon contact, as the germ theory would require, but after their pattern of life and relationships with the natural world were increasingly (oft times precipitously) and drastically altered. In a presentation to the Society for Nutrition Education in the year 1980, nutritionist Carol Farkas, a nutrition consultant to the National Indian Brotherhood/AFN, observed that Canada’s Aboriginal people “consider that the illness and disease of their people dates from the advent of the white man. The white man’s misuse of the land has caused hardship and pollution, which have contributed to Indian morbidity and mortality, and also the white man’s food has been responsible for much suffering.” 35

The National Commission Inquiry on Indian Health aptly observed that whenever the refined foods of commerce made significant inroads into displacing the traditional dietary, “disease and physical degeneration” followed.

Once refined foods became a significant proportion of the diet, disease and deformity greatly increased in incidence: dental decay, facial deformities, with narrowed dental arches and crowded teeth, infections and degenerative disease, difficult labours, and birth defects. There has been abundant historical and anthropological documentation of the effects of this inferior diet on the health and
physique of those forced to live on it, and the same pattern of disease and physical
degeneration shown by the Indian people has been exhibited by the Inuit to the
north, and by indigenous peoples throughout the world.\textsuperscript{36}

Given the considerable importance of the post-colonial bio-physical degeneration of Indigenous
peoples in Canada and throughout the world, this issue is afforded special attention in Section II -
Scientific Perspectives, sub-section 2.4 titled “A Worldwide Phenomenon of Progressive
Degeneration.”

1.4 TWENTIETH & TWENTY-FIRST CENTURY HEALTH CONDITIONS

The establishment of the reserve system, the transfer of Inuit to confined settlements, and Metis
to segregated communities clearly had a deleterious impact on the minds and the bodies of
Canada’s first peoples. Referring to the impact of this on First Nations, the National Commission
Inquiry on Indian Health comments:

\begin{quote}
The health of Indian people became further impaired when they were forced to a
confining and demoralizing reserve life. Most of the lands assigned by treaty
were not arable, and were of insufficient size to provide sufficient fish and game.
Dependence on commercial and junk food thereby became solidly established. By
crowding the Indian population into limited areas, sanitary conditions were made
worse, and contagion became more inevitable and widespread Lack of a sound
economic base for the reserves led to unemployment, with resultant lack of
physical work. The result of this combination of adverse factors has lead to a new
kind of epidemic, that of degenerative disease. A host of ailments, never
experienced by Indian people previously, are now common and becoming
increasingly so: obesity, dental caries, diabetes, peptic ulcers, gall bladder
disease, heart disease, cancer and the like.\textsuperscript{37}
\end{quote}

So as we fast forward to more current times we find that Canada’s first peoples are now afflicted
with a range of degenerative diseases commonly associated with modern “civilization”. The
greater prevalence of these diseases in Aboriginal populations than is occurring in the general
population gives pause for serious concern. \textit{“High levels of diabetes and end-stage renal
disease, cardiovascular disease, and some forms of cancer as well as injury and pneumonia have
been identified as more common in Aboriginal populations than the general Canadian
population.”}\textsuperscript{38}

In light of this egregious situation, Commissioners to the Royal Commission on Aboriginal
Peoples raised the following concerns.

\begin{quote}
We are deeply troubled by the evidence of continuing physical, mental and
emotional ill health and social breakdown among Aboriginal people. Trends in
the data on health and social conditions lead us to a stark conclusion: despite the
extension of medical and social services… to every Aboriginal community, and
despite the large sums [billions] spent by Canadian governments to provide these
services, Aboriginal people still suffer from unacceptable rates of illness and
distress. The term ‘crisis’ is not an exaggeration here.\textsuperscript{39}
\end{quote}
Among Canada’s first peoples there are also significantly high levels of obesity, gall bladder infections, hypertension, tooth decay, alcoholism, family violence, suicide, and various mental and emotional diseases. Virtually all of these diseases were virtually absent historically among these peoples. From the early twentieth century to the present time both Canada and the United States governments have expended literally billions of dollars in medical interventions to curb this onslaught of social and degenerative diseases, with negligible observable impact.

As a fitting summary to this section a quotation from then National Chief Matthew Coon-Come published in the *Toronto Globe and Mail* on February 4, 2003 follows.

_Across Canada from coast to coast to coast, First Nations peoples are trapped in a cycle of ill health, inferior health care, lower life expectancy, poverty, lack of resources and despair. Our peoples have extraordinarily high rates of disease, substance abuse and suicide. As Health Canada reiterated in 2000, “Canada’s aboriginal people, as a group, are the most disadvantaged and have the poorest overall health status.” Pick any health indicator - rates of infant mortality, postnatal mortality, hospitalization, AIDS and TB infection: First Nations peoples’ rates are many, many times higher than most Canadians take for granted. Our life expectancy remains six or so years lower than other Canadians, a terrible cost of millions of lost potential years of life._

**1.5 TRADITIONAL FOODS, HEALTH & DISEASE AMONG THE INUIT**

The traditional foods of Canada’s Inuit, the far northern Aboriginal people who’ve undergone the most recent exposure to modern civilization, included a variety of wild edible plants and berries, as well as game, fish, and other marine life. Like the First Nations and Metis people to the south, this whole food diet was historically replaced by damaging trade goods, and in 20th and 21st centuries by devastating “junk foods”, which have been commonly fed to babies less than a year old.

With regard to the health consequences of trading patterns among the Inuit in Northern Canada we find this telling comment by Kaj Birket-Smith:

_Since the coming of the white traders the Caribou Eskimos have learned to relish certain foreign foods. So far, however, it is only flour, tea, sugar and molasses which really are of any importance to their food, and as a rule only during the period immediately after a trade journey....[also] the Hudson’s Bay Company has introduced preserves into its shops. One must look long for a more misguided policy than sending salt pork and tinned mutton to the Eskimos - but of course it_
yields more foxes and more trade when the Eskimos neglect their caribou hunting and buy insufficiently nourishing but preposterously expensive, imported products.  

Studies among the Inuit, found a more than 500% greater incidence of arterial calcification among 40 to 69 year old Inuit males, who had spent more than ten years in settlement communities, as compared with those men who had more recently lived in remote nomadic groups. Among various groups a statistically significant association was noted between dental status and the incidence of aortic and peripheral arterial calcification. This experience provides compelling evidence that behind many medical phenomena with which every practitioner in the Western world is now confronted, lies a nutritional factor. When an Inuit man gave up his traditional nomadic lifestyle and moved into a settlement, he, his wife and children all underwent some remarkable changes. The children grew faster and taller, and reached puberty much sooner. Their teeth rotted, his wife probably came down with gall bladder disease and, likely as not, other members of the family will also suffer one of the degenerative diseases for which the Euro-Canadians are well known.

Samuel Hutton who served as a permanent physician on the Labrador coast in the years 1902-1908 found that the Inuit people there were losing much of their ancient strength.

The Eskimos living among these settlers have to a large extent adopted the ‘settler’ dietary… and not only does scurvy occur among them in its typical form, but their physique is less robust than is that of their northern brethren. They have lost the… sleek outlines to the Eskimo face and figure; the nose is more prominent and the jaw less square. They endure fatigue less easily, and their children are puny and feeble.

Two decades after Hutton’s arrival on the Labrador coast a Czech professor named Suk arrived in the region. He later authored a paper correlating the changed dietary of the Inuit in Labrador with significantly increased levels of tuberculosis. “Especially those pure Eskimos who in spite of the presence of the White man still maintain their old established dietary are particularly free from it [tuberculosis], but it is quite different with the [Inuit] settlers, who without exception lie entirely on European food.”

When based in Fort Smith, Northwest Territories, ophthalmologist Elizabeth Cass, on various field trips, examined the eyes of 2,124 Inuit, some of whom were still living in traditional settings, and others had been resettled in permanent settlements. Interestingly she expressed that before the year 1940 among the Inuit people (of all age groups) in one region of Canada’s Northwest Territories myopia was non-existent. However, in the year 1940 virtually all of the school age Inuit children and young people from that region were placed into a Catholic
boarding school, with the consequence that in a few years time 100 percent of the relocated students became myopic. Cass attributed this form of rapid ocular degeneration primarily to adverse changes in their nutrition.  

With reference to the problem of otitis media (OM - middle ear infections) among the Inuit the report Gathering Strength notes: “Inuit moved into government-built houses that were often inadequate for the climate, and their immune systems were compromised by inferior store-bought food, alcohol consumption and cigarette smoke. Bottle-feeding replaced breast-feeding in many households. All the conditions needed to promote OM at high rates were in place, and indeed the condition was epidemic until very recently.”

1.6 BACKGROUND ON & HEALTH CONDITIONS AMONG THE MÉTIS

The origin of the Métis people is unique among Aboriginal groups in Canada. The Métis were mixed-blood offspring of French fur traders from the North West Company or Scottish and English fur traders from the Hudson’s Bay Company and Cree, Ojibwa or Saulteaux women. Most mixed-blood children, however, grew up to find themselves alienated from both their tribal and European relatives as a result of the “stigma” of having a mixed-blood heritage. Finding common bonds of surviving the challenges of living outside of extended kinship relationships became essential, and mixed blood families grew to develop their own unique way of life.

Their establishment as a distinct people actually begins around the mid 17th century, and took on more definite shape socio-culturally and linguistically by the mid 19th century. In this historic period Michif developed as a distinctive language using French nouns, Cree verbs, and some local vocabulary borrowed from Indian languages like Ojibwa or Dene. It likely originated, not as a pidgin between Crees and French speakers trying to communicate, but rather as a practical means of communication among Métis reared in both languages (similar to Yiddish in Europe). By this time Métis villages had appeared in and around fur trading posts stretching from Lake Superior to the Mackenzie Delta. So it was that in the Canadian northwest they evolved into a new and separate Aboriginal group, today referred to as the Métis Nation. It wasn’t until the Constitution Act of 1982 in section 35 (2) that the Métis were officially recognized by the Government of Canada as a distinct Aboriginal people.

In the latter half of the 19th century, threats of Métis self-governance in the western regions interfered with federal plans for a national railway that would consolidate their land holdings and effectively preclude any territorial threat from the United States. An initial conflict occurred in the Red River region of Manitoba in 1869-70. Further west some 15 years later, in distress over the government's violation of their land holdings, and the withholding of food and supplies to coerce compliance, a bloody battle took place in the area of Batoche, Saskatchewan that not only shut down Métis governance, but left the Métis with a legacy of marginalization that has lasted
into modern times. Throughout the last century their socio-economic status has closely paralleled that of First Nations people living on reserve.

The systematic removal of Métis People from the lands they traditionally occupied resulted in the destabilization of Métis self-governing processes, interruption of their traditional knowledge patterns, and oppression of Métis culture and language. Although of mixed heritage, Métis people have suffered effects similar to other Aboriginal peoples as a result of the colonization of Canada and subsequent devaluation of Aboriginal cultures and knowledge systems.

Their mixed traditions and command of both European and First Nation languages, led to their role as logical intermediaries in the commercial relationship between two civilizations. Consequently, as a people they were heavily involved in fur trading activities, which inevitably led to their widespread dependency on denatured foodstuffs, and alcohol which were obtained for trading services, or by barter and a corresponding abandonment of living off the land. This greatly contributed to their experiencing the same range of devastating infectious, degenerative, and social diseases as historically occurred among their First Nation cousins, and later the Inuit.

By the end of the nineteenth century, most western Métis could be found living on the margins of both First Nation and Euro-Canadian societies. Many lived on lands adjacent to First Nation reserves, and although most held strong ties of kinship with people on the reserve, they were denied treaty and other benefits and services because of their ambiguous legal status. Others lived along road allowances on the outskirts of Euro-Canadian settlements, and were considered squatters on provincial lands. The more northern Métis settlements like those in the south were impoverished, and infectious diseases, particularly tuberculosis and syphilis became rampant.

Today, Métis People have neither treaties, nor a land base within Canada. Most Métis People are disbursed across the country, living in urban, northern and rural public communities. One exception to this is found in northern Alberta. In 1932, the Government of Alberta set aside a modest land base for the Métis of the region, now comprising eight communities known collectively as the Métis Settlements of Alberta.

1.7 Historical Overview of Medical Services to Canada’s First Peoples

The process of dealing with Aboriginal title and rights through formal treaty agreements began shortly after contact was established between Europeans and Aboriginal peoples of North America. These first agreements, the Peace and Friendship treaties, were concluded during a period of extended warfare between England and France. They were intended to secure the neutrality or assistance of the Aboriginal nations in exchange for a commitment not to impede them in their traditional pursuits. Several of these treaties were concluded by the British Crown
and various Maritime Aboriginal nations up until the end of the eighteenth century. This was followed by a series of Upper Canada treaties, Province of Canada treaties, and Post-Confederation Numbered treaties being entered into with a number of first nations. Of these treaties the one which specifically mentions medical care is Treaty Six which contains two clauses in which the crown agrees to afford assistance in times of "pestilence" and that a "medicine chest" would be maintained at the dwelling of respective Indian Agents for the benefit of Indians.  

The Supreme Court of Canada's recognition in the mid-1980s of a fiduciary relationship between the federal government and Aboriginal Peoples established important guiding principles for Crown-Aboriginal relations. However the precise nature and scope of this fiduciary relationship, along with its political, legal and financial implications have been a continuing source of dispute between Aboriginal peoples, and the federal government and its legal system. Although Canada admits the existence of a fiduciary relationship and that certain obligations are thus owed to Aboriginal peoples, it has taken the position that the financing of health services to First Nations and Inuit peoples is provided only as a matter of policy and not because of any fiduciary obligations, or Aboriginal, or treaty rights.

By the dawn of the 20th century a low-point for Aboriginal health and social conditions existed in Canada. Beginning in early post-contact period, traditional Aboriginal medicine practices had been progressively suppressed and significantly weakened. Aboriginal groups holding close contact with Euro-Canadian settlements increasingly accepted medical assistance from the now dominant society of Euro-Canadians. To this time western health care measures had been largely a patchwork of improvised assistance in times of perceived crisis or emergency, and were largely provided by traders and missionaries.

In the first decade of the new century newspaper stories and official reports described the relative destitution and unabated epidemics of disease endemic to many Inuit, First Nations and Métis settlements. The situation was beginning to be viewed by many with shame and was deemed a national disgrace. The first person assigned official responsibility for improving Indian health was Peter Bryce, who was appointed in 1904 to the position of General Medical Superintendent in the federal Department of Indian Affairs. Despite the relative lack of interest and sometimes outright negative racist attitudes of his colleagues toward his mission, Bryce fought tirelessly (with negligible success) to raise the standards of health and well-being among the Aboriginal population until leaving office in 1910. Many of his successors went on to face similar hurdles, with change coming slowly.
The National Commission Inquiry on Indian Health found that while Bryce was in office he:

...examined the status of Indian health in a thorough-going manner, thus incurring the enmity of his superiors. He toured the residential schools in the prairies and found them to be a breeding ground for tuberculosis, which was decimating the plains tribes at the time. In one report on Indian schools, he revealed that within one 15-year period of time that 24% of all the pupils which had been in the schools were known to be dead, while... [in another] school, 75% were dead at the end of 16 years since the school opened. When he sought to remedy the situation, the Deputy Minister ignored him. His complaint that a $2.00 per capital expenditure on health services for Indians was insufficient was also ignored. The same was true with his study in which he demonstrated that the Indian population from 1904 to 1917 should have shown a normal increase of 20,000, but instead showed a decline of 1,639 persons.  

Following his retirement from the public service as Chief Medical Officer in 1921, his position was left vacant for the next six years. Bryce took immediate steps to plead his case to the public, by publishing at his own expense in the year 1922 a booklet entitled The Story of a National Crime (title abbreviated). In it he documented how Aboriginal peoples were experiencing “a death rate more than double that of the genera population and in some provinces more than three times.” He also described how efforts to improve “the health of the Indians, especially his fight against tuberculosis, were met with hostility and inaction from an apathetic Indian Affairs bureaucracy.” This apparently had little or no impact on public policy, as throughout the 1920's and 1930's the provision of adequate health services was hampered by a chronic lack of funds from parliamentary appropriations. Consequently, the Department of Indian Affairs, during this time had little funding to work with, representing only a fraction of the per capita expended on the health care of the general Canadian population. This meant an ever present shortage of medical personnel and facilities. In 1934, the per capita cost for DIA medical services was $9.60 per on reserve Aboriginal, in contrast with $31.00 for other Canadians. Much of the “health care” consisted of crash programs to control widespread tuberculosis, and for smallpox vaccination campaigns. These measures were introduced more with a view to protecting the general population than for the benefit of the Aboriginal people. 

In the early decades of the 20th century, health care was provided, initially by an assortment of semi-trained RCMP agents, and government medical officers, with church involvement still occurring to a limited degree. As time progressed there was in put in place a growing number of nurses and doctors in the full or part-time employ of the federal government. By the year 1930, the first on-reserve nursing station was opened in Fisher River, Manitoba.
By the 1950s, the federal department of National Health and Welfare was operating a network of 33 nursing stations, 65 health centres, and 18 small regional hospitals for registered Indians and Inuit. This undertaking was motivated by the post-war spirit of humanitarianism that propelled the emerging Canadian welfare state and by fear of the threat posed to Canadians by sky-high rates of tuberculosis in Aboriginal communities. ⁵³

By 1956 the **Department of National Health and Welfare** had grown considerably with an increase in staffing and a new $17 million budget allocation. In 1962 a new division called **Medical Services Branch** was established in this department with its primary mandate being Indian and Inuit Health. Federal government allocations for Indian and Inuit health increased, and by the end of the 1960s the budget was more than $28 million compared with $4 million in the 1950s. ⁵⁴ The newly emergent health system operated on the assumption that Aboriginal peoples would welcome Western-style health care services, and for the most part they did. However, there were some serious problems:

- Aboriginal people with serious illnesses were often sent, unaccompanied, to distant medical facilities for treatment in strange and sometimes hostile environments.
- In their own communities, Aboriginal people were offered health care services that had no foundation in local values, traditions or conditions. At worst, a few were forced (or convinced) to suffer invasive medical procedures, including sterilization.
- Virtually all providers of health and social services were non-Aboriginal, many with little interest in the cultural practices or values of their Aboriginal clients. Encounters were often clouded by suspicion, misunderstanding, resentment and racism.
- Indigenous healing skills and knowledge of plant medicines and other traditional treatments were devalued by medical personnel and hidden by those who still practiced or even remembered them. Much knowledge was eventually lost.
- Aboriginal people learned that they were not in charge; non-Aboriginal people learned that they were. This legacy has been difficult for both sides to put behind them. ⁵⁵

### 1.8 Health Services for the Métis

Government supported health care services for the Métis of western Canada developed very slowly and in an ad-hoc and unpredictable fashion. This was no doubt due to the atypical status of the Métis. Unlike the Indians and later the Inuit, the federal government never acknowledged or undertook any official responsibility for the Métis, and it thus fell largely to the provinces to render needed medical assistance. It appears that the western provinces were reluctant to do so until the Métis began to experience widespread ill health and were seen as a threat to the Euro-Canadian population.

Since there is minimal historical health information on the Métis, we will examine some salient events that occurred in the early twentieth century in the province of Alberta. In response to
organized efforts by the Métis including petitions, a Royal Commission was established in 1934 to examine the problems of health, education and general welfare of the “half-breed” population in the province. This commission came to be called the Ewing Commission after its chair. It included a medical doctor, E.A. Braithwaite, who had played a key role in organizing public health services in Alberta. Evidence presented by the recently established Métis Association of Alberta presented testimonials verifying serious levels of infectious diseases from six doctors and Indian agents in the Grouard area, where it was believed the worst health conditions existed. The reliability of these testimonies was challenged by the Alberta government in the person of Harold Orr, a physician employed by the Alberta Department of Health. Earlier, Orr had alerted his minister to the political implications of increased health expenditures on the Métis.

When the Ewing Commission report was issued, it ran to only fifteen pages, and it did agree that the Métis were experiencing serious health problems and identified a number of possible reasons. They noted that many Métis lived far from any health professionals and lacked money both to cover travel costs to consult them and to pay for medical services rendered. Traveling doctors and nurses, who commonly visited “Indian reserves”, rarely came to these Métis communities. The report also noted the poor sanitary conditions which characterized Metis homes and the lack of proper food (implying in fact that some Metis were, in effect, periodically starving). However, in the final analysis the commissioners wrote, “On the whole, the Commission is of the opinion that while the health situation is serious, it is not, except as to the particular diseases mentioned [presumably tuberculosis and venereal diseases], more serious than among the white settlers”.

Clearly, the Métis were once again victimized by their unclear legal status. The Ewing Commission did make it clear that any assistance provided to them was to be given out of “considerations of humanity and justice,” and not because the Métis held any special rights as an Aboriginal people. The Commission did not want the Métis to become wards of the state. However, it did recommend that land be set aside for the Metis, parcels which were referred to then as “colonies” and today as “settlements,” where small hospitals could be constructed. These colonies were established thereafter under the authority of the Métis Population Betterment Act of 1938. The Métis living in these colonies were to be periodically provided with the services of a traveling physician, with the anticipation that ultimately a resident physician would be hired. It remains unclear whether or to what extent the Métis were to be required to pay for these services.

While the systematic treatment of tuberculosis among First Nation people on reserves had begun in western Canada until 1935, the Métis did not receive similar attention until later, primarily in the 1940s, which coincided with the establishment of the “colonies.” Between 1934 and 1939, Métis represented only 6.9 per cent of the patients discharged from general tuberculosis treatment facilities in the province, but this figure began to rise thereafter, until by the outset of the 1960s the Métis constituted nearly one quarter of the patient load. This obviously indicates that a much higher proportion of their population was contracting tuberculosis, than that of the mainstream. The prevalence of disease remained high among the Métis for many years, despite these health programs. Again unlike the First Nations and later the Inuit, who received regular programs of diagnosis and treatment, the Métis were subjected to only ‘irregular’ screening. Interestingly, a notable study issued in 1963 claimed that the Métis tuberculosis rate was, by the early 1960s, about half that of the “treaty Indians”. It was argued that, “the major determinants
of Métis status, and hence contributing factors to tuberculosis incidence, are economic poverty and... not an aboriginal way of life”. It was recommended that the solution to the disease problem lies in “extending civilization northward and increasing Métis participation in it,” hence promoting Métis “individual and group upward mobility”.  

1.9 TRANSFER OF PUBLIC SECTOR HEALTH SERVICES TO ABORIGINAL CONTROL

Although federal appropriations for First Nations and Inuit health care had significantly increased since the mid twentieth century, both the scope of these services and funding appropriations continued to be inadequate to meet the tasks at hand in the ensuing decades. It was in the late 1970s when the federal government made overt political overtures to eliminate uninsured health benefits (e.g. dental and vision care), and to transfer responsibility for the administration of First Nations and Inuit primary health care to the provinces and territories. In response to this unanticipated crisis the National Indian Brotherhood (NIB/AFN) established the National Commission Inquiry on Indian Health (NCIH).

(To insert some historical background, in 1961 the National Indian Council was formed to represent Treaty and Status peoples, the Non-status people and the Métis [the Inuit were excluded]. However, maintaining unity proved difficult and the Council was dissolved in 1968. The Status and Treaty aboriginal groups then formed the National Indian Brotherhood, while the non-status and the Métis groups together formed the Native Council of Canada. The NIB gained early legitimacy as one of its first actions was to successfully oppose the federal government’s 1969 White Paper which called for the assimilation of First Nations people into mainstream of Canadian society and the dismantling of DIAND, the main federal department administering the Indian Act. While retaining the NIB’s original legal name and charter, in 1982 the public name of Assembly of First Nations (AFN) was adopted and the organization was reorganized to be more representative and accountable. Today, the AFN continues as the national representative and advocacy organization of the 630 First Nations communities across Canada.)

The NIB’s Executive Council formally established the NCIIH marking out its mandate, and placing upon me the task of spearheading its overall development, organization and operations. I was given the additional responsibility of serving as its founding Chairman, and John F. Coombs was assigned to serve as its Chief Medical Advisor. His services to the Commission proved to be exemplary. Representatives serving on the Commission came from all of the First Nation provincial and territorial organizations across Canada. The Commission conducted its inquiry in the period of November 1978 to the end of 1980.

Based largely on the excellent work and political influence of the NCIIH, in the year 1979 the federal government issued its new and historic Indian Health Policy. The policy acknowledged that a simple enrichment and expansion of health services alone would not lead to substantial improvements in the health status of First Nations, and that spiritual health is as important as physical health. The policy outlined the three primary pillars of: “community development, the traditional relationship of the Indian people to the Federal Government, and the interrelated Canadian health system” as together providing the means to “end the tragedy of Indian ill-health in Canada.” With regard to these pillars it was affirmed that “the first, and most significant, is community development, both socio-economic development and cultural and spiritual
development, to remove the conditions of poverty and apathy which prevent the members of the community from achieving a state of physical, mental and social well-being.” Indeed, the overarching goal of the new federal policy was to “achieve an increasing level of health in Indian communities, generated and maintained by the Indian communities themselves.”

In the same year the government of Canada formally adopted the 1978 Alma Ata Declaration. This point is here noted because this landmark international declaration is in some respect more explicit than the 1979 Indian Health Policy in actually defining and acknowledging the bedrock requisites of health.

PRINCIPLES OF ALMA ATA DECLARATION

i. Equitable Distribution - addressing the multiple root causes of ill health, and ensuring health resources are equitably distributed among all groups and across geographic regions.

ii. Community Involvement - ensuring that health decision-making is duly vested with local communities.

iii. Multisectoral Approach - according practical recognition to the key influence on health of environmental, nutritional, economic, and social factors, as well as health services.


(Source: http://www.who.int/hpr/NPH/docs/declaration_almaata.pdf)

This historic universal declaration largely arose from the demands of Developing World representatives for a more fundamental and common-sense approach to health care predicated on the axiom that multi-sectoral measures which are safe, simple, effective and uncostly hold the answer to attaining sustainable and long term health improvement for all peoples and nations. (In the international context, this milestone agreement was all too soon to be overshadowed and overwhelmed by a vastly expanded policy emphasis on the part of western governments [including Canada] in the promotion of “Western selective medicine”, viz. a massively funded acceleration of and expansion in the employment of patented pharmaceuticals, and artificial immunization as the primary answer to human health problems.)

Under the leadership of the NCIIH, the Advisory Committee on Indian and Inuit Health Consultation (headed by Justice Thomas Berger) issued its 1980 report which detailed a consultative process for effecting a transfer of a health services to the control of First Nation communities. Within a few years, in 1983 the Special Committee on Indian Self-Government (also know as the Penner Report) added its voice to the demand for improvements in Aboriginal health care. The report...
stressed the need to take a more holistic approach to health care, incorporating traditional approaches as well as biomedical, and a greater investment in ensuring preventative measures. Aboriginal witnesses stressed the need for flexible negotiations between First Nations and governments, and the need for an integrated model of health care services.

For First Nation communities the first faltering steps toward health services transfer began in the year 1982 with the launching of the Community Health Demonstration Program. This was a short term program (1982-1985) designed to foster experimentation with different models of delivery and levels of health service control. First Nations were never informed that only those who participated in the demonstration program would later on be allowed to transfer health services to local control. Finally in 1987 the government issued an explicit process on how transfer could be actualized, however local communities found it to be unduly complicated and frustrating. In the fall of 1989 58 pre-transfer projects were underway, involving 212 communities. The same year a national conference on health transfer brought calls from First Nation delegates for removal of some of the constraints built into the process. By the fall of 1990, eight transfer agreement had been signed, and some sixty-seven First Nations were then involved in pre-transfer planning.  

By early 1996, 141 First Nations communities had assumed administrative responsibility for health care services, either individually or collectively through multi-community agencies or tribal associations, and a total of 237 First Nations communities were involved in the pre-transfer process. As the transfer process has evolved, the benefits have been notable. Gains include more flexibility in the use of program funds, greater freedom to adapt services to local needs and priorities, a lessening of paperwork in accounting to Health Canada, and a greater sense of ownership of services. But there have also been noted some disadvantages, too. The drawbacks include the restricted nature of the programs and services that can actually be transferred, the brief time made available for pre-planning and community preparation for assuming program responsibility, the cap on funds regardless of need levels, and the possible failure of the Canadian government to fulfill the fiduciary obligations that Aboriginal peoples deem due.  

One of the early First Nation communities to actualize health services transfer was Montreal Lake in Saskatchewan. An assessment of the changes, include the fact that community members have come to feel more secure about their health since better-qualified personnel are available on a more regular basis. Emergencies that would have required evacuation to the city are now more likely to be handled at the community level. In some cases, such as emergency treatment for coronary attacks, the availability of immediate medical service has been critical. The educational component of the centre has encouraged more people to attempt home management of minor illnesses (especially management of children's illnesses by parents), and has led to a reduction in after-hours calls at the nursing station. Some elders, who previously tended to avoid the nursing station, have become more comfortable with the services provided at the centre, perhaps partly because it allows them to use the Cree language. It thus appears that local control coupled with cultural and linguistic compatibility has been an essential ingredient in helping to make the health centre successful. As with other transfers, extending from the early 1990s to the current time, no substantive changes have occurred relative to how diseases are understood, diagnosed and treated.
Assembly of First Nations National Chief Phil Fontaine affords a relatively recent summary of the status of the health transfer process which has been occurring among first nations.

Nearly half of First Nation communities now control and deliver their own health services under the Federal Health Transfer Policy. There are successful community-based projects aimed at improving the integration of health services. Provinces such as Manitoba, Ontario, Alberta and New Brunswick are reaching out to include First Nations in establishing electronic health records and tele-health networks to provide timely access to patient information and care...During the historic Canada-Aboriginal Peoples Roundtable of April 19, 2004... I stated that our vision for improved health revolves around a First Nations controlled and sustainable health system that builds effective capacity and asserts First Nations jurisdiction in health, aligned with a holistic and culturally appropriate approach... The role of research in further informing First Nations’ united efforts to improve the health and well-being of our peoples cannot be underestimated.  

1.10 Interminable Aboriginal Community Infrastructural Deficiencies

Although throughout the 20th century there have been gradual socio-economic improvements in virtually Aboriginal communities in Canada leading to improved living conditions, at mid-point in the first decade of the 21st century there still remain significant infrastructural deficiencies in many Aboriginal communities. These deficiencies clearly contribute to continuing unacceptable health levels. As of 2005, across Canada in First Nation communities there is a “housing shortage of between 20,000 and 35,000 units. The shortfall is growing by an estimated 2,200 units a year.”

The limited supply of housing leads to “overcrowded conditions... [that] affects the health and well-being of Aboriginal people living on-reserve.”

New Federal commitments over the next five years, combined with Canada Mortgage and Housing Corporation (CMHC) will fall short of even keeping up with the estimated new unit requirements. In Canada’s North, 16.8 percent of Inuit households were “overcrowded and in core housing need compared with 1.9 percent for non-Aboriginal households. The Inuit population’s young average age and high birth rate mean numbers of families and households are growing rapidly, putting increasing pressure on the current housing stock.”

The annual Report of the Commissioner of the Environment and Sustainable Development to Parliament (2005) found that when it comes to potable water, First Nation communities do not have the same level of protection as does the rest of Canada. Federal assessments in 1995 indicated that about 25% of all First Nations' water systems were at “high risk” to contamination and pose a “high risk” to human health. An more recent assessment in 2003 found that almost 30% of systems were at high risk, indicating that the situation is worsening. Currently, more than 100 First Nations communities are under “boil water” advisories. The report notes that the problems in the current system range from the lack of technical capacity and training in First Nations communities to absent or poorly maintained infrastructure systems. One of the underlying problems is the lack of any federal laws or regulatory framework to ensure the provision of safe drinking water. The question that we must ask is what should be the real priorities for public sector investment, which will with effectiveness enhance the lives and health of Aboriginal peoples.
1.11 Summarization

The movement towards self-determination in health care has grown out of the broader political moves toward self-determination and self-government, in which all aspects of Aboriginal life are being defined and the rights to “control” asserted. Another factor has been the recognition that the health of Aboriginal peoples is far worse than that of other Canadians, and that major changes in the health care delivery system are required. At the outset of 2005, Phil Fontaine echoed the earlier quoted observation of his predecessor at the AFN, but went into more detail as to the health conditions which prevail among first nations peoples in Canada.

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 and 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, and five times the unintentional injury rates compared to the average Canadian. This underscores our case that more investment is required immediately - investment which focuses both on health promotion and on primary care…

Interestingly, south of Canada’s border we find a similar situation in which the U.S. Indian Health Service health care outcomes are graphically described by an evaluation group:

Despite the creation of an independent public health system and more than $3 billion in funds appropriated by Congress each year to deliver health care services for Native Americans, a wide range of public health status indicators demonstrate that Native Americans continue to suffer disproportionately from a variety of illnesses and diseases… Today, Native Americans continue to experience significant rates of diabetes, mental health disorders, cardiovascular disease, pneumonia, influenza, and injuries. Specifically, Native Americans are 770 percent more likely to die from alcoholism, 650 percent more likely to die from tuberculosis, 420 percent more likely to die from diabetes, 280 percent more likely to die from accidents, and 52 percent more likely to die from pneumonia or influenza than the rest of the United States, including white and minority populations…

Native Americans rate their health as fair or poor at a rate significantly higher than all other racial/ethnic groups… Consequently, not only is reduced health status a burden to Native Americans, but a cumulative drain on the entire Native American existence. Poor health inhibits the economic, educational, and social development of Native Americans and establishes an inescapable cycle of disparity.

Whether in Canada or the U.S. the first peoples of North America require more than medical intervention, or even the control of health services to radically improve their health status. The authors of Aboriginal health in Canada freely acknowledge this fact.

There can be no significant improvement in health unless the broader socio-economic and political issues are addressed… improving health care, by no
matter what method, can lead to only marginal changes in the health status of these peoples... So, when Aboriginal peoples gain control of the health care system, do their efforts produce a noticeable improvement in health status, or are their efforts frustrated by problems within the larger socio-economic world within which they live? 67

As the 20th century drew to its close and the new millennium commenced it was seen by all parties that the process of self-determination in health care is as irreversible process as it is linked to the broader struggle for social and political self-determination by Aboriginal peoples. In this new historical process, the evidence to date suggests that some major changes are occurring. Nevertheless, there still remain some obvious problems. The dearth of Aboriginal health professionals has led to a continuing reliance on non-Aboriginal people, and with the new Aboriginal Health Human Resource Initiative (launched in 2005, with a $100 million funding commitment over five years.) it is expected that this will be on a temporary basis. Funding continues to be a perennial problem since in virtually all programs there remain financial shortfalls, and funding seems to be becoming more difficult just as progress is being made.

“With local control, Aboriginal groups seem to be willing to keep the best of biomedicine and complement it with more traditional programs.” Whether there is any significant change in health status is another question, one which the lack of data makes it presently impossible to address. 68

The Royal Commission on Aboriginal Peoples (RCAP) issued this statement in Vol. 3 Section 3.3.1 of its 1996 report Gathering Strength:

Aboriginal, federal, provincial and territorial governments, in developing policy to support health, acknowledge the common understanding of the determinants of health found in Aboriginal traditions and health sciences and endorse the fundamental importance of:

- holism, that is, attention to whole persons in their total environment;
- equity, that is, equitable access to the means of achieving health and rough equality of outcomes in health status;
- control by Aboriginal people of the lifestyle choices, institutional services and environmental conditions that support health; and
- diversity, that is, accommodation of the cultures and histories of First Nations, Inuit, and Métis people that make them distinctive within Canadian society and that distinguish them from one another.

The issue here seems to revolve around the decisive question of what are the actual determinants that will maintain health (prevention) and effectually restore health (treatment) on an holistic basis. Is it medical services, or alternatively basic multi-sectoral factors such as an unpolluted natural environment, potable water, whole foods free of chemical contamination, positive psychological and spiritual attitudes stemming from having hope and a high purpose in life. The question of preventive and treatment determinants will be afforded careful consideration in Section II of this document.
SECTION II. SCIENTIFIC PERSPECTIVES

2.1 VITAL ISSUES REQUIRING RECONSIDERATION

The historically unprecedented Blueprint on Aboriginal Health - A 10-Year Transformative Plan prepared for the November, 2005 meeting of First Ministers and leaders of national Aboriginal organizations, represents a very ambitious and conciliatory set of principles and an overall framework for addressing the health needs of Aboriginal peoples for many years to come. However, it bears noting that the very best of intentions, masterfully designed structures and programs, a vast workforce, and unrestrained funding will do nothing to reverse current health conditions, unless a correct perspective on and understanding of health and disease causation is embedded in all that is planned and done.

As a first step we must consider why previous and ongoing strenuous public sector efforts to remedy the low health levels among the first peoples of Canada have fallen so far short of their goals. What are the real keys to attaining soundness and integrity of life and health? Are health and disease the fruits of capricious and inevitable chance, i.e. mere accidents of fate? Is the unimpaired wholeness and balance that the term “health” implies simply the consequence of human beings interacting intelligently and lawfully with the laws of life as embedded in the natural world, and adhering to time-honored social, and spiritual life values? These and other important questions will be duly examined as we delve further into and apply valid scientific perspectives on the early and more recent history of the health of Canada’s Aboriginal peoples. Also due consideration will be given as to whether better alternatives exist.

2.2 WHY ABORIGINAL PEOPLES EXPERIENCED OUTSTANDING HEALTH

The relative absence of disease, whether of an infectious or degenerative nature among Canada’s first peoples in the pre and early-contact period has already been well documented in Section I. This has afforded us with a broad overview of the underpinning historical, social and biological factors determining Aboriginal health levels, with a particular focus on the impact of nutrition patterns. It would be instructive at this point to provide a cross-sampling of some additional important research which explains more fully why Canada’s Aboriginal peoples historically evinced high natural immunity, general health, and long life. Indeed, both the historical record and modern-day corroborative research amply testify to the fact that there are key principles for preventing and reversing the full range of both infectious and degenerative diseases (including those deemed “incurable” by Western selective medicine), and as well the social diseases.

In this world, natural laws have been established to govern all of its animate and inanimate forces and functionality, with intelligent human life being subject as well to vital bio-physical, social, and spiritual laws. All of these Creator ordained principles, whether taken separately or together are indeed sacred as they ensure life, wellness, and happiness throughout the creation. Well informed observation points to disconnection from nature and its laws, the waning of spiritual values, scholastic and media promulgated misinformation, coupled with giant industries placing monetary profits at a higher premium than the life and health of people, as constituting the fountain-head of what is now widespread disease in both dominant and Aboriginal societies.
The physical reality is that today we as individuals are engulfed in a world where we are not only surrounded and induced by the obvious evils of multiple types and brands of illicit drugs, and legal drugs such as alcohol, nicotine, and caffeine, etc., but even our basic food supply has been severely corrupted. Daily our palates are being tempted and tickled by industries typical fast foods such as meats and vegetables deep-fried in hydrogenated fats, with such fats created by heating liquid oil up to 400 degrees centigrade over several hours, and pressuring hydrogen atoms into the oil, usually in the presence of a catalyst such as nickel or platinum. The result is a no longer actually a “fat” but rather an unnatural plastic substance that the human body cannot properly assimilate and metabolize, wreaking havoc with the system. There are also the artificial chemical filler based milkshakes, the 50 gallon drum coal tar derived “tomato” sauces for use on refined flour pizzas; and chemical laden refined sugar rich soft drinks, all of which are actually artificially fabricated toxoids that cumulatively weaken and prematurely decay our finely tuned 70 trillion cell body-mind complex. Furthermore, from the bottom to the very top of our food supply we inescapably imbibe deadly pesticides derived from poisons such as phosgene which caused almost all poison gas deaths in World War 1, and Zyklon-B which the Nazis used to kill millions of innocents at Auschwitz, Dachau and other concentration camps. Indeed, the highly palliative and costly social and physical disease treatment industries of our era, i.e. medical, addiction, correctional and social “services” represent continuing grim testaments to widespread and chronic breakdowns which are tearing apart the very fabric of modern world societies.

2.2.1 Optimum Nutrient Intake
We’ve already noted that when living on traditional foods the Aboriginal people of Canada enjoyed a level of mineral and vitamin intake far exceeding that of modern RDAs/RDIs, and were generally free of both infectious and degenerative diseases. Modern research has documented that even sub-clinical levels of “malnutrition and deficiencies of vitamins, minerals and trace elements” are linked to the “impairment of immune responses”, and a broad range of diseases such as various cancers, osteoporosis, high blood pressure, diabetes, infertility. It follows that the adequate and regular provision of the full complement of such minerals and vitamins by restricting one’s diet to “whole foods” will effectually prevent the selfsame disease conditions.

2.2.2 Low Stress
Canada’s first peoples enjoyed a life close to nature and they generally experienced comparatively low levels of stress in contrast with modern urban and semi-urban dwellers. Science has found that stressful conditions can profoundly suppress the body’s natural immune responses of blood and splenic lymphocytes, including protective killer cell activity, and the production of beneficial interleukin-2 (IL-2) and interferon, and IL-2 receptor expression. The body’s production of interferon is known to arrest the reproduction of pathogenic viruses, and is vital in reversing many forms of viral infection including hepatitis, chicken pox, herpes simplex and zoster, etc. Excessive stress adversely affects the onset, treatment or recovery from the following diseases and conditions: cardiovascular diseases; cancer; depression; angina pectoris; diabetes mellitus; tuberculosis; rheumatoid arthritis; hypertension; ulcers; and AIDS.
2.2.3 Much Outdoor Exercise
The traditional lifestyle of Aboriginal peoples – whether hunter gatherer or agriculturalist - was one that entailed significant outdoor physical activity for men, women, and children. Evidence suggests that addition to increasing physical endurance, physical exercise enhances protective killer cell function and elevates natural interferon, serum leukocyte, and interleukin-1 levels. (Interleukin-1 enhances both B and T lymphocyte activity, and is thus involved in the body’s initial protective response to all forms of infection and inflammation.)\(^7^4\) A study involving 656 men found that a program of regular and vigorous exercise led to an average numeric reduction in blood pressure levels by 15 percent. Also exercise was found to aid in the control of diabetes reducing the amount of insulin required. It also is extremely effective in effecting stress reduction.\(^7^5\) Regular physical exercise provides a wide range of additional benefits which include: an increase in beneficial cholesterol (HDL) levels; maintenance of or an increase in bone mineral density; the prevention of obesity; a decrease in the risk of certain cancers; improvements in the symptoms of Alzheimer’s, and help in preventing or controlling fibromyalgia, osteoarthritis, depression, and anxiety.\(^7^6\)

2.2.4 Sufficient Sleep (Rest)
In traditional Aboriginal societies one retired not long after the sunset and arose at the breaking of the dawn, thus ensuring a long nights sleep in the dark. This corresponded with the body’s natural circadian rhythms and maximized melatonin production. Even brief periods of sleep deprivation (as little as 7 hours) have been linked to dramatic decreases in the body’s basic immune system responses, thus adequate sleep is considered vital in prevention of the disease.\(^7^7\) The broader impacts of sleep deficiency include: mood shifts, e.g. depression, and increased irritability, stress, anxiety, and the loss of coping skills. It is also linked to weight gain; feelings of lethargy; lessened creativity and productivity; reduction in motor skills and coordination; and a lessening of ability to: perceive, concentrate and remember, handle complex tasks, think logically and critically, learn, and make decisions. Finally, there is also a reduction in both vocabulary and communication skills, with less interest in socializing with others.\(^7^8\)

2.2.5 Abundant Sunlight
Bodily exposure to ultraviolet rays as found in natural sunlight, significantly strengthens the overall immune system. For example, it increases the number of lymphocytes, antibodies (mostly gamma globulins), and lymphocyte produced interferon. As well, the effectiveness of neutrophils in engulfing pathogenic bacteria can be at least doubled.\(^7^9\) Other observations follow.
A 12 year study of male college students revealed that only 10 minutes of irradiation with ultra violet light, up to 3 times weekly during the winter months, reduced colds by up to 40.3 percent. Under similar treatment during the winter months, there was observed a greatly increased resistance to a range of infectious diseases in Russian school children.

The current medical concept seeks to portray a sun that is destructive to human health, i.e. responsible for accelerating the aging of the skin, and the prime causative factor behind the now endemic onset of skin cancers. However, extensively documented research on the health effects of both sunlight and nutrition clearly point to the fact that “the highly refined western diet plays the leading role, both in the aging process and in the development of skin cancer.” Contrary to popular belief, a seminal 2005 National Cancer Institute study shows that a “high frequency of sun bathing” is actually associated with 30% to 40% reduced risk of skin cancer.

Dramatic results have been achieved and documented in the treatment and reversal of a variety of diseases with sunlight (this treatment is termed heliotherapy), including blood poisoning, childbirth infections, peritonitis, viral pneumonia, and mumps.

Directly researched beneficial effects of sunlight include a: lowering of elevated blood pressure; decrease in cholesterol in the blood stream; normalization of blood sugar levels in both diabetic and hypoglycemic conditions; increase in endurance by enhancing the blood’s delivery of oxygen to the tissues and the lessening of lactic acid in the tissues; decrease in resting heart and respiratory rates thus enhancing longevity; increase in the efficiency of the heart (in one study the output of blood from the heart increased by 39 percent, and lasted five or six days, due to one ultraviolet exposure); and increase in natural immunity to various cancers.

2.2.6 Freedom from Alcohol

In the pre-contact Americas alcohol was both unknown and unused by its inhabitants. Over time, the trading of furs and other goods for alcohol led to widespread addiction. The use of alcohol accompanied and exacerbated the newly emerging diseases, and in itself became a widespread scourge resulting in the premature loss of unnumbered lives. In short, it further precipitated the socio-economic and cultural devastation of Aboriginal societies. When imbibed, alcohol functions as an “immunosuppressive drug with far reaching consequences”, e.g. it significantly impairs the body’s inherent defense system against pathogenic bacteria, and adversely affects cell-mediated natural immunity, thereby increasing risks for viral infections, tuberculosis, and neoplasia (tumor formation). Alcohol inhibits the normal function of protective B lymphocytes, with as little as 3 ounces (2 drinks) reducing antibody production to 1/3 normal amounts.

It has been documented that there is increased susceptibility to HIV’s (retrovirus commonly linked to AIDS) rapid growth when even moderate intake levels (e.g. 4 beers) are taken, with such immune suppression lasting 3-7 hours with T cells producing less interleukin-2, and T-suppressor cells producing less of the soluble immune response suppression factor. Drinking parents can precipitate fetal alcohol syndrome during the conception and gestation of the unborn. Babies born with FAS tend to weigh less and be shorter than normal. They commonly suffer from: smaller heads; deformed facial features; abnormal joints and limbs; poor coordination;
problems with learning; and short term memories. Later in life, victims often experience mental health problems, disrupted school experience, inapt sexual behavior, trouble with the law, alcohol and drug problems, difficulty caring for themselves and/or their children, and homelessness. (Ref. contains information on a micronutrient intervention that is reported to have effectively reversed mental retardation in a number of FAS damaged Aboriginal children.)

It has been experimentally demonstrated that when animals are fed a highly refined diet deficient in minerals and vitamins, particularly the B complex, there is a created and sustained craving for alcohol. Experimentation at Loma Linda University School of Public Health demonstrated that when small mammals were fed the standard refined American diet (including junk foods, and caffeinated beverages) and given a choice between water and alcohol they invariably preferred the alcohol. However, when the diet was changed to human plant-derived whole foods, the animals switched their preference to water.

True recovery from alcohol and/or drug addiction should be understood as “abstinence without cravings and engagement in productive activities.” According to large scale studies, the average treatment program obtains on average only a 25 percent abstinence rate over a year following completion of treatment. The typical person entering a recovery program is entering for the third time, is using multiple substances, and has other health and social problems. High treatment failure rates have caused some experts to conclude that addiction is an incurable disease. However, such low success rates more likely reflect the fact current approaches to rehabilitation are either seriously flawed or incomplete.

An extensive search covering over 50 years of published literature provides consistent evidence that vitamin, mineral and amino acid therapy in drug withdrawal and rehabilitation can reduce withdrawal symptoms, increase treatment retention, improve psychological status, contribute to higher abstinence rates and improve quality of life. The typical program that includes a nutrient component has a social-educational focus and some are entirely drug free. Published outcome studies of programs that include nutrient therapy report 55-81% long term sobriety rates... Nutrient therapy should receive much more research attention given the safety, cost-effectiveness and higher outcomes in those studies that have been published.

In one human trial, a standard hospital diet was compared with a healthier diet which included fresh fruit and the germ of wheat (which is lost in processed flour), and excluded inter alia, caffeinated coffee, dairy products, and junk foods. After six months, 38% of those on the standard hospital diet remained sober, whereas 81% of those eating the improved diet remained sober. Other trials have demonstrated that restricting refined sugars, increasing complex (unrefined) carbohydrates, and eliminating caffeine reduces the craving for alcohol.
The Health Recovery Center, based in Minneapolis, Minnesota employs an outpatient program with an advanced approach to alcohol addictions recovery, based on inter alia the elimination of refined sugars and all highly processed foods, adoption of organic whole foods and high-level vitamin-mineral supplementation. It has realized outstanding success (both short and long term) in its recovery program. One hundred alcoholic clients, chosen at random, were followed up three and a half (3 ½) years after completing the seven week program. At discharge 85% were free of anxiety, 94% claimed no sleep problems, 98% claimed no shakiness, 96% were free from dizziness, and 95% were subjectively depression-free. Furthermore, at the 6-month interview 92% were abstinent from alcohol, 85% of whom had remained continually abstinent since treatment. Some three years later, 95 of the original 100 subjects were interviewed and 74% (1987 Mathews-Larson study) had remained abstinent. See Figure I below for comparison with standard treatment results.

![Post-Treatment Alcoholics: Percentage Abstaining From Alcohol (Long Term)](image)

2.2.7 No Habitual Tobacco Use
In Aboriginal societies the ceremonial use of the pipe was employed by a select few leaders on special or rare occasions. The health effects of this were clearly negligible. On the other hand, the commercialization of tobacco products has led to the habitual smoking of cigarettes, cigars and pipes in the modern world. The smoking habit, in addition to being linked to significantly greater lung cancer and emphysema, has also been shown to weaken the body’s entire host defense system against pathogenic bacteria and viruses, including the impairment of macrophage function. Smoking is not only linked to cancer of the lung, and throat but also to a surprising variety of other cancers including cancer of the: stomach; liver; colon; pancreas; kidney; bladder; cervix; and skin. Smoking is a major risk factor for atherosclerotic peripheral arterial disease, increasing the risk ten times or more. In fact, it is estimated to be the principal cause in 30% to 40% of all coronary heart disease deaths. Babies whose mothers smoked during pregnancy and after, are three times more likely to be victims of sudden infant death syndrome (SIDS) than babies of nonsmokers.

2.2.8 Fasting
The practice of fasting has existed as a traditional practice in virtually all indigenous cultures as a means of attaining physiological, mental and spiritual healing. It was likely first adopted through
observation of the animal kingdom where fasting is instinctively resorted to as a primary means of recovery in times of injury, sickness, or great stress. It is important that we distinguish the difference between fasting and starving. Starving is the harmful result of food denied when the human system urgently requires sustenance, whereas therapeutic fasting is the intentional abstinence from food by an impaired system that is non-desirous of sustenance until rested, cleansed, and ready for the labors of digestion and assimilation. Although fasting remains as a largely neglected and little understood practice today, it was in fact employed over the millennia by Aboriginal peoples as a primary and highly effective means of prevention and recovery from virtually all forms of disease. Table I below provides a highly condensed summarization of the multiple physiological and mental benefits of therapeutic and regenerative fasting.

<table>
<thead>
<tr>
<th>TABLE I. PSYCHO-PHYSIOLOGICAL EFFECTS OF FASTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. It affords the vital organs a complete rest.</td>
</tr>
<tr>
<td>ii. It empties the digestive tract and disposes of putrefactive bacteria.</td>
</tr>
<tr>
<td>iii. It affords the organs of elimination an opportunity to catch up with their work and promotes elimination.</td>
</tr>
<tr>
<td>iv. It re-establishes normal physiological chemistry and normal secretions.</td>
</tr>
<tr>
<td>v. It promotes the breaking down and absorption of abnormal growths, exudates, effusions, deposits, and “diseased” tissues.</td>
</tr>
<tr>
<td>vi. It restores a youthful condition of the cells and tissues and rejuvenates the entire body-mind complex.</td>
</tr>
<tr>
<td>vii. It permits the conservation and re-canalization of energy.</td>
</tr>
<tr>
<td>viii. It increases the powers of digestion, and enhances the ability to assimilate nutrients.</td>
</tr>
<tr>
<td>ix. It clears and strengthens the mental powers, and increases acuity in the five senses;</td>
</tr>
<tr>
<td>x. It enhances all of the integral functions of the body-mind complex.</td>
</tr>
</tbody>
</table>

In the clinical practice of James McEachen of Escondido California, a careful record was kept of the impact of therapeutic fasting on over 715 of his patients. This record included a wide diversity of serious diseases, many of which were degenerative “incurable” conditions such as arthritis, heart disease, ulcerative colitis, multiple sclerosis, and cancer. The results were very impressive with 654 (88.4 percent) either fully recovered, or notably improved.

Other practitioners such as William Esser reports that despite the fact that on average only 20 percent of his thousands of previous patients at his centre in the southeastern U.S. was able to stay and fast as long as recommended, a partial survey sample found that the rate of complete recoveries (averaging all cases treated) was just over 70 percent. Many of the disease conditions treated were of a very serious and intractable nature, including Parkinson’s disease, epilepsy, arthritis, and cancer. In an interview that I conducted with him while serving with the NIB/AFN, he stated that his prospective patient waiting list was backed up by about 18 months.
TABLE II delineates the efficacy of therapeutic fasting on 443 cases at the Pawling Health Manor at Hyde Park, New York. Clinic Director Robert Gross explained that a number of the patients reflected in this data were unable to remain long enough to undertake a fast, or periodic fasts of sufficient length. This was considered a key reason why a number of cases either fell short of total recovery, or did not measurably respond. Even so taken overall, their fasting therapeutic program demonstrated a recovery rate of 71.2 percent, a partial recovery rate of 24.2 percent, and a failure rate of 4.6 percent.

<table>
<thead>
<tr>
<th>DIAGNOSED DISEASE CONDITION</th>
<th>NUMBER OF CASES TREATED BY FASTING</th>
<th>NUMBER OF CASES FULLY RECOVERED</th>
<th>NUMBER OF CASES NO MEASURABLE RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Blood Pressure</td>
<td>54</td>
<td>38</td>
<td>0</td>
</tr>
<tr>
<td>Arthritis</td>
<td>42</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>36</td>
<td>34</td>
<td>0</td>
</tr>
<tr>
<td>Goiter</td>
<td>33</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>31</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Mental Disorders</td>
<td>29</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>Bronchitis</td>
<td>24</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>Colitis</td>
<td>23</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Hay Fever</td>
<td>22</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Pyorrhea</td>
<td>20</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Asthma</td>
<td>19</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Ulcers</td>
<td>14</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Diabetes</td>
<td>14</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Kidney Disease</td>
<td>12</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Gallstones</td>
<td>11</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Anemia</td>
<td>11</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>8</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Poliomyelitis</td>
<td>8</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Appendicitis</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
2.3 Adverse Impacts on Health of Modern Civilization

As pointed out in the earlier historical overview, the excessive consumption of highly processed foods with its high intake of processed sugars, refined carbohydrates and fats has been immensely damaging to the health of Canada’s first peoples. T.L. Cleave a former surgeon-captain in the Royal Navy and Director of Medical Research at the Institute of Naval Medicine coined the term “saccharine disease” for the multiple diseases stemming from the over-consumption of refined foods, deficient in vitamins, minerals, fiber and quality proteins. (The term “saccharine”, with an e means “related to sugar”, the suffix is pronounced like the river Rhine, which distinguishes it from the word saccharin which is used for a common synthetic chemical sweetener.) After long years of research, including trial and error in medical practice, he devised the following classifications of specific nutrition related causes for varied degenerative disease conditions.

I. Conditions due to the removal of fiber in foods:
   a. Simple constipation (intestinal stasis), with its complications of venous ailments (varicose veins, deep venous thrombosis, haemorrhoids, and varicocele), diverticular disease, and to a degree, cancer of the colon.
   b. Dental caries (in conjunction with the taking of refined sugars) and periodontal disease.

II. Conditions due to the over-consumption of refined foods:
   Diabetes, Obesity, and Coronary thrombosis
   Primary E. coli infections and gall-stones

II. Conditions due to the loss of quality protein in refined foods:
   Peptic ulceration.

He refers to these varied manifestations of degeneration as:

…parts of a single master-disease, mostly erupting within the past 100 years, particularly such conditions as colonic stasis (with its diverticular and venous complications) and extending through the Escherichia coli infections, peptic ulcer and diabetes right up to the dreaded coronary thrombosis, what have the thousands of highly academic papers published on these conditions so far achieved? They have produced miraculous surgical and pharmacological antidotes to the ravages produced by these conditions on the human body, but the conditions have not been stopped from occurring; on the contrary they are commoner now than they ever were, and most of them are still getting commoner.

Nor have members of our own profession (medicine) been in any way absent from the sufferers in this remorseless advance. May not the author therefore plead, with all humility, that there may be room for a different type of work, embodying a much greater reverence for Nature herself?

It is estimated that today approximately 75% of foods eaten by North Americans are either highly processed or fabricated. Although literally billions of dollars have been invested by western world governments in studying the degenerative diseases, the fact remains that the major historical shift from whole to highly processed foods and its cumulative effect on health and disease are not being studied at the present time in any substantive way.
The oral cavity has long been recognized as a good barometer of an individual's underlying nutritional and overall health status. The most obvious measure of the dental health problem is its sheer magnitude. It was estimated, for example, that by the year 1960 the then 180,000,000 people in the United States had accumulated at least 700,000,000 unfilled cavities. Various diseases found in the supporting bone and gingival tissues by age 50 were extant in at least 50% of the population, and by age 65 in virtually 100%. It has been conservatively estimated that up to 75% of North Americans have distinct irregularities in the development of the dental arches and facial form, yet a 1930 study where 1,276 Inca skulls were systematically examined failed to find a single instance of deformity in the dental arches. It was concluded that this was the result of a system of living, using nutrition in the very early part of the formative period, which is very closely in accord with nature's fundamental laws of reproduction.

Disease in western society has been progressively manifesting itself among children and youth. By the mid-twentieth century, close to 60% of college-age youth were estimated to be clinically ill. Notably, a screening survey of entrants to college and university in 1956 found no less than 589 diseases or physiological abnormalities per 1,000 students admitted. It is not appropriate or accurate to explain the absence of historic references to disease by saying that primitive people just never lived long enough to reach the age at which such diseases attack. Today teenagers are falling prey to many disorders. “Babies have tooth decay. The degenerative disease cancer is the chief cause of death from disease among children.”

2.4 A WORLDWIDE PHENOMENON OF PROGRESSIVE DEGENERATION

Beginning in the early 1930's Weston Price D.D.S. undertook a 9 year epic journey covering more than 150,000 miles worldwide in which were recorded the physical, social and psychological conditions of “primitives” living (to varying degrees) in relative isolation and in their traditional manner. Comparisons were made between these and other groups of the same ethnicity living nearby who had adopted more “civilized” costumes and the typical highly processed foods of modern civilization. This unique and monumental study could never be replicated today.

His research included Aboriginal peoples living in the Yukon Territory, British Columbia, Manitoba, and Ontario. His reports and photographs serve as testimony to the formerly superb state of Aboriginal health, and the sorry state to which it has since declined. Price had ample opportunity to observe at first hand the sad wreckage produced by the introduction of commercial foods into traditional life. His research produced hundreds of photographs of differing groups raised on either natural diets, or diets of refined flour, sugars, and
other processed foods. The evidence is very clear. Whether indigenous North American, Australian aboriginal, East African native, or Pacific islander wherever traditional lifestyles and dietary patterns were followed there was evidence of superb physical development, undecayed teeth, absence of physical disease, and markedly less mental and social disease. However, it required only one generation living on the processed fare of civilization and both infectious and degenerative diseases became prevalent, and dental decay became pandemic. Another salient symptom of this tragic change was a marked increase in women experiencing far more frequent complications during pregnancy, labour, and childbirth. There were also major increase congenital anomalies, and facial deformities (narrowed arches crowding the teeth, and a narrowing of both the chin and nostrils). He also documented that these deformities could actually be totally absent or come to appear with different children of the same parents, by correlating changes in their parent’s dietary pattern. Furthermore, it was demonstrated that this disturbed heredity and quality of life is to a great degree reversible by a simple return to traditional diets.  

In speaking of his visit to a very remote region close to the Pelly Mountains of Canada’s southern Yukon Territory Price observed:

*The condition of the teeth, and the shape of the dental arches and the facial form, were superb. Indeed, in several groups examined not a single tooth was found that had ever been attacked by tooth decay. In an examination of eighty-seven individuals having 2,464 teeth only four teeth were found that had ever been attacked by dental caries. This is equivalent to 0.16 per cent. As we came back to civilization and studied, successively, different groups with increasing amounts of contact with modern civilization, we found dental caries increased progressively, reaching 25.5 per cent of all of the teeth examined at Telegraph Creek, the point of contact with the white man's foods. As we came down the Stikine River... the dental caries problem increased to 40 per cent of all of the teeth...*

Careful inquiry regarding the presence of arthritis was made in the more isolated groups. We neither saw nor heard of a case in the isolated groups. However, at the point of contact with the foods of modern civilization many cases were found including ten bed-ridden cripples in a series of about twenty Indian homes. Some other afflictions made their appearance here, particularly tuberculosis which was taking a very severe toll of the children who had been born at this center.
All the foods of these nature based societies grew in unpolluted environments free of artificial chemical fertilization, and neuro-toxic pesticides. These peoples ate no canned or processed foods and used no alcohol, coffee, tea, pastries, candies, sugared drinks, or colas. Whole races have been damaged and in some cases wiped out after introduction of the highly devitalized diet called "civilized." Among the native Hawaiians who maintained their traditional diet, dental caries were only 0.02 %. In contrast, when they adopted the foods of modern commerce, decay levels increased up to 80%. “Many were suffering from degenerative diseases. The effects of Western civilization's diet of death on other races is more rapid and therefore more apparent than what we are doing to ourselves. But the white man is eating his way out of existence. He is committing slow suicide on a racial scale.”

A study covering the period of 1968-7 found that New Zealand Maoris compared to their Polynesian counterparts who live in the remote islands of the Pacific, appeared more inclined to suffer infections, rheumatic fever, and tuberculosis. They also seemed considerably more prone to develop hypertension, heart disease, and diabetes, afflictions which are virtually foreign to more traditional living islanders. Despite material improvements, as measured by European standards, Maori women between 35 and 55 years in age in New Zealand, suffered from hypertension and coronary heart disease four to five times as frequently as did their female ethnic cousins of the same age group who maintained their traditional lifestyles on the atolls of the Central Pacific.

2.4.1 Key Nutrient Intake of Canada’s First Peoples
Using field data from Price’s research in highly remote regions of Northwestern Canada and Alaska the Figures II, III and IV on the next page compare some key nutrient intakes of Canada’s first peoples when still living on their traditional foods, in contrast to the Recommended Dietary Allowance (RDA). The high nutrient levels of these peoples ensured that they enjoyed outstanding levels of natural immunity to tooth decay and a general freedom from degenerative disease processes. Similar high mineral and vitamin intake levels were also exhibited by remote Polynesians, Melanesians, pastoral and agriculturist Africans, and South American Indians who...
were still living on their traditional diets. The historical health record of all of these peoples, and the comparative figures as illustrated in these tables strongly suggest that modern dietary standards fall far below what they would be if they were based on whole food diets derived from non-soil depleted natural environments.
2.4.2 North American Degenerative Disease Levels

Disease levels and patterns in North America have been compared with those of rural Africa. The vast majority of chronic and degenerative diseases pandemic in North America are, it is contended, genuinely preventable. The most frequent adult emergency operation in North America is appendicitis. In Africa, a physician after 20 years of rural African practice had yet to see his first case of appendicitis. Cancer of the large bowel, the second most frequent cancer in North America, is always rare among traditionally living people. Disease of the heart is the greatest cause of death in the Western world, while one case has been seen in 15 million East Africans. In the U.S.A. close to 350,000 gall bladders are removed annually. A physician recounts his clinical experience in which he states that “I only removed 20 gall bladders in my 20 years in Africa. However, regarding the population of blacks in industrial South Africa, they have been found to have the same prevalence of certain degenerative diseases as in North America. So we cannot say these diseases are due to the colour of the skin. They are due to the way we live. These diseases get worse from rural Africa to Westernized Africa.”

Sir Robert McCarrison who served as a Major General in the British Medical Corps and as the Corp’s Director of Nutrition Research spent the early years of the 20th century in the northern frontier region of India investigating the legendary and very isolated mountain people of Hunza. Hunzukuts are reputed to live to a vigorous very old age, and even as recently as the mid 20th Century, as a distinct society, they have been attested by various observers to have been free of both infectious and degenerative diseases. As for McCarrison, he concluded that their extraordinary health was essentially due to their lifestyle and nutrition patterns, coupled with extracting a living in a pristine environment which included mineral rich topsoils. His rare opportunity to purposely study a people optimum health greatly contrasted with the excessive focus on pathology that even to this day is the norm in medical research. In his travels he also observed that among the diversified ethnic people groups inhabiting India and the bordering nations to the North, some groups were extremely well developed and robust, while others were frail in appearance and clearly sickly. He went on to systematically study their respective diets and then conducted comparative feeding tests on animal subjects in a series of experiments at the Nutrition Research Laboratories at Coonoor, India. Over time he observed that the growth, vigour, disease resistance, and disease patterns, of the animals closely paralleled his observations of the varied people groups that he had observed.
Discounting extremely rare exceptions such as McCarrison’s work, the relative disinterest of the medical community in the role of nutrition as a preventative and a curative, has left us a legacy of nutrition research that is based on bits and pieces of diets rather than whole diets. Much modern nutrition research deals with the action of a single vitamin or mineral and leaves great gaps in our understanding. Indeed, although tens of billions of public dollars have been spent on disease research in North America, it is doubtful that even $10 has been spent on the systematic research of the health effects of the whole diet of contemporary North Americans. Disease research, like food science, has always tackled parts of humans, such as coronary arteries, but rarely the whole and even less rarely the wellness of human beings. Diet and nutrition are first biological processes and not merely chemical. “We must seek an understanding of whole nourishment in the complete dynamic context of living processes.”

As agents of these devastating changes, the transnational purveyors of western technology and death foods are clearly the most culpable. The intrusive methods of a transnational cola company upon the modern descendants of the Inca (today’s Quechua) have been documented. Many a small town has saved a pretty penny by permitting the kind soft drink companies to print their one-way signs (of course with their cola drink printed alongside the arrows). School children carry notebooks saying "Drink X Cola" (in Spanish). Police direct traffic under umbrellas saying "Drink X Cola." Indian women pour from church bearing fans similarly marked. Imperial Spanish evangelism brought the Inca to an inglorious end, and now the philanthropy of technology, untried and untested, threatens to mar the beauty of that superb symbiosis of humanity and nature, the adaptation of the Incas moulded over millennia.

2.5 Medical Concerns on Milk Usage of another Species and Beyond Weaning

Among many Indigenous societies in the Americas, Africa, Asia and Oceania where the drinking of milk beyond infancy has not been a traditional practice, children over five and adults lack the enzyme lactase which is essential for healthful milk digestion and absorption. This enzyme is produced in the small intestine. This inability to break down (hydrolyze) milk disaccharide causes a process of fermentation in the large intestine evidenced by the production of carbon dioxide, intestinal pain, and flatulence. Although there has been an evident genetic adaptation to digest milk in people whose ancestry is from adult milk-drinking societies as in northern Europe, there remains nonetheless some question as to the healthfulness of the practice. Some scientists have logically concluded that the progressive decline in the production of lactase in infants (with such production generally terminating in the period of three to five years of age) is a natural
regulatory mechanism of nature signaling the need for a progressive reduction in breastfeeding leading to its elimination, and a corresponding transition to reliance on solid foods.  

Abriutina, writing in *Cultural Survival Quarterly*, refers to the roughly 30 different Aboriginal peoples of northern Russia (former USSR), as having inadequate health care, substandard living conditions, and a compromised ecology which contribute to unacceptably high morbidity and mortality rates. She insightfully observes that the “combination of these problems with specific anthropo-biological peculiarities inherent to the Aboriginals of the North is significant.” She goes on to comment:

> Morbidity (the relative incidence of disease) among Northern Aboriginals is 2.5 to 10 times higher and lifespan 10 years less than among non-indigenous populations of the North... In 1993, the incidence of tuberculosis in Chukotka among Aboriginals was on average 17.5 times higher than that among the non-indigenous population... Over the last 15 years, the average age at death for Aboriginals in my home district of Bilibino (in western Chukotka) has been about 37 years... The recommendations for organizing nutrition programs in children's institutions in northern villages did not and still do not consider the fact that most Aboriginals cannot process milk sugar and therefore cannot digest whole milk. A milk-based diet is obligatory and even forced.  

It is worthwhile to note that this state promotion and enforcement of milk in the diet of these Aboriginal peoples is indisputably a contributing factor in their grave disease patterns, and shortened lifespan. An article posted in the *Townsend Letter for Doctors and Patients* affords documented research which shows that the ingestion of cow's milk in humans, especially commercially processed cow's milk and milk derived products, “has been linked to a variety of health problems.” The range of problems attributed to milk and dairy (cheese and butter) consumption by weaned children, adolescents and adults include: excessive mucus production; loss of hemoglobin; diabetes; heart disease; atherosclerosis; arthritis; kidney stones; mood swings and depression; irritability; and various allergies.

A 2005 study published in *Neurology*, found that middle aged males in Hawaii who were followed for 30 years, and had a daily intake of 16 or more ounces of milk, in contrast with those who did not drink milk, experienced a 230% (2.3 times) greater risk of developing Parkinson’s disease. This is neurodegenerative disorder that causes slowed movements, tremor, rigidity, and a wide variety of other symptoms due to the degeneration or death of neurons, the type of cell in the brain that is the basis for all brain activity.

Lawrence Broxmeyer, a leading researcher in the field of mycobacterial associated diseases has methodically documented the link between tubercular infection (Mycobacterium bovis and paratuberculosis, both commonly found in milk) not only with the neurological degeneration of Parkinson’s disease, but also the brain plaque (amyloid) disorders of Creutzfeldt-Jakob Disease.
(CJD - the human variant of Bovine spongiform encephalopathy or BSE, a fatal degenerative disorder which destroys the brain and central nervous system of cattle) Alzheimers, and even diabetes.

A minimum of 1 million cattle have been infected with mad cow disease globally, in the last two decades of the 20\textsuperscript{th} century. In the same time period, over 4,750 deaths in the U.S. have been admitted by public health authorities as human BSE. This figure could well represent a small fraction of what has really been happening. The absence of reports of cattle carrying the disease is not a useful indicator for the presence or absence of BSE, because (for example) in the U.S. cattle are routinely slaughtered or die before the 5-8 year period required for BSE to actually manifest outward symptoms. Also only 2% of downers are tested for BSE, while the World Health Organization recommends that 100% should be. Broxmeyer states:

\textit{That tuberculosis and M. Bovis can cause the progressive ataxia found in Mad Cow “downers” has been adequately cited, in both man and cattle. Moreover, that M. bovis or cow tuberculosis, can cause “Mad Cow Disease” in cattle is also a matter of record... The southwest of the UK, the very cradle of British BSE and CJD outbreaks, saw an exponential increase in bovine tuberculosis just prior to its spongiform outbreaks. All of this brings up the unthinkable: that Alzheimer’s, Cruetzfeldt-Jackob, and Mad Cow Disease might just be caused by eating the meat or dairy in consumer products or feed.}

\textit{The trail of evidence remains intact... At least four autopsy studies have uncovered that anywhere from five to 30% of the 4.5 million US Alzheimer’s victims and an untold number of those with dementia are apparently misdiagnosed and many could actually have Creutzfeldt-Jakob disease (CJD), the “variant” form of which has in the past been called Mad Cow in humans and whose plaques and cortical preference simulate Alzheimer’s.... In one study, Alzheimer’s was misdiagnosed in up to 13% of autopsied patients actually suffering from this Creutzfeldt–Jakob (CJD) disease. But the full number of US CJD patients will never be known until it is proclaimed a reportable disease.}\textsuperscript{124}

The assumption that pasteurization totally eliminates the dangers associated with mycobacteria is unfounded. For example, in 2002 a total of 710 retail milk samples collected from retail store and dairy plants in southwest Ontario were tested for the presence of live Mycobacterium Paratuberculosis. Fifteen percent, i.e. 110 of these samples tested positive.\textsuperscript{125}

\textbf{2.6 SOCIO-ECONOMIC FACTORS & DECLINES IN INFECTIOUS DISEASES}

In that historical epidemiological data in western world nations shows that major declines in the primary infectious diseases took place before the advent of specific vaccines and antibiotics, scientists and/or physicians such as Dubos, McKeown, Dettman, McCormick, Taylor, Buttram, and Hoffman agree that the overall eradication of varied infectious diseases were due to basic improvements in nutrition, sanitation, housing, education and related socio-economic conditions. For example, Canadian physician W.J. McCormick was able to make this telling observation at midpoint in the 20\textsuperscript{th} century.
The usual explanation offered for this changed trend in infectious diseases has been the forward march of medicine in prophylaxis and therapy; but, from a study of the literature, it is evident that these changes in incidence and mortality have been neither synchronous with nor proportionate to such measures.... the decline in diphtheria, whooping cough and typhoid fever began fully fifty years prior to the invention of artificial immunization and followed an almost even grade before and after the adoption of these control measures. In the case of scarlet fever, mumps, measles and rheumatic fever there has been no specific innovation in control measures, yet these also have followed the same general pattern in incidence decline. 126

A much more recent observation by highly reputed London Medical School public health epidemiologist Bunker observes that:

The epidemiology of medical care and its effect on health have received little attention over the years. The exception is McKeown's Role of Medicine, based on cause-specific mortality reports for the century ending in 1971. Life expectancy had increased by 23 years during the first half century, but McKeown was able to attribute no more than a year or two to advances in medical care. He presented no data on the harm that medical care might incur, but his conclusion that medical care had contributed little to health was interpreted by many as an attack on medicine, and it was linked by many to Ivan Illich’s claim that medicine does more harm than good. Illich’s Medical Nemesis: The Appropriation of Health, published in 1975, and McKeown's Role of Medicine, published the following year raised questions that have remained largely unanswered to this day.

The implications for public health of McKeown's and Illich's books have been largely ignored or considered irrelevant by clinicians, who are busy taking care of patients one at a time. Basic scientists appear not even to have noticed their existence... [Despite the fact that] Age-adjusted death rates were reported to be greater in countries with greater numbers of doctors, and presumably with more medical care. Equally difficult to explain, death rates for diseases amenable to treatment were reported to be greatest in areas with the most medical care resources.... Iatrogenic mortality may similarly help to explain... that greater numbers of doctors and medical resources, and presumably more discretionary medical and surgical care, are associated with higher death rates. Iatrogenic mortality is also reflected in the observation of brief but dramatic decreases in population death rate[s] when doctors strike and surgery for elective (but not emergency) operations are suspended. 127
It has been frequently evidenced in differing regions of the world that programming interventions which are not defined as "health or medical" in nature, have in fact provided the greatest impact terms of enhancing the actual "health" and vitality of both individual and community life. For instance, some locally-controlled agricultural extension programmes have substantively enhanced the levels of self-sufficiency and "health" through the provision of practical employment, increased income, greater self-respect, and vastly improved nutrition.  

In the classic work *Health, Food and Nutrition in Third World Development*, M. Sharpston provides critical insights on how multiple social and environmental factors ultimately serve as the real determinants of survival, or alternatively death. In his words “...there is a limit to what conventional health services can achieve in an unchanged physical and social environment.” He then refers to the experience of a medical school affiliated hospital in Cali, Columbia which had a special program for premature infants. During their period of critical care, survival rates remained comparable to those found in North American critical care settings, however within three months of being discharged, 70 percent of the infants had died. With reference to those regions within the Developing World where notable health improvements have occurred he suggests that:

_The most likely factors leading to health improvements...are a rise in the levels of nutrition and the slow spread of modern ideas of personal hygiene. Across the developing world, per capita incomes are rising, and transport systems are improving; the result is more food, better quality food, fewer localized food shortages, and a more varied diet. In other words, the principal factor behind the improvement in health... in developing countries is probably not any form of health measure, but economic development itself... Mere exposure to a disease agent need not produce clinical disease and very frequently does not do so._

He concludes by pointing out that malnutrition is a significant concern because it hampers the body's natural resistance. Malnutrition acts “synergistically” with disease agents to increase the incidence and severity of clinical diseases.

Thomas McKeown, former Chairman of the World Health Organization (WHO) - Advisory Group on Health Research Strategy points out that evidence is available from a number of developing world countries that have “advanced rapidly in health”: China, Costa Rica, Cuba, India (Kerala State), Jamaica, Sri Lanka, Thailand, and some others. The improvements in their health status were almost entirely due to a lessened prevalence of infectious diseases. In his words:

_To assess priorities in health policies in the third world the chief requirement is therefore to come to a conclusion about the reasons for the decline of the infections... All the countries that advanced rapidly achieved a substantial improvement in nutrition, which led to increased resistance. Indeed in some countries this was the only important direct influence. It is perhaps surprising that immunization appears to have contributed relatively little to the advances... the reduction in mortality occurred during a period when vaccine coverage was still low. To anyone who has traveled extensively in the rural areas of the third world, the common causes of ill_
health may seem self-evident. Many children are visibly malnourished, sanitary conditions are primitive, drinking water is unclean, the food... is contaminated… Our conclusions concerning the determinants of health can be epitomized by the simple statement that people must have enough to eat, and must not be poisoned. 130

Finland’s H. Hellberg (a former Division Director at the WHO) postulates that the success of any genuine effort to alleviate disease in the impoverished countries must incorporate "intersectoral and multisectoral action”. In his words “involvement of specialists other than the traditional healing professions; water, food, housing, sanitation and education are all important prerequisites for health. If they are neglected curative repair... may even be impossible”. 131

Finally, K. L. Standard Professor and Head - Department of Social and Preventive Medicine, University of the West Indies strongly contends that to achieve mere survival is not enough. Without improving the standard of living, and particularly nutrition status, children will frequently succumb to infections, and have repeated relapses. For primary prevention, public health education, enhanced food production and environmental sanitation deserve the highest priority. Indeed,

For obvious reasons, the highest priority must be given to preventive measures... The final and permanent answer to the problem will rest in... social and economic development... taking into account the need for nutritional improvement of the present generation. If good nutritional status is maintained in the first years of life, successive attacks of most infectious diseases of moderate virulence will probably produce no more than mild effects.... 132

Statistical data for the United States found in FIGURE V above, which closely parallels Canada’s experience, illustrates that a number of common infectious diseases underwent major declines without vaccines or before specific vaccines were ever introduced (e.g. there were no vaccines for either scarlet fever or typhoid). Very similar major decline patterns for a range of infectious diseases occurred during this same time-frame in the Australia before vaccine programs were initiated in there. 133 In other words it is self-evident that such declines were essentially due to improvements in socio-economics, transportation, nutrition, and hygiene.

It can here be summarily stated that in the vast majority of cases where one observes significant health problems among Indigenous peoples whether of an infectious or degenerative nature, one will also find conditions of poverty. Such poverty is often associated with the historical dispossession of traditional economies, livelihoods, lands, and lifestyle patterns which includes a
turning away from traditional foods to the refined foods of commerce. General socioeconomic improvements, environmental improvements, the restoration of land, the harvesting of uncontaminated traditional foods, the development of and reliance upon organic family and community based gardens, the availability of potable water, safe housing, enhanced hygienic conditions, intelligent fasting (a common traditional preventive and therapeutic practice), and the appropriate use of simple (non-toxic) plant medicines are the basic requisites that will ensure rapid healing and fullness of health.  

2.7 Reconsidering the Causes Underlying Infectious Disease Epidemics

Since the issue of pre and post-contact infectious disease is the area most extensively addressed in the literature pertaining to the health of the first peoples of Canada and North America, it is important to accord consideration to an largely ignored alternative perspective on the basic theory and unchallenged assumptions that underpin this major field of bio-medicine. Indeed, it remains remarkable that whether we go to recent or more distant history, we find that fundamentally critical scientific discoveries and observations which serve to clarify these issues, and point in a more appropriate direction, continue (at least in practice) to be largely unknown and or ignored. Due to the need for brevity, only a few historic cases will be considered. In a real sense, what follows essentially represents a lost chapter biomedical history of the greatest importance.

Earlier in the twentieth century, C. E. Rosenow of the Mayo Biological Laboratories began a series of experiments in which he took distinctive bacterial strains from a number of different disease sources and placed them in one culture of uniform media. In time the distinctive strains all became one class. By repeatedly changing cultures, he could individually modify bacterial strains making some harmless or “pathogenic” and in turn reverse the process. He concluded that the critical factor allowing demonstration of the polymorphic (or pleomorphic) nature of bacteria was their environment and the food they lived upon. These discoveries were first published in the year 1914 in the Journal of Infectious Disease.  

Rosenow’s work was corroborated and expanded upon a few decades later by R.R. Rife, developer of the Universal Microscope, developed at the time of RCA’s early marketing of the electron microscope. Rife’s scope was a 5,682 component, 150,000 power (60,000 diameters of magnification) instrument which made live bacteria visibly “clear as a cat on your lap”. (An alternative was required, as living matter when viewed under the electron scope, becomes altered and distorted due to bombardment by a virtual hailstorm of electrons, with such distortions increasing proportionally with the intensity of magnification. Consequently, the extremely high magnification levels found in the latest electron microscopes actually serve to exacerbate this major flaw.) This microscope was a light transmitting instrument which overcame the chief weakness of the electron scope, i.e. the inability to view living cells
structures and microorganisms in their unaltered living state.\footnote{136}

Modern microscopy texts suggest that with light microscopes it is impossible to obtain extremely high magnifications of objects and still retain visual clarity. For example, Novikoff and Holtzman affirm that in such instruments a point is reached after which the image is “increasingly blurred and nothing is gained by further magnification. Thus, light microscopes are rarely used at magnifications greater than... 1500 X.”\footnote{137} However, Rife’s invention with its 14 separate crystal quartz lenses and prisms, was able to bend and to polarize light in such a way that a specimen could be illuminated by extremely narrow portions of the spectra, and even by a single light frequency. This combined with the shortening of projection distance between prisms, and other innovative technical features permitted high resolutions without distortion at extremely high magnifications, never before or since attained in light microscopy.

Rife actually demonstrated that by altering the environment and food supply, friendly bacteria such as colon bacillus could be converted into "pathogenic" bacteria. For example, he observed that in as brief a time span as 48 hours (by just altering the media - 4 parts per million per volume) harmless Bacillus coli became Bacillus typhosus. - a process somewhat analogous to the metamorphosis of caterpillar and butterfly - with the process being reversible. In Rife's words:

\[\text{In reality, it is not the bacteria themselves that produce the disease, but we believe it is... the unbalanced cell metabolism of the human body that in actuality produce the disease. We also believe if the metabolism of the human body is perfectly balanced... it is susceptible to no disease.}\footnote{138}

This observation closely parallels Alexis Carrel's earlier research at the Rockefeller Institute where he was able to control the rates and levels of infectious disease mortality among mice. Beginning with the “standard American diet” he observed a corresponding death rate of 52 percent. By making specific dietary improvements, he was able to reduce mortality rates downward to 32 percent, then 14 percent, and finally to a rate of 0.\footnote{139}

Not too long after Rife's and Carrel's reported observations, scientist Rene Dubos (like Carrel, also at the Rockefeller Institute) reaffirmed their open and direct challenge to the conventional thinking and practice of the scientific community at large. This prominent scientist concluded that the presumed relationship between microbes and human diseases has been "so oversimplified that it rarely fits the facts of disease. Indeed it corresponds almost to a cult... undisturbed by inconsistencies and not too exacting about evidence." He expanded upon this view in suggesting that we need to objectively account for the fact that extremely virulent:

\[\ldots \text{pathogenic agents [bacterial and viral] sometimes can persist in the tissues without causing disease, and at other times can cause disease even in the presence of specific antibodies. We need also to explain why microbes supposed to be non-pathogenic often start proliferating in an unrestrained manner if the body's normal physiology is upset... During the first phase of the germ theory the}\]
property was regarded as lying solely within the microbes themselves. Now virulence is coming to be thought of as ecological... This ecological concept is not merely an intellectual game; it is essential to a proper formulation of the problem of microbial diseases and even to their control. 140

Indeed, over time Dubos came to voice the radical conclusion that “Viruses and bacteria are not the cause of disease, there is something else”. In his classic work Mirage of Health, he states “The world is obsessed by the fact that poliomyelitis can kill and maim... unfortunate victims every year. But more extraordinary is the facts that millions upon millions of young children become infected... yet suffer no harm from the infection.” 141 This view closely corresponds to the oft quoted conclusion arrived at in later life by R. Virchow (popularly reputed as father of the “germ theory”) when he stated, “If I could live my life over again, I would devote it to proving that germs seek their natural habitat, diseased tissues, rather than being the cause of disease.” Since Dubos’ time, researchers have estimated that the quantity of symptom free exposure to viruses out number clinical illnesses by at least one hundred-fold. 142 This conclusion is based on the “high proportion of adults who have virus-neutralizing substances in their serum and the number who, during an epidemic, excrete virus without becoming ill.” 143

So we can reasonably conclude that the conventional idea that infectious disease is a sole result of bacterial invasion is widely promulgated medical half-truth that has for decades conveniently allowed politicians and physicians to side-step more controversial issues in health and disease. As long as the "enemy" is a mere germ or virus one can wage wars against disease using the toxicological armaments of selective medicine, i.e. vaccines and drugs and never really have to change prevailing social inequities, and political and economic injustices, that in fact serve as the underlying causes of human disease. Behind the outward signs of human wellness or alternatively physical and mental breakdown, lie many more fundamental issues not traditionally considered part of "health care": political self-determination, adequate income generation, access to unpolluted natural resources, quality food production and intake, and practical education. All of these factors function as key determinants of health outcomes. 144 For a better appreciation of the contrasts between the bacterial/viral and the cellular/ecological theories of infectious disease, see Annex I.

2.8 Vitamin Prophylaxis & Remediation of Infectious Diseases

Given the evidence that infectious diseases continue to be a major health problem in Aboriginal communities it is deemed important to examine how a few indispensable micro-nutrients can have a major impact in the prevention and remediation of a wide diversity of infectious conditions. It was prominent British physician Leonard Williams who affirmed that: Until lately disease was regarded as a sin of commission by some unseen and subtle agency. The vitamins are teaching us to regard it... as a sin of omission on the part of civilized and hyper-civilized man. By our habit of riveting our attention on microbes and their toxins we have sadly neglected... our own bodily defenses. 145

It is remarkable that some of the most significant experimental and clinical based research that exists on the relationship between nutrition and infectious disease were published in the first half of the 20th century, with much of this early research detailing the considerable protective and remedial values of the newly discovered vitamins. To this day, in North American clinical practice the employment of such critical nutrients is largely overlooked. For brevity's sake our
examination will be limited to considering the two vitamins which hold incredible potentialities in the effective prevention and alleviation of human infectious diseases, i.e. Vitamins A and C.

2.8.1 Vitamin A
Vitamin A is recognized as an essential nutrient for maintaining normal physiologic functions, including cellular differentiation, membrane integrity, vision, immunologic responses and growth. A diet high in vitamin A and pro-vitamin A carotenoids is essential at all stages of life. Severe vitamin A deficiency can lead to blindness, developmental problems and even death, especially for children. Literature dating back as far as the 1920s has noted an association between Vitamin A deficiency and an increased incidence and severity of infection, \(^{146}\) which early led to the labeling of Vitamin A as the “anti-infective vitamin”. \(^{147}\) In addition to being anti-infective, it has been found to be protective against major chronic diseases such as diabetes, some cancers, obesity and heart disease. In the late 20\(^{th}\) century, Vitamin A deficiency received considerable attention in international health circles as having tremendous potential for the saving of infants and young children’s lives. This was due largely to various field studies which linked Vitamin A deficiency with an increased risk of childhood morbidity and mortality from multiple infectious diseases in underdeveloped regions of the world. \(^{148}\)

Among these studies it was observed by field researchers that preschool children with mild night blindness and bitot's spots – evidencing a Vitamin A deficiency - were dying at a rate ranging from 4 to 12 times greater than that of neighboring children with normal vision. \(^{149}\) This was observed in an 18 month longitudinal study of 4,600 preschool children from six separate communities in Indonesia. In fact such relationships persisted even after stratifying for the presence or absence of respiratory disease, protein energy malnutrition, or diarrhoea. The researchers asked but did not fully answer their own question as to why children perceived as well nourished, but who were mildly Vitamin A-deficient, died at such significantly increased rates.

The first major controlled field study to be published in an well-known medical journal detailing an observed relationship between Vitamin A deficiency and death rates from infectious disease, reported on the results of a randomized, community trial of Vitamin A supplementation also in Indonesia. 450 villages were randomly assigned to either participate in a Vitamin A supplementation scheme for one year (229 villages), or serve as a control for the same period (221 villages). The study observed that among children aged 1 to 6 years at baseline, the death rate in the 221 control villages without any vitamin a supplement nor any placebo, was 49% greater than in those villages in which Vitamin A supplementation was given. \(^{150}\)

According to an exhaustive review carried out by Mamdani and Ross, and reported in their article “Vitamin A supplementation and child survival: magic bullet or false hope?” they state that:
An association between Vitamin A deficiency and infectious diseases, in particular diarrhoea, respiratory infections and measles - which are among the most important causes of death during childhood... [in impoverished communities] has significant policy implications... Overall, the balance of evidence suggests that Vitamin A deficiency does lead to an increased risk of infections such as measles, respiratory infections and diarrhoea, and hence to an increased risk of death. Conversely, the evidence suggests... that Vitamin A supplementation, or other strategies for improving Vitamin A status, would lead to a decrease in the incidence and/or the severity of these infections and of the substantial mortality associated with them. The magnitude of this potential... may be substantial. 151

Strategies for supplementation include the fortification of selected commercially sold foods which are commonly consumed, and dietary modifications. The latter measure includes a “long term solution”, i.e. the increased production of Vitamin A-rich foods through home, school, and community gardens, wherever climate and soil conditions permit.

2.8.2 Vitamin C

In a shocking nutritional status survey conducted close to mid-century on a First Nations population group in Northern Manitoba, it was found that the most prevalent micro-nutrient deficiency was Vitamin C, i.e. on average less than 1/71 the recommended daily allowance. At the time, the death rate from tuberculosis among these Aboriginal people stood at 1,400 per 100,000 in comparison to 27 per 100,000 in the general population (i.e. over 50 times the general population rate.) The researchers concluded, “…it is probable that the Indian’s great susceptibility to many diseases, paramount amongst which is tuberculosis, may be attributable...to their high degree of malnutrition arising from lack of proper foods.” 152

Kalokerinos, who over many years use employed Vitamin C as a preventative and therapeutic measure to reduce substantial vaccine related mortality among the Aboriginal population of Australia with co-author Glen Dettman (the scientist who formerly headed the science team commissioned by the Australian government to investigate Kalokerinos claims on Aboriginal death rates – for more detail see section 2.10.2) stated the following:

If you were offered a substance that could assist with the endogenous production of interferon and PGE1, that activated enzyme systems, assisted with mineral uptake and collagen production, aided healing, prevented capillary fragility and stimulated renal function, was capable of curing both viral and bacterial infections, was a universal detoxifier effective against drugs and venomous bites and was currently being used more and more in the treatment of degenerative diseases, you would rightly scoff. More particularly if you were told that this substance was Vitamin C, yet all these claims and more have been documented and put to clinical trial. 153
As we go on to examine what is indeed a vast body of experimental and clinical data on Vitamin C, we find that there are indeed substantive evidences for its efficacy as a low cost, perfectly safe, and wide spectrum anti-viral, anti-toxic and anti-bacterial agent. Internationally noted biochemist Irwin Stone has alone described and documented a wide range of applied bio-medical research and clinical experience (employing 122 literature citations) spanning a 40 year period showing its marked efficacy as a prophylactic and therapeutic agent.\textsuperscript{154}

**Viral Infections**

The results achieved in the direct clinical practice of North Carolina physician F. Klenner (M.D.) approached the extraordinary. He graphically describes, from his own clinical practice and other reputable sources, the substantive efficacy of Vitamin C in preventing and or reversing serious pathological and life threatening conditions which literally extend over “the entire gamut of medical knowledge”.

The list which follows on Table III below suggests the range of conditions as described in this and other journal articles by Klenner. Although viral related conditions are being discussed in this sub-section, a few bacterial diseases have been included in this list and are italicized for identification (some serious toxic and degenerative conditions are also included).

<table>
<thead>
<tr>
<th>TABLE III. CONDITIONS SUCCESSFULLY PREVENTED &amp; REMEDIATED EMPLOYING VITAMIN C</th>
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<td>infectious hepatitis</td>
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<td>influenza</td>
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<td>virus encephalitis</td>
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<td>poliomyelitis</td>
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<td>measles</td>
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<td>parotitis (mumps)</td>
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<td>mononucleosis</td>
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<td>scarlet fever</td>
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<td>heavy metal intoxication</td>
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<td>trichinosis *</td>
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<td>malignancies</td>
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<tr>
<td>childbirth labor (ease and shorten)</td>
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<tr>
<td>cardiovascular diseases</td>
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<td>pancreatitis</td>
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<td>radiation sickness</td>
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In Klenner’s successful reversal of trichinosis, a combination of Vitamin C and para-aminobenzoic acid were used.\textsuperscript{155}
Writing in the Journal of Southern Medicine and Surgery, he ascribes the relative limitations in success that had been observed in much of the earlier experimental results with Vitamin C, to the extremely low dosage levels used in the trials. Conversely, the explanation to his unprecedented clinical achievements lay in the much higher dosage that he administered. He comments:

*The years of labor in animal experimentations; the cost in human effort and "grants", and the volumes written, make it difficult to understand how so many investigators could have failed in comprehending the one thing that would have given positive results [i.e. to the degree Klenner attained]... This one thing was the size and frequency of its administration.*

In the same article he goes on to describe:

- A measles epidemic in which “Vitamin C was used prophylactically”, in which without exception all who received 1 gram every six hours either intravenously or intramuscularly “were protected”.
- 60 acute cases of poliomyelitis, (the diagnosis was confirmed by lumbar puncture, with cell counts ranging from 33 to 125) for the first 24 hours, 1 to 2 grams - depending on age - of Vitamin C was administered every second to fourth hour (intramuscularly in children up to four years). For the following 48 hour period the 1 to 2 gram dosage was given only every sixth hour, with all 60 patients diagnosed “clinically well” within 72 hours from the commencement of treatment.
- Six cases of virus encephalitis were similarly treated with Vitamin C injections, and all without exception made dramatic recoveries.
- Diphtheria patients were treated using the same intensive treatment method and fully recovered “in half the time required to remove the membrane and get negative smears by antitoxin.”  

Summarily, Klenner could well affirm that “we have been able to assemble sufficient clinical evidence to prove unequivocally that Vitamin C is the antibiotic of choice in the handling of all types of virus diseases.” As well he demonstrated, through trial and experimentation that where tissue levels of the vitamin are maintained, an environment that is extremely unfavorable for virtually all forms of viral infection to exist in the human body.

**BACTERIAL INFECTIONS**

Within five years of the discovery of Vitamin C, research studies were being published in the medical literature on the clear association between scurvy and a range of infectious diseases in guinea pigs and humans that were both bacterial and viral in nature. Sirsi reported that 10 mg. percent was sufficient to destroy virulent strains of M. tuberculosis. Other researchers found that Vitamin C was effective in completely neutralizing and rendering harmless a wide range of bacterial toxins. These included: diphtheria; tetanus; staphylococcus; and dysentery.

Charpy reported on a clinical trial where 15 grams of Vitamin C was administered daily to a group of extremely advanced Tuberculosis patients, in which the medical prognosis for all six
cases was certain death. (Six were originally to be tested, however one died before the trial could actually begin). As for the five patients who were actually given this treatment, all underwent an impressive transformation in their general condition, and not only left their beds, but within a six to eight month period had regained from 20 to 70 pounds in body weight. As an added point of interest, each patient had cumulatively taken about 3 kilograms (3,000,000 milligrams) of Vitamin C during the test period with absolute safety and perfect tolerance.

Hochwald employed injections of 1/2 gram of Vitamin C every one-and-a-half hours (6 grams in a 12 hour period) in pneumonia until the fever and local symptoms subsided. The speed with which this treatment worked was so rapid that it was actually possible within the first day to practically eliminate all local symptoms of infection including the fever, and to attain a normalization of blood counts.

Two articles in the Canadian Medical Association Journal reported on oral Vitamin C therapy - i.e. 1/2 gram the first day, followed by an average 1/5 gram each day thereafter - on 29 whooping cough (pertussis) patients. The researchers concluded that “this treatment markedly decreases the intensity, number and duration of the characteristic symptoms.” In DeWit’s clinical experimentation in the Netherlands 1/2 gram of Vitamin C was administered daily in the treatment of children with Pertussis for a period of one week, after which it was gradually reduced stepwise. Of the 90 children treated (who were divided into 3 comparable groups) the duration of the illness was 15 days for those receiving the vitamin injections, 20 days for oral recipients, and 34 days for the control group who did not receive the vitamin in any form, but had instead received the newly developed vaccine.

Other clinical trials on the successful reversal of human bacterial infections by Vitamin C exist in the bio-medical literature, e.g. in the treatment of leprosy, typhoid fever and dysentery. In these various reports, without exception, the speed and level of success as reported correlates directly with the amount of dosage administered. Physician R. Cathcart’s extensive clinical experience led him to conclude that proportional to the level of Vitamin C depletion, there would follow human immune system failure, consequently increasing the susceptibility and potential manifestation of a wide range of disorders including various acute, secondary, and chronic infections (viral and bacterial), allergic reactions, inflammatory and collagen diseases, as well as an impaired ability to heal.

On a personal level, at the outset of my wife’s being diagnosed with hepatitis A (then termed infectious hepatitis), I convinced a local physician to administer 10 grams of Vitamin C over three consecutive days intravenously at the Winchester, Ontario hospital. After the third treatment her strength and appetite fully returned, and fully recovered she got out of bed. On the other hand, her younger sister who had apparently been the transmitter of the infection to my wife, spent nearly three weeks in bed recovering.

In considering the practical implications and strategic importance of the knowledge of Vitamin C relative to the issue of health in Aboriginal communities, it would be worthwhile to conclude this discussion of Vitamin C with the following summarization by Toronto, Ontario physician William McCormick.
In many cases of deficiency, where the dietary intake indicates a subnormal intake of Vitamin C over a lengthy period, the correlated clinical history shows repeated occurrence of infectious processes....The author has made intensive application of vitamin-C therapy, orally and parenterally, in many... infectious diseases,... with results in every case even more rapid and favorable than could be expected from the use of the modern antibiotics, and with the added advantage of complete exemption from toxic or allergic reactions. 170

2.9 BIO-PHYSICAL UNDERPINNINGS OF MENTAL HEALTH

As stated in section one, among pre-contact and very early contact indigenous peoples in North America “there was a much greater scarcity” of most mental disorders, than was being experienced in the European population. Conversely, we today find that behavioural disorders, accidents and social violence are endemic in many Aboriginal communities.

In the year 1979 when attending a national First Nations conference in Calgary, Alberta, James Wuttunee - who was then a highly reputed and sought after criminal defense lawyer - shared a unique feature about his professional practice. He explained, that it in order for any prospective client (Aboriginal and non-Aboriginal) to obtain his legal services, he/she must first accept the pre-condition to drop cigarettes and alcohol, and change to a prescribed 100% unrefined whole food (plant based) diet. This was done because, as he said, these fundamental changes in lifestyle practices had a profound impact in terms of improving the attitude, spirit and demeanor of his clients. Their marked attitudinal and behavioral changes made the task of dealing with juries and of winning cases much easier. 171

Wuttunee’s experience has been corroborated by Stephen Schoenthaler, a professor of Criminal Justice in the California State University system, who has studied nutrition and behaviour at numerous juvenile and adult correctional facilities and in public schools. His series of studies over the last two decades is voluminous and has demonstrated impressive results in human behaviour simply by making adjustments in food intake and/or ensuring nutritional supplementation. For instance, in a typical study, the diets of 71 residents of a state juvenile treatment facility were improved by inter alia eliminating junk foods and high sugar snacks. During the treatment phase of the double-blind, placebo-controlled, crossover study, overall violence fell 66 per cent from 306 incidents to 104. Total AWOL and escape attempts fell 84 per cent from 79 to 13 incidents and destruction or theft of state property dropped 51 per cent from 49 to 24 incidents. In another 1983 study of 3,000 imprisoned teenagers, highly refined foods were replaced with healthier options. During the year in which diets were changed, violent and anti-social incidents decreased significantly. There was also a 100 per cent reduction in suicides, 25 per cent reduction in assaults, and 75 per cent reduction in use of restraints. In a smaller study of 68 juveniles receiving a nutritionally superior diet, the incidence of assault dropped 82 per cent and theft dropped 77 per cent. 172
Psychotropic (behavior and mood altering) synthetic drugs are clearly not the solution, but it appears have become salient part of the problem. For example, 16-year-old Chippewa youth Jeff Weise on March 21, 2005 killed his grandfather who was a longtime companion, and then went to the school on Red Lake Indian Reservation in Minnesota where he killed nine people and wounded seven others before killing himself. He was on prescribed Prozac (fluoxetine). If we go on to examine some other sample cases of what has been referred to as “iatrogenic homicidality disorder” (narrowing our focus on the time period of 1999 to 2001) we find eight (8) separate incidents which occurred in Alberta, Washington, California, Pennsylvania, Georgia, Oregon, Idaho and Colorado in which teenagers, ranging in age from 14 to 18 years, either took students hostage, or took the lives of loved ones and/or fellow students. Without exception, every perpetrator of these crimes was daily taking one or more of the following prescribed psychotropic drugs: Prozac; Effexor; Calexa; Dexadrine; Luvox, and Ritalin.

2.10 Western Medical Services & Aboriginal Health Outcomes

The textbook Aboriginal Health in Canada attributes the decline in diseases such as “measles, rubella, mumps, poliomyelitis, tetanus and diphtheria in Aboriginal communities” to the “success of immunization programs.” Likewise, the commissioners who authored Gathering Strength, affirmed the common understanding that the decline in infectious diseases which were the major causes of premature deaths among Aboriginal populations have significantly lessened due to the impact of medical interventions. This includes a notable decline in infant mortality and a corresponding increase in life expectancy. Evaluators of the overall impact on Native American health of the U.S. Indian Health Service interventions, echo these assertions:

Not all news regarding [Native American] health status is bad news. The IHS, which has been given primary responsibility for eliminating this disproportionate health status, has been largely successful in reducing mortality rates, while making significant improvements in other areas… [viz.] the incidence and prevalence of many infectious diseases have been dramatically reduced through increased clinical care and public health efforts such as vaccination for infectious diseases and the construction of sanitation facilities.

We will now examine more closely the veracity of this widely accepted and oft repeated claim, initially focusing on the Aboriginal context in Canada.

2.10.1 Tuberculosis and BCG Vaccine Usage Among First Nations and Inuit People

The overall decline from the mid 20th century to the present in the incidence of tuberculosis in Aboriginal communities has been generally attributed by public health officials to employment of the BCG vaccine. The widespread employment of this vaccine in Aboriginal communities, with a particular emphasis on infants and children began in the late 1940s. As of September 2004, the vaccine is still being employed in the vaccination of infants in Saskatchewan (24 Aboriginal communities and at least an additional 30 communities under the Northern Inter-
Tribal Health Authority); in Alberta (four communities); and in Ontario all Aboriginal communities located in Northwestern Ontario, Thunder Bay and Sioux Lookout Zones. However, in the 2003 Pediatrics and Child Health article “To BCG or not to BCG, that is the question!... Why can’t we get it right?” the author asks “Does BCG vaccine work?” and then answers “This is the proverbial $64,000 question.” (The same article refers to “adverse events” during the period of 1993-2001 in five First Nations children [one with HIV] officially attributed to the administration of BCG. All of the infants died, with their deaths being attributed to immunodeficiency.) A 2005 article in the Pediatrics Infectious Disease Journal notes that the Vaccine-Associated Adverse Event Surveillance (VAAES) program, (a passive national reporting system) identified (1987-2002) 157 adverse events from use of the vaccine. It was concluded that “Serious BCG vaccine-associate complication continue to occur in Canada. The numbers of FNI children with disseminated disease was greater than expected from reported rates in the literature.” In light of this information it is not surprising that the 2002 Canadian Immunization Guide, notes that a “careful review of adverse events associated with BCG vaccine has raised concerns that routine neonatal immunization in First Nations children could be associated with unacceptable health risks.”

A 2004 article published in the International Journal of Circumpolar Health asks the question “Does BCG have a role in 21st Century Canada?” It reports that in the period of 1997-2000 tuberculosis among First Nations (on-reserve) and Inuit people was still disproportionably high, i.e. “25 times higher than the Canadian-born, non-Aboriginal rate”. This raises the question, since Aboriginal peoples – particularly children – have been widely and routinely vaccinated with BCG since the late 1940s, and the vaccine presumably prevents the disease, why are the TB infection rates still so prevalent? The report also alarmingly indicates that “Disseminated BCG infection increases mortality among children with immunodeficiency disorders.” Since it is generally recognized that immunodeficiency related to poor nutrition is not an uncommon problem in Aboriginal communities, what are the real implications of this observation of increased deaths associated with the vaccine’s usage?

Also addressing the issue of efficacy, is a 2005 article published in the Canadian Respiratory Journal which concludes that “BCG vaccinated Aboriginal people were no less likely to have active TB from recently transmitted disease. BCG vaccination appears to have limited value in preventing clustering of TB cases within this high risk community [Aboriginals].”

It further bears noting that in a massive community-based double blind randomized controlled trial of BCG’s effectiveness involving over a quarter of a million Indian (India) subjects who were vaccinated with BCG or a placebo, with careful follow-up monitoring extending over a 15 year period, it was found on average that the number of persons contracting tuberculosis were higher in the vaccinated groups than in the placebo group (1/3rd received a high dose of 0.1 mg BCG, 1/3rd a low dose 0.01 mg BCG, and 1/3rd a placebo). Interestingly, when compared with the placebo group, in years 0-2.5 the vaccinated had double the incidence of the disease, and in years 2.5-5 the number of vaccinated contracting tuberculosis were virtually double in the high
Two other large developing world trials based in Africa, one of which involved 83,000 subjects, found that “There was no statistically significant protection by BCG against tuberculosis in this population.” In fact as in India, it was reported that there were more cases of pulmonary tuberculosis found in the BCG vaccinated group. The England/Wales decline pattern as illustrated in Figure VI below is instructive as it essentially parallels the decline history that has occurred in the United States and Canada. The only Canadian provinces that implemented any routine use of the vaccine were Newfoundland and Quebec in the year 1948 (it was at this time that widespread usage of BCG was launched in First Nation communities) and Prince Edward Island in 1966. These few provinces employed the BCG exclusively for school students, with such usage discontinued entirely in the mid to late 1970s.

With reference to the causes of decline of tuberculosis, Gerhard Buchwald a medical doctor from Germany testified in Montreal before a hearing of the Quebec College of Physicians Medical Board on March 25, 1996. (He had previously served as a special advisor to various plaintiffs in 150 legal cases involving vaccine injury complaints, and written 200 papers on the subject of immunization.) He there stated that tuberculosis “has come to be less and less dangerous over time. One hundred years ago, being diagnosed with tuberculosis was a death sentence.” Referring to its decline he states that “vaccinations had no influence at all. The reason behind this decline is as I showed you earlier. Never before have... Canadians, for instance, enjoyed such a good life. The victory that has been won over epidemics is not due to physicians, but to farmers and social legislation... Better dwellings, better bathrooms, and more soap... Everything that we may refer to as general social ameliorations...”

2.10.2 Other Vaccines & Infectious Diseases
As a matter of public policy, in addition to those who still receive BCG, a wide spectrum of recommended vaccines is routinely administered to First Nations, Inuit and Metis (with a particular emphasis on infants and children). These include: DPT, OPV, IPV, MMR, HBV and Influenza (flu).
Since this represents a highly complex and controversial field, and we are regularly exposed to the proponent views of officialdom, it is important to understand that there are noted physicians and scientists who have raised weighty counterclaims on the crucial issues of vaccine efficacy and safety.

General Concerns Related to Efficacy

Since this paper has already addressed efficacy issues surrounding BCG, and has space limitations, only a few other vaccine interventions and their alleged effects will be looked at.

Flu Vaccine(s)

It bears noting that the flu vaccines are probably the most widely promoted for virtually all age groups and at all levels of society, on a recurring basis. According to a recent article prepared by the Coordinator of the Italy based Cochrane Vaccines Field (a UK based Cochrane Collaboration entity) and published in the British Medical Journal, the ability of inactivated influenza vaccines to significantly reduce morbidity and mortality from the “flu” is unknown, and data confirming influenza vaccine safety are limited. The report indicates that such vaccines have marginal or no effect in preventing influenza in children and the elderly. It also indicates that there is not enough evidence to recommend universal vaccination against influenza in healthy adults. “There is a big gap between policies promoting annual influenza vaccinations for most children and adults and supporting scientific evidence... given the significant resources involved in annual mass influenza vaccination campaigns, there is urgent need for re-evaluation of these strategies.”

These findings are paralleled in an extensive review and analysis of multiple research studies on flu vaccine efficacy in the United States. The synthesis report was recently published in the Journal of American Physicians and Surgeons, which examined “yearly influenza death rate, yearly influenza case rate, and yearly rate of hospitalizations with influenza as the first-listed discharge diagnosis. By these measures, the yearly U.S. mass influenza vaccination campaign has been ineffective in preventing influenza in vaccine recipients.” Figure VII above is copied from this landmark review study.

Furthermore, a 2006 study published in the journal Vaccine confirms that Canada’s first experiment in universal, free flu vaccine has cost Ontario taxpayers more than $200-million, but
appears to have done nothing to reduce the spread of influenza. Per-capita flu rates in the province have not decreased at all since the mass vaccination program was introduced in the year 2000, concluded the University of Ottawa research team. In fact, the average monthly incidence of influenza actually increased over the first five years of the program, although researchers suggest that it is too early to say for certain that numbers are continuing to rise. “All we do know is rates haven’t decreased, and there has been a lot of money spent,” said Professor Dianne Groll, lead researcher in the study. “The program was designed to reduce the incidence of flu, and this hasn’t yet happened.”

Polio
Since the decline of polio among Aboriginal people in Canada and other North Americans has been popularly attributed to the polio vaccine, we need to consider the testimony of Bernard Greenberg, late Dean - School of Public Health, University of North Carolina, who during the polio epidemics of the 1950’s chaired the Committee on Evaluation and Standards for the American Public Health Association. Greenberg testified to U.S. Congressional Hearings on Polio Vaccines (HR 10541, 1962). (Unfortunately the Canadian record is not as accessible.) His evidence respecting diagnostic modifications and statistical manipulation, seriously challenged the popularly promoted view that the epidemics subsided as a result of vaccine intervention. In his words “As a result of... changes in both diagnosis and diagnostic methods, the rates of paralytic poliomyelitis plummeted from the early 1950’s to a low in 1957.” This involved: redefinition of what constitutes an epidemic; redefinition and mislabeling of the disease itself; and a statistical recategorization of the disease. He also testified that U.S. public health authorities purposely manipulated statistics and issued official statements to give a false impression to the public that the disease was on the decline due to vaccine campaigns, when polio rates were then actually on the increase.

In recent years some compelling epidemiological evidence has been garnered which now links polio’s emergence and its precipitous subsidence to what is a strongly correlated rise and decline in the widespread usage of certain industrial neurotoxins, such as DDT, BHC, arsenic and lead based pesticides. Before the banning of DDT in the U.S. and Canada, some scientists came to recognize that the organochlorine pesticides such as DDT are associated with nerve damage, paralysis and death in animals and humans. Today polio continues to exist in Developing World countries such as India where DDT continues to be used. Note the illustrations to the left and Figure VIII on the next page.
General Concerns Related to Safety

Issues of efficacy are in fact overshadowed by concerns relative to artificial immunization’s short, long term, and unknown dangers. A discussion paper issued by the National Aboriginal Health Organization (NAHO) observes that Aboriginal infants in Canada are “at higher risks of incurring conditions like sudden infant death syndrome (SIDS)”. In fact the First Nations and Inuit Health Branch Statistical Profile identifies sudden infant death syndrome (SIDS) as the leading cause of infant death among First Nations people in 1999. 194 In the Western World SIDS is actually the principal cause of death for infants falling in the age-range of four weeks to six months. Eighty percent of SIDS deaths occur before five months of age, with literally tens of thousands (some claim hundreds of thousands) of cases recorded in North America alone.

In the mid-1980s a widely published Australian research scientist Viera Scheibner worked with biomedical engineer Leif Karlsson in developing a superior breath monitoring system named “Cotwatch”. This highly advanced monitoring implement was used with babies thought to be at risk of SIDS. They observed that the monitor was consistently sounding alarms when babies were affected by varied stressful events, with artificial immunization being the most obvious and prominent. The microprocessor recorded the breathing pattern of infants over a period of days and weeks, with the data recorded in computer print-outs. Most researchers arbitrarily subscribe to the unproven idea that in order to attribute deaths to a vaccine(s), such deaths must occur within only hours, or the first few days following vaccination. However, breath monitoring patterns observed over several weeks revealed that babies may and do die for up to 25 or more days after vaccination, in which the “toxic effects of the vaccines” appears to play an observable
and definite role. Indeed to these researchers the linkage between vaccine (particularly DPT) injections, and sudden infant deaths became painfully obvious, and irrefutable.

At this point in her research career, Scheibner was unaware of the concerns and debate surrounding artificial immunization. To settle the issue in her own mind, she went on to systematically review some 30,000 pages from orthodox medical journals spanning a period of over a century. She consequently summarily stated that “…there is a wealth of scientific data to demonstrate that vaccines cause serious derangements of all systems of the body which result in serious injuries, including deaths, and in babies in particular, being misinterpreted as being caused by inflicted trauma [i.e. mistaken for shaken baby syndrome].”  

Dawn Richardson and Karin Schumacher spent considerable time at a U.S. based morgue in order to examine autopsy reports of infants listed as SIDS deaths, and then looked at related vaccination information. They found that a highly disproportionate amount of SIDS deaths clustered at 2, 4, and 6 months, which are the very times when infants are vaccinated. If vaccines had nothing to do with these deaths, the infant mortality should have been randomly spread throughout the first 6 months of life. Furthermore, it was very rare for the vaccine information on the dead infants to be recorded, and there were virtually no investigations into the cause of the multiple infant deaths. Medical examiners routinely missed asking about or even considering the notable correlation between the deaths and the timing of their vaccinations.

In the early 1980s, I was commissioned by the President’s office of the National Indian Brotherhood [today AFN] to spend time in Australia and New Zealand to explore and document the socio-political conditions among the Aboriginal and Maori peoples. This included a visit to the Redfern Aboriginal Health Centre near Sydney where I engaged in dialogue with the Centre’s medical director, Archie Kalokerinos. Two years before my visit he had been awarded the Australian Medal of Merit for “outstanding scientific research.” He is well known worldwide as a physician who devoted much of his career to fighting for the well being of the Aboriginal people of Australia. Now in his retirement years, he is looked to as an “Honorary Medical Advisor for Aboriginal Health.” He is also noted as author of the seminal book Every Second Child. The story that inspired this book follows.

While serving as Medical Superintendent of Collarenebri Hospital (NSW) a Northern Territory politician informed him that the infant death rate in the Northern Territory had doubled in one year, and it actually looked as if it was going to double again. The politician mentioned that there had been a recent intensification and expansion of vaccination campaigns among Aboriginals. “And that is what had done it. They were actually immunising sick kids. The next day I took off by plane to go to the Northern Territory and I was excited by the realisation that at last I had the answer to the problem.” Health teams would sweep into an area, line up all the Aboriginal babies and infants and immunize them. Although the literature warns that sick and malnourished children should not be vaccinated, this would be done without any prior examinations, no taking of case histories, and no checking on dietary deficiencies.
I found that they were visiting the reservations... and if for some reason a mother didn’t want her child to be vaccinated they would simply grab the child and forcibly vaccinate it. I saw them chasing them on foot, and chasing them in Landrovers and grabbing the kids and vaccinating them. Now, a lot of these kids were terribly sick. They were malnourished... And if they survived the first vaccine, in a few weeks they would come back with booster shots... then they would come around with polio shots and so forth. It is a wonder that any kid survived really, not that the death rate had just doubled. [As for those who did survive]... some of the reactions to the vaccines were not those that were listed in the standard literature.

...with some of these reactions which normally resulted in death, I found that I could reverse them by giving large amounts of vitamin C intramuscularly or intravenously. One would have expected, of course, that the authorities would take an interest in these observations that resulted in a dramatic drop in the death rate of infants in the area under my control, a very dramatic drop. But instead of taking an interest their reaction was one of extreme hostility. This forced me to look into the question of vaccination further, and the further I looked into it the more shocked I became. 197

Kalokerinos’ telling experience brings to mind the fact that in late 1991 my sister Elizabeth Obomsawin (who is an RN) while visiting the Cherokee Indian Hospital in western North Carolina, interviewed a Native American U.S. Indian Health Service employee who had served in five or six different Native American hospitals throughout the United States. A key question that she posed to him was what he considered to be the most serious health problem facing Native American people in the country. Expecting to hear that it was diabetes or alcohol dependency, she was taken aback when he explained that it was vaccine damage to infants and children. He went on to enumerate the numerous cases of neurological and other forms of damage that he had seen in every one of the Indian hospitals that he had served in over a period of many years.

One other area of very serious concern relates to the issue of the impact of vaccines on the human nervous system, brain function, and behavior patterns. In the year 2004 board certified neurosurgeon Russell Blaylock - associate editor of the Journal of American Physicians and Surgeons - published an article in this journal in which he outlined that “There is growing evidence that overstimulation of systemic immunity can produce deleterious effects on nervous system function including neurodegeneration.” He links this pathophysiological “overstimulation” with the routine practice of administering multiple vaccines, which far exceed the coping ability of the human body-mind complex, particularly in infants. 198 To better understand his findings, keep in mind that vaccines contain killed viruses or bacteria, toxic extracts or attenuated live organisms. To stimulate an enhanced immune reaction against these organisms, the manufacturers add powerful immune-stimulating substances such as squalene, and aluminum, etc. (called immune adjuvants). The process of inducing artificial immunization usually requires repeated injections of the vaccine(s) over a set period of time.
In another related paper, he indicates that because more and more studies are being published which cite “vaccine failure, their manufacturers' answer is to make the vaccines more potent. They do this by making the immune adjuvants more powerful or adding more of them. The problem... is that in the very young, the nutritionally deficient and the aged, over-stimulating the immune system can have an opposite effect, it can paralyze the immune system. This is especially prevalent with nutritional deficiency.” Blaylock then refers to the fact that early attempts to vaccinate certain African populations met with disaster when it was discovered that many were dying following vaccination. The high mortality was traced to “widespread vitamin A deficiency” among recipient tribal groups. “Once the malnutrition was corrected, death rates fell precipitously.”

Blaylock’s concerns relate to the observed destruction of synaptic connections, dendrites and the onset of abnormal pathway development in the developing brain, as well as in the adult brain. Known toxic metals placed in vaccines such as thimerosal (mercury), aluminum, and fluoroaluminum directly interfere with brain metabolism and antioxidant enzymes, causing damage to DNA and DNA repair enzymes, and triggering excitotoxicity. Furthermore, since the artificially induced immune stimulation in vaccination continues to act over a prolonged period of time, the immune adjuvants in the tissues, constantly stimulate immune-activating cells.

With most natural infections the immune activation occurs rapidly, and once the infection is under control, it drops precipitously. This, as we shall see, is to prevent excessive damage to normal cells in the body... For a long time no one considered the effect of repeated vaccinations on the brain. This was based on a mistaken conclusion that the brain was protected from immune activation by its special protective gateway called the blood-brain barrier. More recent studies have shown that immune cells can enter the brain directly.

For our discussion, activation of the body’s immune system by vaccination is a most important stimuli for activation of brain microglia... The more powerfully the body’s immune system is stimulated the more intense is the brain’s reaction... Therein lies the danger of our present vaccine policy. The brain’s immune system cells, once activated, begin to move about the nervous system, secreting numerous immune chemicals (called cytokines and chemokines) and pouring out an enormous amount of free radicals in an effort to kill invading organisms. The problem is, there are no invading organisms. It has been tricked by the vaccine...

His article goes on to point out that cytokines cause:

- Confusion
- Language difficulties
- Disorientation
- Seizures
- Memory problems
- Somnolence and Low-grade fevers
- Irritability
- Mood alterations
- Combativeness
- Difficulty concentrating
- A host of other behavioral problems
…Unlike the body’s immune system, the microglia also secrete two other chemicals that are very destructive of brain cells and their connecting processes. These chemicals, glutamate and quinolinic acid, are called excitotoxins. They also dramatically increase free radical generation in the brain. These destructive chemicals, as well as the free radicals they generate, are diffused throughout the nervous system doing damage, a process called bystander injury. It’s sort of like throwing a bomb in a crowd… Normally, the brain’s immune system, like the body’s, activates quickly and then promptly shuts off to minimize the bystander damage. Vaccination won’t let the microglia shut down. In the developing brain, this can lead to language problems, behavioral dysfunction and even dementia.

Blaylock refers to a recent study by the world-renowned immunologist Dr. H. Hugh Fudenberg who has found that adults vaccinated yearly for five years in a row with the flu vaccine “had a 10-fold increased risk of developing Alzheimer’s disease.” Fudenberg attributes this to the mercury and aluminum in the vaccine. “Interestingly, both of these metals have been shown to activate microglia and increase excitotoxicity in the brain.”

In the child, brain immune over-activation has been shown to be particularly damaging to the amygdala and other limbic structures of the brain. This can lead to unusual syndromes such as the loss of “theory of mind”… It has also been shown to damage the executive functions of the frontal lobes. In essence, what is lost is that which makes us social human beings, able to function in a complex world of ideas and interactions… Several studies have indeed shown elevated levels of cytokines in autistic children… what we see is a vicious cycle of immune activation, excitotoxin and cytokine excretion, and free radical production. The latter starts the cycle all over again.

With reference to vaccines using attenuated viruses Blaylock expresses concern that “in far too many cases these viruses escape the immune system and take up residence in the body for a lifetime.” Most of these viruses were found to be “highly mutated.” In fact, different mutations have found among viruses in various organs in the same individual.

These attenuated viruses undergo mutation brought on by the presence of free radicals in the tissues and organs and they can mutate into virulent, disease-causing organisms. Recent studies have confirmed this frightening finding. Once these live viruses are injected, they cannot be removed. Because the viruses remain in the body, they will be under constant free radical exposure, which can increase during times of stress, illness, exercise and with aging… the viruses can exist in the brain, or any organ, either silently and slowly producing destruction of the brain or spinal cord or producing sudden disease once the virus mutates to a highly lethal form.
With respect to the public policy of giving numerous vaccinations to individuals, in particular children, he comments that “A considerable number of studies have shown conclusively that such a practice can lead to severe injury to the brain by numerous mechanisms. Because the child’s brain is undergoing a period of rapid growth from the third trimester of pregnancy until age 2 years, his or her brain is at considerable risk from this... policy.”

In this vein, medical historian Harris Coulter co-authored a book focusing on the dangers of DPT (diphtheria, pertussis, tetanus) which gave primary impetus to the United States Congress passing the National Childhood Vaccine Injury Act of 1986 (Public Law 99-660), thus creating the National Vaccine Injury Compensation Program (VICP). As of the end of 2004, this program had received nearly 11,000 vaccine damage claims, and has paid out over $900 million in the settlement of just over 2,000 of these claims. Coulter subsequently researched and authored a book with even more serious repercussions entitled Vaccination, Social Violence, and Criminality. His research led him to conclude that vaccine associated “physical disabilities are only part of the picture. Much more important at the mental, emotional, and moral dimensions of vaccine damage.”

In this book he outlines how myelin is a waterproof substance that coats nerve fibers just like insulation on an electric wire and has the same function. Without this protective substance nerve impulses will short-circuit from fiber to fiber. The cerebral hemispheres and the cerebral cortex (the locus of memory and higher activities of the mind) are the last regions of the human brain-nerve system complex to be myelinated, i.e. in the fifth year of life, or later. Magnetic resonance imaging has shown that infants and children who are developmentally delayed have parallel immature patterns of myelination. The fact that vaccination can impair the myelination process has been well established in medical science for decades. For example, autopsies performed after postvaccinal encephalitis show complete or partial destruction of myelin sheaths within the lesions.

A large body of research has been done on the neurological status of persons involved in violent crime. They are seen to have a very high incidence of one or more typical post-encephalitic conditions such as: low IQ, hyperactivity; allergies; varying degrees of mental retardation; and seizure disorders. The neurological damage caused by DPT and MMR, is encephalitic and is symptomatic of these very same conditions, as well as: dyslexia; hyperactivity; attention-span difficulties; anxiety; depression; low self-esteem; paranoia; and alienation from others. As damaged infants mature into adolescents they often become involved in “crime, or the violence may be self directed (suicide). They rarely show remorse for what they have done but dissociate themselves from their acts.” He estimates of the number of cases of vaccine caused “severe neurological damage” are considerably higher than the “preposterous figures” given by the medical establishment, with the comment that “at one end of the spectrum you will find a group of seriously damaged children; at the other end there will be a group of children who are apparently not damaged at all. But in between you will find all the gradations of damage ranging from slight to serious.”
Coulter goes on to afford an interesting parallel between what is happening in modern society and what occurred in ancient Rome:

*A major cause of the Roman Empire's decline, after six centuries of world dominance was its replacement of stone aqueducts by lead pipes for the transport and supply of drinking water. Roman engineers, the best in the world, turned their fellow citizens into cripples. Today our own “best and brightest,” with the best of intentions, achieve the same end through childhood vaccination programs yielding the modern scourges of hyperactivity, learning disabilities, autism, appetite disorders, and impulsive violence.*

### 2.11 Diabetes – A Major & Growing Epidemic

In the year 1991, the First Nations and Inuit Health Branch of Health Canada reported that, “from 80,000 to 120,000 Aboriginal people 15 years of age and over had diabetes in Canada. This is still likely to be an underestimate, as we know that both the rates of diabetes and the number of Aboriginal people has increased since 1991.” This estimate is based on the Aboriginal Peoples Survey (1991) correlated with other information. [Figures IX and X](#) which follow are based on Figure 4 in this same Health Canada report. The figures strikingly illustrate the considerable contrast that exists in levels of self-reported diabetes differentiated by gender, between the First Nations population and the general Canadian population in the year 1999. The statistical findings in these Figures are derived from data obtained in the First Nations and Inuit Regional Health Survey 1999.

![Figure IX: Age Adjusted Prevalence of Diabetes (Self-Reported)](image-url)
Diabetes often carries with it a number of disabling and life threatening complications. These include:

- Increased Risk of Cardiovascular Disease (heart disease)
- Higher Prevalence of Hypertension (high blood pressure)
- Increased Risk of Stroke
- More Lower Limb Amputations
- Higher Rates of Kidney Disease and Dialysis
- Higher Rates of Eye Disease
- Frequent Instances of Peripheral Neuropathy (impaired nerve conduction)
- Children - Instances of Aboriginal Children with a Diagnosis of Type 2 Diabetes
- Women - Higher Prevalence, Risk of Complications of Pregnancy, and Future Risk for the Child

**Figure XI** to the right illustrates the greater presence of these various complications in people with diabetes.

**Prevention and Treatment**  
In a clinical trial in Scandinavia involving 522 subjects with impaired glucose tolerance, they were
randomly assigned to either a control group or lifestyle intervention group. The intervention group were encouraged to increase fiber and decrease fat, via whole grains, vegetables, fruits, and low-fat dairy and meats, weight reduction, and daily exercise, including supervised, progressive resistance training and endurance exercise. After an average 3-yr follow-up, the risk of diabetes was reduced by 58% in the intervention group, despite minimal weight loss (7.7 lbs after 2 years).  

A major review study published in the Journal of Applied Physiology in 2005 confirmed that basic dietary changes and moderate increases in physical exercise can prevent or markedly reverse Type II Diabetes. The review refers to researchers who have compared the Pima Indians living in the American southwest who consume a Westernized diet, and have a more sedentary lifestyle with the Pima Indians who live in rural northern Mexico and still follow a traditional Pima lifestyle. Despite very similar genetic backgrounds the U.S. Pimas, living in a more “affluent” environment, have strikingly higher rates of obesity and diabetes than do their cousins in Mexico who live a much more “traditional” lifestyle, characterized by a diet with less animal fat, more complex carbohydrates and greater energy expenditure in physical labor and activities. Examples of other populations who have similarly transitioned to a Westernized lifestyle, and now exhibit very high rates of diabetes include Micronesians in Nauru, Wanigela in New Guinea, and Australian Aboriginals, among others.

The reviewers affirms that: “Overwhelming evidence... over the past 20 years from a variety of sources, including epidemiological, prospective cohort, and intervention studies, has documented that physical activity, diet, and combined activity and diet interventions can mitigate progression of chronic disease and in fact reverse existing disease.” With respect to achieving diabetes reversal through implementing lifestyle measures, **FIGURE XII** below shows the remarkable impact of the three week Pritikan lifestyle program.

A similarly designed program at Weimar Institute ‘s NEWSTART Lifestyle Center in northern California, in which type 2 diabetes patients eat a low-fat diet and exercise daily, is also experiencing consistent and significant success in reversing diabetes. A large number of participants are able to return to normal blood sugar levels, thus eliminating the need for insulin and medication. Neuropathy has also been reversed, and renal function improved in many. Atherosclerosis, the big killer of people with diabetes, has also responded favorably to this lifestyle intervention program.

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

2.12 CARDIOVASCULAR DISEASE - A LEADING CAUSE OF ABORIGINAL MORTALITY

In the late 1990s First Nations and Inuit Health Branch of Health Canada reported that “Heart Problems” among the First Nations population (on-reserve) approximates three times that of the national average. This finding is based on age adjusted prevalence rates by self-reported condition as reflected in the First Nations and Inuit Regional Health Survey (1997) and the National Population Health Survey (1997).

The only recent population based study comparing atherosclerosis and cardiovascular disease (CVD - sometimes referred to as Coronary Artery Disease/CAD) rates among Canadian Aboriginal people and the Euro-Canadian population was published in 2001 in The Lancet. The study involved the random recruitment of 301 Aboriginal people from the Six Nations Reserve, at Ohsweken, Ontario and 326 people of European ancestry from Ontario and Alberta. It was found that the Aboriginal people at Six Nations had significantly more carotid atherosclerosis, and had a higher frequency of cardiovascular disease than Euro-Canadians, i.e. 18.5% vs. 7.6%. These Aboriginal people also had significantly higher rates of smoking (roughly double), high blood pressure, raised cholesterol, and diabetes. For any given income level, Aboriginal people had higher rates of risk factors and cardiovascular disease. In a follow-up commentary article published in the Canadian Medical Association Journal Myers comments that “An epidemic of CVD can be anticipated in Canada’s Aboriginal population unless the current risk factor profile can be modified. Smoking-cessation and weight-reduction programs should be encouraged.”

In reviewing a comprehensive administrative database of all hospital admissions for Ischemic Heart Disease (IHD) in Ontario for the period of 1981 to 1997, it was found that hospitalizations for IHD have doubled in the Aboriginal population, despite gradually declining rates in the general population. By 1997 CVD admissions for Aboriginal people were found to be at a rate of 155/10,000, while admissions for the general population were 82/10,000. The researchers concluded that “These findings document an alarming trend in Aboriginal health and support the need for further research and targeted intervention.”

The same pattern is occurring among Aboriginal peoples south of the Canadian border and to the northwest in Alaska. In the United States American Indians were long thought to have inherent protection from cardiovascular disease. For example a review of Indian Health Service (IHS) records from the 1960s showed very low rates. However, more recent IHS data, indicate that CVD is now the leading cause of death among American Indians. The study found that CVD rates in the Dakotas were the highest when compared with other regions, which suggests that this could likewise be the case with Aboriginal peoples living in Canada’s prairie provinces. Figure XIII which follows on the next page is based on figure two (2) in the study report.
Epidemiological Evidence on Lifestyle Impacts

In the early 1980s as an international collaborative effort between Cornell University, the Chinese Academy of Preventive Medicine, the Chinese Academy of Medical Sciences, and Oxford University there was launched a very extensive study on the relationship between lifestyle/nutrition patterns and health. The study initially looked at socio-economic characteristics and dietary patterns in 6,500 adults living in 138 villages in 65 counties in China and correlated this with mortality data for 50 different diseases. It was found that in rural China, fat intake was less than half of U.S. North American intake, and fiber intake was 3 times higher. Animal protein intake was very low, only about 10% of N. American intake levels. Mean serum total cholesterol was 127 mg% in rural China compared with 203 mg% for adults aged 20-74 years in N. America. Deaths from coronary artery disease was 16.7-fold greater for N. American men and 5.6-fold greater for N. American women than for their Chinese counterparts. It was also found that the death rate for breast cancer for N. American women is five times higher than among Chinese women.

One of the first things to emerge in the study was that the civilization diseases such as coronary heart disease, stroke and hypertension, cancer of the breasts, prostate, and lungs, as well as diabetes and osteoporosis were extremely rare in rural China, but became increasingly prevalent with: proximity to the major cities; increased wealth; more sedentary lifestyles; and a high intake of animal products, including dairy. These same degenerative diseases today account for over 75% of premature deaths in N. America. On the other hand, it was found that the greater the percentage of whole plant foods in the diet, the lower the risk of developing these diseases. With the dietary cause of cholesterol well known, and the blood cholesterol-heart disease linkage clearly established, the chief epidemiologist for the study, Richard Peto of Oxford University, observed that “The Chinese experience shows that most Western coronary heart disease is unnecessary.”

Figures XIV and XV on the next page, employing data on dietary patterns and heart disease deaths from 40 different countries, affords compelling corroborative evidence for the China study findings.
Concerns with Standard Treatment Approaches

At the close of the 20th century prominent cardiologist and surgeon Caldwell Esselstyn penned his classic article *An Overdue Requiem for Palliative Cardiology*. In it he affirms that:

*Modern cardiology has given up on curing heart disease. Its aggressive interventions - coronary artery bypass graft, atherectomy, angioplasty, and stenting - do not reduce the frequency of new heart attacks or prolong survival except in small subsets of patients... (1) Life-threatening plaques are not directly treated. (2) The procedures themselves carry risks of new heart attacks, strokes, infections, encephalopathy, and mortality.(12) In addition, benefits erode with time... Thus, it is clear that the goal of cardiology has become the relief of pain and unpleasant symptoms in the face of progressive disability and often death from disease.*

What about promising new drug treatments? Pfizer, in late December 2006 announced that its long hoped for block-buster drug Torcetrapib (on which it had spent $800 million in development) was killing more people on its test run, than were dying in the control group. The treatment group experienced a greater number of cardiac events such as angina, heart failure, and a need for angioplasty. The unfathomable mysteries of human metabolism could not tolerate the assault of this drug. It was making vascular disease worse not better. Another whammy for cardiology in the second half of 2006 came in the form of reports from Europe that patients utilizing the new drug eluting stents were suddenly having heart attacks and some were dying. This was disturbing to cardiologists and remains frightening for patients.

What about surgical procedures? Angioplasty or by-pass surgery does not treat the small unstable juvenile arterial plaques are prone to rupture and actually cause over 85% of heart attacks. Then why do cardiologists treat the blockages unlikely to cause the heart attacks? There is a lingering belief that somehow the patient will be improved, and there is of course major income for physicians and hospitals in doing these procedures.
The Coronary Health Improvement Program (CHIP) is an educationally intensive lifestyle intervention program that is primarily taken directly to the community. The program has more than 40,000 successful graduates worldwide. In the U.S. it is endorsed by the Physicians Committee for Responsible Medicine (PCRM) and the Center for Science in the Public Interest (CSPI). The CHIP program focuses on developing a greater measure of intelligent self-care involving a clearer understanding of the nature and cause of heart disease, its epidemiology, and its risk factors. The Program aims at a marked reduction of coronary risk factor levels through the adoption of better health habits and lifestyle choices. The goal is to facilitate disease reversal by lowering blood cholesterol, triglycerides, and blood sugar levels by reducing excess weight, lowering high blood pressure, enhancing daily exercise, and eliminating smoking. CHIP’s dietary component emphasizes the importance of unrefined foods—as grown. These foods are usually high in unrefined complex carbohydrates, and are encouraged to be eaten freely.

Bob Kilger, the Mayor of Cornwall, Ontario and former Chairman of Committees - House of Commons, spoke before the Canadian Parliament in the early 1990s with regard to the Coronary Health Improvement Program, which had been recently staged in Cornwall. He reported that:

The Cornwall Coronary Health Improvement Program (CHIP) is an innovative community health project that has obtained fascinating results. During the four-week intensive intervention program, 500 participants lost a total of more than one ton of excess fat. Elevated cholesterol levels dropped an average of 16%. In addition, 36 smokers quit, the group collectively walked 12,000 miles, and many participants had marked reductions in medications for angina, hypertension and diabetes…. I believe this program may well hold the key to improving the health of Canadians through a lifestyle medicine approach, and, at the same time, reduce the financial burden that is being placed today on Canada’s healthcare system.

In 1988 Bob and Theresa Anderson participated in the CHIP in Creston B.C. Bob, then 66, said that at the time he “could hardly make it out to the mailbox, 200 feet from my front door,” he recalls. “I had no energy, I was 60 pounds overweight, had severe arthritis… smoked three packs of cigarettes a day, and was always short of breath.” Theresa’s health wasn’t much better. She suffered from high blood pressure and diabetes, and was overweight and extremely depressed. When CHIP came to their area the Andersons decided to give it a try. They dumped their alcohol down the kitchen sink and cleaned out their fridge.
filling it with more healthful foods. They burned their cigarettes in the fireplace and started walking. First just one block, then two, three, five, and they were on their way. Following the CHIP seminar, they enrolled in whole food cooking classes. Bob’s health greatly improved. Theresa’s blood pressure, cholesterol, and blood sugar levels returned to normal. Both took up bicycling, shed 50 pounds, and three years later, at age 69, Bob bicycled 3,210 miles from Creston B.C. to Ottawa in 60 days. 222

Going back to the 1960s Finnish men had the world’s highest death rate from heart disease. Heart disease was problematic throughout Finland, however the death rate was especially high in the province of North Karelia, in eastern Finland. This province was dominated by dairy farming and the consumption of high fat dairy products such as butter, cream, whole milk and cheese was widespread. The diet was also very deficient in fresh fruits and vegetables. The North Karelia Project was launched in 1972 in response to the local petition to get urgent and effective help to reduce the great burden of exceptionally high coronary heart disease mortality in the area. Over time a variety of activities and innovative programs were set in motion in order to reduce the risk factors for cardiovascular disease, with the Project being expanded to the rest of the nation by 1977. A number of Project interventions and support activities were undertaken.

- Programs at workplaces were implemented to help employees lose weight, quit smoking, and work place eateries were requested to increase the availability of fruit and vegetables.
- Cholesterol-lowering competitions were organized between villages in North Karelia.
- There were national televised broadcasts portraying the successes of groups of people making healthy changes in their lifestyles.
- A lay health leadership program was implemented in which leaders at the community level were educated and enlisted in the promotion of healthful living, for example by discussing the effects of smoking and diet with members of the community, and in urging local grocery store outlets to improve the variety of fruits and vegetables on sale.
- Food manufacturers and supermarkets were worked with to facilitate important dietary changes. For example, the food industry was encouraged to focus on the development of significantly lower fat and salt content in multiple food products. There was also close collaboration with vegetable oil product manufacturers to produce healthier oils.
- Local communities were given incentives to get involved in growing berries for widespread consumption, since berries grow well in cold climates and are known for their valuable anti-oxidative and nutritive content. Also dairy farmers were encouraged to diversify into crops such as berries and apples.
- All tobacco advertising was legally banned, and prohibitions against smoking were imposed in most enclosed public places. Tobacco taxes were earmarked for anti-smoking programs, and special quit smoking programs were widely introduced and supported.

Over time there has been observed some marked behavioral changes. For example, smoking rates were significantly reduced. In 1972 about 9 out of 10 North Karelians habitually put butter on
their bread. Today it is less than 1 in 10 who does so. Dietary improvements have led to roughly a 17% reduction in the mean serum cholesterol level of the population. Elevated blood pressures have been brought well under control and leisure time physical activity has been increased. The results of this Project are unprecedented given the fact that by relatively basic and simple measures major inroads have been realized on a national level in the reduction of death from all causes, as well as from coronary heart disease and cancer. Furthermore, life expectancy has increased by approximately seven (7) years for men and six (6) years for women. In recent years other projects modeled on this one have been launched under support of the World Health Organization - Noncommunicable Disease Prevention and Health Promotion Division in Tianjing, China; Valparaiso, Chile; Isfahan, Iran; Nizwa, Oman, and Olmsted County, Minnesota in the U.S. 223

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<th>Table IV. Mortality Changes in North Karelia (Rates Per 100,000, 35-64 years, men, age adjusted) 1970-1995</th>
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**Figure XVI. Coronary Heart Disease Death Rate North Karelia & All of Finland - Males 35 to 64 years 1969-2001**

- Start of the North Karelia Project
- Extension of the Project nationally

North Karelia

All Finland
2.13 Cancer a Growing Affliction Among Aboriginal Peoples

Before proceeding with a discussion of the issue of cancer as it relates to Canada’s first people, it would be instructive to consider the following observation of Moss on the history of this disease with a focus on Aboriginal peoples: (In this quotation Inuit has been substituted for Eskimo.)

In 1843, a French surgeon, Stanislas Tanchou, MD, formulated a doctrine that the incidence of cancer increases in direct proportion to the “civilization” of a nation and its people. This theory was embraced by John Le Conte, MD (1818-1891), first president of the University of California, and his enthusiasm led medical missionaries, ship surgeons, anthropologists and others to undertake an avid search for cancer among the Alaskan Inuit, northern Athapaskans of Canada and the native peoples of Labrador. The result was always the same: for 75 years, not a single case of cancer was documented among the tens of thousands of such people studied by competent medical examiners. The Harvard-trained anthropologist, Vilhjalmur Stefansson, for instance, lived for 11 years among the Inuit and never saw a case. In later life, he wrote a book on the topic, Cancer: A Disease of Civilization?

...Evidence points to drastic changes in diet as the most likely explanation for the increase in cancer. Indigenous people of regions across the globe seem protected so long as they eat the diet that their ancestors ate for millennia. But once they adopt Western dietary habits, cancer appears and then begins its inexorable climb towards the same astronomical heights as are seen in the societies they emulate. 224

Having adopted the lifestyle practices of modern civilization, and having been exposed to industrial toxins in the food supply and environment the incidence of cancer has become increasingly common over the decades for Canada’s First Peoples, and it continues to rise in incidence. This relentless increase in cancer is accelerating, while survival following cancer diagnosis has been poorer for Aboriginal peoples than for the general population. Thus we find today that cancer has become a major health concern and priority among Aboriginal peoples in Canada. A study of First Nations throughout the United States, reveals that cancer is the second leading cause of death among American Indians and Alaska natives over the age of 45. Not unlike Canada’s first peoples, cancer rates among America Indians and Alaska Natives are rising, and American Indians have the poorest survival rate from cancer of any minority population in the U.S. 225

Canadian Aboriginal Data

- In British Columbia in the period of 1991-2001, the mortality rate of Status Indians with cancer was 16.7% higher than among non-Aboriginals. 71% of cancer deaths in the Status Indian population were for people under 75, as compared to 57.3% of non-Aboriginal people. 226
- Research on members of First Nations in Ontario reveals that for all age groups cancer is now the third leading cause of death. Other research indicates that the most common
forms of cancer among First Nations people are cancers of the cervix, gallbladder, and kidney. In examining the most recent demographic and disease trend patterns, the incidence of cancer among First Nations is expected to continue rising over the next decade. 227

- Cancer increases in First Nations are largely due to rapidly rising rates of lung and colorectal cancer. Furthermore, cancers of the cervix, gallbladder and kidney are more common in First Nations people than in the general population. FIGURE XVII below illustrates the progressive rise in cancer rates among First Nations people of Ontario (blue line) in the period of 1968 to 1991. 228

![Figure XVII. New cases of cancer in Ontario, 1968-1991](image)

Canadian Partnership Against Cancer
In November of 2006 the Prime Minister of Canada announced the creation of the Canadian Partnership Against Cancer. This new group has been commissioned to play a critical role in the fight against cancer by focusing on prevention, detection, and treatment. Canada’s Health Minister Tony Clement publicly notified Aboriginal organizations that they will be accorded a voice in the newly established organization, by serving on its board, and they will as well be asked to serve on expert groups addressing key cancer related issues. Members of the newly established Partnership and its future technical groups can benefit from an awareness of the information that follows. 229

Treatment
Over half of all cancer victims in North America receive chemotherapy. Chemotherapy is cytotoxic, i.e. it is lethal to human cells. Although it does destroy cancer cells, unfortunately it does not distinguish between cancerous and healthy cells. The cytotoxic effects of the drugs are greatest in rapidly growing cells, their toxicity to normal healthy tissues occurs mainly at sites which contain a high proportion of such cells, e.g. the bone marrow where blood cells are produced, the digestive tract, hair follicles and gonads. This destruction of healthy cells is associated with a variety of serious adverse impacts.

One of the most frequent adverse effects is damage to the bone marrow that results in leucopenia (loss of anti-infective white blood cells) thrombocytopenia (loss of platelets, which can lead to
hemorrhaging and bleeding in the brain) and anemia (loss of oxygen carrying red blood cells). Some toxicities are specific to particular chemotherapeutic drugs. For example, vincristine can produce neurological damage (such as loss of reflexes and neuropathy), doxorubicin can produce cumulative cardiac effects such as congestive heart failure, and methotrexate can cause kidney and liver damage. **TABLE V** below shows the five most commonly used cancer drugs, and the frequency of adverse effects on different organs of the body.  

Although physicians are expected to routinely identify and report adverse events in clinical trials of cancer chemotherapy, it is of concern that a 2004 study published in the *Journal of Clinical Oncology* found that “even in a tightly controlled clinical trial, physician reporting was neither sensitive nor specific in detecting common chemotherapy adverse effects.” In other words, chemotherapy adverse effects are being significantly underreported.  

This finding has been corroborated in a 2006 study published in the *Journal of the National Cancer Institute*. In this study researchers at Dana-Farber Cancer Institute and Harvard Medical School have found that younger breast cancer patients (under 63) experience more chemotherapy-related serious adverse effects than is being reported in clinical trials. Hassett, who is an instructor in medicine at Harvard Medical School observes that: “We found that eight chemotherapy-related serious adverse effects may be more common than reported in large clinical trials, and, therefore, these adverse effects may be responsible for more patient suffering, and higher health care expenditures than currently predicted.”  

Radiation is employed even more widely than chemotherapy in the treatment of cancer. The only problem is that all forms of radiation as are commonly employed in medical procedures and treatments have been conclusively shown to be a highly significant cause of cancer in the human population. A recent research a report from Clemson University has shown that a single therapeutic dose of radiation can cause appreciable bone loss. “*Profound changes in trabecular architecture*” were observed. The term “trabecular” describes the bony latticework that characterizes the interior of skeletal bones and gives bones their structural strength. Since chemotherapy (often now given with radiation as part of a one-two punch) can also independently cause bone loss, the cumulative effects of both treatments delivered to the same patient may therefore be significantly more damaging.  

With regard to the employment of surgery in cancer it has been found that procedures as seemingly routine as needle biopsy, as well as more invasive surgical procedures aimed at the control or excision of tumors, are capable of inadvertently spreading the disease. Moss states:

![Table V. Adverse Effects: Chemotherapeutic Drugs](attachment:table_v.png)
There are abundant studies and case histories in the medical literature documenting instances of surgically-triggered ('iatrogenic') tumor spread and warning of the intrinsic dangers of certain surgical procedures in the presence of cancer… When tumors are perforated, sliced or penetrated by surgical instruments, so-called tumor spillage or seeding can occur. That is, tumor cells or clumps of cells can be accidentally spilled into the body's cavities, sucked into the withdrawal track of a needle or catheter, or introduced directly into the bloodstream or lymphatic system. Even rough handling during surgery can cause clusters of tumor cells to break away from the primary tumor. And since the physical insult of surgery itself is well known to be immunosuppressive (i.e., to hinder the normal functioning of the immune system), any accidentally released tumor cells would have a head start over the body's natural defenses in the days and weeks following surgery.  

Moss’s observation is corroborated in a 2005 study published in the European Journal of Cancer which found that surgery to remove a lump or a breast can actually cause the cancer to spread more quickly throughout the body. The authors state that, “A new crisis is upon us now in that trials of early detection have resulted in unexpected disadvantages… clinical data that suggests the act of surgery might accelerate the appearance of distant metastases. The explanation... is that surgery can induce angiogenesis and proliferation of distant dormant micrometastases, especially in young patients with positive nodes.”

J.R. Davidson (former Associate Professor of Clinical Medicine, Univ. of Manitoba) while serving as a consulting physician at Winnipeg General Hospital observed that a significantly greater number of cancer patients were being admitted to the cancer ward in the spring than in the fall, with most coming from more remote rural areas. He began to wonder whether there might be a connection between the restricted diet “taken by people on Western farms in winter, with its low nutritional content and the disease” (i.e. a diet lacking in unrefined foods, including a regular intake of fresh fruits and vegetables). He went on to reflect on his own boyhood on a farm as a time when foods were whole with little processing, and cancer was still a very rare disease.

Based on these insights Davidson went on to independently conduct 10 years of nutrition experiments on mice. In mice it’s possible to observe cancer in rapid development during several generations, which of course isn’t possible with humans. Employing a poor nutritional diet and the external application of tar on a small area of skin, he succeeded in developing a strain of mice with 100 percent cancer. In his words “then taking the offspring of this strain, I fed them a high vitamin diet and eventually developed a strain which would resist cancer under the same conditions as their ancestors developed it”, thus demonstrating that cancer is reversible, and that resistance to cancer is largely nutrition based.

A landmark 2005 study published in the proceedings of the National Academy of Sciences highlights the fact that Vitamin C (ascorbic acid) should be further explored as a highly safe and 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 and conditions that reflect potential clinical use. The effect was due only to extracellular... ascorbate, consistent with clinical i.v. dosing... It is unknown why ascorbate, via H2O2, killed some cancer cells but not normal cells... Complementary and alternative medicine practitioners worldwide currently use ascorbate i.v. in doses as high as 70 g over several hours. Because i.v. ascorbate is easily available to people who seek it, a phase I safety trial in patients with advanced cancer is justified and underway. 238

This recent “discovery” was actually observed on a clinical level by various medical practitioners decades earlier. For example, the seminal book Cancer and Vitamin C (which was the culmination of a number of reports published in the medical literature by both Cameron and Pauling) documents a long-term experiment conducted in a cancer ward at the Vale of Leven Hospital, in Loch Lomondside, Scotland in which 1,000 cancer patient controls, were compared to 100 cancer patients who were treated with high dosage ascorbate (Vitamin C). Of the total 1,100 persons in this clinical trial, 96% had not received any previous chemotherapy, since their conditions were diagnosed as being highly “advanced and untreateable”. A “substantial minority” of the patients receiving vitamin C experienced an increase in subjective well being accompanied by objective clinical evidence of “retardation of tumor progression, reduced pain from bone metastases, reduced rate of accumulation of malignant effusions, reduced obstructive jaundice, or improved respiratory function.” There were also few cases of sustained clinical remission, and a few cases of acute tumor hemorrhage and necrosis. Most importantly, the mean time of survival for the vitamin treated group was 4.2 times as great, as it was for the 1,000 controls, all of whom died of cancer. 239

Canadian physician Abram Hoffer documented a clinical longevity study of cancer patients that he carried out. It was comprised of 120 persons with various cancers in which 101 received vitamin therapy (which included high dosage Vitamin C) for the treatment of a variety of cancers, compared with a comparable control group of 19 persons undergoing conventional medical treatments, also for a variety of cancers. Figure XVIII below provides percentile survival rates for the two respective groups. 240

**Figure XVIII.** Effect of Orthomolecular Treatment on Survival of Cancer Patients

![Graph showing survival rates](image-url)
2.14 Aboriginal Peoples AIDS Crises – Critical Theory & Practice Issues

According to the Public Health Agency of Canada, in 1993, the proportion of reported Acquired Immune Deficiency Syndrome (AIDS) cases in Canada with known ethnicity attributed to Aboriginal persons was 2.0%. This proportion steadily increased until reaching a high of 10.0% in 1999. A further increase was seen in the first six months of 2002, wherein Aboriginal persons accounted for 14.1% of the total reported AIDS cases where ethnicity was known. The latest estimates of HIV prevalence and incidence produced by Canada’s Center for Infectious Disease Prevention and Control (CIDPC), indicate that the number of Aboriginal persons living with HIV has increased from 1,430 in 1996 to 2,740 in 1999 (91% increase during the 3 year period). With regard to reported AIDS cases with known exposure, the proportion of Aboriginal cases attributed to injecting drug use has dramatically increased over time, from 10.3% prior to 1992 to 30.0% during 1992-1996 and 53.1% during 1997-2001. In the first six months of 2002, 55.6% of reported AIDS cases among Aboriginal persons were attributed to injecting drug use. In response to this growing crisis, the Canadian Aboriginal AIDS Network was established. According to the Network’s publication AIDS and Aboriginal Peoples we find that:

The HIV/AIDS pandemic continues to grow and threaten Aboriginal Peoples throughout the world. The last decade has seen a steady rise in Aboriginal AIDS cases in Canada. Experts speculate that as many as twenty percent of nearly 17,000 AIDS cases in this country could be Aboriginal. Aboriginal AIDS cases are younger than non-Aboriginal AIDS cases. 28.6% of all newly documented cases among First Nations Peoples are under 30 years old, with almost one in four cases being female (compared to one in thirteen among non-Aboriginal persons). In some cases, people are being infected at ages 19 and 20.

Insofar as Aboriginal peoples embrace the conventional selective medicine approach to understanding and to resolving the AIDS crisis what will be the consequences?
AIDS Overview
The billions of dollars devoted to cancer research have now been outstripped by the tens of billions of dollars dedicated to AIDS research. Indeed, AIDS now exceeds cancer as being the most highly profiled and politicized disease in human history. Conventional approaches to treating AIDS have been widely proclaimed in the media as holding great promise, with such approaches enjoying largely unchallenged governmental support in virtually all nations of the world. For example, in 2005 national leaders at the *G8 Summit* and the *UN World Summit* pledged to come as close as possible to the goal of universal access to antiretroviral (ARV) drug treatment worldwide by 2010. 243

In seeking to objectively examine the issue of AIDS it became readily apparent that since Robert Gallo’s 1984 claimed discovery of HIV as the causative agent, to this time there has been a considerable degree of controversy and polarization in the scientific and medical communities as to the primary basis of this condition, and also with respect to the most effective and least damaging modes of treatment. The number of scientists and physicians who maintain dissident views actually number in the several hundreds and more likely the thousands. 244 These numbers include the scientist who mapped the genetic structure of retroviruses, defined the first cancer gene, and was a candidate for the Nobel Prize for his work in discovering oncogenes; and a scientist who won the 1993 Nobel Prize in chemistry for his invention of the polymerase chain reaction (PCR) method for multiplying a given DNA segment from a complicated genetic material billions of times in a few hours. 245

Unresolved Issues of Controversy
In a well researched and polemic article entitled *Out of Control: AIDS and the corruption of medical science*, published in the March 2006 issue of *Harper’s* which is the oldest (1850-2007) American general periodical, Farber describes the intensive politics of AIDS, and the story behind a major *National Institutes of Health* (NIH) AIDS related cover-up. A former developer of protease inhibitors is quoted to observe that: “The scientific-medical complex is a $2 trillion industry. You can buy a tremendous amount of consensus for that kind of money.” Farber herself insightfully notes that:

>When it comes to AIDS, basic scientific standards seem no longer to apply. AIDS is a “syndrome” defined by twenty-five diseases, all of which exist independently of HIV. No one has ever demonstrated the cell-killing mechanism by which HIV is supposed to cause all these different diseases… Orthodox AIDS researchers have failed to demonstrate, using large-scale controlled studies, that the incidence of AIDS-defining diseases is higher among individuals infected with HIV than among the general uninfected population… [An] exhaustive analysis of the peer-reviewed scientific literature has revealed more than 4,000 documented AIDS cases in which there is no trace of HIV or HIV antibodies. This number is significant, because… the vast majority of AIDS cases are never described in formal scientific papers. In fact, most AIDS patients have no active HIV in their systems, because the virus has been neutralized by antibodies. Another embarrassment for the HIV hypothesis is the extraordinary latency period between infection and the onset of disease, despite the fact that HIV is
biochemically most active within weeks of initial infection. This latency period... enables proponents of the theory to evade Koch’s third and fourth postulates. 246

Not knowing the degree to which blood levels of HIV could predict the rate of CD4 (T-Helper cell) loss, a major study was launched by HIV/AIDS experts from the Harvard University School of Medicine; Harvard School of Public Health; Center for AIDS Research; Case Western Reserve University; University of Washington, Center for Modern Epidemiology of Infectious Diseases; and the University of California, San Diego and San Francisco, in order to determine the extent to which blood levels of HIV can account for CD4 cell depletion among the untreated HIV-infected population, including women and ethnic minorities. The study provided repeated analyses of 2,800 HIV positives, with observations beginning in May 1984 and ending in August 2004. The results were published in the September 27, 2006 issue of the Journal of the American Medical Association (JAMA).

It was found in this landmark study that HIV-RNA viral load measures failed in 94% to 96% of individual cases to predict or explain immune status or rate of progression to AIDS. This meant that the HIV-RNA viral load and the numbers of CD4 cells measured in plasma had no influence on disease progression, and provided no practical information about defense capacity, with disease progression being clearly determined centrally by “non-viral factors”. In the same issue on p. 1523 W. K. Henry writes: “These findings provide support to those who favor non-virological mechanisms as predominant causes of CD4 cell loss” He also writes: “The seemingly useful practice of combining CD4 cell count and plasma HIV RNA levels to assess individual prognosis or response to HAART needs to be re-examined”... [and] sustainability of the current paradigm (anti-retroviral combo drugs) is at best questionable.” These findings shake the foundation of the past decade of HIV-AIDS science to its core, for since the mid 1990s viral load tests have been employed as a primary means of predicting AIDS. Drug companies have also used viral load numbers in place of actual health or survival benefits to gain FDA approval of protease inhibitors, a primary ingredient of today’s antiretroviral drugs. 247

One month earlier (August, 2006) the world’s most highly reputed medical journal, The Lancet, carried a landmark report which synthesized the treatment research findings of hundreds of clinicians on the effects of Highly Active Anti-retroviral Therapy (HAART) treatment on 20,000 AIDS patients who had not been previously treated with chemotherapeutics, carried out between 1995 and 2003 at 12 different locations in Europe and North America. 248 Upon reviewing this seminal report, Helene D. Gayle, President of the International AIDS Society and Co-Chair of the XVI International AIDS Conference asks the all important question:

...have further therapeutic advances for HIV translated into continued declines in disease outcomes? The Antiretroviral Therapy (ART) Cohort Collaboration,
involving 12 European and North American prospective cohort studies, addresses this issue by examining virological, immunological, and disease progression outcomes in more than 20,000 antiretroviral-naive individuals starting HAART in 1995–2003. 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, and a significant increase in combined AIDS/AIDS-related death risk in more recent years. 249

So not only has HAART completely failed in reducing AIDS-defining diseases or death rates, there is now clear scientific evidence in hand that these highly toxic drugs have instead directly caused a plethora of serious and/or deadly diseases including: the cardiovascular diseases; liver and kidney failures; osteoporosis; thyroid dysfunctions; neuropathy; Parkinson’s disease; and non AIDS-specific classes of cancer. 250 Furthermore, after a short period of time, HAART treatment has also led to the increased formation of precisely those opportunistic infections (from fungal infections of the lungs, skin and intestines via threadworms to various mycobacterial infections) that define the AIDS syndrome. 251 Moreover antiretrovirals, “not features of the host or the immune response to HIV, are overwhelmingly responsible for the development of lipoatrophy,” (wasting syndrome) according to studies presented on the 14th of November 2005 at the Seventh International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV, in Dublin, Ireland. 252

Nutrition Oriented Therapies
So now we must ask, since AIDS remains as a major health threat, and is actually precipitated or worsened by conventional drug treatment regimens, are there any genuinely effective approaches being used to reverse the condition? Every published textbook in the fields of biology and biochemistry documents the critical role of vitamins, minerals and other micronutrients in strengthening natural immunity and optimizing the metabolism of the trillions of cells in the human mind-body complex. Treating this vast body of evidence as if it doesn’t exist, to this day it continues to be virtually impossible to obtain government-sponsored research on healing methods that don’t employ patented drugs, surgery or radiation. Nonetheless, at least two orthodox physicians who have turned to nutritional medicine, have succeeded in organizing, monitoring and evaluating their own clinical trials in the treatment of AIDS.

First we should consider the clinical experience of Ian Brighthope, whose research application for nutrition therapy in AIDS, the Grants Division of Australia’s Commonwealth Department of Health refused to fund. He now serves as president of the Australasian College of Nutritional and Environmental Medicine, and as editor of the College’s journal. He has authored two books documenting his outstanding success employing primarily nutrition based therapy in treating a sizable number of AIDS cases. Working at a Melbourne based private hospital, over a period of three years he treated very successfully hundreds of patients with AIDS or HIV antibodies. Employing strategic dietary improvements, high dosage vitamin C, other vitamins, minerals, plant medicine extracts, thymus extract, liquid proteans, antifungals, and enzymes all of the AIDS patients (excepting one, who did not maintain the regimen) are today alive and well, with infections completely under control, and have resumed normal daily activities with a great sense of well-being. 253
Physician Mathias Rath heads a research and development institute in South Africa focusing on nutritional and cellular medicine. The institute is conducting research and clinical studies to document the health benefits of micronutrients in reversing a variety of diseases, including AIDS. He recently conducted an eight-week pilot micronutrient clinical treatment program for advanced AIDS cases. The treatment regimen included: a defined combination of various vitamins, minerals and trace elements, amino acids, and other micronutrients such as citrus bioflavonoids, inositol, and coenzyme Q-10. One hundred community members with AIDS were selected by community health professionals to enter the program. The participants included adult HIV positive men and non-pregnant women with advanced AIDS symptoms (stage 2 and 3 of the 4-stage grading according to the Center for Disease Control, CDC). None of the participants was or had been taking antiretroviral drugs (ARVs). Figures XX and XXI below demonstrate the excellent results that were obtained in this clinical pilot program on all of the AIDS cases treated, with not one case suffering from any adverse side-effects.

**FIGURE XX.**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>After 8 Weeks</th>
<th>After 4 Weeks</th>
<th>After 0 Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colds/Flues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joint Pain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blurred Vision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin Bruises</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irregular Heartbeat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nausea/Vomiting</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Clincial Effects of Nutrients in HIV/AIDS Patients:**

**FIGURE XXI.** Improved Mental Health

<table>
<thead>
<tr>
<th>Symptom</th>
<th>After 0 weeks</th>
<th>After 4 weeks</th>
<th>After 8 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling Dizzy</td>
<td>72%</td>
<td>57%</td>
<td>22%</td>
</tr>
<tr>
<td>Trouble Remembering</td>
<td>72%</td>
<td>60%</td>
<td>17%</td>
</tr>
<tr>
<td>Feeling Depressive</td>
<td>83%</td>
<td>44%</td>
<td>22%</td>
</tr>
</tbody>
</table>

85
2.15 Recent Health Regenerative Successes in an Aboriginal Community

At the Peawanuck First Nation, (northern Ontario) in March and April of 2005 and in May and August of 2006 over 60 persons participated in a series of five-day Advanced Wellness Workshops originally conceived and organized by Nechi Institute founder Eric Shirt. Participants included community members, various elected community leaders, local school staff, and two Health Canada nurses in charge of the nursing station. A press release issued by the First Nation headline “Our Health is Finally Changing for the Better” reports that: “This intensive workshop had immediate results” such as: normalizing and stabilizing of blood sugar levels; the elimination of high blood pressure; the alleviation of arthritic pain; notable improvements in vision, and as a bonus the participants loss of several hundred unwanted pounds. “The results are astounding!”

The workshop provides participants with a complete understanding of whole food nutritional approaches to health renewal and then applies this knowledge as key element in taking a comprehensive approach to various Aboriginal health problems. Community leaders have proceeded to replace the school’s snack program with a whole food nutritional program. Local leaders, staff, and nurses who have taken the workshop have become its most vocal advocates.

Over the years we have seen various health programs come and go into our community and yet we witnessed the steadily rising rates of chronic diseases of lifestyle - diabetes, arthritis, obesity, dental disease, addiction, high blood pressure, stomach ulcers, visual degeneration, cancers and cardiovascular diseases... The Advanced Wellness Program... however, is comprehensive and addresses the whole health concept. We are addressing and improving our health very quickly in a very short time frame [whereas] modern medicine or mainstream health care has failed to do [this] in the long term.

This program is very simple, yet it is quite challenging and revolutionary... [for] it challenges the very medical foundation of doctors and nurses... and revolutionary in the sense that you can change your health within a 5-day workshop as opposed to many years of doctor visits and medical appointments. We realized as a result of this workshop that our bodies house our dreams, hopes and aspirations. If our bodies are operating at optimum level... then our dreams can be realized or at least become possible... This program is not available through the public health care system. We want to SHARE our story. We want to SHARE our good fortune. If you are interested we can DELIVER this workshop in your community.

Excerpts from the personal testimonies of three participants follow:

George Hunter previously served an Executive Director and Treatment Director of the addiction recovery centre for the Peawanuck region. He states that:

I began looking for alternatives to addictions treatment [and had] always suspected that there is a body poisoning happening when we consumed foods that had no nutritional value to the overall health of our bodies... I did not succeed in
making the valuable changes which were needed... I can testify after every intake and despite earning accreditation, we had a 98 percent rate of failure and every client virtually gained 20 pounds or more. I have had two uncles who lost their lives through diabetes. Several years ago I was diagnosed as having the early stages of diabetes. I began following the normal directives as set by the regional diabetes program. I got my glucometer, took my readings and continued the process of recording the fluctuation of my blood sugars as required. I changed my diet as required. I watched what I bought and what I ate. This process proved very stressful. There were no results or cures. My diabetes continued to get worst. I completely lost faith... I realized my vision had gone bad. I never suspected diabetes at the time. I received many warnings from my doctors and the regional diabetic program that if I didn’t change my diet and keep up with my glucometer readings, I had a very short life ahead of me....

The doctors and the diabetes personnel did not give me the knowledge to make the accurate dietary changes I needed to make... I kept following orders as prescribed to me... When I felt sick I went to the visiting doctors. I did a lot of blood tests...This information was used to warn me of the impending dark future that lay ahead of me. Despite the advice of health professionals my health continued to deteriorate. In the past three years my kidneys were screaming. I began having pains. I could barely sleep on my side. My hands, legs and feet began to go numb and I felt like that for a long time. I would keep silent and wondered how long I really had to live.

Two days after my 5-day cleanse workshop, my sugar readings had normalized to 5.9. I have not looked back since. In order to maintain my new found health, I completely do not buy or eat processed and prepackaged foods. Today, this program has been adopted and has become a mainstay in the community... This program is universal as it accommodates all nationalities and cultures across the globe. In fact it uses the nutritional knowledge and the food wisdom from all cultures around the world.

George Hunter invites queries at 1-705-473-2554, and can be contacted by e-mail at: georgehunter@knet.ca or by regular mail, P.O. Box 2, Peawanuck, Ontario  P0L 2H0.

Mary-Jane Wabano - Community Mental Health Worker, James Bay Mental Health Program states:

The first time I took the workshop... I was losing weight, eating better, exercising and feeling better. I found I did not miss the junk food - junk food being white bread, white milk, white flour, klik, pop and many other processed foods. I was off my hypertension medication by October and my doctor said he was sure I would have been diabetic by this time... I was not... I am no longer rushed. My life changes have affected those around me. My spouse has lost 30 lbs as a result of my cooking and the wisdom I gained from the workshop... I have more energy, my mental health is better, I am happy and I am looking forward to each day. I can communicate better with clients, connect with them and understand them and
their situations. I look forward to working... I felt that I had reached a fulfillment that I needed to reach in my life. For me this workshop is about physical, mental and spiritual recovery.

Jean Hunter testifies:

I am a member of the Weenusk First Nation. We are located along the Hudson Bay coast in northern Ontario... I am 46 years old and a mother of six children. Over a year and a half ago I participated in a nutritional and wellness workshop that was offered through the health department of our community. The workshop offered a 5-day meal replacement component with tons of topics on nutrition and life-changing guidance to long term wellness. To say the least, this program has tremendously helped me... Today I consider myself many times healthier than I ever was. Not only am I healthier, I look better, and I feel much better than I have ever did in the past 30 years. I can’t remember when it was the last time I felt this good... perhaps when I was 16 years old. Each day I run for over 30 minutes, my weight is down quite a bit (over 50 lbs). I have incredible renewed strength I never had before. Within the past year alone, I realize I have endless amounts of energy and stamina.

This program I took is very exciting... I now spend lots of time with my children and grandchildren. I can keep up with all of them 24/7... I do not get any sicknesses like I used to... I used to be on medication for heart problems, now I do not use any medication whatsoever. I used to have arthritis... I now have discontinued medication for this as well. This program is something better and... many miles ahead of what is being offered to us through the present public health care system. This workshop improves your health significantly [more so] than what mainstream health care programming has ever done for us. It is scary to think back of what and where my health would be if I continued to rely on the same daily health care I was [receiving]... This program is a rescue, and the answer to where public health care failed. I believe this program will reduce health care costs, it will replace existing methods of client reach and care, and probably renovate the medical landscape in the future. This program is a god-send.

2.16 Dominance of Western Selective Medicine & Its Iatrogenic Impacts

The relatively negligible impact of Western selective (allopathic) medicine in relation to improving the general health and the lessening of mortality among both Aboriginal and non-Aboriginal populations, has already been well documented in this paper. We will now consider some additional salient corroborative evidence on this basic and important issue of iatrogenesis.

The impact of doctor’s strikes as alluded to by Bunker (see reference 127) will first be considered. A British Medical Journal article entitled “Doctors strike in Israel may be good for health” indicates that over a period of three months hundreds of thousands of visits to outpatient clinics had been cancelled or postponed, along with thousands of elective operations. As a consequence,
“the number of funerals we have performed has fallen drastically” said Hananya Shahor, the veteran director of a burial society in Jerusalem that handles 55% of all deaths in the metropolitan area. During the strike period, referring to month of May of 2000, there were “only 93 funerals compared with 153 in May 1999.” The same thing happened in 1983, when the death rate dropped by nearly half, and a major Tel Aviv newspaper headline read “Doctors on Strike - Morticians Beg for Bread.”

Although practicing physicians are supposed to report deaths or serious injuries caused by prescription drugs, in the U.S. only about 1% of serious events are reported, according to former Food and Drug Administration Commissioner David A. Kessler. In his book Prescription for Disaster Thomas J. Moore (a senior fellow in health policy at the George Washington University Medical Center) warns that of the 50 top-selling prescription drugs, only four are “safe”. The number of Americans killed annually by pharmaceuticals is quadruple the number of people who are murdered, and double the number who die in car crashes. “With 100,000 annual deaths, one million severely injured and another two million harmed during hospitalization, adverse reactions to drugs rank as one of the greatest man-made dangers in modern society,” He documents from the medical literature the “inevitable, inherently unpredictable, amazingly varied” adverse effects associated with the nation's most commonly used medications, leading to perforated ulcers, brain damage, addiction, cancer and cardiac arrest.

In a similar vein, a landmark article published in the Journal of the American Medical Association in the year 2000 explicitly addressed the issue of medically caused human morbidity and mortality. It confirmed that in the United States medical care has become the 3rd leading cause of death in the country, amounting to 225,000 deaths annually. Of these deaths 106,000 are due to “nonerror, adverse effects of medications” and 12,000 deaths “from unnecessary surgery.” The article indicates that these estimates are actually lower than the Institute of Medicine (National Academy of Sciences) whose report estimates as many as high as 284,000 iatrogenic deaths annually. “These estimates are for deaths only and do not include adverse effects that are associated with disability or discomfort.”

A quote taken from Coulter’s exhaustive four-volume series Divided Legacy… which details the history of western medicine from its origins in ancient Greece and down through the twentieth century, draws a provocative parallel between modern and early 19th century medicine.

Society today is paying a heavy price in disease and death for the monopoly granted the[allopathic] medical profession in the 1920’s. In fact, the situation peculiarly resembles that of the 1830s when physicians relied on bloodletting, mercurial medicines, and quinine, even though knowing them to be intrinsically harmful. And precisely the same arguments were made in defense of these medicines as are employed today, namely, that the benefits outweigh the risks. In truth, the benefits accrue to the physician, while the patient runs the risks. On the positive side, modern acute emergency medicine does represent a vital contribution to society and has saved and will continue to save many lives. However, “the saving of lives in acute life-threatening emergencies is an important … goal, but it represents a very small
component of the total medical effort: while lives are saved, the sum of such saving is too small to have a measurable impact on the life expectancy of an entire population.” 261

In reference to Western medicine’s central focus on absolving mankind from giving due respect to safeguarding one’s own health by understanding and heeding the natural laws as established in nature and in our very being, Mahatma Gandhi shares the following insightful perspective.

I was at one time a great lover of the medical profession... I no longer hold that opinion... Doctors have almost unhinged us.... Hospitals are institutions for propagating sin. Men take less care of their bodies and immorality increases... ignoring the soul, the profession puts men at its mercy and contributes to the diminution of human dignity and self control.... I have endeavoured to show that there is no real service of humanity in the profession, and that it is injurious to mankind.... I believe that a multiplicity of hospitals is not test of civilization. It is rather a symptom of decay. 262

Ivan Illich portrays modern medicine as a radical monopoly that serves to actually disable people from effectively “doing... things on their own” even going so far as to turn mutual and self-care into “misdemeanors or felonies”:

Traditional cultures derive their hygienic function from this ability to equip the individual with the means for making pain tolerable, sickness or impairment understandable... In such cultures health care is always a programme for eating, drinking, working, breathing, loving, politicking, suffering. Most healing is a traditional way of consoling, caring, and comforting people while they heal... Better health care will depend not on some new therapeutic standard, but on the level of willingness and competence to engage in self-care. The recovery of this power depends on the recognition of our present delusions. 263

2.17 Conclusion

Compelling evidence suggests that Western medicine’s over specialization and singular focus on pathology has literally obfuscated its perception and undermined its faith in the preventive and restorative powers of nature, i.e. the normal determinants and requisites of health. Aboriginal peoples have been and continue to be one of the most medically treated groups in North America, and yet their health remains alarmingly poor. For families or communities to abrogate responsibility for the health of its members to external experts, who dispense the toxicological end-products of multi-billion dollar industries heavily beholden to the interests of shareholders, is a violation of the fundamental natural laws by which preventive healing and wellness can and should prevail.

The National Commission Inquiry on Indian Health well recognized these issues.

One of the major flaws in the present health care delivery system is that it has developed into a professionalized monopoly that is becoming extremely expensive
to support. Doctors, dentists, pharmacists, drug companies, and medical supply houses are now all part of an industry that has become flagrantly profitable, an industry which is increasingly serving its own...interest, to the detriment of the sick and disabled it was originally intended to care for. The Indian people have not been responsible for the escalating cost of medical services that this monopoly brings... The only recourse, both from economic and medical standpoints, is to introduce what the Indian people have never experienced since their own traditional healing system was effectively destroyed: TRUE PREVENTIVE HEALTH CARE, aimed at correcting the root causes of disease, and enhancing the ability of individuals and entire communities to improve their own health. 264

Surely a positive restitution of sound health among Canada’s first peoples will not be accomplished through pouring more resources into the multiplication of medical schools, hospitals, clinics, and expanded government sponsorship of palliative disease care services. The solution will not be in trying to patch up the present system. The solution will come rather in seeking out and recognizing the socio-economic, occupational, environmental, nutritional, and spiritual causes of health, and in becoming directly involved in the support and the actualization of these causes within their communities. The solution will also come in educating and encouraging the people in the sacred principles of how to maintain their health, thus preventing the onslaught of both infectious and degenerative diseases. This education will need to focus on improved nutrition, regular moderate exercise, the importance of positive mental-spiritual attitudes, balanced and purposeful living, and stress reduction. Indeed the greatest breakthrough in Aboriginal health and health care is to be found in the certain knowledge that human beings can be healthy, and can be responsible for directing their own lives, and maintaining their own health.
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24. Ibid.
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“glyconutrients”. They did remarkably well, improving from IQ's estimated to be around 50 to levels around 100. The explanation given was the fact that within a week of giving glyconutrients, it is found that there are 200-400 stem cells seen in a microliter of blood with about 5-10 thousand white blood cells. If one extrapolates to the whole body, it is possible that there are 1.7 to 3 trillion new stem cells throughout our body as we add in glyconutrients. The body employs these as “master keys” to repair neurologically damaged organs, including the brain. (For paper on this go to: http://www.fisherinstitute.org/ order link.)

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## Annex I. Infectious Disease Theories Contrasted

<table>
<thead>
<tr>
<th>Bacterial / Viral Theory of Infectious Disease</th>
<th>Cellular / Ecological Theory of Infectious Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease arises from micro-organisms originating outside the body.</td>
<td>The evolution of and susceptibility to disease arises from conditions arising within the cells of the body.</td>
</tr>
<tr>
<td>As the primary &quot;cause&quot; of disease, microorganisms are generally to be considered as vicious, needing to be destroyed.</td>
<td>These micro-organisms are primarily endogenous to more complex living organisms and normally function to assist the life sustaining and/or metabolic processes of such bodies.</td>
</tr>
<tr>
<td>The appearance and function of specific micro-organisms is constant.</td>
<td>The appearance and function of these micro-organisms changes when the host organism is weakened or injured, which injury may be mechanically, bio-chemically, or emotionally induced.</td>
</tr>
<tr>
<td>Every disease is associated with a particular micro-organism.</td>
<td>Every disease is associated with particular factors and conditions.</td>
</tr>
<tr>
<td>Micro-organisms are primary causal agents.</td>
<td>Micro-organisms become pathogenic, i.e. associated with disease, only when the integral health of the body deteriorates. Hence, psycho-physical integrity is of first importance, as it constitutes the key factor in the prevention, or the remediation of human disease in all its forms.</td>
</tr>
<tr>
<td>Disease is inevitable and can &quot;strike&quot; anybody, anytime.</td>
<td>Disease arises from the persistent violation of natural laws, and correlated unhealthful conditions.</td>
</tr>
<tr>
<td>To prevent and cure disease, it is necessary to war upon pathogenic micro-organisms (using toxic and pathogenic weaponry) that as well destroys the health of the body-mind complex.</td>
<td>To prevent or to cure all forms of disease, one need only to ensure that the primal requisites of health are met, which includes systematic compliance with natural physical, psychological, and spiritual law.</td>
</tr>
</tbody>
</table>
ANNEX II.  
WAR ON DISEASE APPROACH VERSUS 
THE HEALTH DETERMINANTS APPROACH 

“Warring on disease’ amounts to battling down reserve life forces & fighting delusional causes & entities. It is really a war upon the human constitution.” H.M. Shelton

1. ORIENTATION AND PHILOSOPHY

**Disease is understood as an entity separate from the patient.**

The body & mind are separated, with distinct diseases & organs treated singly.

The focus is on labeling, isolating, & destroying disease entities & symptoms.

2. CAUSALITY

The focus of causality is external to the patient - viruses, bacteria, poisons, & in more recent time stresses in the environment.

3. PREVENTION & CURE

Separates preventative and curative measures.

The emphasis is on removing or palliating symptoms. It aims at achieving quick results.

Relies on highly sophisticated technological & costly measures that are not amenable to self-care, e.g. manufactured vaccines, organ transplants, drugs, etc. These measures are noted for bearing harmful side effects (pandemic iatrogenesis).

**ORIENTATION AND PHILOSOPHY**

Recognition of acute disease as a systemic reparative process inseparable from the person.

Recognizes that the body & mind are inseparably one, & must be treated as a unity.

The focus is on strengthening the protective healing energies & resources of the person.

**CAUSALITY**

The focus of causality is both internal to the person as it relates to habitual lifestyle practices, primary deficiencies, negative emotions, etc.; & external as it relates to debilitative factors in the natural & social environments.

**PREVENTION & CURE**

Recognizes that health sustenance & restoration depend upon the selfsame measures.

The emphasis is on removing causes through sustainable changes to debilitative socio-economic & environmental conditions, & enhanced lifestyle factors.

Relies on health building & restorative measures that are harmless, noninvasive, efficacious, family based & uncostly. These include: adequate & quality nutrition; potable water; an enhanced natural environment; complemented by local non-toxic plant medicines & appropriate technologies.
### 4. Care Providers

The emphasis is on exclusive management & control of health and disease by medical professionals who know all, while patients follow orders.

Relies solely on the expertise of highly trained medical professionals.

### 5. Cost

Cost is escalating to the point of being an unsustainable burden.

### 6. Research

Research focuses on tracking, isolating & destroying disease associated entities.

The absence of disease is considered the result of techno-medical interventions.

### 7. Health Care Outcomes

Produces a system of disease care & disease scare. People learn to fear, distrust and disrespect the respect natural world, and their own bodies

People become unduly dependent upon medical institutions & authorities. This in diminishes self-respect and responsibility, coping strategies are diminished leading to resignation, helplessness and hopelessness.

| Note: This table was developed by the author, with appreciated input by Ottawa based health professional Lois Chatelet. |

### Care Providers

Emphasis is placed on the informed and responsible involvement of people in understanding & managing their own health needs.

Builds upon the distinctive knowledge & inherent capacities of individuals, families & communities. "Local healers" are prepared to provide basic care coupled to training in wellness principles and family self care.

### Cost

Cost is de-escalating, to the point of being marginal.

### Research

Research focuses on better understanding & appropriating the fundamental requisites of life & health.

The absence of disease is recognized as the consequences of compliance with natural law.

### Health Care Outcomes

Produces a system of health care based on people developing a practical knowledge of, trust in & for the natural world, and their own bodies.

People develop and carry out coping strategies, which in turn will inevitably lead to better health and fuller life.