

# GAPS™ CLASS

*Heal Naturally*

A 12 MODULE COURSE ON THE GAPS™ PROTOCOL



## *Bonus Module 2:* Heart Disease Part 2

## The Legal Redundancy

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This work is the result of my own time, and is a combination of my intellectual property along with the extensive work of Dr. Natasha Campbell-McBride. I share it with those who recognize the value and who are willing to compensate for that value. Please respect this.

Please note that much of this guide is based on my understanding and training as a Nutritional Therapy and GAPS Practitioner, as well as personal experience. I make every attempt to ensure accuracy of the content, I take no responsibility for errors or omissions.

You should use this information as you see fit, and at your own risk.

Nothing in this guide is intended to replace common sense, legal or other medical advice, it is meant to inform the reader. Apply it to your own set of circumstances with care.

Any health recommendations are based on my experience as a GAPS Practitioner and of those I trust. Any recommendations are from sources that I would use for my own family or clients but I make no guarantees about the service or rates you will receive from these providers.

I think you will receive great value from this guide. Please email me at [melanie@honestbody.com](mailto:melanie@honestbody.com) with any errors or incorrect links so that I can update the materials.

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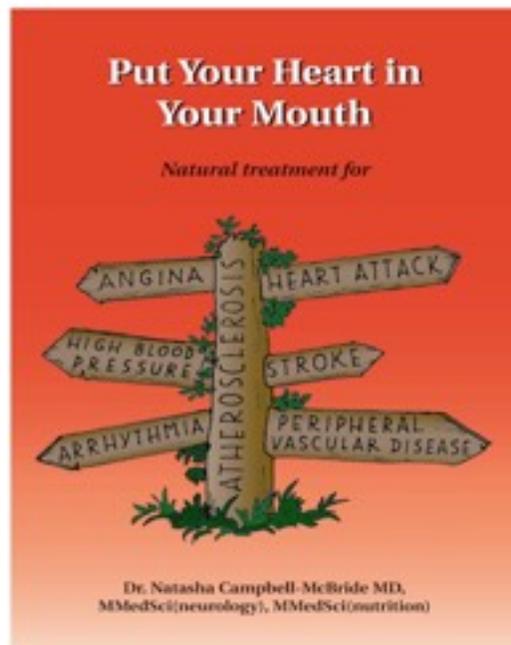


Welcome To The:

## Bonus Module 2

In this workbook we will be discussing:

1. Atherosclerosis
2. Metabolic Syndrome
3. Preventing heart disease naturally



# ATHEROSCLEROSIS

## WHAT IS IT?

There are many different diseases a human heart can suffer. But when people talk about *heart disease*, they are primarily talking about *atherosclerosis*. Atherosclerosis is a disease of the wall of the arteries which feed the heart muscle, called the coronary arteries. This disease narrows the coronary arteries or obstructs them...making the heart muscle starve...this is the heart disease everybody talks about.

Atherosclerosis leads to damage in multiple organs in the body. Most effected are:

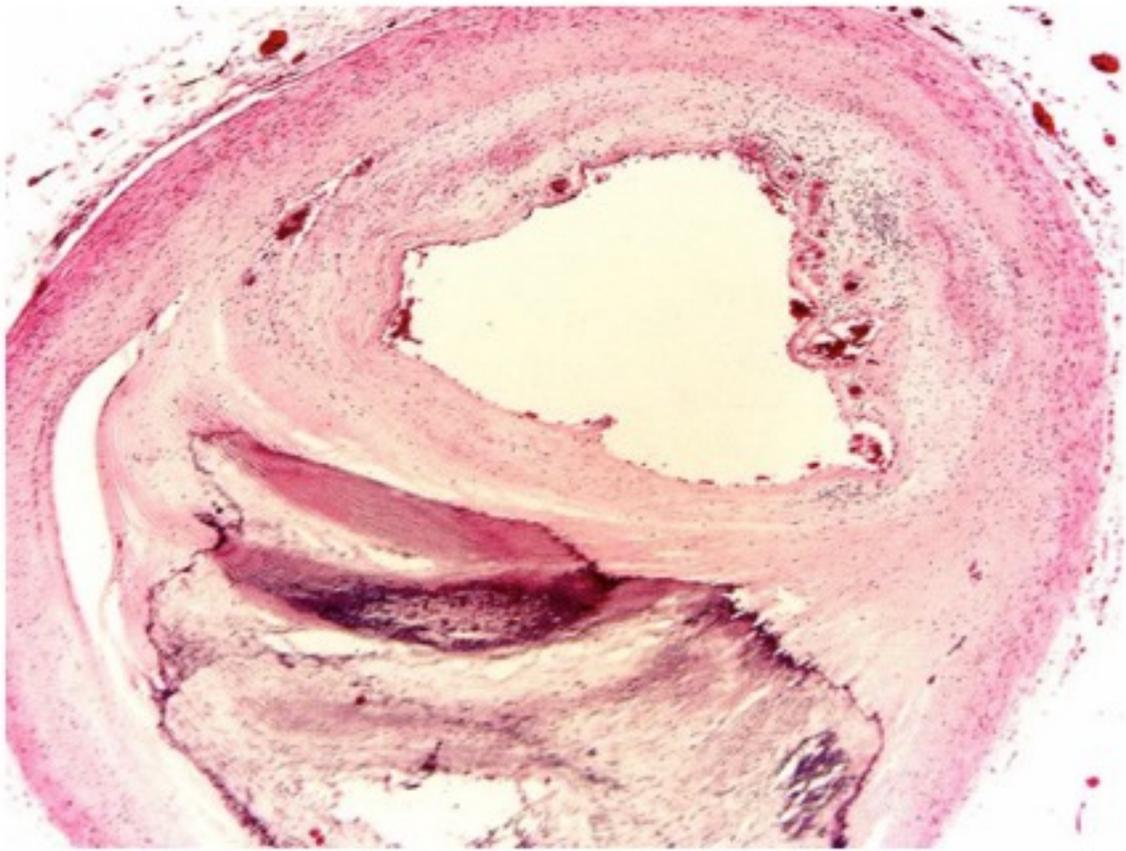
1. The **heart** - Coronary heart disease (CHD) #1 cause of death...angina pectoris & myocardial infarction (heart attack)
2. The **brain** - Stroke, third most common cause of death
3. Peripheral **arteries** - Peripheral vascular disease
4. The **kidneys** - High blood pressure & kidney failure
5. **Intestinal arteries & organs**

## ATHEROSCLEROSIS IS AN INFLAMMATORY CONDITION

- Endothelium-the inner lining of blood vessels
- Inflammation and repair
- In atherosclerosis, inflammation is out of control
- Atherosclerotic plaque - a never healing ulcer in the blood vessel
- First stage plaque
- Second stage plaque
- Third stage plaque (76% of fatal heart attacks)

Why do we find cholesterol in sites of plaque? Because the liver sends cholesterol out to repair injury. We blame cholesterol...when it is the very substance that is repairing our injuries and damage. Instead, we need to find out why we are injured first. Clearing infection, removing toxic elements and healing wounds, requires cholesterol and fat.

Healing involves the birth, growth & functioning of thousands of cells...which require cholesterol and fats for their structure and functioning.



## ATHEROSCLEROTIC PLAQUE

- 68% fibrous repair tissue, largely collagen
- 8% calcium
- 7% inflammatory cells
- 1% foam cells(enlarged white blood cells full of debris)
- 16% lipid-rich necrotic core (Kragel et al, 1989)
- 74% of all fats in the core are unsaturated (Enig,2000)
- Fats & cholesterol in the plaque are chemically damaged & oxidized

The substances above are pieces of the repair mechanism. Repair gone awry. Inflammation is supposed to be followed by repair. In the case of atherosclerosis the inflammation is chronic and gets in the way of the repair process. There are 3 stages of how atherosclerotic plaque forms.

1. A damaging agent in the blood attacks the lining of the artery (endothelium) which leads to white blood cells, macrophages, & foam cells coming to "clean up". This is inflammation.
2. Smooth muscle cells grow through the plaque into the artery wall to start repairing, and makes the whole plaque more permanent. Collagen fibers grow as well and form a "cap" over the plaque, sealing it off. Calcium may settle in. The plaque in effect, becomes scar tissue. Repair and inflammation continue side by side and the plaque can grow bigger or smaller, depending on whether inflammation or repair is winning. This can go on for years.
3. If inflammation is winning then the whole site becomes pussy with debris, dead white blood cells, oxidized/damaged fats and cholesterol. If the abscess is not drained it can affect surrounding tissue and burst, leading to immediate blood coagulation, and can turn into a heart attack or stroke.

Pages 33 - 42 of *Put Your Heart In Your Mouth* is an important part of the book.

# CHOLESTEROL & FATS IN ATHEROSCLEROSIS

- Healing agents in the body are essential for both inflammation and repair
- LDL, or so-called “bad cholesterol” takes cholesterol from the liver to the plaque
- HDL, or so-called “good cholesterol” returns cholesterol from the plaque to the liver
- Free radical damage
- Antioxidants: vitamin C, E, lipoic acid, etc.
- Chemically damaged, oxidized cholesterol & fats gets deposited in the plaque

In the inflammation process, many free radicals are created. They are useful in the inflammation process, but then the excess free radicals need to be neutralized. This is where antioxidants come in. One of our antioxidants is cholesterol...but in the process of neutralizing the free radicals, the cholesterol gets damaged, as fats are more susceptible to free radical damage. If we have enough of the other antioxidants, like vitamin C, E, etc. this damage can be handled and atherosclerotic plaques can be reduced.

Unfortunately many today are deficient in antioxidants in their diets so then all the damaged cholesterol, fats, etc. become like a garbage heap filling up the area along with dead cells, broken down collagen, damaged tissue & burst foam cells.

Cholesterol, and the other healing agents, are not the causes of atherosclerotic plaque, they are victims of out-of-control inflammation in the plaque.

It's a mess, and a dangerous mess at that.

At any stage though, the process can be halted and even reversed. It depends on what is happening in the body biochemically...which largely depends on our diet.

# METABOLIC SYNDROME

## THE CAUSE OF PERPETUAL INFLAMMATION

- Consumption of processed carbohydrates leads to permanent glucose overload  
↓
- Glucose overload leads to overproduction of insulin  
↓
- Overproduction of insulin leads to insulin resistance  
↓
- Too much insulin leads to permanent inflammation  
↓
- Permanent inflammation is the cause of atherosclerosis

Carbohydrates absorb as glucose and raise the blood sugar levels. That is why it is important to get the majority of your carbs from low glycemic vegetables. Processed carbohydrates quickly spike our blood sugar.

# THE REAL CAUSES OF HEART DISEASE

## 1. METABOLIC SYNDROME

See above.

## 2. ANYTHING THAT INJURES THE ENDOTHELIUM

### Man-made chemicals

- Personal care products
- Laundry/dishwasher detergent
- Domestic cleaning
- Re-decoration, building
- Pharmaceuticals
- Smoking
- Industrial pollution
- Agricultural chemicals (see Overloaded????)
- Tap water (chlorine, fluoride, other chemicals)

### Processed Foods

### Microbes

### Abnormal gut flora

**Nutritional deficiency** - homocysteine, Lp(a), etc.

**Lack of sun exposure** - leading to Vitamin D deficiency

**Other** - radiation, electromagnetic, pollution, stress, sedentary lifestyle, etc

# CHOLESTEROL LOWERING DRUGS OR STATINS

## THE CONSEQUENCES

- Cancer
- Liver damage
- Kidney damage
- Nerve damage
- Memory loss & Parkinson's disease
- Cognitive decline
- Heart failure through co-enzyme Q-10 deficit
- Depression and short temper
- Fetal malformations if used in pregnancy

Statins mess with the vital and natural process of cholesterol production. Our body ramps up or reduces its cholesterol production *based on its needs*.

When we chemically alter this process with cholesterol reducing drugs, we start a damaging and dangerous process. Cholesterol reduction has many consequences, as you can see above.

# DIGESTIVE HEALTH

## THE GUT AND HEART CONNECTION

- Most toxins floating in the blood come from the gastrointestinal tract (estimated 80 - 90%)
- A large percent of the population have abnormal gut flora
- Without healthy gut flora, food does not get digested and absorbed well + there is a B vitamins deficit
- Nutritional deficiencies lead to the formation of homocysteine, Lp(a) and many other toxins

**Every course of antibiotics must be followed by a course of probiotics and fermented foods!!**

Take probiotic supplements or eat fermented foods CONSISTENTLY, to nourish and protect your gut flora, and therefore your whole body...heart included. Also, the same influences that damage the endothelium also damage the intestinal tract, so it is doubly important to avoid and minimize your exposure.

# PREVENT HEART DISEASE NATURALLY!

1. Stop eating processed foods!
2. Stop polluting your body!
3. Look after your digestive system!

It's as simple as that. The most important thing to change in your diet are your fats. Cook from home, as nearly all restaurants cook with vegetable oils that are not meant to be cooked with or consumed.

# NATURAL FATS

- All animal fats are the best fats for cooking
- Butter and ghee
- Coconut oil and palm oil
- Cold pressed virgin olive oil
- Other cold pressed plant oils (flax, avocado, walnut, borage, hemp, etc.) NOT for cooking!
- Deficiencies in fat soluble vitamins: A, D, E & K are a major cause of heart disease

**Avoid all margarines, butter replacements, vegetable oils and cooking oils!**

To gain a full understanding of what causes heart disease and how to prevent it and even reverse it, please read this book. It is written in an easy to understand style, but is fully referenced for those scientifically minded.

