whole food nutrition

Vegan

a purely plant-based diet

The Journal of Family Practice:

Eighteen patients with serious heart diseases followed a strict vegan diet under the close observation and care of Dr. Esselstyn, the head of the research project. In the previous eight years before the project began, these patients had forty-nine significant heart problems: heart attacks, angina pectoris attacks, bypass operations and more. In the eleven years following the change in diet there was only one significant heart problem among all the eighteen participants. In 70% of the participants clogged arteries became free-flowing again.

"A strategy to arrest and reverse coronary artery disease: a 5-year longitudinal study of a single physician's practice." The Journal of Family Practice, December 1995, pp. 560–568 .

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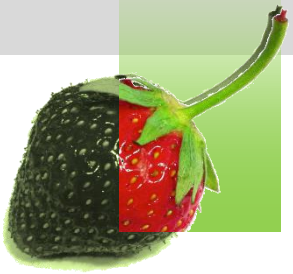


Is it possible to live without meat and dairy products?

Almost three quarters of the world's population cannot tolerate dairy products.

Yet milk, cheese, yoghurt and cream are part of our daily life. What would we eat if there were none of these? But it is a fact that this idea of a "normal" diet is found only among northern Europeans, North Americans, and related peoples.

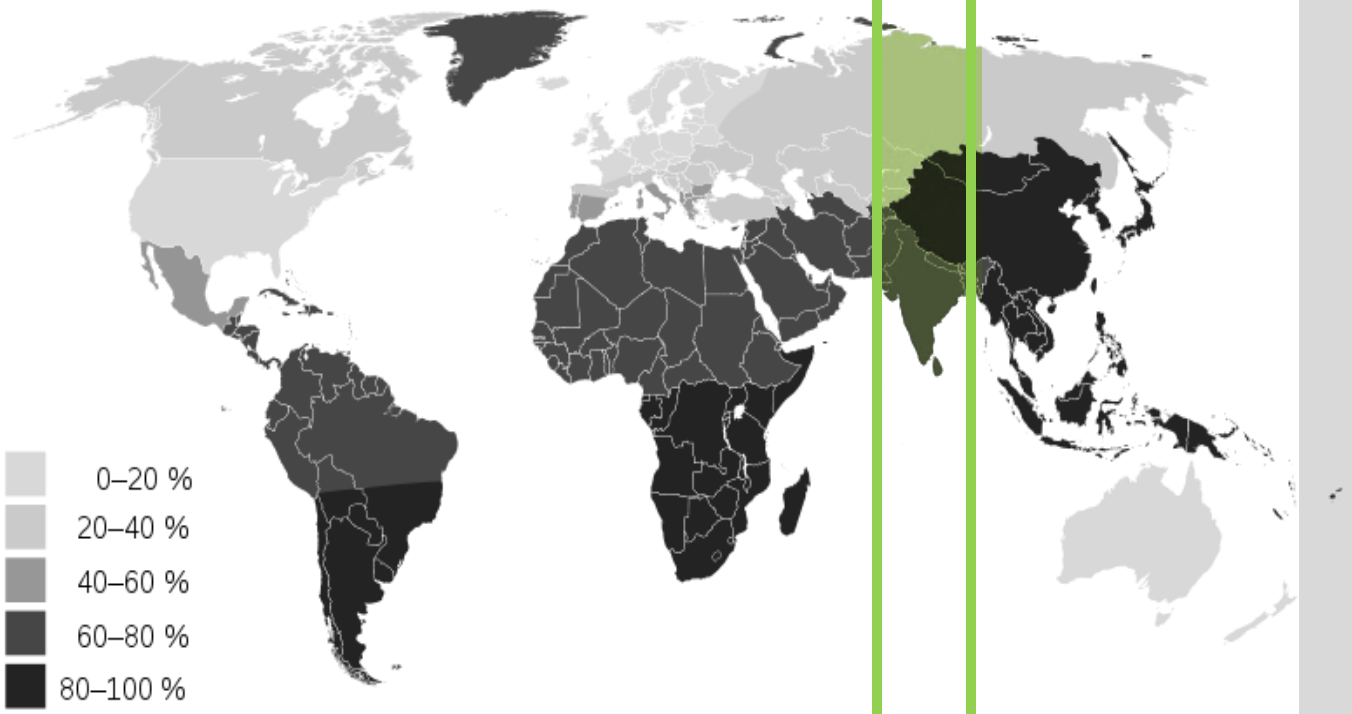
After weaning, a child physiologically loses its ability to digest milk—it develops a lactose intolerance or lactose malabsorption.

So for the largest part of the world population, namely 75%, these foodstuffs are not normal at all.

A lactose intolerance between 60% and 100% is typical for the overwhelming number of ethnic groups scattered throughout the world. This includes all the American Indians and Eskimos who have been examined so far. It also includes several groups of Spanish origin in the new world, most of the peoples south of the Sahara and their descendants in other parts of the world. It relates to the Mediterranean peoples and those from the Near East, most of the peoples of Indian descent, all the peoples of south-eastern and eastern Asia and the populations of New Guinea and Fiji.

F.J. Simoons, The geographic hypothesis and lactose malabsorption. A weighing of the evidence. The American Journal of Digestive Diseases, Vol. 23, Nr. 11, November 1978.

Lactose intolerance world map



Source: http://www.britannica.com/EBchecked/media/157598/Global-distribution-of-lactose-intolerance-in-humans.

"Whereas (almost) everyone during infancy can break down lactose in the intestines due to the presence of the enzyme lactase (a lack of this enzyme was lethal in the past), this ability is lost for the majority of persons in later years. They become lactose intolerant, which is of no consequence for most cultures because the dairy industry is practically non-existent, or because people have learned to make milk more digestible through the processes of cheese or yoghurt making …"

According to Joachim Burger from the Institute of Anthropology, Mainz University, the persistence of lactase—which permits milk digestion—among adults in Central Europe is on average 60% compared to only 20% in Southern Europe and an almost complete intolerance in most of the other areas in the world.

Deutsches Ärzteblatt (German Doctor's Newspaper), 28 August 2009.

But:

The protein question

Don't we need dairy products in order to have a sufficient supply of protein? No, because pulses, grains, nuts, and seeds can fully supply the protein we need.

The calcium question

Don't we need dairy products in order to have an adequate supply of calcium for our bones?

No, because animal proteins cause a calcium deficiency, probably due to an increased excretion of calcium by the kidneys. It is a fact that the consumption of milk and other dairy products leads to an increase in the incidence of fractures. For example, there are 31 fractured hips per 100,000 Bantus in South Africa (low consumption of dairy products) as compared to 968 fractured hips per 100,000 in Norway (very high consumption of dairy products).

Human Vitamin and Mineral Requirements—Report of a Joint FAO/WHO Expert Consultation 2002.

Recipe: Scrambled Tofu

Ingredients for 2 people

Ingredients:

Preparation

300 g tofu
1 l water
20 g salt
5 g soup seasoning

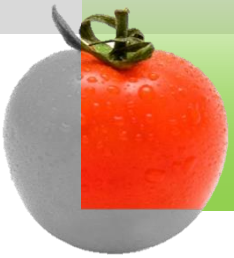
Scrambled Tofu

15 g olive oil
100 g onions
2 g turmeric
2 g salt
4 g soup seasoning
0.6 g paprika powder
0.6 g basil powder
20 g olive oil
chives

Method:

Preparation: Rinse the tofu in water and cut in half-inch slices. Mix the water, salt and soup seasoning and cook the tofu in it for approximately 10 minutes. Drain the tofu and then mash it with a fork or potato masher until it is broken down to the size of large crumbs.

Scrambled Tofu: Finely cut the onions and sauté them in the 15 g of oil. Add the crumbled tofu and continue to sauté while stirring. Add the seasoning towards the end. Finally, stir in the remaining 20 g of olive oil and chives.



The "China Study"

Scientists from Cornell University (New York), Oxford University (England), and the Chinese Academy for Preventive Medicine (China) investigated the connection between diet and health in rural China in a comprehensive scientific study from 1980 onwards.

The "New York Times" later singled out this research as "The Grand Prix of Epidemiology."

The dietary habits of China and the USA:

In 65 districts of rural China 6,500 subjects were questioned about their diet. Blood samples were taken and the incidence of diseases recorded. The results differed dramatically from results in the USA:

Nutrients	China	USA
Calories (kcal/kg body weight/day)	40.6	30.6
Fat (% of calories)	1.5	34-38
Animal protein	0.8 (without fish)	10-11
Fiber (g/day)	33	12

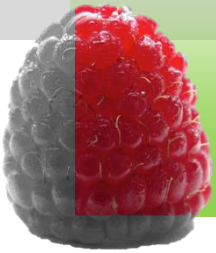
Extracted from: T.C. Campbell, China Study, BenBella Books, 2006.

The results:

- The average consumption of calories per kilogram of body weight was 30% higher in China than in USA. But still, the body weight of the Chinese was 20% less! The reason for this was that the Chinese were more physically active and ate plant-based fat and protein. The Americans were less active and ate animal fat and protein.
- A diet rich in fiber was coupled with a reduced risk of cancer of the colon and rectum.
- The average blood cholesterol levels were 127 mg/dl in China and 215 mg/dl in USA.
- The menarche (first period) begins on average at the age of 17 among Chinese girls. This is much later than that in American girls (11 years). A menarche at a young age is associated with a greater risk of breast cancer in later life.
- The mortality rate of breast cancer is 5 times higher among American women than the women from rural China.
- The mortality rate of coronary heart disease among American men was 17 times higher than men from the rural districts of China.

The decisive factor for the higher incidence of sickness for typical civilization diseases in USA was found to be animal foodstuffs.

T.C. Campbell, China Study, BenBella Books, 2006.



The scientific burden of proof is overwhelming

Highly civilized countries differ from other countries by their excessively high consumption of animal foods. Meat, sausage, eggs, milk, and dairy products are an expression of affluence. And they are accompanied by the well-known affluent diseases.

Obesity

The average body mass index for the various dietary forms are as follows:

Vegans:	**23.6**
Vegetarians:	**25.7**
Non-vegetarians:	**28.8**

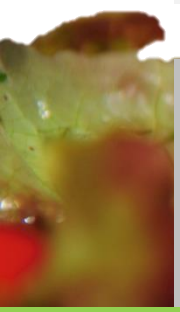
Diabetes Care, May 2009, Vol. 32, Nr. 5, p. 791–796.

The body mass index (BMI kg/m²) relates body weight to size and is a good measure of normal weight versus overweight. Here are the guidelines:

BMI 18.5 - 24.9 -> normal range

BMI 25.0 - 29.9 -> overweight

BMI 30.0 -39.9 -> obese



Diabetes

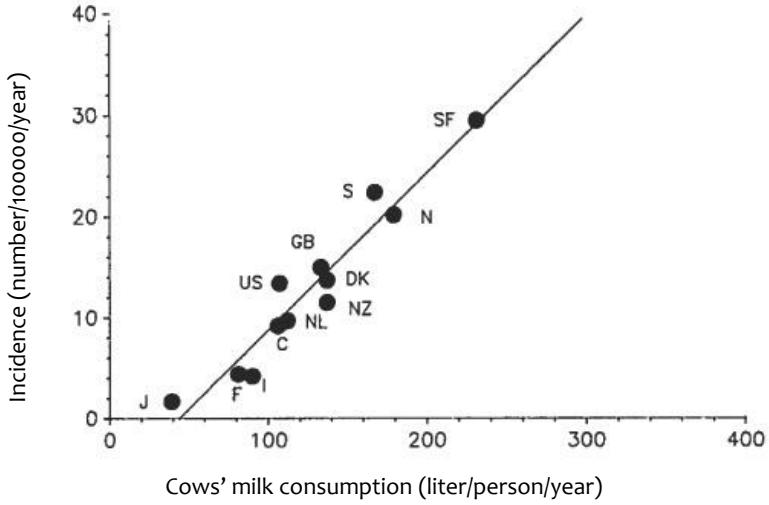
Type 1:

Diabetes Type 1 is considered to be an autoimmune disease which hardly has anything to do with diet. However, a Finnish study showed that consumption of cows' milk raises the risk of developing diabetes type 1 by 5 to 6 times.

Diabetes Care, June 2000, Vol. 49, Nr. 6, pp. 912–917.

The higher the consumption of cows' milk the greater the incidence of diabetes type 1. That was the result of a Norwegian study: "Correlation between milk consumption and incidence of insulin-dependent diabetes mellitus (IDDM) was 0.96."

Diabetes Care, November 1991, Vol. 14, Nr. 11, pp. 1081–1083.



Average yearly incidence of insulin-dependent diabetes mellitus in children between 0 and 14 years of age with an average yearly consumption of liquid cow's milk per person and year in various countries. J=Japan, F= France, I=Israel, C=Canada, US=USA, NL=Netherlands, NZ=New Zealand, GB=Great Britain, DK=Denmark, N=Norway, S=Sweden, SF=Finland. Incidence—6.77 + 0.16 x Consumption, $R2 = 0.94$.

Type 2:

The danger of contracting diabetes type 2 is almost 50% less in vegans than in non-vegetarians.

Diabetes Care, May 2009, Vol. 32, Nr. 5, pp. 791–796.

Autoimmune diseases and allergies

Autoimmune diseases and allergies in children are promoted by the consumption of dairy products.

American Journal of Clinical Nutrition, May 2009, Vol. 89, Nr. 5, pp. 1638–1642.

"Improved health is one of the many reasons people choose to adopt a vegetarian diet, and there is now a wealth of evidence to support the health benefits of a vegetarian diet."

Marsh et al; AMERICAN JOURNAL OF LIFESTYLE MEDICINE, May/June 2012, Vol. 6, Nr. 3, pp. 250–267.

Cholesterol

Cholesterol levels are 14% lower in vegetarians and 35% lower in vegans than in non-vegetarians.

American Journal of Cardiology, 1 October, 2009.

Heart diseases

The danger of dying from a heart disease is twice as high in the general population than it is in vegetarians. This has been confirmed by a vast number of scientific investigations in different countries.

American Journal of Clinical Nutrition.

Cancer

Cancer of the testes and prostate gland are more prevalent where there is an increase in the consumption of dairy products.

International Journal of Cancer, 2002, pp. 98, 262–267.

The same applies to cancer of the ovaries in women.

American Journal of Clinical Nutrition, November 2004, Vol. 80, Nr. 5, pp. 1353–1357.

In summary we can say that a plant-based diet has a therapeutic or healing effect on many forms of cancer, heart and circulatory diseases, overweight, diabetes, blood lipid malfunction and in the many widespread allergies and autoimmune diseases (diabetes type 1, multiple sclerosis, rheumatoid arthritis and many more).

Whole food – vegetarian – vegan

Whole food

"Whole food" means the entire food. It means whole grain flour as opposed to refined flours, cold pressed and unrefined oil instead of the neutral tasting, industrially refined oil, and so on. It means using foods in their natural entirety as opposed to extracts from foods.

Vegetarian

This includes all plant-based foodstuffs but also, in Western countries, dairy products and eggs.

Vegan

This is a purely plant-based diet. While a vegan diet is the exception in the Western countries, it is the rule with the majority of the world's population. In fact, humanity will only be able to survive with this form of diet.

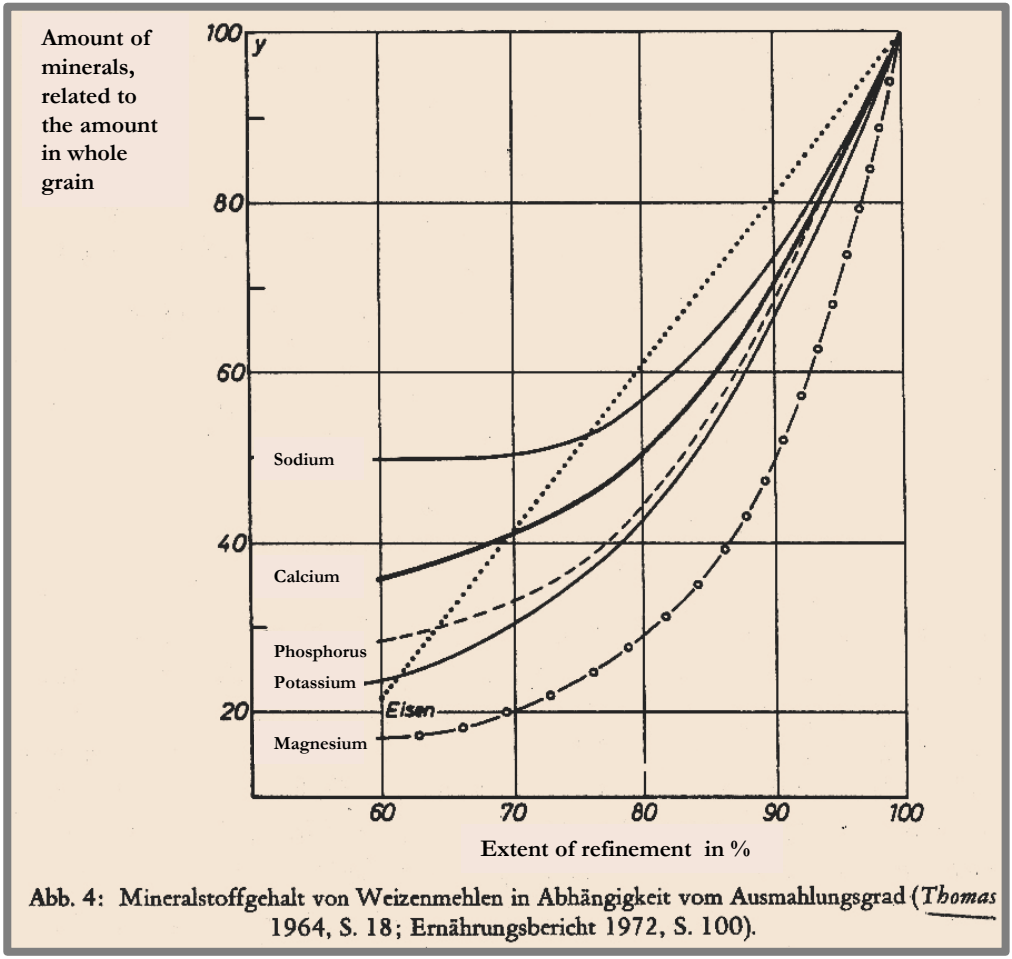


Abb. 4: Mineralstoffgehalt von Weizenmehlen in Abhängigkeit vom Ausmahlungsgrad (*Thomas* 1964, S. 18; Ernährungsbericht 1972, S. 100).

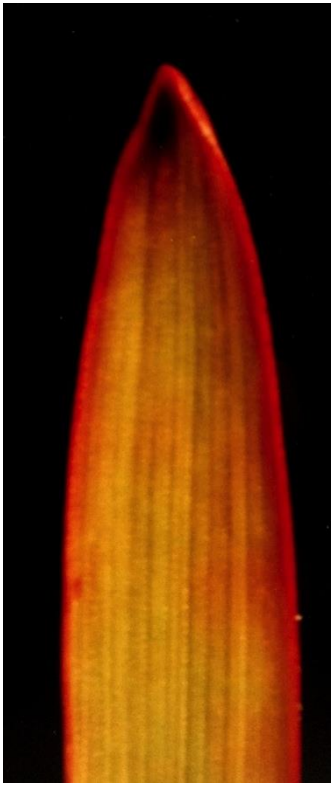
Source: Koerber/Männle/Leitzmann, Vollwerternährung (Whole food nutrition), Haug-Verlag 1982

The diagram (originally in German) shows the correlation between the extent of flour refinement and the accompanying loss of minerals (sodium, calcium, phosphor, potassium, iron and magnesium). The values on the left refer to the quantity of minerals present. The bottom figures show the extent of refinement. Both values are expressed as percentages.

Vitamin B12—an environmental problem?

"Vitamin B12 can be found only in animal-based food." This is wrongfully claimed, even in recent scientific articles.

Vitamin B12 is produced exclusively by bacteria. These bacteria live in soil, and they are also a part of the intestinal flora in humans. We have to learn to work together with bacteria and not see them only as enemies.



How rich in bacteria is the soil?

This picture of a young leaf was sent to us by Professor A. Mozafar. The photo was taken after barley had been put in a water bath with a nutrient solution of 3.2 mmol/L (4.34 g/L) of B12.

Cobalamin (B12) naturally has a red color. It has accumulated on the edges of this leaf after being carried there by the nutrient solution. It remains there when when the water evaporates through the surface of the leaf.

Vitamin B12 in spinach and grains—it is possible

Spinach and other green vegetables can absorb B12 molecules from the soil and store it in their leaves. This was presented in 1994 by Professor A. Mozafar in a widely recognized and quoted work. If the soil is treated with 10% cow dung, or if B12 is added directly to the soil, then the spinach leaves or grains can contain a considerable amount of B12.

A. Mozafar, Plant and Soil 167: 305-311; 1994.

Wild mushrooms and cultivated mushrooms

Both taste good, but while one grows in natural soil the other is grown in sterilized soil. The former has more B12 producing bacteria, the latter has less. The result: mushrooms grown in natural soil contain more B12, while cultivated mushrooms have less.

Both chanterelle and black trumpet mushrooms contain considerable quantities of real B12, which our bodies can use.

Food	Origin	B12 content in µg/100 g
Boletus	Serbia, nature reserve	0.22
Parasol mushroom	Forests in Westerwald, Germany	0.23
Chanterelle	Serbia, nature reserve	0.31
Oyster mushroom	China	0.35
Black trumpet	Serbia, nature reserve	0.73
Black trumpet	Bosnia	0.85

Analyses of dried specimens were conducted by the IFP (Institut für Produktqualität—Institute for Product Quality), Berlin, and the quantities of B12 in fresh mushrooms calculated.

An adult requires between 1 and 3 µg vitamin B12 daily.

LIVESTOCK'S LONG SHADOW

The long shadow of stock breeding

This is the title of an almost 400-page report of the FAO, published in November 2006. It analyzes the effects of cattle breeding on the ecosystem of planet earth.

"Globally it is one of the largest sources of greenhouse gases and one of the leading causal factors in the loss of biodiversity, while in developed and emerging countries it is perhaps the leading source of water pollution." (Summary p.267)

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO), Rome, 2006.

Web-Link: http://www.fao.org/docrep/010/a0701e/a0701e00.HTM

The keeping of livestock uses the greatest amount of land

26% of the ice-free land on the earth is used for the keeping of livestock. In the Amazon this is the major reason for the deforestation of the rain forest.
33% of all arable land is used to produce animal feed.

Livestock produce more greenhouse gases than traffic

At the moment the keeping of livestock contributes 18% towards global warming—that's more than the effect of all the transport in the world together. Livestock is responsible for 9% of CO_2, 37% of methane and 65% of nitrogen oxide.

Keeping animals has a substantial influence on drinking water

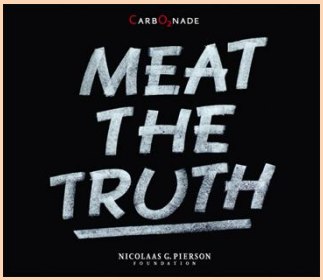
In the USA stock breeding is responsible for:

- 55% of the erosion
- 37% of pesticides used
- 50% of antibiotics used
- 32% of the nitrogen and 33% of the phosphorus pollution of freshwater reserves

Keeping animals is a fundamental cause of the loss of biodiversity

Possible solutions suggested by the FAO report are: more efficient methods of "… feed production, livestock production and processing, distribution, and marketing. … the intensification and perhaps industrialization of livestock production is the inevitable long-term outcome …" These suggestions must be accompanied by adequate protective measures for the environment. (See *Livestock's Long Shadow*, pp. 283, 284.)

Changing to a plant-based diet would help people, the world, and the animals.

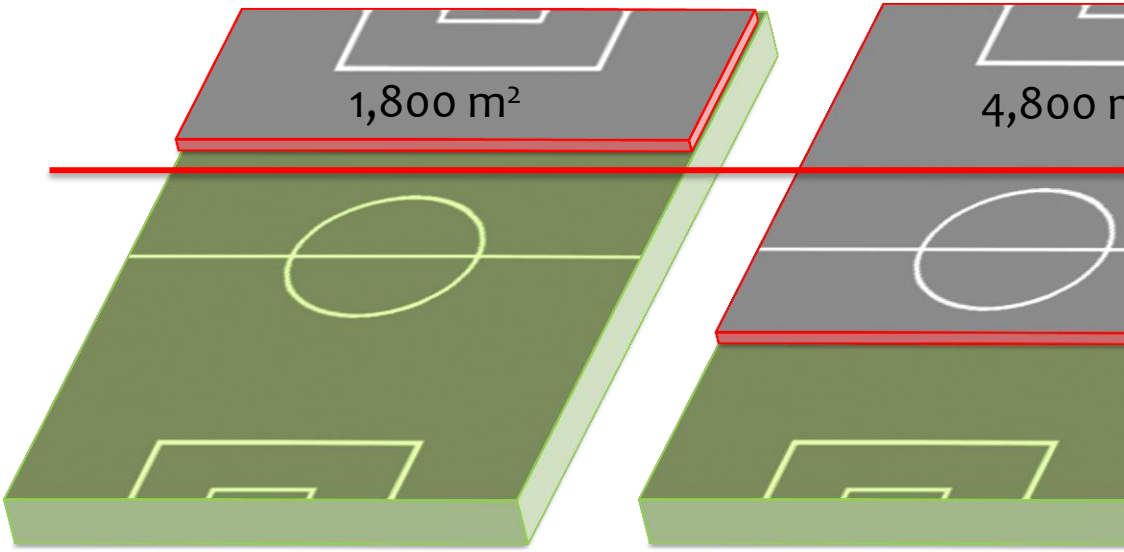


Video: "Meat the truth"
http://www.meatthetruth.nl/en/

How much land do we need?

Without meat

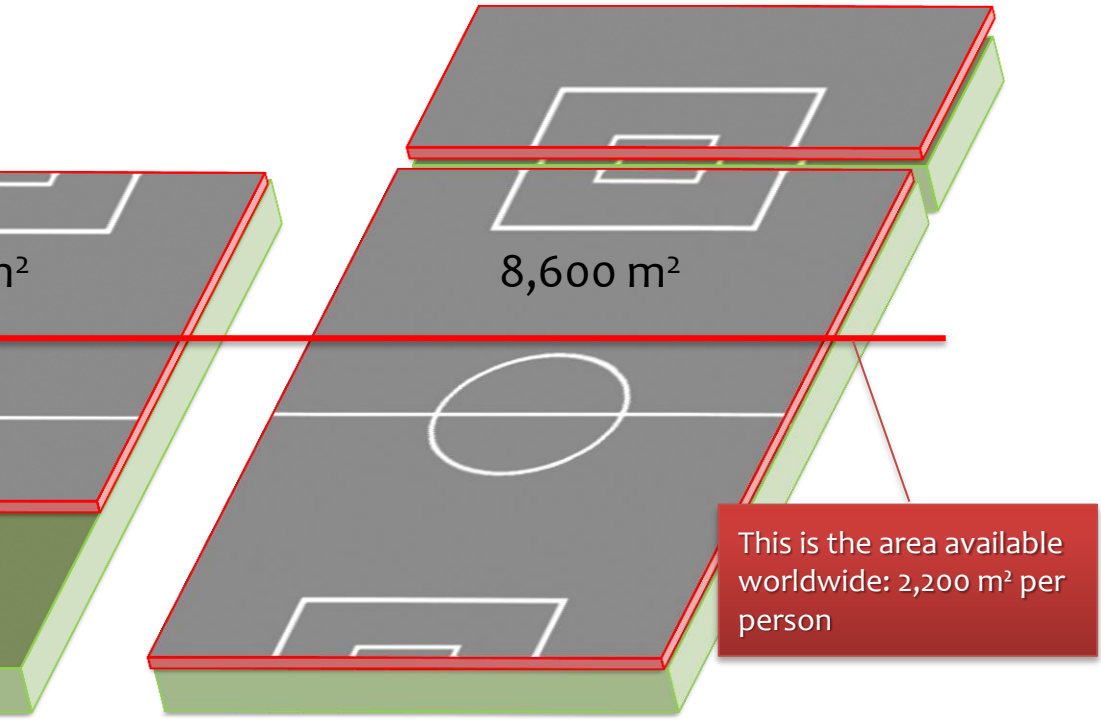
With g
pe



1. K. von Koerber, Globale Nahrungssicherung für eine wachsende Weltbevölkerung (Global food securance for a growing world population), Journal für Verbraucherschutz und Lebensmittelsicherheit, Mai 2009, Vol. 4, pp. 174–189
2. Peters, C. J.,Wilkins, J. L. und Fick, G.W. (2007) Renewable Agriculture and Food Systems 22:145–153.
3. WWF Europe 2005—European Policy Office, 28.

90 g meat
er day

With 381 g meat
per day

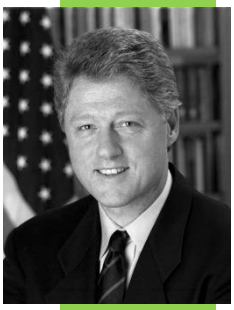


They are everywhere: people who eat a vegan diet

In history

Adam and Eve:

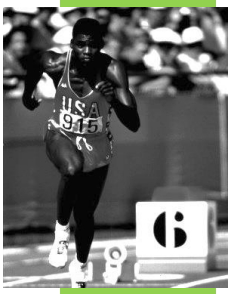
"Then God said, 'Look! I have given you every seed-bearing plant throughout the earth and all the fruit trees for your food.'" *Genesis* 1:29.



In politics

Since his heart operation Bill Clinton eats only a plant-based diet. He lost 11 kg (24 lbs) in weight and the blood flow in his coronary arteries has increased.

www.youtube.com/watch?v=R3ied_AD4iE

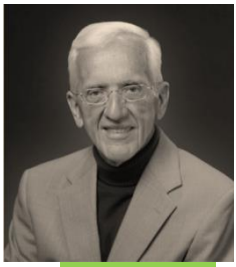


In sport

Carl Lewis is one of the most successful athletes in the history of sport. He achieved several world records and dominated the sprint and long jump from 1983 to 1996 with nine Olympic gold medals and eight world champion titles. In 1999 he was honored as the athlete of the century by the IAAF. He has lived on a vegan diet since 1990.

Wikipedia.

http://www.earthsave.org/lifestyle/carllewis.htm



In science

"People who ate the most animal-based foods got the most chronic diseases … People who ate the most plant-based foods were the healthiest and tended to avoid chronic disease. These results could not be ignored." says the internationally recognized nutrition and health scientist, Dr. T. Colin Campbell, Cornell University, author of the China Study.

Source: T.C. Campbell, China Study, BenBella Books, 2006

So you want to change?

Then let's start!

In the beginning I thought, "then I won't be able to eat anything." But that's where I started to learn. It was very interesting and a whole new world opened up before my eyes.

My food tastes excellent and it is still interesting; our children are regularly among the best in endurance sports among their peers.

So take heart as you adopt a new diet and the changes will come. You will lose weight, feel lighter and easier, and have more joy in your life. Allergies will be reduced, joint pains lessened, your blood pressure will get better—your body will be more in balance. Serious diseases will be alleviated, or they will not develop at all.

It's usually easy to go without meat and salami, but giving up eggs and dairy products is a bigger step. Yet it is exactly this change that will bring you a big step forward. Are you willing to learn to cook again? There is simply no end to the possibilities of creating wonderful, tasty, nourishing, delicious, choice, whole food meals—of cooking well and enjoying your food!

Things to consider

1. Don‘t just take away the meat, sausages, eggs and dairy products from your diet, but change to a wholesome and adequate natural diet. A plant-based diet is only successful when you put effort and care into it.
2. Make sure you have an adequate supply of vitamin B12:
   a. Some people seem to absorb enough vitamin B12 from their intestinal flora and therefore have an adequate supply without animal products or other foodstuffs.
   b. It is also possible to build up and keep a sufficient level of B12 by eating a good quantity of Nori seaweed (Porphyra yezoensis) or Chlorella.
   c. In many cases however, it will be necessary for the time being to supply the body’s requirement of a sufficient supply of vitamin B12 with a dietary supplement.
3. Take care to consume a sufficient supply of protein, especially when doing manual labor.
4. You will have an insufficient supply of vitamin D unless the country where you live is very sunny. This applies to vegetarians as well.
   a. You should expose your skin to the sun when you can.
   b. Wild mushrooms, particularly those that have been dried in the sun, contain considerable quantities of vitamin D2.
   c. In some cases, especially in the darker months of the year, it may be necessary to take a vitamin D supplement.
   d. A visit to the solarium will also raise the vitamin D level in the blood.
5. There are ample supplies of iron, zinc and other essential minerals in plant foods.

Arteriosclerosis is reversible

In the Lifestyle-Heart-Study Dr. Dean Ornish investigated 28 heart patients after they had made a major change in their lifestyle. Animal products were prohibited, apart from egg white and a cup of skimmed milk or yoghurt per day.
After just one year on this diet the frequency, gravity and duration of heart pains had decreased significantly. The flow of blood through the arteries had improved. 82% of the patients who undertook this trial experienced an improvement in their heart condition within one year.

The Lancet, "Can lifestyle changes reverse coronary heart disease?" 21 July 1990, pp. 129–133.

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