Treating the Cause to Prevent and Reverse Heart Disease

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Dr Esselstyn reports no known financial conflicts.
Absence of Coronary Artery Disease

- Rural China
- Papua Highlanders
- Central Africa
- Tarahumara Indians
Early Atherosclerosis Present in Virtually All Americans

Fig. 1 - Mortality from circulatory diseases in Norway in 1927-1948. Standard population = population of Norway in 1940.
BIRTH OF A PLAQUE

1. Excess LDL particles accumulate in the artery wall and undergo chemical changes.

2. In the intima, the monocytes mature into active macrophages. The macrophages
   become泡沫 cells and release inflammatory mediators.
Treating The Cause

Endothelial Cell
Endothelial Progenitor Cell
HDL Cholesterol
Dimethyl Arginine Dimethylamino Hydrolase
Participants 1985 - 1988

23 men, 1 woman with severe triple vessel coronary artery disease – age range 44 - 68
Method

Avoid

• Oil
• Fish
• Fowl
• Meat
• Dairy
• Caffeinated Coffee
Olive, soybean and palm oils intake have a similar acute detrimental effect over the endothelial function in healthy young subjects

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<table>
<thead>
<tr>
<th>Lecithin and Carnitine</th>
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<tbody>
<tr>
<td>Eggs</td>
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<tr>
<td>Milk</td>
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<tr>
<td>Cream</td>
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<td>Dairy</td>
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<tr>
<td>Liver</td>
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<td>Red Meat</td>
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<td>Poultry</td>
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<td>Pork</td>
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<td>Duck</td>
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<td>Lamb</td>
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<tr>
<td>Venison</td>
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<tr>
<td>Shell Fish</td>
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<tr>
<td>Fish</td>
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</tbody>
</table>
Lecithin
Carnitine

Gut
Bacteria

TMAO

Vascular Disease
Foods to be Included

• Whole Grains
• Legumes, lentils
• Vegetables
• Fruit
Original.  Chunky.
Reversal of Coronary Disease

November 27, 1996

Distal LAD
Reversal of Coronary Disease

November 27, 1996

Distal LAD

July 22, 1999
8 Years Prior to Study

49 Coronary Events in 18 Patients

- Increased angina: 18
- Angiographic disease progression: 13
- Bypass surgery: 7
- Infarctions: 4
- Strokes: 3
- Angioplasty: 2
- Worsening stress test: 2
18 Patients Followed 12 Years

- 49 coronary events during 8 years prior to study
- None in 17 compliant patients during 12 years
ORIGINAL RESEARCH

A way to reverse CAD?

Though current medical and surgical treatments manage coronary artery disease, they do little to prevent or stop it. Nutritional intervention, as shown in our study and others, has halted and even reversed CAD.
Treating the Cause
3.75 Years Follow-Up

Lost to Follow Up: 2
Adherent (89%): 177
Non-Adherent: 21
TOTAL: 200

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Patients With Intervention (119)

Patients Avoiding Intervention (27)

Severity Index $\frac{146}{177} = 82\%$

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Recurrent Events(%)  

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Adherent</td>
<td>0.6</td>
</tr>
<tr>
<td>Non-Adherent</td>
<td>62</td>
</tr>
</tbody>
</table>
Treating The Cause

Recurrent Major Cardiac Events Study Comparison

% Major Cardiac Event

TTC  Treating the Cause of CAD
Courage  PCI Group
Nat Hx  Natural Hx of a Atherosclerosis
Lyon  Diet Heart Study

TTC: 0.6%
Courage: 19.4%
Nat Hx: 20.4%
Lyon: 25%
Volume 20, Issue 7, 2014

Title: "The Nutritional Reversal of Cardiovascular Disease â€“ Fact or Fiction? Three Case Reports"

Authors: Caldwell, Esselstyn and Mladen Golubic

Arrest and Reversal Outcomes

- No mortality from the diet
- No morbidity from the diet
- Benefits improve with time
Quality of Life Issues

Patients are empowered by the knowledge that they are in control of the disease that was destroying their lives.
A POPULATION-BASED STUDY OF DEMENTIA IN 85-YEAR-OLDS

Ingmar Skoog, M.D., Lars Nilsson, M.D., Ph.D., Bo Palmertz, M.D., Lars-Arne Andreasson, M.D., and Alvar Svanborg, M.D., Ph.D.
Exercise Preserves Muscle Mass

Baseline Cholesterol
10-14 days

248 mg/dl
137 mg/dl

Left

Right

Before Rx

After Rx

Esselstyn 2007
8 Measures of Cardiovascular Disease Reversal

Coronary Angiogram
Stress Test
Pet Rubidium Dipyridamole Scan
Carotid Ultrasound
Pulse Volume
Angina
Claudication
Erectile Dysfunction