



**CHOLESTEROL  
FREE**

# **VIRGIN COCONUT OIL**

*NATURE'S SMARTEST OIL  
from the  
TREE OF LIFE*



  
**Rainforest Herbs®**  
*Herbs for Life*

[www.rainforestherbs.com](http://www.rainforestherbs.com)





# Rainforest Herbs®

*Herbs for Life*

Welcome to Rainforest Herbs.

Established in 1995, Rainforest Herbs brand is fully owned by Asia Botanicals Sdn Bhd and is the pioneer herbal company in Malaysia that focuses exclusively on developing world-class herbal products from tropical Malaysian herbs. Today, we have a range of 30 products that are available in Malaysia, Japan, USA, China, Vietnam and Singapore. Our head office in Kuala Lumpur houses our Research & Development, Manufacturing and Marketing Teams.

Grown in their natural rainforest environment free from pollution, our medicinal herbs are collected by people native to the areas where they are found. After the herbs are collected, each batch is selected by our Master Herbalist, tested in-house by our team of chemists to ensure maximum purity and concentration. Our quality control is stringent. Our products meet both the **Malaysian Ministry of Health Good Manufacturing Practice** specifications and the **Japanese Health Regulatory Authorities** standards.

Organic and sustainably wild crafted raw materials are used. All our products are 100% Halal. We are proud that Rainforest Herbs range is available through all major retail pharmacy chains and independent pharmacies throughout Malaysia. We believe that speaks highly of the quality of our products.

Our company's mission is to bring to you the health benefits of herbs and natural products while at the same time, support and protect our natural rainforest resources. All our packaging is made from 100% recyclable materials and glass bottles. As a company, we invest efforts in the education of the need to maintain and protect our rainforests ecosystem for future generations.

*Herbs for Life*

Yours,



Benjamin Drewe  
Medical Herbalist & CEO  
Rainforest Herbs®  
Asia Botanicals Sdn Bhd

**asia**  
**botanicals**





When choosing VCO, the quality of the VCO is apparent by its naturally clear colour, aroma of coconuts and it will solidify in temperatures below 24°C. In countries with colder climates, it is often sold in jars as it is solid and is scooped up with a spoon for cooking or consumption. In supermarkets in tropical countries, you may find solidification of VCO at the base of the bottle if it is kept in temperatures close to 24°C which is common in air-conditioned retail outlets.

**Virgin Coconut Oil is the purest, unprocessed coconut oil, pressed out from fresh coconuts.** It does not contain any preservatives, neither has it gone through any process to bleach or change its appearance or taste and hence, its nutrients are intact and is naturally a very stable oil with long shelf life.

## **BENEFITS OF VIRGIN COCONUT OIL (VCO)**

- Boosts energy levels. Useful in chronic fatigue syndrome
- Increase metabolism, burn more calories, weight loss management
- Prevent metabolic syndrome
- Aids digestion in people with digestive disorders
- Promotes healing rates
- Aids absorption of fat-soluble vitamins A, D, E, K
- Antibacterial, antiviral and antifungal
- Improves hair & skin

# **VIRGIN COCONUT OIL**



*VCO will solidify and turn white when cold.*

**RAINFOREST HERBS' Virgin Coconut Oil is organic, cold pressed and unrefined.**

Organic fresh coconuts are harvested and dried quickly. The coconut meat is then cold-pressed to get out the first batch of high quality coconut oil. This natural oil is very stable and has a shelf life of several years. No chemicals or heating is needed to refine this oil for consumption, thus the expression unrefined is used to describe the purity of this oil.



# **ENERGY**

# Understanding Your Fats and Oils.

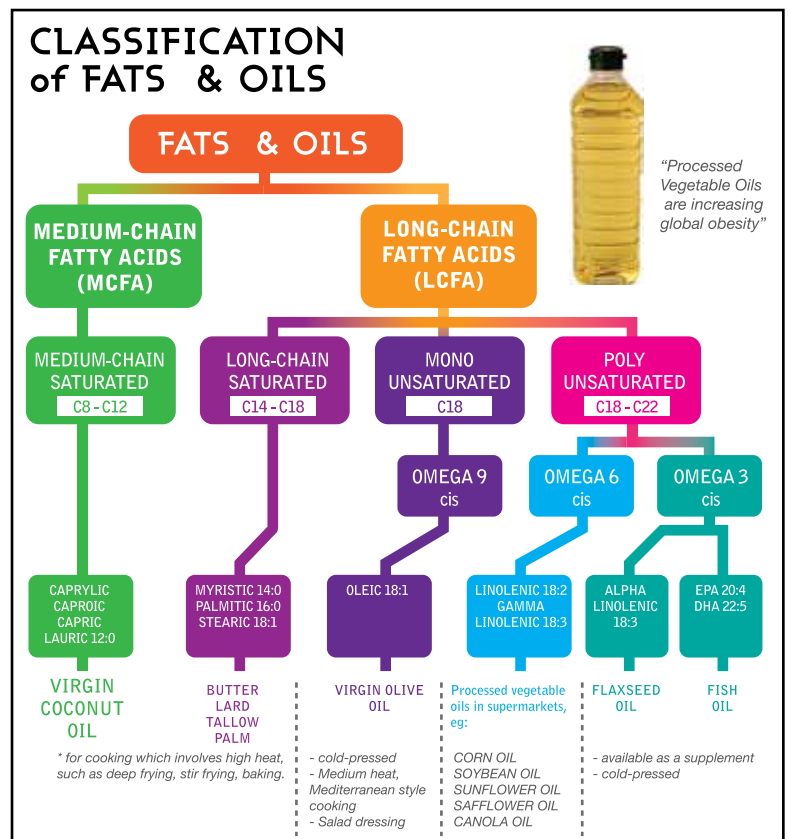
**Fat is one of 3 main constituents of food. The other 2 are Carbohydrate and Protein.**

Fats and Oil are usually classified in 2 ways - by saturation or length of carbon chains.

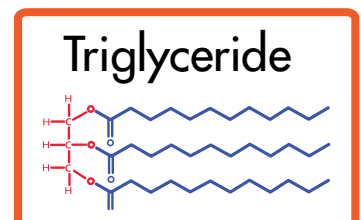
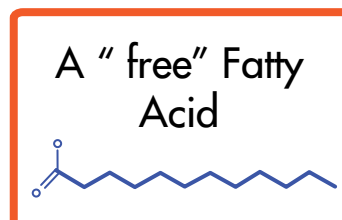
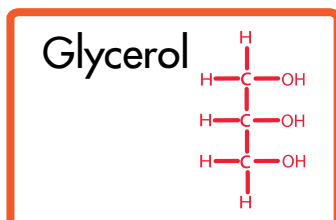
Oil is used to describe fat which is liquid at room temperature. Otherwise, fat is used to describe fat which is solid at room temperature.

Fat is important to our diet because:-

- It makes up important components of our body. Every cell in our body has 2 layers of cell membrane which is made up of 2 layers of fat. Fat gives our cells structure and strength.
- It provides long lasting energy.
- It helps the absorption of vitamins A, D, E, K and carries them throughout the body.
- It helps you feel full thus reduces the urge to eat more.
- Helps your body make hormones.
- Helps to improve your body's metabolism.



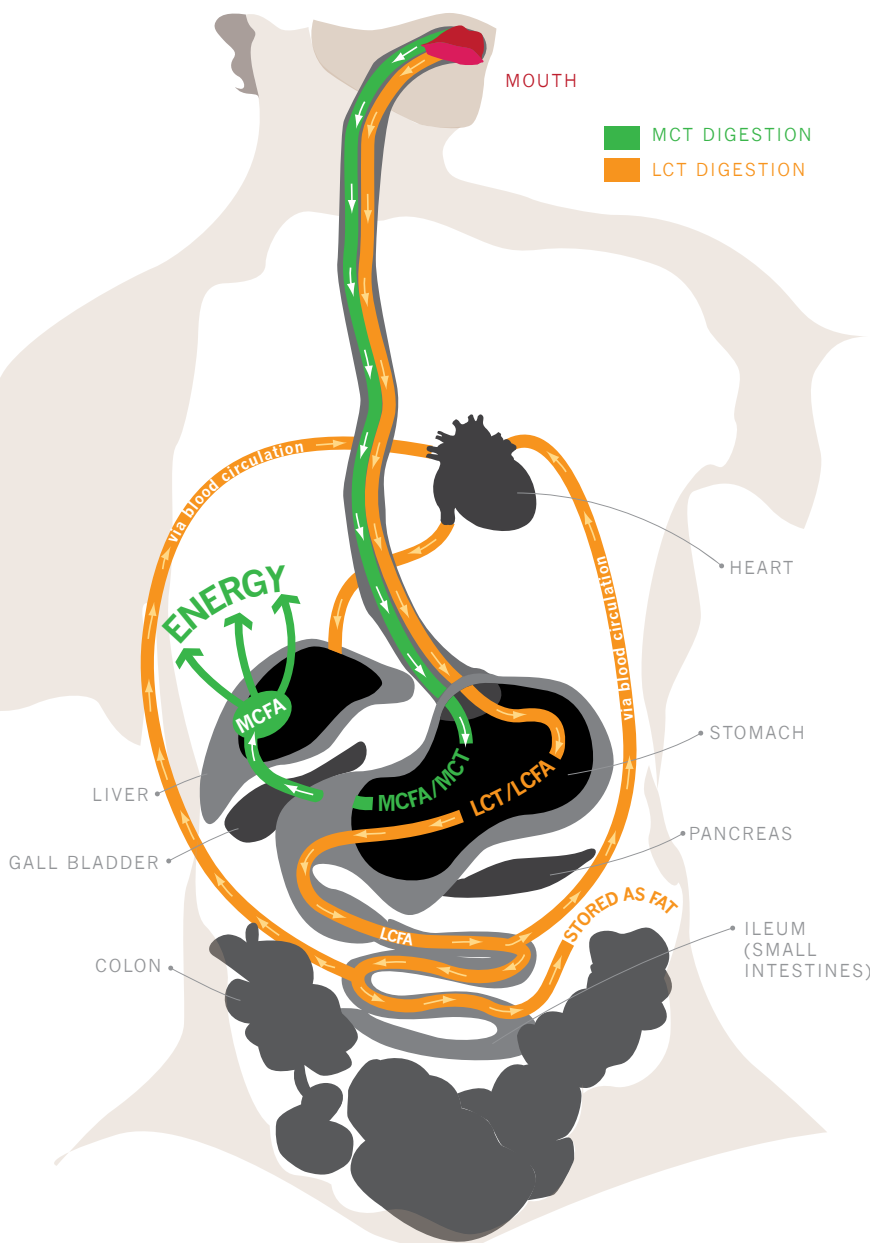
A Triglyceride is 3 Fatty Acids joined together via a Glycerol.



=> Medium Chain Triglyceride (MCT) is 3 Medium Chain Fatty Acids joined together via a Glycerol molecule.

=> Long Chain Triglyceride (LCT) is 3 Long Chain Fatty Acids joined together via a Glycerol molecule.

# Digestion Of MCT Vs LCT In Our Body.



MCFA is metabolized into energy easily

LCT is DIGESTED through a more complex route

As seen in the diagram, MCTs are digested differently from LCTs.

MCTs molecules are so small they are easily digested, quickly converting into MCFA (Medium Chain Fatty Acids) which are rapidly absorbed through our intestinal walls, bound to albumin and transported directly to the liver via the portal vein to be used as energy. Our body uses MCTs as an immediate source of fuel rather than pack them away in storage as fat cells. Coconut oil and palm kernel oil are the only 2 oils that are primarily made up of MCTs.

LCTs (found in supermarket vegetable cooking oils) however require additional pancreatic lipase enzymes to break them into smaller molecules called LCFA (Long Chain Fatty Acids) before being absorbed through the intestinal walls. Once LCFA pass through the intestinal wall it is then transported via lymphatic and systemic arterial circulation as chylomicrons before finally ending up in the liver. In the liver, LCFA either undergo oxidation, biosynthesis to LDL cholesterol or re-packaged as triglycerides. These LDL-cholesterol and triglycerides then circulate in our bloodstream as they head to peripheral cells and are used up slowly.<sup>1. 2.</sup>

It is this transportation phase of LCFA's - through the arterial system and their need to participate in the biosynthesis and transport as cholesterol that is now being considered a major cause of heart disease, arterial inflammation and atherosclerosis (cholesterol deposit in the arteries).

## Metabolic Syndrome

is the name given to a group of risk factors linked to being overweight which increases a person's chance of having heart disease, diabetes and stroke.

The factors are:-

- Central Obesity – having an apple shape
- High blood pressure
- Insulin resistance – higher than normal fasting blood sugar
- High triglycerides
- Low HDL-cholesterol
- Sedentary lifestyle

Worldwide statistics now show that arterial disease and its complications has rapidly risen in the last 50 decades. In Asia, this phenomenon is concurrent with the trend of local cultures giving up the use of traditional cooking oils (coconut oil, animal fats) and adopting modern processed vegetable oils and hydrogenated vegetable oils (margarine) as part of our daily diet. Contrary to what we have been brought up to believe, researchers and Doctors are now learning more and more that the main culprit in arterial disease is not saturated fats at all but the excessive intake of refined carbohydrates (example sugars, rice, bread and pasta) combined with too much omega-6 polyunsaturated processed vegetable oils which leads to obesity and the 'metabolic syndrome'.

Today, there is increasing number of Doctors and researchers worldwide who are now recommending VCO to their patients as an essential part of their daily diet.



**“Virgin Coconut Oil is composed of more than 65% medium chain fatty acids. MCFAs are easily used by our body to produce energy similar to carbohydrates and are not circulated in the bloodstream unlike other fats. Hence they do not increase the bad LDL cholesterol which causes arterial deposits and they do not become stored in fat cells or contribute to weight gain.**

**On the other hand, all the so-called heart healthy polyunsaturated (Omega-6) oils we use for cooking are primarily composed of LCFAs that require LDL cholesterol (the bad cholesterol) to move the fat through the bloodstream contributing to plaque build-up and fat storage. Furthermore, unlike MCFAs which are highly resistant to oxidation, LCFAs are rapidly altered by free radicals creating oxidized LDL cholesterol which is the main culprit in arterial disease. Only oxidized fats can end up as arterial plaque and the composition of 74% of this plaque comes from poly and mono-unsaturated vegetable oils. Recent studies have shown that the incidence of heart disease worldwide has increased in parallel with the increase of omega-6 fatty acids due to their pro-inflammatory effects when consumed in excess. The recommended ratio of omega-6 to omega-3 oils in our diet is 1:1 as is the natural balance that our ancestors consumed over millions of years, however the actual ratio in modern diets is around 20:1. A very high omega-6/omega-3 ratio as is found in today’s Western diets, promote the pathogenesis of many diseases, including cardiovascular disease, cancer, and inflammatory and autoimmune diseases.<sup>6</sup>**

**“Those communities in countries consuming the highest amounts of coconut oil; in Polynesia, Indonesia, Sri Lanka, India and the Philippines, not only have lower serum cholesterol but also lower coronary heart disease rates”<sup>2</sup>**

MCFAs from coconut oil have long been used by sports people for energy and by Doctors in nutritional formulas used in hospitals for patients recovering from surgery, undernourished patients<sup>8</sup>, treating malabsorptive disorders in adults<sup>7</sup> and children<sup>3</sup> as well as premature babies who have higher energy requirements<sup>16</sup>.

## VCO, Weightloss and Metabolism

Many of the benefits of VCO are due to how our body digests, absorbs and uses MCFAs so easily. Substituting LCFAs in our diet with MCFAs, provides our body with an immediate source of energy which is not stored as fat.

Studies have shown that MCFAs increase our metabolism rate compared to LCFAs. <sup>4,5</sup>

Increase in metabolism rates will produce

- a stronger boost of energy
- burn more calories
- improves the performance of all cells in our body.

This increase in metabolism not only helps overweight people, it also helps adults who experience a slowing down in their metabolism as they approach their 40s and they start to experience weight gain as well as other risk factors related to the Metabolic Syndrome.



### TIPS FOR WEIGHT & HEALTH MANAGEMENT:-

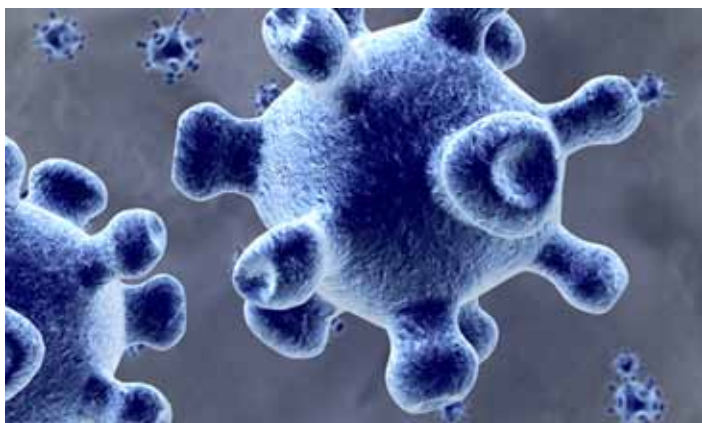
- Cut down on fast digesting carbohydrates such as sugar, rice, bread, pasta, potatoes etc.
- Increase intake of protein and vegetables (slow digesting carbohydrates rich in phytonutrients)
- Replace all processed Omega 6 vegetable oils in our home & diet with Virgin Coconut Oil (for cooking), Virgin Olive Oil and Omega 3 Fish Oils.



# VCO and Infections

VCO is composed of more than 50% Lauric Acid which is converted in the body to Monolaurin. Monolaurin is an anti-microbial agent that protects the immune system from a range of infectious agents. Monolaurin is found naturally in high concentrations only in breast milk and VCO.

Lauric acid was originally discovered by microbiologists who studied human breast milk to determine the antiviral substances that protected infants from microbial infections. It has been shown to protect newborns, whose immune systems are underdeveloped, from respiratory tract viruses. Monolaurin works by destroying the lipid membrane of viruses, bacteria and protozoa and thus kills them. In general, Monolaurin can help treat colds, flu, EBV, shingles, herpes, peptic ulcers and even AIDS. <sup>10.11.14</sup>



Research has shown that the amount of MCTs in mother's breast milk can be increased through her own intake of VCO. For everyone else, taking VCO as a supplement will boost our immune system or protect ourselves against known infections.

Proven against:- <sup>12. 13. 15. 17. 18.</sup>

*Herpes simplex types 1 & 2*

*Cytomegalovirus*

*Influenza*

*AIDS virus*

*Epstein-Barr Virus (EBV)*

*Respiratory Syncytial Virus (RSV)*

*Rubeola*

*Staphylococcus aureus*

*Streptococcus agalactiae & Groups A, F & G streptococci*

*Chlamydia*

*Helicobacter pylori*

*Multiple yeasts and fungi, including Candida and ringworm*

Samples of studies done:

In 2007 a study was conducted by the Department of Dermatology, Makati Medical Center, Philippines which compared monolaurin (derived from coconuts) against other common antibiotics used to treat skin infections (penicillin, oxacillin, fusidic acid, mupirocin, erythromycin and vancomycin) on skin culture samples taken from 100 participants (from newborn to 18 year old patients with infected skin conditions). The conclusion the research team came to was that Monolaurin has statistically significant in vitro broad-spectrum sensitivity against *Gram-positive* and *Gram-negative* bacterial isolates from superficial skin infections. Most of the bacteria did not exhibit resistance to it. <sup>15</sup>

Another study published recently in Dermatitis 2008 American Contact Dermatitis Society by Verme'n M. Verallo-Rowell ; Dillague Kristine M. and Bertha S. Syah-Tjundawan showed VCO's effectiveness in moisturizing dryness and removing bacteria *Staphylococcus aureus* (SA) from colonized Atopic Dermatitis. This study compared VCO and VOO ( Virgin Olive Oil) in 52 patients with AD. Each group had 26 patients. The oils were applied twice daily for 4 weeks. <sup>17</sup>.The following table is the results:-

	VCO Group (26 patients)			VOO Group (26 patients)		
	Week 0	Week 4	% effective-ness	Week 0	Week 4	% effective-ness
SA (+)	20 patients	1 patients	90%	12 patients	6 patients	50%
SA (-)	6 patients	25 patients		14 patients	20 patients	



# How do I take Virgin Coconut Oil?

**Children 2 to 6 years old:**

2 teaspoons every morning.

**Children 7 to 12 years old:**

4 teaspoons every morning.

**Adults:**

Take 2 to 4 tablespoons every morning as a supplement.



Virgin Coconut Oil is both safe and recommended for use during pregnancy and breastfeeding.

For those with a sensitive taste or stomach it may be helpful to mix with juice, yoghurt or add to some food such as cooked oats.

**Used in Cooking:** Mix into salads and used as cooking oil, a healthy replacement for all processed vegetable cooking oil.

**Used Externally:** Apply as moisturizer to hair & skin or on infected areas. For hair, apply once or twice a week for 20 minutes, then rinse, shampoo and condition as normal.

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