# Using the World's Oldest Oil As a Remedy to Cure Emerging New Diseases\*

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#### Abstract

According to the Ayurvedic script in Sanskrit, coconut oil has been used to cure illness as far back as 4,000 years ago. The Chinese had used it for more than 2,000 years to cure 69 diseases. Likewise, people from most other lands in which the coconut palms were grown have made use of it to cure all kinds of ailments for thousands of years. Although heart disease, cancer and diabetes were recorded way back in history, yet only recently that they were recognized as number one, two and three killers. In this paper, these diseases are referred to as emerging new diseases. Together with some brand new diseases such as HIV/AIDS, SARS, and the 2009 pandemic influenza, all of which are caused by new strains of viruses, the said diseases are all actually or potentially treated through the use of coconut oil. Its unique properties include having: (i) saturated fatty acids (SFAs), whose single bonds prevent oxidation and hydrogenation, their end products - free radicals and trans fats - of which are detrimental to health (ii) medium chain fatty acids (MCFAs) that are directly converted into energy in the liver; they also increase the metabolic rate resulting in a better conversion of food into energy and thermogenesis that stimulates the breakdown of stored fats into energy, all of which culminate in weight loss; (iii) antimicrobial property of lauric acid and other MCFAs that kill pathogenic bacteria, fungi, viruses, and protozoa; and (iv) antioxidants that prevent oxidation from occurring. In addition to its numerous beneficial health effects, coconut oil has proven to be effective against heart disease, cancer and diabetes which are considered as emerging new diseases simply because of the adoption of modern lifestyle of the people. Several new viral diseases occur as a result of changing climate, convenient and rapid transportation, and the raising of domesticated livestock which culminate in new strains of the viruses causing HIV/AIDS, SARS, and 2009 pandemic influenza that cannot be treated by the use of chemical drugs and antibiotics because they possess lipid coat that does not allow drugs to penetrate the viral particles, but surrender to the coconut oil, which, could dissolve and break down their lipid coat, thereby penetrating them.

The author founded CDCOT in August 2007 aiming at providing proper knowledge of virgin coconut oil (VCO) and encouraging people to use it to promote health and beauty. Its activities include the publication of technical bulletins and a quarterly newsletter, giving lectures to public and academic gatherings and sharing information through television and radio broadcasting, news releases, technical seminars, etc. More than ten technical bulletins have already been published. CDCOT members have reached 600 within just two years and coconut oil is now "talk-of-the town" of people of all walks of live.

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The number of manufacturers of VCO has increased from three at the beginning to more than 100 at present, and still increases at a rapid rate. VCO worth of over 65 million Bath (US\$ 2.2 million) has been exported in 2008. Although this is still a small amount as compared to other export commodities from Thailand, a ten-fold increase is expected in 2009.

*Keywords:* VCO, SFAs, MCFAs, antimicrobial, antioxidants, heart disease, cancer, diabetes, HIV/AIDS, SARS, 2009 pandemic influenza, modern lifestyle, CDCOT.

### Introduction

In the pharmaceutical circle, we normally run across the news that new drugs have been discovered to cure stubborn old diseases. Is there any case in which an old drug could cure new diseases? Indeed there is, and that old drug is the coconut oil. It is one of the world's oldest oils. Coconut oil has a record in the Ayurvedic script of India of being used as food and to cure illness as far back as 4,000 years ago. The Chinese had used it for more than 2,000 years to cure 69 diseases Likewise, people from most other lands in which the coconut palms are grown have made use of it to cure all kinds of ailments for thousands of years.

Although heart disease, cancer and diabetes were recorded to have occurred way back in history, some of which were known since the Egyptian era, yet only recently that they were recognized as number one, two and three killers of mankind. Around eight to ten million people around the globe died from each from these diseases annually, and the incidence of each is increasing every year. In this paper, these diseases are referred to as emerging new diseases. Together with some brand new diseases such as HIV, SAR, and the 2009 pandemic influenza, all of which are caused by new strains of viruses, are all potentially cured through the use of coconut oil.

### What Makes Coconut Oil Unique?

Coconut oil has the following properties which make it the best edible oil in the world.

#### Saturated Fatty Acids (SFAs)

The same property that has given it a bad name turns out to be the one that makes it far

better for the health of the consumers than all other unsaturated oils which are predominantly produced for the world market at present. Coconut oil contains the highest amount of SFAs of 92% as compared to 15-20% of most other oils. Their molecules are made up of the chain of carbon atoms connected by single bonds which are stabilized and not replaced by oxygen atom known to create free radicals which affect the health of the consumers. This is not the case of other oils having one or more double bonds. known as monoand polyunsaturated fatty acids, in which their molecules are easily replaced by oxygen which is always plentiful in the atmosphere and in the body of human beings. In addition, these unsaturated oils are hydrogenated when used in deep frying or in industrial food production when hydrogen gas is pumped into the oil to make it solid, the end result of which is partially hydrogenated oil in which an isomer known as trans fat is formed. Only recently that trans fats are known to be hazardous to health, causing heart disease, cancer and diabetes, among others. SFAs, on the other hand, are not hydrogenated as their bonds are all single.

#### Medium Chain Fatty Acids (MCFAs)

Coconut oil has 62% of MCFAs, having 6-12 carbons atoms, considered to be small molecule as compared to all other oils which consist of long chain fatty acids having from 14 to 20 carbon atoms. As a result it does not need to be broken down by pancreatic enzyme, thus could move from the mouth, through esophagus to the stomach where it is absorbed into the intestine and enters the liver right away where it is burned into energy. On the contrary, the long chain fatty acids have larger molecules, thus move slowly and do not enter the liver, but instead end up in the fat cells where they are stored there as energy stock when the body needs. Moreover, coconut oil is known to stimulate thyroid gland which activates metabolism; consequently all food consumed along with coconut oil are broken down to release energy, thus do not turn into fat. The most fascinating fact is that consumption of coconut oil results in thermogenesis in which the body temperature is raised  $1-2^{\circ}$ C which is enough to burn fats stored earlier in the body. As a result of all these effects, the consumer of coconut oil is getting thinner, thus the saying, "Eat Fat - Look Thin".

### **Antimicrobial Property**

Coconut oil contains four medium-chain fatty acids, namely lauric acid (C-12, 48-53%), capric acid (C-10, 7%), capryllic acid (C-8, 8%), and caproic acid (C-6, 0.5%). When inside the body, they are transformed into corresponding monoglycerides, namely monolaurin, monocaprin, monocapryllin, and monocaproin, all of which are able to kill pathogenic microorganisms including bacteria, fungi and yeasts, viruses and protozoa. They also provide immunity to the body.

#### **Effective Antioxidants**

Not only possessing 92% of SFAs in which no oxidation can take place, coconut oil also contains several effective antioxidants which prevent oxidation to take place in the unsaturated portion of the oil as well as in the body. These are vitamin E, phytosterol and phenolic compounds. Antioxidants ultimately prevent the formation of free radicals that are hazardous to health.

### **Beneficial Health Effects of Coconut Oil**

Coconut oil has numerous beneficial health benefits, such as:

- Promoting heart health by raising HDL while reducing LDL.
- Promoting weight loss.
- Supporting immune system health.
- Possesses antimicrobial antiviral property.
- Reducing the risk of heart disease.
- Maintaining ideal weight.

- Increasing metabolic rate and normalizes thyroid function.
- Supporting a healthy metabolism by providing an immediate energy source.
- Supporting the proper functioning of thyroid gland.
- Helping in the management of chronic fatigue, diabetes, irritable bowel syndrome, and other gastrointestinal disorders.
- Preventing wrinkles and rejuvenating the skin.
- Helping to keep skin healthy and youthful looking.

### **Emerging New Diseases**

A large number of people in the modern time die of heart disease, cancer and diabetes much more than any other illnesses. It is postulated that modern lifestyle is the real cause of these emerging new diseases. This includes consumption of processed foods, change from saturated oil to polyunsaturated oil; no exercise, stay away from sunlight, not enough rest, too much stress and cigarette smoking.

Over 30 years that coconut oil has been blamed to be the cause of heart disease. Because of its high saturated fat content it is assumed that it has a negative effect on blood cholesterol and, therefore, promotes heart disease. However, after years of study researchers have been unable to link coconut oil consumption with an increased risk of heart disease. In fact, the evidence shows that coconut oil may actually protect against heart disease (Fife 2005). Research to date has shown that coconut oil has the potential to protect against not only heart disease but a wide variety of chronic health problems including diabetes and cancer.

#### **Heart Disease**

The primary concern most people have about coconut oil is its effect on blood cholesterol levels. Being highly saturated it is assumed that it has a negative effect on cholesterol. Studies, however, have shown that it does not have a harmful effect but improves

cholesterol levels (Chomchalow 2008). When people add coconut oil to their diets their total blood cholesterol levels may fluctuate either up or down slightly, but in either case their highdensity lipoprotein (HDL - good cholesterol) increases. HDL is believed to protect against heart disease and the higher it is the better. Total cholesterol is not a very accurate measure of heart disease risk because it includes both low-density lipoprotein (LDL bad cholesterol) and HDL, and we don't know how much of the good or the bad makes up the total. This is why nearly half of those people who die of heart attacks have normal or below normal total cholesterol levels. In fact, Forette et al. (1989) found that among the elderly living in a nursing home in France, those that have low cholesterol have a death rate five times higher than those having high cholesterol.

#### Cancer

Coconut oil plays the following roles in preventing cancer (Chomchalow 2009 a): (1) free from damage caused by free radicals because it is a saturated oil with effective antioxidants, (2) free from damage caused by trans fats because no hydrogenation takes place in saturated oil of the coconut, either through deep frying or artificial hydrogenation of industrial food products (Kohlmeier *et al.* 1997), (3) free from cancer-causing pathogens or their toxins due to the presence of antimicrobial agents and increasing immunity of the body, and (4) inhibits the growth of cancerous cells by altering the activity of these cells thereby inhibiting their growth (Anon. 2006).

#### Diabetes

Coconut oil plays the following roles in preventing diabetes (Chomchalow 2009 b): (1) free from damage caused by free radicals, (2) free from damage caused by trans fats, (3) provides food and energy to the starving cells, (4) increases the efficiency in synthesis of, and cellular response to, insulin, (5) stimulates metabolism, (6) resumes the production of insulin of the pancreas, (7) regulates the level of blood sugar, (8) builds up glucose resistance, and (9) reduces glycemic index of the food.

#### **New Viral Diseases**

Several new viral diseases occur as a result of changing climate, convenient and transportation, the rapid raising of domesticated livestock, as well as many unknown reasons. As a result, new strains of the viruses are causing HIV/AIDS, SARS, 2009 pandemic influenza, etc., that cannot be treated by the use of chemical drugs and antibiotics because they possess lipid coat that does not allow drugs to penetrate the viral particles. They, however, surrender to the coconut oil, which, being lipid itself, could dissolve and break down, or lyze, the lipid coat of the viruses, thereby penetrating them and literally killing them (Chomchalow 2009 c).

### The Role of CDCOT

The author founded CDCOT in August 2007 aiming at providing proper knowledge of virgin coconut oil (VCO) and encouraging people to use it to promote health and beauty. Its activities include:

> Publication of technical bulletins on various aspects of the coconut oil. So far 15 bulletins have been issued, with a total print run of 5,000 to 40,000 each, making a total of over 300,000 issues.

> A quarterly newsletter, name *Kalapaphruek*, with a print run of each number of 5,000. So far, 10 numbers have been issued.

 $\succ$  Giving lectures to public and academic gatherings.

> Occasionally organizing technical seminars; so far, five seminars were held in Bangkok and the provinces.

> Providing information through television and radio broadcasting, and news releases.

> Promotional campaign on the use of coconut oil among the tourists visiting the world famous Samui Island. Ten thousand 50 ml bottles of VCO have been distributed during 5-25 December 2552 to encourage tourists to be aware of the benefits of VCO. As a result, a lot of them bought back to their countries upon their return. Many mail orders have been received through the Internet.

➤ Up until last month, a mere 30 months after its establishment, CDCOT members have

reached 700. More importantly, each member has spread with words of mouth the beneficial effects of the coconut oil to his/her friends and relatives, such that at present, coconut oil is "talk-of-the town" of people of all walks of live.

> The number of manufacturers of VCO has increased from three at the beginning to more than 100 at present, and still increases at a rapid rate as the demand of VCO has never been met.

> VCO worth of over 65 million Bath (US 2.2 million) has been exported in 2008. Although this is still a small amount as compared to other export commodities from Thailand, a ten-fold increase is expected in 2009.

➢ Many CDCOT committee members are producers of VCO using different oil extraction techniques, namely expeller press, centrifugation, distillation, fermentation, etc.

Several innovative techniques have been invented, e.g. the use of enzyme and new strains of bacteria, the use of magnet to rearrange molecules of VCO, the development of new machine to extract the residue of grated coconut after milk extraction, vacuum or nitrogen gas distillation, incorporation of fragrance from aromatic coconut water, and the use of nanotechnology to filter the oil.

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