# The Benefits of the 4 Principles of Healthy Living

Results from Medical Studies

- 1. Do Not Smoke.
- 2. Maintain a Body Mass Index (BMI) < 30.
- 3. Exercise 150 minutes/week
- 4. Eat 5 servings of fruits or vegetables daily.

#### **Mortality**

1) *The American Journal of Medicine* (2007); 120:598-603 "Turning Back the Clock: Adopting a Healthy Lifestyle in Middle Age"

Individuals who adopt 4 healthy lifestyle principles have a 40% reduction in mortality in just 4 years.

2) Plos Med January 2008

"Combined Impact of Health Behaviors and Mortality in Men and Women: The EPIC-Norfolk Prospective Population Study"

The risk of death (particularly from heart disease) decreases as the number of positive health behaviors increase. People who practice all 4 healthy principles will on average live 14 years longer than people who practice none.

3) BMJ 2008:337

"Combined Impact of Lifestyle Factors on Mortality: Prospective Cohort Study in US Women"

Over 24 years follow-up it was found that 55% of all deaths (mostly from heart disease and cancer) could have been prevented by following all 4 principles of healthy living.

### **Coronary Heart Disease**

1) Circulation 2006; 114: 160-167

62% of heart attacks can be prevented by long term (16 years) adherence to healthy lifestyle habits.

Among people taking medications for hypertension or high cholesterol 57% of all heart attacks can be prevented by following healthy lifestyle habits.

Just adopting 2 healthy lifestyle habits lowers the risk for heart attacks by 27%.

2) The American Journal of Medicine (2007); 120:598-603 "Turning Back the Clock: Adopting a Healthy Lifestyle in Middle Age"

Individuals who adopt 4 healthy lifestyle principles have a 35% reduction in coronary heart disease in just 4 years.

3) Circulation 2008;118

The typical American diet of fried foods, salty snacks, eggs, and meat leads to a 30% <u>increase</u> in heart attacks while a diet high in fruits and vegetables leads to a 35% <u>reduction</u> in heart attacks.

4) Arch Intern Med. 2009;169(15):1355-1362.

Individuals who follow all 4 healthy principles have an 81% lower risk of having a heart attack.

<sup>&</sup>quot;Healthy Lifestyle Factors in the Primary Prevention of Coronary Heart Disease Among Men"

<sup>&</sup>quot;Dietary Patterns and the Risk of Acute Myocardial Infarction in 52 Countries"

<sup>&</sup>quot;Health Living Is the Best Revenge: Findings From the European Prospective Investigation Into Cancer and Nutrition—Potsdam Study"

#### **Diabetes**

1) The New England Journal of Medicine; Sept 2001; 345: 790-797 "Diet, Lifestyle, and the Risk of Type 2 Diabetes Mellitus in Women"

91% of cases of diabetes can be prevented by following healthy lifestyle habits.

Archives of Internal Medicine; April 2009; 196
"Lifestyle Risk Factors and New-Onset Diabetes Mellitus in Older Adults"

In individuals 65 years or older, 90% of cases of diabetes can be prevented by following healthy lifestyle habits.

3) *Arch Intern Med.* 2009;169(15):1355-1362. "Health Living Is the Best Revenge: Findings From the European Prospective Investigation Into Cancer and Nutrition–Potsdam Study"

Individuals who follow all 4 healthy principles have a 93% lower risk of developing diabetes.

#### **Hypertension**

Journal of the American Medical Association; July 2009; 302: 401-411 "Diet and Lifestyle Risk Factors Associated with Incident Hypertension in Women"

80% of cases of hypertension can be prevented by following healthy lifestyle habits.

In women a BMI>25 (being overweight) causes 40% of all cases of hypertension.

### **Stroke**

1) Circulation 2008; 118: 947-954

"Primary Prevention of Stroke by Healthy Lifestyle"

Individuals who follow healthy lifestyle principles have a 50% reduction in stroke.

2) Arch Intern Med. 2009;169(15):1355-1362.

"Health Living Is the Best Revenge: Findings From the European Prospective Investigation Into Cancer and Nutrition—Potsdam Study"

Individuals who follow all 4 healthy principles have a 50% lower risk of having a stroke.

### **Congestive Heart Failure**

Journal of the American Medical Association; July 2009; 302: 394-400 "Relation Between Modifiable Lifestyle Factors and Lifetime Risk of Heart Failure"

Individuals who follow healthy lifestyle principles have a 50% reduction in the development of congestive heart failure.

## **Cancer**

Arch Intern Med. 2009;169(15):1355-1362.

"Health Living Is the Best Revenge: Findings From the European Prospective Investigation Into Cancer and Nutrition—Potsdam Study"

Individuals who follow all 4 healthy principles have a 36% lower risk of developing cancer.