

How Healthy is Your Diet ?





MEAT


HEALTH HAZARDS

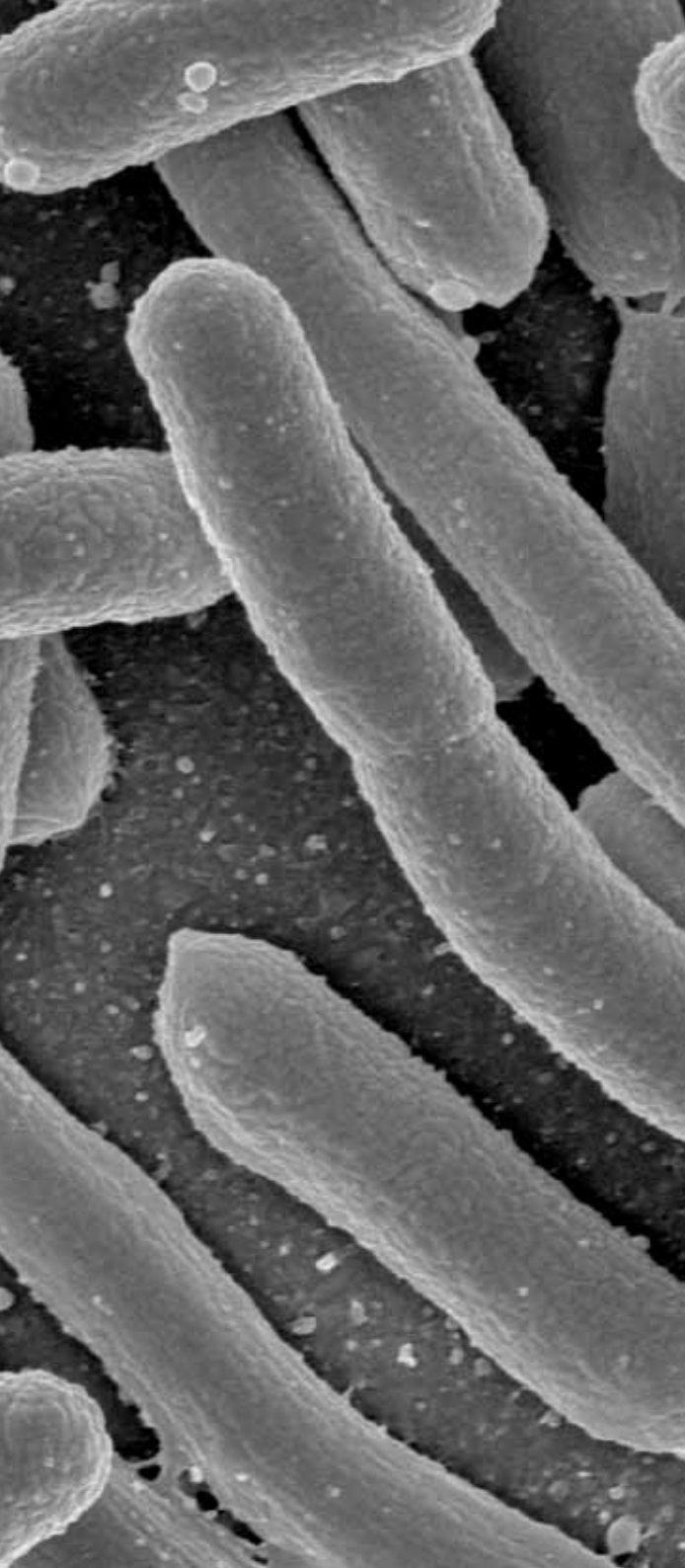
Meat and dairy products are promoting disease. They are high fat foods, a primary source of unhealthy (and inessential) saturated fats and cholesterol, contain no fibre, no complex (starchy) carbohydrate, none of the primary antioxidant (disease-busting) vitamins – vitamin C, E, and beta-carotene (the antioxidant form of vitamin A) – and no vitamin K.

Source: "Safeguarding Children's Health: Defeating Disease Through Vegetarian/Vegan Diets" by Laura Scott MSc, with introduction by Prof Colin Campbell and Dr Anne Griffiths MB ChB

30-40% of cancers, 17-22% of coronary heart diseases and 24-66% of diabetes can be prevented by strongly decreasing consumption of saturated fats (found in animal products such as meat, especially red meat, eggs and dairy products) and increasing physical activity.

Source: Gardner G., Halwell B., "Underfed and Overfed: The Global Epidemic of Malnutrition", World Watch Institute Paper 150, March 2000





FOOD POISONING

Animal products are responsible for **95%** of all cases of food poisoning. **Young children, pregnant women and the elderly are most vulnerable.**

Source: Prof. E Goldman (Ed.), 2001. Stop Bugging Me.

A staggering 9.5 million people get food poisoning each year, costing the NHS **GBP 750 million annually.**

Source: "Safeguarding Children's Health: Defeating Disease Through Vegetarian/Vegan Diets" by Laura Scott MSc, with introduction by Professor Colin Campbell and Dr Anne Griffiths MB ChB

A complication of infection with **E.coli 0157** is now thought to be the biggest cause of acute (short term) kidney failure in children. Farmed animals, in particular cattle, are thought to be the reservoir of infection. **"A diet free of meat, fish, milk and eggs is by far the safest and one that I highly recommend."**

Source: Prof. E Goldman (Ed.), 2001. Stop Bugging Me.



The rate of **premature heart disease** among obese teens **is set to triple**, and the increasing prevalence of high blood pressure in children is a major culprit, experts warned at a news conference sponsored by the American Society of Hypertension.

Source: WebMD, 10 Oct 2008 <http://tinyurl.com/62qptt>

“The avoidance of meat is likely to reduce the risk of coronary artery disease (heart disease), because meat is the major source of saturated fat... High consumption of red meat has adverse health consequences: thus **vegetarian diets tend to impart**

health advantages.”

Source: American Journal for Clinical Nutrition, 1999; 70 (suppl): 434S-8S. “Convergence of philosophy and science: the Third International Congress on Vegetarian Nutrition”, Dr WC Willett, Prof. of Medicine, Harvard Medical School, <http://tinyurl.com/6ndkm3>

Meat, dairy, eggs (animal protein) are **strongly linked** to high blood cholesterol levels which is a predictor of heart disease and many cancers.

Source: American Journal for Clinical Nutrition, 1999; 70 (suppl): 434S-8S. “Convergence of philosophy and science: the Third International Congress on Vegetarian Nutrition”, Dr WC Willett, Prof. of Medicine, Harvard Medical School <http://tinyurl.com/6ndkm3>

High blood pressure increases the

tendency for blockages to form in the arteries and is therefore a risk factor for heart disease and stroke. Many studies have shown that a **meat-free diet can help lower blood pressure** in people already hypertensive. According to the PCRM, this effect has nothing to do with changes in body weight, salt or fat intake, but **entirely down to the vegetarian diet.**

Sources:

- Lindahl O et al, 1984. A vegan regimen with reduced medication in the treatment of hypertension. Brit. J. Nutr.;52:11-20.
- Physicians Committee for Responsible Medicine, 31 January 1995. Recommended Revisions for Dietary Guidelines for Americans. p.3.
- McDougall J et al, 1995. Rapid reduction of serum cholesterol and blood pressure by a twelve-day, very low-fat, strictly vegetarian diet. J. Am. Coll. Nutr.;14(5):491-496.



O B E S I T Y

At least **10% of children** in the UK are now classed as being overweight. The 1991 Bogalusa Heart Study showed that even mild obesity in childhood is related to higher levels of blood pressure, insulin and cholesterol and that to some extent these track into adulthood. Numerous studies show that vegetarians are leaner than meat-eaters.

Source: National Forum for Coronary Heart Disease Prevention, May 1993. Food For Children: Influencing Choice and Investing in Health. p.20

Currently, **over half of women** and about **two thirds of men** in the world are overweight or obese. The World Health Organisation states that obesity is linked to heart disease, hypertension, diabetes, osteoarthritis, gallstones and some cancers. They recognise that since it is very difficult to encourage people to slim, prevention is the key. Vegetarians are, as a group, slimmer than meat-eaters.

Source: Appleby PN et al, 1998. Low body mass index in non-meat eaters: the possible roles of animal fat, dietary fibre and alcohol. Intl. J. Obesity; 22:454-460.



CANCER

Over a third of cancer deaths, and possibly many more, may be linked to diet. **Vegetarians have a 40% reduction in cancer** mortality than meat eaters, independent of differences in smoking, obesity and socioeconomic status. Cooking animal proteins (but not plant proteins) produces cancer-causing chemicals called heterocyclic-amines. Low-fat vegetarian diets have more 'natural killer' cells than high-fat diets, which destroy abnormal cells that may turn cancerous. Fibre helps sweep away toxins, and antioxidant vitamins (C, E and beta-carotene), abundant in balanced vegetarian diets, help protect body cells against damage.

Sources:

- Barnard N, 1999. Foods That Fight Pain. p.205. (Bantam).
- Sinha R et al, 1995. High concentrations of the carcinogen 2-amino-1-methyl-6-phenylimidazo-[4,5] pyridine (PhIP) occur in chicken but are dependent on the cooking method. Cancer Research; 55:4516-4519.
- Knekt P et al, 1994. Intake of fried meat and risk of cancer: a follow-up study in Finland. Int J. Cancer; 59:756-760.
- Malter M et al, 1989. Natural killer cells, vitamins and other blood components of vegetarian and omnivorous men. Nutr. Cancer;12:271-278.

Breast Cancer

Breast cancer has now taken over lung cancer as the most common cancer in the UK. Asian countries have a much lower rate of breast cancer than Western countries but when Japanese girls are raised on Western diets, their rate of breast cancer increases dramatically. A Japanese study found the risk of breast cancer was **8.5 times higher** in affluent women consuming meat every day than poorer women who did not eat meat daily.

Sources: - Physicians Committee for Responsible Medicine. Cancer, Prevention and Survival Series: Food Choices for Health. p.5.- Hirayama T, 1978. Epidemiology of breast cancer with special reference to the role of diet. Prev. Med.;7:173-195.

Women consuming diets high in animal-based protein produce greater amounts of reproductive hormones, which are linked to higher rates of breast cancer.

Source: China Study 2004, T. Colin Campbell, Ph.D., The China Study, the most comprehensive research on health and nutrition with human subjects in history, conducted collaboratively by Cornell University, Oxford University, and the Chinese Academy of Preventative Medicine

Prostate Cancer

In 1993, American researchers analysed data from the prospective cohort study "Health Professionals Follow-up Study" looking at diet and subsequent disease patterns. Of all the foods studied, red meat represented the food group with the strongest positive association with advanced prostate cancer. A lower risk of prostate cancer is associated with diets higher in rice, soya bean products and green and yellow vegetables. Vegetarians have been found to have low rates of prostate cancer and increasing consumption of **beans, lentils, fruits and vegetables are all associated with significantly decreased prostate cancer risk.**

Sources:
- Giovannucci E et al, 1993. A prospective study of dietary fat and risk of prostate cancer. JNCI;85:1571-1579.
- Physicians Committee for Responsible Medicine. Cancer, Prevention and Survival Series. p.8.
- Phillips RL, 1975. Role of life-style and dietary habits in risk of cancer among Seventh-Day Adventists. Cancer Research;35:3513-3522.
- Mills P et al, 1989. Cohort study of diet, lifestyle, and prostate cancer in Adventist men. Cancer;64:598-604.

Colon Cancer

Preliminary results from the EPIC study, a major on-going study looking at the link between diet and cancer, are showing that a high intake of red meat (particularly processed meat) is associated with a significant increased risk of colonic cancer. Frequent consumption of beef, veal, pork and lamb is associated with a **20-40% increase in colorectal cancer risk.**

Sources:
- Riboli E and Kaaks R, The EPIC Project: rationale and study design. Intl J. Epidem.;26(Suppl.1):S6-S14.
- Davey G, 27th June 2001. Letter re: EPIC Study of Nutrition and Health.

Cancer specialist Doctor Rosy Daniel states: "The best move... is to become completely vegan and eliminate animal products from the diet altogether."

Source: Dr Daniel Rosy with Ellis Rachel, 2001. The Cancer Prevention Book. p.109-111. (Simon & Schuster).

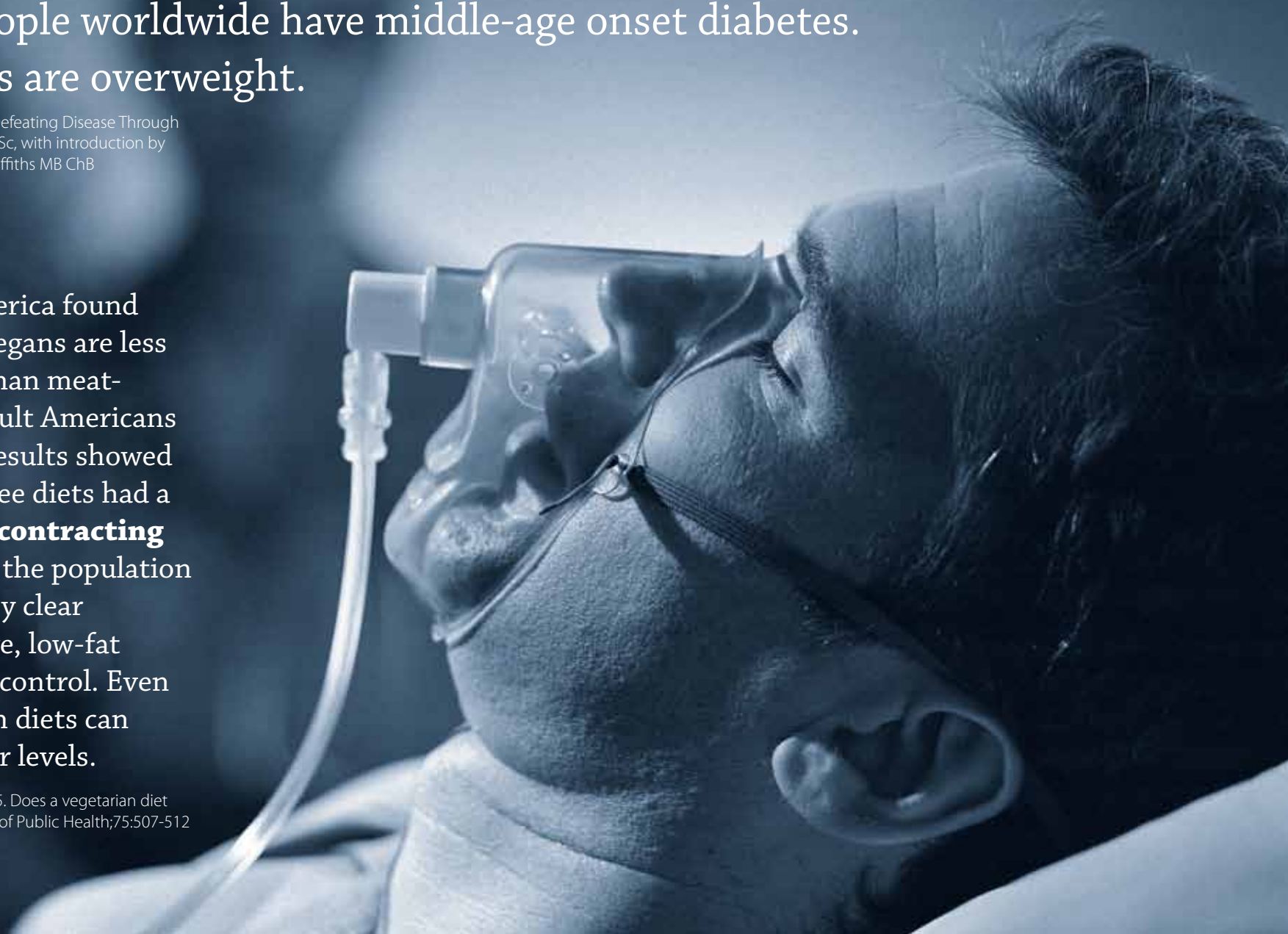
Diabetes

150 million people worldwide have middle-age onset diabetes.
80% of sufferers are overweight.

Source: "Safeguarding Children's Health: Defeating Disease Through Vegetarian/Vegan Diets" by Laura Scott MSc, with introduction by Professor Colin Campbell and Dr Anne Griffiths MB ChB

A 21-year study in America found that vegetarians and vegans are less at risk from diabetes than meat-eaters. Over 25,000 adult Americans were studied and the results showed that people on meat-free diets had a **45% reduced risk of contracting diabetes** compared to the population as a whole. There is very clear evidence that high-fibre, low-fat diets improve diabetic control. Even without exercise, vegan diets can bring down blood sugar levels.

Source: Snowdon DA and Phillips RL, 1985. Does a vegetarian diet reduce the occurrence of diabetes? Am J of Public Health;75:507-512





Gallstones

A British Medical Journal study found that non-vegetarians have about a two fold increase in risk of developing gallstones than vegetarians.

The main risk factors appear to be low fibre intake, saturated fat and cholesterol intake and obesity.

Source: Pixley F et al, 1985. Effect of vegetarianism on development of gallstones in women. *BMJ*;291:1-12.

Kidney Disease

A Harvard study found that intake of animal protein was directly associated with the risk of kidney stone formation. Researchers here found that an increase in animal protein from less than 50g per day to 77g per day was associated with a 33% increased risk of kidney stones in men.

Source: Curhan GC et al, 1993. A prospective study of dietary calcium and other nutrients and the risk of symptomatic kidney stones. *NEJM*;328:833-838.

A well-planned vegetarian diet may be useful in the prevention and treatment of renal [kidney] disease. Studies... suggest that some plant proteins may increase survival rates and decrease proteinuria [proteins in the urine]... and histological renal damage [kidney tissue damage] compared with a non-vegetarian diet.

Source: American Dietetic Association, 1997. Position of the American Dietetic Association: Vegetarian Diets. *JADA*; 97(11):1317-1321.

Rheumatoid Arthritis

It is hypothesised that meat and offal may be a major factor contributing to the inflammation in RA.

Source: Grant WB et al, 2000. The role of meat in the expression of rheumatoid arthritis. *Brit. J. Nutri.*;84:589-595.

A short period of fasting followed by a vegetarian diet can cause clinically relevant long-term improvement in patients with RA.

Source: Muller H et al, 2001. Fasting followed by vegetarian diet in patients with rheumatoid arthritis: a systematic review. *Scand. J. Rheumatol.*; 30:1-10.

More Diseases

- Blue tongue disease
- E coli
- Salmonella
- Bird flu
- Mad cow disease
- Pig's disease (PMWS)
- Listeriosis (most deadly, and on the rise)
- Shellfish poisoning
- Pre-eclampsia
- Campylobacter
- Most viruses have zoonotic origin

Sources:

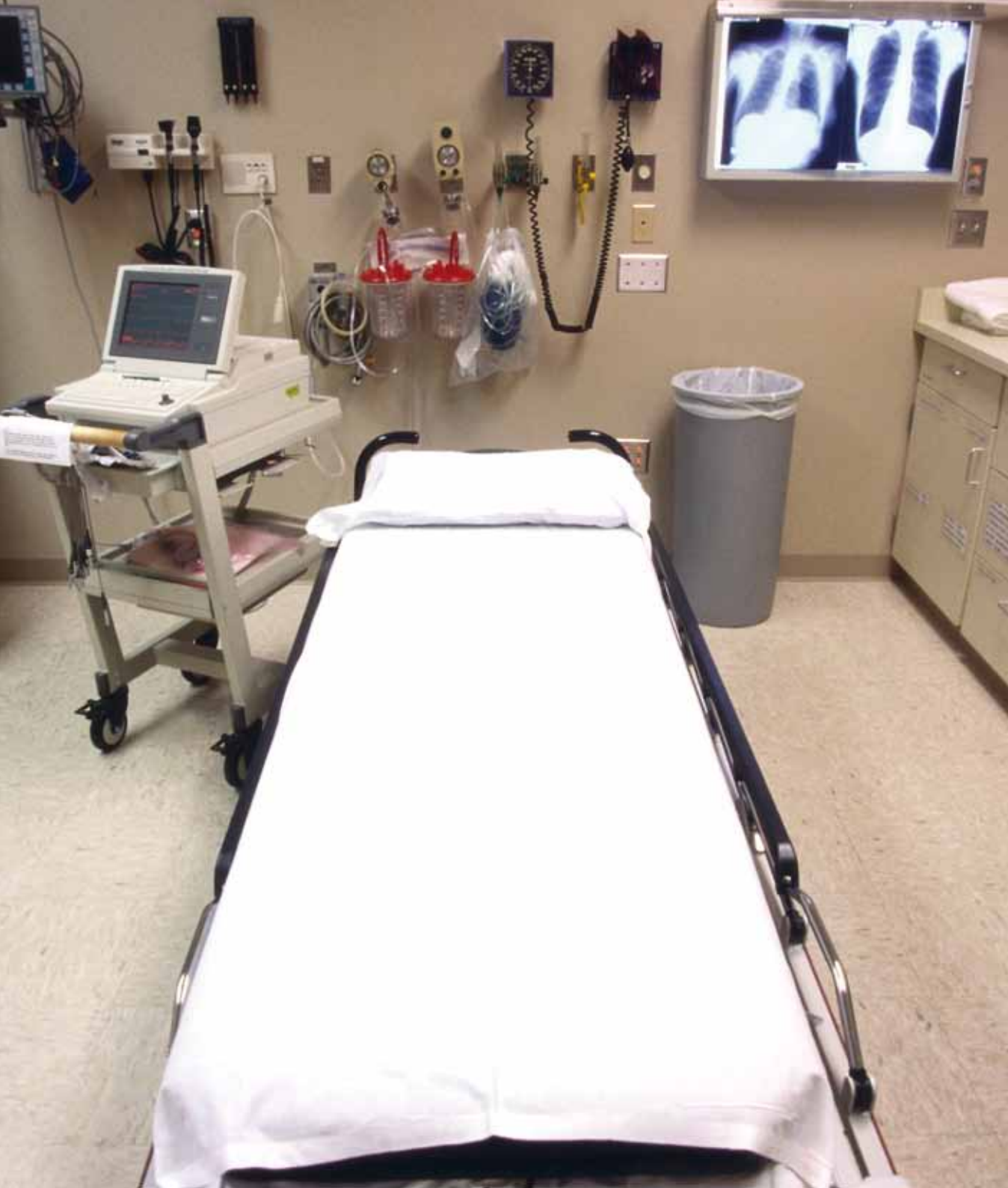
-US Food and Drug Administration <http://tinyurl.com/u99z>

-Department for Environment Food and Rural Affairs

<http://tinyurl.com/68p5z3> & <http://tinyurl.com/5vycks>

-Wikipedia <http://tinyurl.com/5m8oas> & <http://tinyurl.com/58pu4p>
& <http://tinyurl.com/gf8xz>

-Listeria poisoning almost double, Independent, Ireland, 25 August 2008 <http://tinyurl.com/68rayd>



Health Costs in the UK

Food poisoning - GBP 750 million/year

Source: Prof. E Goldman (Ed.), 2001. Stop Bugging Me. p.3,10,11

**Heart disease - GBP 29 billion/year
(healthcare expenditure and lost
productivity)**

Source: BBC News, 14 May 06 <http://tinyurl.com/6eeffd>

**Diabetes - GBP 365 million/year in Northern
Ireland alone**

Source: Belfast Telegraph, 24 Oct 08 <http://tinyurl.com/5mwvsn>

Diabetes - takes up 10% of NHS budget

Source: The Guardian, 7 Oct 08 <http://tinyurl.com/56kbap>

**Obesity - GBP 119 million/year in Central
Lancashire**

Source: Lancashire Evening Post, 10 Oct 08 <http://tinyurl.com/5f96hp>

Obesity - GBP 6.3 billion/year by 2015

Source: Personneltoday.com, 17 Oct 08 <http://tinyurl.com/65hva8>



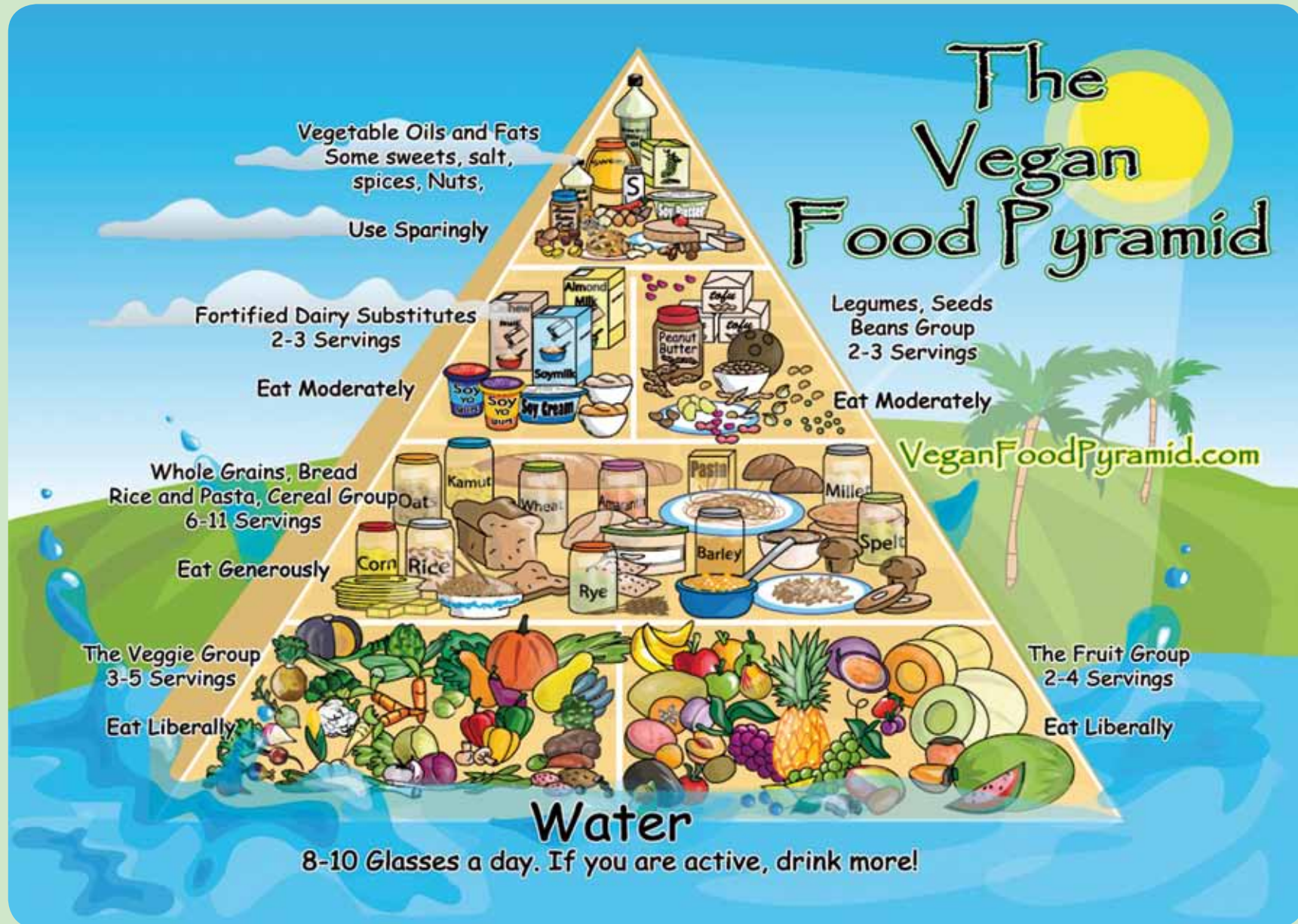
Factory farm conditions can spread **E Coli**, the deadly **Avian Flu** and cause respiratory problems.

Source: World Watch Institute, <http://tinyurl.com/5t5zuw>

Feed containing meat and bone meal can cause **mad cow disease**, which has affected thousands of cattle in industrial countries.

Source: World Watch Institute

Healthy Food Pyramid



The Right Start in Life for Children

“A vegetarian diet, if properly selected, can meet all of the requirements of the growing child.”

Source: American Journal for Clinical Nutrition, 1994: 59 (suppl): I 1765-815, T. Sanders, Prof. of Nutrition & Dietetics, King's College, London, <http://tinyurl.com/6aslqs>

Recent research comparing omnivore and vegetarian children found that vegetarian children had lower intakes of total and saturated fat, cholesterol and sodium and higher intakes of beneficial nutrients like potassium and vitamins beta-carotene, C and E.

Source: Thane CW and Bates CJ, 2000. Dietary intakes and nutrient status of vegetarian pre-school children from a British national survey. J. Hum. Nutr. Dietet.;13:149-162.



Veg for Life

“Scientific data suggest positive relationships between a vegetarian diet and reduced risk for several chronic degenerative diseases and conditions, including obesity, coronary artery disease, hypertension, diabetes mellitus, and some types of cancer.”

“Vegetarians often have lower morbidity and mortality rates from several chronic degenerative diseases than do non-vegetarians.”

“Vegetarian diets offer disease protection benefits because of their lower saturated fat, cholesterol and animal protein content and often higher concentration of folate, antioxidants such as vitamins C and E, carotinoids and phytochemicals.”

“Vegetarian diets have also been successful in arresting coronary artery disease.”

Source: American Dietetic Association Position Paper on Vegetarian Diets, 1997.



Vitamin B12 & Iron

New research from the Framingham Offspring Study, a prospective study into risk factors for heart disease, suggests that **vitamin B12** from fortified breakfast cereals, supplements and dairy products may be more efficiently absorbed in the body than foods traditionally viewed as the best sources: meat, poultry and fish. The theory put forward here is that such foods are cooked before eaten and the heat effectively destroys the vitamin.

Source: Tucker, KL et al, 2000. Plasma vitamin-B12 concentrations relate to intake source in the Framingham Offspring Study. *AJCN*;71:514-522.

Vegetarians are no more at risk of iron-deficient anaemia than meat-eaters, so says the British Medical Association and the American Dietetic Association. Many everyday foods contain **iron**: in beans, wholemeal bread and even cocoa beans.

Sources:

- American Dietetic Association, 1997. Position of the American Dietetic Association: Vegetarian Diets. *JADA*;97(11):1317-1321.
- 220. BMA, 1996. Diet, nutrition and health. *BMA Report*;4.11.

Protein

FOOD	PROTEIN (gm/100cal)
Gluten or Seitan (from flour)	22.1
Veggie burger	13.0
Spinach, cooked	13.0
Tofu, firm	11.7
Soybeans, cooked	9.6
Lentils, cooked	7.8
Broccoli, cooked	6.8
Whole wheat bread	3.9
Almonds	3.7

Source: Dr R. Mangels <http://tinyurl.com/5zys36>

