### HIGH BLOOD PRESSURE

What should the blood pressure be? Optimal is under 115 mmHg systolic and under 75 diastolic. Risk of cardiovascular disease beginning at this level doubles with every 20 mm rise in systolic and every 10 mm rise in the diastolic pressure. Those with normal levels at age 55 still have a lifetime risk of 90% of getting hypertension. For those older than 55 the systolic level is more important than the diastolic level. The systolic blood pressure was the single best predictor of both stroke and heart attack as well as total mortality in a study of people 65-84 years of age. Arch Intern Med 2001;116:1183-92. There was no lower level at which risk was not increased.



## **ELEVATED SERUM CHOLESTEROL**

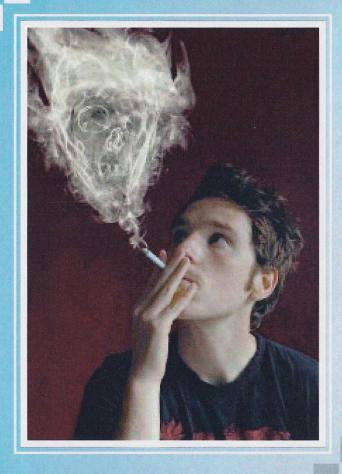
Serum cholesterol levels are elevated by cholesterol and saturated fat in our diet. 100% of the cholesterol in our diet is from animal products and about two-thirds of the saturated fat also comes from animal products. The recommendation is not to get more than 100 mg of cholesterol in our diet for every 1000 kcal. consumed. We are not to get more than 7% of our kcal. from saturated fat. Avoiding the use of meat would usually bring one within these recommended guidelines. Total cholesterol should be under 200 mg/dl. However, LDL cholesterol is the main number to know. It should be under 130 mg/dl. HDL cholesterol should be at least 40 mg/dl for men and 50 mg/dl for women.

# MAJOR BREAKTHROUGH IN THE WORLD OF HEALTH

According to the scientists today the most important lifestyle health habits relating to premature death are: Don't smoke, Don't drink alcohol, Exercise daily, Don't Get Overweight, Use More Fruits and Vegetables and Consume Less Meat. Other major risk factors are High Blood Pressure, Elevated Serum Cholesterol, and Diabetes. The five lifestyle factors help to prevent the other risk factors.

"What remains first among strategies for primary stroke prevention is modification of lifestyle factors... (They) are associated with about an **80%** lower risk of first stroke... *There's virtually nothing that we can do with medicine or interventions of any kind that's going to have that kind of impact.*" New Guidelines on Primary Stroke Prevention from AHA/ASA Dec. 7, 2010. "We know that **80%** of all myocardial infarctions could be prevented with simple lifestyle measures." "The highlight of the new document remains prevention." New European Society of Cardiology Empasizes Primary Prevention. May 3, 2012, Dublin, Ireland. The risk of diabetes was lowered by **88%** by these same health behaviors. Circulation 2010;121:586-613. The 2020 goal will emphasize PRIMORDIAL PREVENTION. This means treating the whole population in a way to prevent whole societies from experiencing epidemics of risk factors. This means doing something with children because disease begins early in life. Circulation Ibid.

How do the health experts know that it is possible to prevent 80% of the heart attacks and strokes? When the scientists have studied many thousands of people over long periods of time they observed those who lived the good lifestyle did not have heart attacks or strokes that the others who were not living this lifestyle were getting. European Journal of Cardiovascular Prevention and Rehabilitation 2006; 13:562-70. See also Arch Intern Med 2005; 165:854-7 and Circulation 2010; 121:586-613. A study was done of 42,847 health professional's age 40-75 who were followed for 16 years and those following all five of the health behavior factors had an 87% reduction in heart attacks. Circulation 2006; 114:160-7. But the major problem was that only 3% of large population groups were living this good "heart healthy" type of lifestyle. Arch Intern Med 2006; 166:1403-9. It is estimated in the U.S. only 5% of the population lives like this but the 2020 year goal is that 20% of the population will be "heart healthy" living in a manner that avoids all these behavioral risk factors. Circulation 2010 lbid.



# SMOKING DON'T EVER START TO SMOKE! Tobacco is a slow most malignant poison.

By 2020 tobacco will be the single greatest cause of death and disability worldwide, causing 10 million deaths per year. W.H.O. Jan. 2004. 1 of 5 13-15 year-olds worldwide are now smoking. When asked if they thought they would be smoking 5 years from now most said no, yet 5 years later 90% were still smoking. Those starting to smoke in their teens and continue through mid-life cut off 24 years of their life. Richard Peto, Lancet, 1992. Smoking is the cause of 50% of avoidable deaths in smokers. European Heart Journal 2012;33:1635-1701.

Much more nutrition is provided for the dollars spent on plant foods vs. animal foods. U.S. Dept. of Agriculute Home Economics Report Number 20, 1962; Unpublished data Scharffenberg J, Proctor Stoy. All endurance runners know that on a high carbohydrate diet such as vegetarians eat there is greater endurance. Nutr Today 1968;3(No. 2):9-11.



For overweight people to be told to eat more fruits and vegetables they must know what they should eat less of to allow for this without getting more overweight. Processed meats should not be eaten at all. World Cancer Research Fund. Processed meats are those that are cured, salted, smoked, have chemicals added such as sodium nitrate which would include ham, bacon, pastrami, bologna, corned beef, salami, hot dogs, bratwurst. Australia-New Zealand Food Standard Code. Many experts say limit intake of red meats (beef, pork, lamb, goat) to 2 three oz. servings a week. The World Cancer Research Fund says the population as a whole should consume no more than 300 gm of red meats a week, even while allowing 500 gms for those who do use it. Even white meats (poultry, fish) cause as much colon cancer as red meats. Am J Epidemiol 1998;148:761-74.

All these meats increase the risk of cardiovascular disease.

#### EAT MORE FRUITS AND VEGETABLES AND LESS MEAT

Grains, fruits, nuts and vegetables constitute the diet chosen for us by our Creator. Fruits, grains, and vegetables, in a simple way, free from spice and grease (animal fat) of all kinds, make, with milk and cream, the most healthful diet. 19.5% of U.S. men live to age 85 or more vs. Adventist vegetarian men 48.6%; women 39.3% and 60.1%. Gary Fraser, Diet, Longevity and Chronic Disease, p. 51 Oxford University Press. 4X as many heart attacks occur in non-vegetarian men in their 40s vs. vegetarian men according to the Adventist Health Study. Prev Med 1984;13:450-500. Women who eat 5-10 servings of fruits and vegetables a day vs. 2.5 or less had only 30% the risk of heart disease. Adventist Health Study. Non-vegetarians have 3.6X greater risk of diabetes being on their death certificates. Am J Public Health 1985;75:507-12. The relative risk for every 1 serving increase in intake is 1.26 for red meat, 1.38 for total processed meats, 1.73 for bacon, 1.49 for hot dogs. Arch Intern Med 2004;164:2235-40. Hemeiron intake from red meat is positively associated with the risk of type 2 diabetes. Am J Clin Nutr 2004;79:70-5. Non-vegetarians have 2-2.5X greater risk of being obese. Adventist Health Study. Lung cancer risk is much higher in both smokers and non-smokers who don't eat many fruits and vegetables. Nutr Cancer 1992;17:263-70. Next to tobacco and alcohol, meat is the greatest single cause of disease and disability in the industrialized countries. J. A. Scharffenberg, Problems With Meat, 1979.





#### **ALCOHOL**

The World Health Organization and the National Academy of Sciences do not recommend the use of alcohol. Diet, Nutrition and the Prevention of Chronic Disease p. 111, 1990; NAS Diet and Nutr p. 16, 1989. The Report of Advisory Committee on the Dietary Guidelines for Americans states: "Make clear that alcohol has no net benefits to health." Nutrition Today, July-August p. 45, 1990." There is little justification to recommend alcohol as a cardioprotective strategy." Circulation 2001; 103:402-5. The data do not justify nondrinkers to drink. JAMA 2001; 265:2004-5. "No patient should be advised to start drinking or to increase alcohol consumption." Lancet1999;353:1815-16.

Alcohol is a poison that has a detrimental effect on virtually every organ of the body. Drinking knocks out brain cells. Social drinkers have a 21% loss in Purkinje cells in the cerebellum. Neurosc Lett 2003; 335:179-82. The brain shrinks with use of alcohol. Nutrition for Health Care 1996: p. 208, 228. See Alcoholism: Clinical and Experimental Research June, 2005. Shrinkage or retraction of the dendrites occur. "The most important structural change is nerve cell loss. Some nerve cells cannot be replaced. Those in the frontal cortex, cerebellum, and several regions deep in the brain." Clive Harper.

Alcohol is second only to tobacco as a proven cause of cancer. About ½ of deaths from car accidents are alcohol-related. A study in Japan states 75% are alcohol related. Traffic Injury Prevention 2006; 7:325-7. Aviation regulators prohibit use of alcohol by pilots for 24 hours prior to flight. FAA.



#### **INACTIVITY**

The more we exercise, the better will be the circulation of the blood. More people die for want of exercise than from over fatigue. When the weather will permit, all who can possibly do so ought to walk in the open air every day, summer and winter. . . . A walk . . . would be more beneficial to the health than all the medicine the doctors may prescribe.

300,000 die yearly in the U.S. early because of lack of exercise. U.S. Surgeon General Report. The World Health Organization reports 2 million die every year from inactivity and inactivity is likely one of the ten leading causes of death. Apr. 4, 2004. Every hour you exercise adds 2 hours to your life. Harvard Alumni Study. People who walked <1 mi. vs. >2 mi./day have about twice the chance of dying. N Engl J Med 1998;338:94-9. Smokers who exercise moderately have a lower risk of heart attack vs. inactive non-smokers. Greater NY Health Insurance Plan Study. If you are physically fit but smoke, have high B.P. and high blood cholesterol you have less chance of dying than people who don't have any of these problems but are not physically fit. JAMA 1996;276:205-10. Exercising 150 min. a week makes you physically fit. S. Blair JAMA 2004; 292:1232-4. A lean person who is unfit has twice the risk of dying as a lean man who is physically fit. Am J Clin Nutr 1999; 69:373-80. Exercise lowers the risk of heart attack, diabetes, hypertension, overweight, cancer and osteoporosis.



#### **OVERWEIGHT**

Gluttony and intemperance lie at the foundation of the greatest moral depravation. Overeating is the sin of this age.

Body weight and physical inactivity together are estimated to account for approximately one-fifth to one-third of several of the most common cancers, specifically cancers of the breast (postmenopausal), colon, endometrium, kidney and oesophagus (adenocarcinoma). W.H.O. Even those who are very overweight if they exercise and are physically fit have only half the death rate as normal weight people who are not physically fit. JAMA 2004;292:1232-4; Med Sci Sports Exerc 1999;31 (11 Suppl):S646-62. 32-4. Dietary ways to avoid overweight: a. no snacks, b. more fruits and vegetables, especially greens and cruciferous vegetables, c. less meat in the diet. vegetarians half as likely to be overweight. d. whole grains rather than refined grain products, e. avoid soft drinks, eat more foods high in fiber such as beans, decrease animal fat intake.