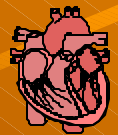


The Living Heart Foundation  
*presents*  
The “Shape-a-Life” Program

CV Risk Factors



A multi-institutional, IRB approved, group  
dedicated to health screening, database  
creation,  
and outcomes reporting.



LHF

# Living Heart Foundation CV Risk Factors

- **Major independent risk factors:**

- Cigarette smoking
- Elevated blood pressure
- Elevated serum total and LDL cholesterol
- Low serum HDL cholesterol
- Diabetes mellitus
- Advancing age

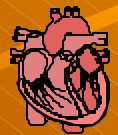
- **Other (predisposing) risk factors**

- **Obesity**

- Abdominal obesity
- Physical inactivity
- Family history of premature CHD
- Psychosocial factors

- **Conditional risk factors**

- Elevated serum triglycerides
- Abnormal LDL particle size and density
- Elevated serum homocysteine
- Elevated serum lipoprotein (a)
- Prothrombotic factors (e.g., fibrinogen)
- Inflammatory markers (e.g., C-reactive protein)



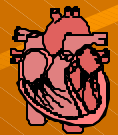
# Living Heart Foundation CV Risk Factors (cont'd)

## ■ **Modifiable Risk Factors:**

- Smoking or exposure to environmental tobacco smoke
- Obesity
- Sedentary lifestyle (not enough physical activity)
- Diabetes
- High cholesterol
- Abnormal blood lipids (fats)
- Hypertension (high blood pressure)

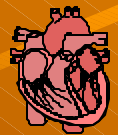
## ■ **Non-modifiable Risk Factors:**

- Male sex
- Age older than 50 years
- Family history of heart disease



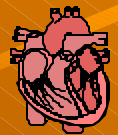
# Living Heart Foundation Reducing Your Cardiac Risk

- Stop smoking
- Eat a low-fat diet rich in vegetables & fruits
- Exercise daily for at least 30 minutes
- Control diabetes & hypertension if you already have these medical conditions.
- Manage your cholesterol & blood lipid levels if they are elevated.
- Know your family history, especially about heart attacks or sudden death at an age younger than 50 years.



# Living Heart Foundation Special Tests that Predict CV Risk

- Coronary Heart Disease (non-invasive tests)
  - Calcium scoring test (EBT)
  - Carotid intimal medial thickness ratio (Ultrasound)
  - Exercise stress test (ECG +/- Radionuclide)
  - Brachial artery reactivity
  - Nuclear magnetic resonance test (NMR)
- Coronary Heart Disease (invasive tests)
  - Coronary angiography (gold standard)
  - Cardiac catheterization



# Living Heart Foundation Important Aspects of CV Risk

- 500,000 people followed up to 30 yrs:
  - 85% developing CV events & survive have  $\geq 1$  MRF
  - 95% who have fatal CV event have  $\geq 1$  MRF
- Conclusion: “control” of MRF improves quality of life and survival
- Myth: MRF only accounts for “50%” of mortality and morbidity
- Other factors involved:
  - Genetic
  - Environmental

