Vilhjalmur Stefansson and His All-Meat Diet Experiment

Written by Sophia Le, PhD in Experience Last Updated November 23, 2021

Vilhjalmur Stefansson (1879 – 1962) was an Arctic explorer, anthropologist, lecturer, and prolific writer.

Stefansson was first forced to live on the all-meat diet of the Inuit to survive when a ship carrying his supplies failed to arrive on one of the expeditions.

After eleven years living with the Eskimos, Stefansson's health did not suffer but improved on this diet, he realized what he previously learned about nutrition and dietetics was all wrong and became a vocal advocate of this diet.

In this post, we will briefly look at Stefansson's background, his Arctic expeditions and the time he spent with the Eskimos, and the famous Bellevue Hospital experiment where he and a friend spent a year under supervision eating nothing but meat.

Vilhjalmur Stefansson's background

Born William Stephenson in 1879 to parents who were both Icelandic immigrants in America, Stefansson studied at the University of North Dakota and later at the University of Iowa and received his B.A. in 1903. He then studied anthropology at Harvard Divinity School where he spent two years as an instructor. During his university years, he changed his name to its Icelandic variation, Vilhjalmur Stefansson.

From the beginning, Stefansson was known to be a rugged character who felt at home in the wild.

In 1906 he finally had the opportunity to participate in an expedition to the Western Arctic and that was his first encounter with the Eskimos and their way of life. When a ship carrying the supplies for the expedition failed to come, he had to live with an Inuit family and ate nothing but fish.

Between 1908 and 1912, he joined another expedition to northern Alaska to study the natives.

Between 1913 and 1918, he led the Canadian Arctic Expedition which had some success in discovering some of the world's last major landmasses. However, he was also heavily criticized for the sinking of one of the ships resulting in the deaths of 11 members and six more deaths over the remaining of the expedition.

Stefansson tried to secure funding for another official Arctic expedition afterward but failed.

In 1921, he dispatched a small party to colonize and claim Wrangel Island as Canadian territory. But this caused tension between the US and Russia, embarrassed the British government, and infuriated the Canadian government. When four young, inexperienced and ill-equipped members of the expedition perished, Stefansson received a lot of public criticism and his reputation was severely tainted.

Later on, Stefansson moved to the US and spent the rest of his life there when he felt his presence and ideas were no longer welcome in Canada.

He continued to be regarded as one of the Arctic experts, worked in advisory roles, gave lectures, and wrote and published many works.

Some sources reported that Stefansson published some 24 books and more than 400 articles. Some of his notable books include:

- *My life with the Eskimos*, published in 1913
- *The Friendly Arctic – The Story of Five Years in Polar Regions*, published in 1921
- *Hunters of the Great North*, published in 1922
- *Not by Bread Alone*, published in 1946
- *The Fat of the Land*, published in 1956.

He died in 1962 at the age of 82.

Vilhjalmur Stefansson's Arctic explorations and his encounter with the Eskimo

As mentioned above, in 1906, Stefansson joined the Anglo-American Polar Expedition to Western Artic. His role was to study the Mackenzie River Indians and to collect artifacts for museums.

Stefansson wrote for Harper's Monthly Magazine's November 1935 issue that when the supplies from white whalers failed to arrive, the Inuit had to revert to their traditional hunting practices and ate just fish.

As a guest, Stefansson was given baked salmon trout while the Eskimos themselves ate boiled fish. Against his expectation, he began to like baked salmon trout and later on discovered that boiled fish tasted even better.

And shortly after he began to eat just like the Eskimos, fish for breakfast, lunch, dinner, and snack. He ate boiled, raw, and fermented fish. He was missing salt at first but gradually could do without it.

After a few months on this diet, he noted that "*mentally and physically, I had never been in better health in my life*".

These months were the beginning of several years during which he would live on a meat-only diet.

According to his own estimate, cumulatively, he had lived exclusively on meat and water in the Arctic for more than five years in total. Another member of his expeditions lived on this exclusive

meat diet for about the same length of time while several others lived on it from one to three years.

He noted that “I did not get scurvy on the fish diet nor learn that any of my fish-eating friends ever had it … There were certainly no signs of hardening of the arteries and high blood pressure, of the breakdown of the kidneys, or of rheumatism”.

Vilhjalmur Stefansson’s exclusive meat diet experiment

In 1928, Vilhjalmur Stefansson and Karsten Anderson, a member of Stefansson’s expeditions participated in the Bellevue Hospital experiment where the two men ate meat only for one year under supervision. The result of this experiment was published in the Journal of Biological Chemistry in February 1930 under the title “*Prolonged meat diets with a study of kidney function and ketosis”.*

The information below is based largely on this published paper.

Institutions involved in the experiment

The general scope of the investigation was outlined in 1926 and 1927 by an advisory committee of scientists from seven institutions of which Dr. Raymond Pearl of Johns Hopkins University, Baltimore, was chairman.

The institutions involved include:

- American Museum of Natural History (Dr. Clark Wissler)
- Cornell University Medical College (Dr. Walter L. Niles)
- Harvard University (Drs. Lawrence J. Henderson, Earnest A. Hooton, and Percy Howe)
- Institute of American Meat Packers (Dr. C. Robert Moulton)
- John Hopkins University (Drs. William G. McCallum and Raymond Pearl)
- Russell Sage Institute of Pathology (Drs. Eugene F. DuBois and Graham Lusk)
- University of Chicago (Dr. Edwin O. Jordan).

The main portion of the work was carried on while Stefansson and Anderson lived and ate in the metabolism ward of the Russell Sage Institute of Pathology in Bellevue Hospital, New York.

The experiment's protocols

Stefansson

Stefansson was fed a standard mixed diet for two weeks. This mixed diet included fruits, cereals, bacon, and eggs for breakfast and meats, vegetables and fruits for lunch and dinner.

After two weeks, Stefansson was asked to start with lean meat only. On the third day of this lean meat diet, he developed nausea and diarrhea.

When fat meat was added to the diet, he fully recovered in 2 days but had a period of constipation lasting 10 days. He stayed at the hospital for about two months and was asked to continue the meat diet at home.

In total, Stefansson completed 375 days on an exclusive meat diet. This was then followed by two periods of 1 week each, the first on a high fat diet and the second on a general mixed diet.

Anderson

Anderson was fed this mixed diet for nearly three weeks before starting the meat diet. He was allowed to eat whatever he wanted as long as it was meat and experienced no disturbances.

Anderson spent 90 days in the hospital before leaving and continuing the meat diet at home. Toward the end of the experiment, he re-entered the metabolism ward and spent 3 more weeks on this diet under supervision making a total of 367 days on this exclusive meat diet.

He then spent three more weeks during which he received a variety of diets, all high in fat content.

He contracted pneumonia while in the hospital but recovered quickly.

The nature of the diet

The meat used included beef, lamb, veal, pork, and chicken and the parts used were muscle, liver, kidney, brain, bone marrow, bacon, and fat.

There was a very small amount of carbohydrates on the diet which came from the meat they ate.

The men were allowed to eat as much as they wanted and in whatever lean-fat ratio they liked.

During the time spent in the ward, Stefansson ate on average 0.81 kilos of meat per day and Anderson ate on average 0.79 kilos per day.

The protein content was in the range of 100 to 140 grams, the fat content was from 200 to 300 grams and the carbohydrate content was from 7 to 12 grams.

The calorie intake was in the range from 2,000 to 3,100 calories per day, of which 15% to 25% were derived from protein, 78% to 85% from fat, and 1% to 2% from carbohydrates.

Did the men adhere strictly to the diet?

The researchers were confident that Stefansson and Anderson strictly adhere to the diet for three reasons:

- First, they were under close observation during a large part of the study
- Second, during the time they were living at home, urine tests were carried out and acetone bodies were found to be so constant that fluctuations in carbohydrate intake were practically ruled out
- Third, the high character of the men was a guarantee that they faithfully followed the diet as prescribed.

Findings

Below is a summary of the main findings:

1. General conditions: both men were mentally alert, physically active and showed no abnormal physical changes. Their teeth showed no deterioration and their bowel movements were normal
2. Weight loss: Stefansson lost 2.5 kg and Anderson lost 3 kg
3. Blood pressure: both of them had normal blood pressure despite the popular belief at the time that a high meat diet would have a negative impact on blood pressure
4. Vitamin deficiency: The men did not suffer from vitamin deficiency. The mild gingivitis which Stefansson had at the beginning cleared up entirely by the end of the experiment
5. Acidity: the acidity of the urine increased by 2 to 3 times during the meat diet compared to the general mixed diet

6. Effect on kidneys: there was no evidence that the exclusive meat diet caused any irritation to the kidneys nor damage to the kidney function. There was also no evidence of kidney hypertrophy
7. Blood constituents: no increase in the non-protein content of the blood of both Stefansson and Anderson.

In summary, after one year on an exclusive meat diet, both Stefansson and Anderson were in excellent health and suffered no ill effects from the diet.

Conclusion

The dietetic beliefs of Stefansson's days were: you need a varied diet that includes both meat and vegetables. Fruits, nuts, vegetables, and whole grains are good for you. The less meat you eat, the better it is for your health. A heavily meat-based diet would have serious health consequences such as rheumatism, hardened arteries, high blood pressure, and kidney damages.

Stefansson's experiment had proved these views wrong but, unfortunately, little had come out of it.

Today, most dietitians and doctors are still of the view that a balanced healthy diet is one that has a variety of fruits, vegetables, whole grains, and some meat.

Not much has changed over the last 100 years or so and that is really scary.

If a similar experiment is repeated today, it may generate some headlines but I doubt whether it would make any difference in the standard dietary advice we receive.

Just look at the current obesity epidemic and we can see that we really can't wait for the health and medical professionals to wake up and catch up.

If you would like to try out an exclusive meat-based diet and see what impact it has on your health, please check out this detailed guide on how to start the carnivore diet step by step.

References

Stefansson, Vilhjalmur (1879-1962) | Harvard Square Library

The Arctic Explorer Who Pushed an All-Meat Diet – Gastro Obscura (atlasobscura.com)

Stefansson 1 – Eskimos Prove An All-Meat Diet Provides Excellent Health. (biblelife.org)

Vilhjalmur Stefansson | The Canadian Encyclopedia

The legacy of Vilhjalmur Stefansson

PROLONGED MEAT DIETS WITH A STUDY OF KIDNEY FUNCTION AND KETOSIS

Fat of the land by Vilhjalmur Stefansson

Disclaimer: *The information in this post is for reference purposes only and not intended to constitute or replace professional medical advice. Please consult a qualified medical professional before making any changes to your diet or lifestyle.*

Sophia Le, PhD

I'm Sophia Le. A few years ago, I came across the carnivore diet by accident. I was intrigued and tried to find out as much as I can about this way of eating. On this site, I write about what I know so people who are interested can learn about it and make decisions that are best for their health.

Recent Posts