During the World War Dr. Hindhede had the opportunity of carrying out the greatest large scale nutrition experiment in the world's history. The war blockade compelled Denmark which imported cattle and hog feeds, to slaughter and sell four-fifths of its hogs and to reduce the dairy cattle by 34%. The farm products thus saved were made a part of the new dietary of the Danish people. A low meat, that is a low protein diet, became necessary. A "war bread" was made from whole rye flour, mixed with about 15% of wheat bran. By governmental order, under Hindhede's advice, each person (from October, 1917) was allowed a daily diet, carefully weighed out, of very little meat, small amounts of butter and milk, and substantial quantities of the above bread, cereals and potatoes. Alcoholic beverages were forbidden; tea and coffee were unavailable. Ordinarily, the average person would turn up his nose at such a diet. Within a few months, the beneficial effects of this diet upon the national health became evident. During the year of the experiment the Danish death rate fell nearly one-fifth, and became the lowest ever known in Europe. When, in October, 1918, the influenza epidemic broke out, Denmark was the only noncombatant nation in Europe with a death rate, during the course of the disease, below the pre-war mortality records. Abstinence from alcohol, tea and coffee, no doubt was a great factor in winning these remarkable results, but careful statistical studies have shown that the simple, natural diet was a prime factor in reducing the normal death rate and in giving the nation resistance against the influenza scourge.

http://www.gentlebirth.org/nwnm.org/Nutrition_Wisdom_Paavo_Airola.htm captured off internet July 30, 2002 Paavo O. Airola, N.D.: Nutrition Wisdom

Whole Foods Save Denmark

"The value of whole, unrefined foods was dramatically demonstrated on a grand scale during the First World War. Denmark was plagued by a serious food shortage. The government assigned Dr. M. Hindhede, the director of the Danish Institute of Nutrition Research, to design a program for protecting the nation from the hunger threat. The first action of Hindhede was to increase whole-grain production by limiting livestock production and curtailing the sale of meat, thus saving grain for human consumption. Production of alcoholic beverages was banned for the same reason. Also, grain processing was stopped and only whole-grain bread and cereals were allowed to be sold. Farmers were directed and encouraged to produce more grain, green vegetables, fruits, milk and butter, instead of meat.

"These simple, but from a nutritional standpoint revolutionary, changes in eating habits resulted in spectacular and rapid changes in the health condition of the whole nation. The death rate dropped over 40% in one year. Diseases that affected other European countries, including the dreaded influenza epidemic, bypassed Denmark. In only a few years, Denmark became the healthiest nation in all of Europe!" (p. 46)

Lecture by Dr.phil. Ljuba Macovicka, held at the 5th European Vegetarian Congress, Bratislava, Slovakia. from EVU News, Issue 1, 1996

The first [example] was the Danish doctor Mikkel Hindhede, who refuted the dogma of the protein indefinitely. During the First World War he saved Denmark, which was threatened at that time with blockade by famine, through the prohibition of pig breeding, making the products which were to be fed to the animals available for the inhabitants. They were only allowed to bake crude whole grain bread throughout the country. The results of this measure were surprising: All of a sudden there were sufficient foods for all, the diseases and the death rate went back strikingly and the doctors complained about the lack of work. The students of medicine unfortunately hear nothing about this experience, which we can mark as a successful experiment with a population of 3 millions.

http://www.soilandhealth.org/02/0201hyglibcat/020126shelton.orthotrophy/020126.ch23. htm captured July 30, 2002.

Uses of Food

It is evident that there is no danger of anyone ever consuming too little protein. In fact, this is just what Hindhede found in his studies of the dietetic habits of nations. He found that in the degree to which a nation lived on a low protein diet, in that degree did they suffer less from disease. During World War I, his opportunity came to demonstrate on a large scale, the truth of his findings. He was made food administrator over Denmark. His experiment involved a whole nation of millions of people and covered a period of three years. No other investigator had ever had such an opportunity. He reduced the death rate in Denmark forty per cent in one year's time by diet alone. He employed a low protein diet. He concludes that the average adult human body may require twenty grams of protein daily, but that the requirement may be even less than this. His assistant, Dr. Madsen, used an experimental diet containing but twenty-one grams of protein, with only favorable results.

The Denmark Story

from the internet 9/17/2012

http://www.ldshea.org/Family%20Health/The%20Denmark%20Story.html

This story was told by Dr. Kenneth Johnson in his 1993 book, "Mormon Wisdom and Health." We met this wonderful physician from Arizona some years ago at a health conference. He is deceased now, and the book is no longer in print; but I feel certain that Dr. Johnson would be pleased to have us share the story with our readers. "The Denmark Story"

From Mormon Wisdom and Health: A Medical Review of Mormon Doctrine Dr. Kenneth E. Johnson, M.D.

World War I became the world's concern in 1914, and a remarkable story[1] from that period has great implications for us, even today.

Dr. Martin Hindhede, chairman of the Danish Institute of Nutrition, had become convinced by previous research that a vegetarian-type diet would be beneficial for human health. He also knew that meat production required large quantities of grains and other plant foods. (Today we know that the production of one pound of meat protein requires six to ten pounds of plant protein.)[2]

Under a land and sea blockade by the Germans, Denmark could import no grains to support meat production, and its people were faced with severe food shortages. Dr. Hindhede convinced the Danes to embark on a large nutritional experiment that required a drastic change in the foods they ate. They slaughtered 80 percent of their hogs and 34 percent of their dairy cows. The grain that had previously been used to feed hogs and cattle became the major part of a new diet for the Danish people.

They started producing "war bread" from whole rye flour with 15 percent wheat and wheat bran. Until the war ended, each person by governmental decree was allowed a daily allowance of "very little meat" and small amounts of butter and milk. The main dietary staples were potatoes, cereals, and vegetables. Alcohol was forbidden, and no tea, coffee or tobacco were available. In essence, the large-scale Danish experiment observed all tenets of the Word of Wisdom.

The diet was low-meat, low-protein, low-cholesterol, low-fat and high-fiber.

Within a matter of weeks, the benefit of the Danes' new food plan was apparent. During the year from October 1917 to October 1918 when food restrictions were the most severe, the death rate from disease had dropped over 34% from the average of the preceding 18 years. It was the lowest ever known in Europe. Furthermore, **Denmark was the only nation in Europe not to have a significant rise in the death rate as a consequence of the 1917 influenza epidemic** (emphasis ours). That statistic gives additional credence to recent evidence that a plant-centered diet increases immunity to infectious disease.

The Danish experiment vividly illustrates the waste that occurs when grains are cycled through livestock. As John Robbins points out in *Diet For a New America*,[3] animal production wastes 90 percent of the grain's protein, 96 percent of its calories, 100 percent

of its fiber, and 100 percent of its carbohydrates.

In the years that followed, nutritional scientists began to study the effect of the consumption of animal products on health and disease. Mountains of data are now available to show this relationship.

As the science of nutrition progressed during the first half of the twentieth century, the LDS population continued to grow. Most Church converts emigrated to Zion in Utah.

During the leadership of seventh LDS church President Heber J. Grant, from 1918 to 1945, scientists first began to realize that tobacco was a deadly habit. President Grant was a strong proponent of the Word of Wisdom, preaching frequently about the revelation's ban on alcohol, tobacco, tea, and coffee.

He was also concerned about the food plan in of the Word of Wisdom. In 1925, President Grant exclaimed that:

No man who breaks the Word of Wisdom can gain the same amount of knowledge and intelligence in this world as the man who obeys that law. I don't care who he is or where he comes from, his mind will not be as clear, and he cannot advance as far and as rapidly and retain his power as much as he would if he obeyed the Word of Wisdom.[4] Twelve years later he said,

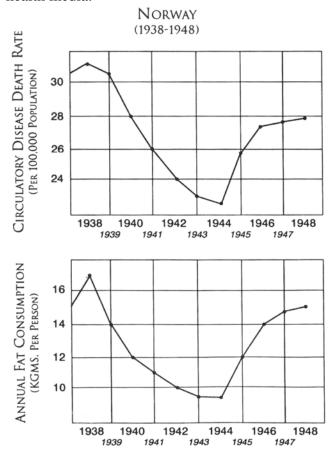
I think that another reason I have very splendid strength for an old man is that during the years we have had a cafeteria in the Utah Hotel *I have not, with the exception of not more than a dozen times, ordered meat of any kind.* On these special occasions I have mentioned I have perhaps had a small tender lamb chop. *I have endeavored to live the Word of Wisdom and that, in my opinion, is one reason for my good health.*[5] President Grant's statement about breaking the Word of Wisdom is similar to one made by his contemporary, film producer Cecil B. DeMille, who said, "The history of mankind has shown us, we cannot break God's laws, rather we break ourselves against them."

President Grant died just before the end of World War II in 1945. Ezra Taft Benson, then an apostle, traveled to Europe to assess the postwar damage and determine the needs of the starving Saints.[6]

The first statistics that caught my medical attention as a young doctor were the death rates of Europeans under Nazi occupation during and after the war. The graph on the next page shows that during the Nazi occupation, deaths from heart disease, strokes, and other circulatory diseases dropped dramatically in Norway.[7] Caloric intake was low; no one was fat. Despite hunger and stress, these people were protected from fatal strokes and heart attacks. As soon as the war ended, milk, eggs, and meat became available, and the death rates rose to pre-war levels.

When President George Albert Smith became the eighth president of the LDS Church in 1945, it seems clear that he made choices about his food habits that relate to the Word of Wisdom. His son-in-law recorded, "In the summer he eats no meat, and even in the winter months he eats very little." [8]

In 1950, Apostle John A. Widtsoe and his wife, Leah, published a book, *The Word of Wisdom, A Modern Interpretation*.[9] **\Pi**Learned and well esteemed, Apostle Widtsoe was a Norwegian immigrant and Harvard graduate. In the light of today's knowledge his book deserves review and comment. Interestingly, it never mentions the word *cholesterol* and mentions the word *fiber* only a few times. Of course, most facts about cholesterol and fiber were not known in 1950. Today they are the "buzz words" in the news and health media.



Widtsoe's book came under some unjust criticism because of his indictment of white flour. His indictment was based on the fact that in 1950 the white flour was stripped of most of its vitamins, minerals, and protein. Now we know that the refinement process also strips flour of its fiber. Today's "enriched" white flour is supplemented with added nutrients, but is still missing the fiber.

Forty years ago when Widtsoe sought the truth, he relied on faith in the Word of Wisdom revelation. He wrote in his book:

Conflicts may appear between the teaching of science and the Word of Wisdom. The Food and Nutrition Committee of the National Research Council recommends meat daily; but the Word of Wisdom says definitely [eat] meat sparingly and then only in winter or famine. In time the scientist will prove that the teaching of the inspired Word is

correct and until then it may be relied on as a safe guide . To date, nothing has been discovered to set at naught any truth taught in the Word of Wisdom, and if we may judge by the past, all statements made therein will in time be proved true. (emphasis added) Many of the things that Widtsoe wrote have been confirmed by subsequent medical and scientific studies.

The following, in his own words, gives us a challenge for modern living: It was shown early in the history of plant science that plants contain all of the necessary food substances: proteins, fats, starches and other carbohydrates, minerals and water. Later it was discovered that the plant kingdom is the best source of the sixth necessary group of food substances, vitamins.

The great Builder of the earth provided well for the physical needs of His children. Countless varieties of edible plants, vegetables, cereals, fruits and nuts are yielded by Mother Nature for man's daily food. Some furnish one predominating food element, some another, each filling some need of the human structure, as bricks in a wall, or as promoters of proper metabolism, to secure his health.

Man should partake in plenty of all edible fruits and vegetables. It is a mistake for a normal person to say: "I don't like this vegetable or that," and refuse to eat it. Children should be taught to eat and enjoy all the different kinds of vegetables so that their bodies may grow in bone strength and nerve tone a well as in size. This practice should be encouraged in adults as well, for all have need of the nutritive value of fruits and vegetables.

Most fruits should be eaten raw, fully ripe, and "in the season thereof." Fruits and vegetables should be eaten in liberal amounts by young and old, and with grain products should form the bulk of the human dietary.

If one uses meat it must be used sparingly and in winter or famine only, as stated in this wise *law of health*. They who wish to be well and gain the promised reward stated in the Word of Wisdom must obey all of the law, not just part of it as suits their whim or their appetite, or their notion of its meaning.

...The foods used by many careless or uniformed modern civilized people yield a shortage, in greater or lesser degree, of many necessary food factors, especially of vitamins and minerals. This is because so much of the food of so-called civilized man today is preserved, salted, sugared, purified, polished, pickled, canned, extracted, distilled, concentrated, heated, dried, frozen, thawed, stored, packaged, processed and refined! The Word of Wisdom warns against the "evils and designs which do and will exist in the hearts of conspiring men in the last days."

If prudence is knowledge applied to daily need, then one with an intelligent interest in food and good life habits is in no sense a faddist or "crank." Indeed, every one should have such a sound fundamental knowledge of nutrition.

The most ardent Word of Wisdom enthusiasts cannot claim that this inspired document gives the last detailed word in nutritional advice. Scientific knowledge concerning man's diet is yet in its infancy. Many new angles to old truths are being discovered constantly. When such are definitely established in the best laboratories of nutrition to be facts, not mere theories, then they may be accepted and used and they will be found to be in harmony with the general principles set forth by the Word of Wisdom. The advice in the Word of Wisdom to use prudence in all these things implies that one should be ready to accept and apply new truth." [10] (emphasis added)

It has been more than forty years since the above words were written by Apostle Widtsoe, who brought into clear focus the spiritual reality of the Word of Wisdom and its relation to the medical and scientific truth of that time.

- [1] Hindhede M., "Die Neue Ernahrungslehre," (1923); also Hindhede M., *Fuldkommen Sundhed* (1934); "The Effect of Food Restriction During War on Mortality in Copenhagen," *JAMA*, 74381, (1920)
- [2] Lappe, F., *Diet For A New Planet* (New York, NY: Ballentine Books, 1982); Altschul, A., *Proteins: Their Chemistry and Politics* (New York, NY: Basic Books, Inc., 1965).
- [3] Robbins, J., *Diet For a New America* (Walpole, NH: Still Publishing, 1987).
- [4] Grant, H., *Conference Report* (Salt Lake City, UT: Church of Jesus Christ of Latterday Saints, April 1925), p.10.
- [5] Grant, H., *Conference Report* (Salt Lake City, UT: Church of Jesus Christ of Latterday Saints, April 1937), p. 15.
- [6] Benson, E., A Labor of Love (Salt Lake City, UT: Deserte Book Co., 1989).
- [7] Malmos, H., "The Relation of Nutrition to Health," Acta Med. Scand., (1950)
- [8] Quoted in Gerald E. Jones, Concern for Animals as Manifest in Five American Churches: Bible Christian, Shaker, Latter-day Saint, Christian Scientist and Seventh-Day Adventist, Ph.D. diss., Brigham Young University (1972), p.111.
- [9] Widtsoe, J. and L., *The Word of Wisdom, A Modern Interpretation* (Salt Lake City, UT: Deseret Book, 1950).
- [10] Widtsoe, J and L, *The Word of Wisdom, A Modern Interpretation* (Salt Lake City, UT: Deseret Book, (1950)

NOTES FROM THE BOOK JACKET

"I have read this book and it has convinced me to change my diet."

CHARLES R. SMART, M.D.

FORMER CHIEF, NATIONAL CANCER INSTITUTE, EARLY DETECTION BRANCH,

WASHINGTON, D.C.

DR. JOHNSON'S COMMENTS ON HEART DISEASE, CANCER, AND OSTEOPOROSIS

"Angina is the agonal cry of an abused heart" -- Chapter 8

"Cancer is a self-inflicted beast" - Chapter 6

"Too much of a good thing and not enough of another causes osteoporosis" - Chapter 9

"As a physician, I have learned that the human body is a marvelous and rugged, biologic machine, especially when it is cared for and treated properly. I also understand and appreciate that the body will, with neglect and abuse, become prematurely worn out causing misery, suffering and even death. By personal experience and scientific documentation I know that a healthy heart requires both proper diet and appropriate exercise. The evidence is overwhelming. And what is most amazing of all is that this prescription for good health and well-being was given to Joseph Smith more than 160 years ago."

KENNETH E. JOHNSON, M.D. AUTHOR

"We are an overfed and undernourished nation, digging an early grave with our teeth. . . . We need a generation of young people, who as Daniel, eat in a more healthy manner." PRESIDENT EZRA TAFT BENSON BYU TALK (1979)

"Mortality is the time for the spirit to constrain and discipline the body's appetites. The choices made on a day to day basis determine whether one lives a long, healthy life or dies prematurely from degenerative diseases."

JAMES O. MASON, M.D.
AUTHOR OF "ATTITUDES TOWARD HEALTH,"
ENCYCLOPEDIA OF MORMONISM, 1992
FORMER ASSISTANT SECRETARY
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES