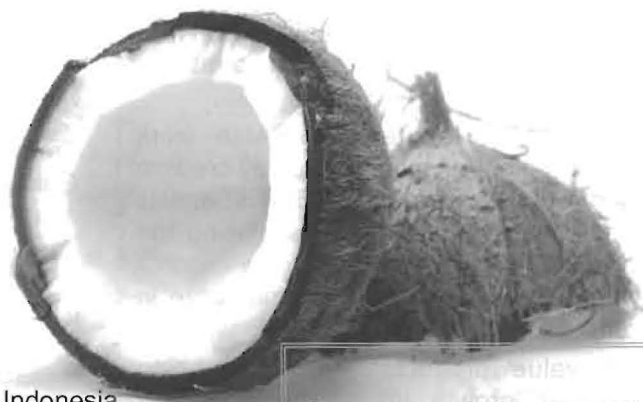


Consume COCONUT

If not, you miss out the most amazing gift of nature



Depthi Nair S

Assistant Director, APCC, Jakarta, Indonesia.

Controversies seem to be never dying and we find old controversies buried earlier being dug up again. And this is very much true in the case of coconut and its varied products, especially coconut oil. This issue of the Indian Coconut Journal with Health as its main theme comes at a very critical time when coconut products, especially coconut oil is again being targetted.

The release of the Presidential Advisory from the American Heart Association on Dietary Fats and Cardiovascular Diseases during the second week of June strongly advises against the use of coconut oil. The release of this advisory has manifold impacts. For the coconut sector across the globe and the 30 million coconut farmers depending on coconut for their livelihood, coconut oil constitutes about two third of the trade of coconut products in the international market and the issue is a matter of serious concern, affecting their livelihoods. In India, it impacts the livelihoods of over 12 million farmers, who are predominantly small holders. For the consuming world which took a 360° turn in favour of consumption of coconut oil inspite of all the negative propaganda that started in the 1970's, its another confusion created.

The tropical coconut growing countries have since

Coconut and Cardiovascular diseases

This is the major talk of all times and debates on whether saturated fat is good, impact of cholesterol, HDL and LDL etc is ongoing and seem to be never ending. Coconut oil has been consumed by populations in South Asia, South East Asia and the Pacific. In countries like Thailand, Indonesia and the Pacific, rice is often cooked in coconut milk. Population studies in major coconut consuming countries like India, Sri Lanka, Indonesia, Philippines and among the Polynesians have not been able to find any evidence that coconut oil causes heart diseases in humans. When these populations consume a traditional diet in which coconut and its products form an integral part, don't these results hold true or do we really need to go after population studies done decades back, that too in non coconut consuming populations which only aim to disprove the beneficial effects of coconut?

time immemorial depended on coconut as a food crop. Coconut possess many nutritional and health attributes, traditional medicine and local folk medicine in most of the coconut growing countries have put to use many of the health and medicinal benefits of coconut, which have further been established in modern science through conclusive research. Coconut and coconut products are being referred to as super foods, celebrities are endorsing its nutritional and health benefits, and infinite success stories are being shared in the social media on the medicinal benefits of coconut with mixed response from around the world. A vast majority of the consumer world is moving ahead with their choice of coconut products based on these evidences, though there is still a skeptical group who feel that all this news is too good to be true. And this skeptical group becomes the target of all controversy makers.

True that coconut is a poor man's crop with coconut cultivation undertaken by small holder farmers. Coconut lacks a strong tradist or pharmaceutical lobbies to back it in its endeavour to establish its goodness. But none of that could nullify the beneficial effects of this commodity on human health.

The MCT effect

Coconut oil is composed of 65% medium chain fatty acids (Lauric acid 50%, caprylic acid 8% and capric acid 7%) and 35% long chain fatty acids. Studies by eminent researchers and clinicians have found that the medium chain triglycerides or MCTs are converted to ketones in the liver which could serve as alternate sources of energy to the brain cells. This is particularly relevant as energy source in the case of diseases like Alzheimer's and dementia where it compensates for the deficiency in glucose metabolism. (Dr. Mary Newport from USA, Dr. Ralph Martin from Australia).

Also MCTs are found to be absorbed directly into portal circulation and transported to liver for rapid oxidation, so no extensive uptake into adipose tissue takes place. Studies have shown that coconut oil or virgin coconut oil doesnot contribute to abdominal obesity. VCO is even found to induce waist circumference reduction. This characteristic could be beneficial for obesity, dyslipidaemia, insulin resistance etc.

Coconut products could also be part of a ketogenic diet which is now followed in sports nutrition by athletes who concentrate on controlled weight and increased performance. A ketogenic diet is even recommended for cancer patients.

The Lauric effect

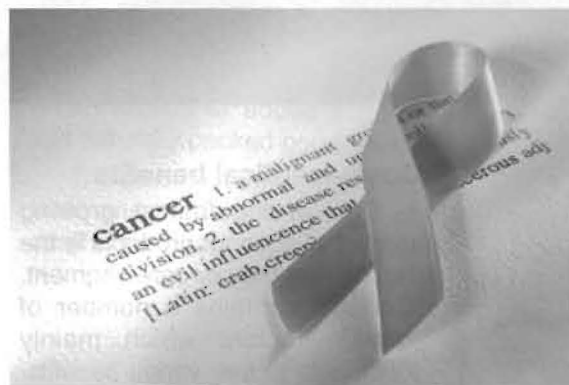
The lauric oils in coconut is similar to the fats in mothers milk (Dr. Kabara from USA) and when consumed, the lauric acid in coconut oil is used by the body to make the same disease fighting fatty acid derivative monolaurin, that babies make from the lauric acid they get from mothers milk (Dr.Mary Enig from USA). The monoglyceride monolaurin is the substance that keeps infants from getting viral or bacterial or protozoal infections.

The Antimicrobial effect

High content of lauric, caprylic and capric components in coconut oil finds its relevance in their effectiveness against a large spectrum of bacteria and fungi. This high antimicrobial activity is all the more significant at a stage when we are experiencing high antibiotic resistance. Studies by researchers have also proved effectiveness against acne, atopic, contact dermatitis and rosacea lesions, psoriasis and its co-morbidities (Dr. Rowell from Philippines)

Antiviral action

Studies have revealed that virgin coconut oil is found to have a positive viral action which is beneficial against HIV/AIDS since it is found to reduce viral load and increase the CD4 counts. The antiviral properties may also find applications in lipid coated viruses like herpes, cytomegalovirus etc.



Anti cancer properties

Coconut oil is found to be effective and possess therapeutic potential for treatment and prevention of oral cancer. Studies have found that the Lauric acid, β -sitosterol, oleic and palmitic acid in coconut oil can target almost 20 cancer associated proteins. Studies in Sri Lanka have shown that coconut milk has an anti-ulcerogenic effect.

Multitude of health benefits of coconut water

Coconut water is accepted as a rehydration fluid with its high mineral or electrolyte content. Traditionally it has been used as home treatment to cure dehydration. Coconut water contains the same major electrolytes as those in human body fluids (Bruce Fife, USA). The use of tender coconut water intravenously by the Japanese in Sumatra, Indonesia during World War I and by Pradera et al for paediatric patients in Havana, Cuba. Coconut water is also used in treating renal disorders and in reducing or dissolving all kinds of kidney stones. Studies have also shown the effectiveness of coconut water as antidote for mineral poisoning.



Cosmaceutical benefits

One of the fastest growing market of coconut products is the Health and Beauty care segment. Coconut contains a number of growth factors which mainly contribute to the varied benefits. Various formulations, mainly from virgin coconut oil have been developed which include facial creams, lip balms, deodorant sticks, moisturizers, anti ageing creams, dermatological formulations with antimicrobial effects etc.



Coconut & hair

Coconut oil is found to be good for healthy hair and prevents hair damage. The science behind this is the fact that coconut oil is having high affinity for hair protein and due to its low molecular weight and linear chain, it is able to penetrate into the hair shaft. Coconut milk has been traditionally used to nourish the scalp and prevent hair loss.

Polyphenols and antioxidants

High content of polyphenols and other antioxidants is found to give beneficial antidiabetic effects and also potential for preventing bone loss in osteoporosis, especially post menopausal osteoporosis. The major studies on the medicinal and health benefits of coconut and its products could be accessed from the website of the Asian and Pacific Coconut Community at www.apccsec.org

With the multitude of health benefits, a time may come soon in the near future, when a tropical diet with emphasis on coconut oil and lauric acid will be recommended by nutritionists in the way the Mediterranean diet gained prominence in the past (with emphasis on olive oil). This concept was also shared by the participants of the last APCC COCOTECH Conference in Bali, Indonesia, during September 2016, when responding to a query from the industry representatives on the vision for coconut oil and virgin coconut oil in another ten years, the panel of technical experts, mostly medical doctors researching on coconut gave a very simple answer : "Much above Olive Oil".

Yes, coconut and coconut products have indeed a multitude of health and medicinal attributes, many of which have been conclusively proven through studies and some to be proven scientifically. Consumers and traditional medicine in coconut growing regions will continue consuming coconut products for a healthy living. The controversies that are generated against coconut products are mostly achieved by cherry picking and selective interpretation of evidence. It is here that the first rule of the Hippocratic oath which says "do no harm" assumes relevance. With the surmounting evidence through research and clinical studies on the health and medicinal attributes of coconut products and the history of coconut as an integral part of the diet in the South, South East Asian and Pacific that dates back to early years of the Christian Era, coconut

products have multifaceted uses to human health and do not cause any harm to humans. In fact they could play the role of nutraceuticals in maintaining human health, if not a drug. If humanity is prevented from using coconut products, they are definitely missing out one of nature's most amazing health products.

The controversies surrounding coconut products, that had started in the 1970s were more or less put to an end, until the emergence of the very recent debate with the Presidential Advisory of the American Heart Association. There is an urgent need for the coconut industry to be united and take up the challenge to establish the goodness of coconut oil and coconut products through the scientific explanations and conclusive scientific research that modern science needs. As the biblical story goes, "We have crossed the Red Sea, but the promised land is still ahead". We have to row through the endless list of controversies surrounding coconut products and finally put an end to them, for the benefit of the millions of coconut farmers across the globe. ■
