# Babassu Oil Health and Beauty Benefits

Babassu oil or "cusi" oil is a clear light yellow vegetable oil (mixtures of triglycerides) with an almost undetectable scent extracted from the seeds (kernels) of the fruits (nuts) of the babassu palm (*Attalea speciosa*, *Orbignya speciosa*) also known as *babaçu*. Babassu is a tall palm tree with large leathery leaves native to the Amazon Rainforest region in South America that is drained by the Amazon River and its tributaries.

The babassu palm is the predominant species in the Maranhão Babaçu forests of Maranhão and Piauí states. These palm trees can produce up to 2,000 fruits, and when they fall naturally to the ground they are collected by women known as "babassu breakers," a moniker that comes from their work of breaking open the nuts with the use of a hatchet. In Brazil, the babassu palm is known as the "tree of life,"

This plant has commercial value because the meat inside the nut is removed and <u>expeller pressed</u> to obtain the oil, which is used in food, cleaners and skin—care products. Because babassu oil is high in saturated fat, it is very stable and can be transported long distances without spoiling, which makes it widely available for use all over the world.

babassu oil can be found packaged either in a jar in soft solid form, like coconut oil would be, or in an oil dropper for direct topical application to face or body. It is frequently an ingredient used in a thicker balm or lotion to use on hair or skin.

#### THE OIL PALMS

- Attalea speciosa (babassu palm).
- Attalea maripa (maripa palm).
- *Elaeis guineesis* (African oil palm or macaw–fat, native to west and southwest Africa, used in agriculture for the production of palm oil).
- Elaeis oleifera (commonly called the American oil palm, used in agriculture for the production of palm oil).

It is a non-drying oil (an oil which does not harden when exposed to air, any oil with an iodine number of less than 115). This oil has properties similar to coconut oil (an edible oil from the wick, meat, and milk of the coconut palm fruit, a white solid fat, melting at around 25 °C (78 °F) into a clear thin liquid) and is used in much the same context. It is increasingly being used as a substitute for coconut oil. Babassu oil is about 70% lipids, in the following proportions:

Fatty Acid	Percentage
Lauric (dodecanoic acid with MCT properties)	50.0%
Myristic (tetradecanoic acid, a common saturated fatty acid)	20.0%
Palmitic (hexadecanoic acid, the most common saturated fatty acid)	11.0%
Oleic (monounsaturated omega–9 fatty acid)	10.0%
Stearic (octadecanoic acid, a saturated fatty acid)	3.5%

Lauric and myristic acids have melting points (changes state from solid to liquid) relatively close to human body temperature, typically 36.5–37.5 °C (97.7–99.5 °F), so babassu oil can be applied to the skin

as a solid that melts on contact. This heat transfer (exchange of thermal energy) can <u>produce a cooling sensation</u>. It is an effective emollient (moisturizer).

#### COMEDOGENIC RATING

A comedogenic rating is a rating given to different natural substances to inform consumers of whether the substance will react poorly to their skin, either causing irritation, clogging their pores, or worsening conditions like acne. Comedogenic ratings are given on a scale of 0–5, the lowest representing a substance least likely to cause a bad reaction.

While coconut oil has a very high comedogenic rating (4), babassu oil is rated low (0–2). This means babassu oil should be safe for most skin types, even sensitive or problematic. It could even help treat irritations and skin conditions such as eczema, psoriasis, acne and rosacea. People with oily skin may experience a purging effect, similar to that of jojoba oil.

#### TAXONOMY OF THE OIL PALMS

In his 1995 *The Palms of the Amazon*, palm–systematist and Curator of the Institute of Systematic Botany at the New York Botanical Garden Andrew James Henderson recognized *A. speciose* and *A. speciose* and *a. speciose* or a hybrid between *A. microcarpa* and it.

In their 2005 World Checklist of Palms Rafäel Govaerts and John Dransfield accepted A. spectabilis as a valid taxon but Sidney F Glassman considered it a dubious taxon (of unknown or doubtful application) in his 1999 Taxonomic Treatment of Palm Subtribe Attaleinae.

Attalea vitrivir was recognized as a distinct species by Michael Balick and coauthors; Glassman and Govaerts and Dransfield concurred, but Henderson considered it part of *A. speciosa*. Glassman also described a fourth member of this group, *A. brejinhoensis*, and it is accepted by Govaerts and Dransfield.

#### REPRODUCTION AND GROWTH OF THE BABASSU PALM

*A. speciosa* is monoecious—male and female flowers are separate, but are borne by the same plant. Pollination has been attributed both to insects and wind.

# OTHER USES OF THE BABASSU PALM

Babassu oil can also be used in cooking foods, as a lubricant, and in soap and cosmetics. The fruit is used to produce products such as medicines, beauty aids, and beverages. Palm hearts are extracted from the tree to make a juice. The shell of the nut can be used to make smokeless charcoal. A flour is produced from the flesh of the fruit, and this is commercialized as a nutritional supplement.

Traditional communities of the Maranhão region use the oil to heal minor wounds, such as cuts and scratches, and a <u>residue from the *mesocarp* called "borra" to treat leukorrhea</u>—vaginal discharge that is associated with hormonal imbalances.

The leaves and stalks (stems) of the babassu palm are used in building materials. The leaves are used as thatch (vegetation matter, roofing material) for houses and can be woven into mats (stiff, hard structures) for constructing house walls. The stems (one of two main structural axes of a vascular plant) are used for timbers. Baskets and other handicrafts can be made from the leaf fibers.

The babassu palm is considered a weed (any plant growing in an undesirable location) in pasture areas (land used for grazing) of *Cerrado* vegetation (a vast tropical savanna ecoregion) in Brazil. A high–protein cake (oil cakes) with about 20% protein content is formed after oil is extracted from the fruits. These cakes are typically used as animal feed.

Non–edible babassu oil turned into biofuel <u>can be used as an alternative to diesel fuel</u>. During February 2008, a mixture of babassu oil and coconut oil was used to partially power one engine of a Boeing 747 (a large, long–range wide–body airliner designed and manufactured by <u>Boeing Commercial Airplanes</u> in the U.S.), in a biofuel trial sponsored by Virgin Atlantic (a trading name of <u>Virgin Atlantic Airways Limited</u> and Virgin Atlantic International Limited, is a British airline).

An aviation biofuel or bio—jet—fuel or bio—aviation fuel (BAF) is a biofuel used to power aircraft and is said to be a sustainable aviation fuel (SAF). The <u>International Air Transport Association</u> (IATA) considers it a key element to reducing the carbon footprint within the environmental impact of aviation. Aviation biofuel could help decarbonize medium— and long—haul air travel generating most emissions, and could extend the life of older aircraft types by lowering their carbon footprint.

#### DISEASES AND PESTS OF THE BABASSU PALM

Various species of palm are affected by a number of pests and diseases, among them are *Psychidae* (bagworm moth) are a family of Lepidoptera. Basal stem rot (*Ganoderma orbiforme*) known as *G. boninse* or just *Ganoderma*, a species of polypore fungus. Cadang—cadang disease (a disease caused by Coconut cadang—cadang viroid (CCCVd), a lethal viroid).

Little leaf syndrome caused by *Oryctes rhinoceros* (Asiatic rhinoceros beetle, coconut rhinoceros beetle or coconut palm rhinoceros beetle, a species of rhinoceros beetle in the family Scarabaeidae) and *Rhynchophorus palmarum* (or South American palm weevil, a species of snout beetle).

Oil palm bunch moth caused by *Tirathaba mundella* (a species of snout moth), *Tirathaba rufivena* (coconut spike moth or greater coconut spike moth, a moth of the family Pyralidae) and Red ring disease (*Bursaphelenchus cocophilus*) a nematode also known as scientific name *Rhadinaphelenchus cocophilus*.

# PROCESSES FOR BABASSU OIL

- Biodiesel production (the process of producing the biofuel, "biodiesel", through the chemical reactions of transesterification and esterification).
- Fat hydrogenation (the process of combining fat—typically, vegetable oils—with hydrogen, in order to make it more saturated).
- Fractionation (a separation process in which a certain quantity of a mixture is divided into a number of smaller quantities in which the composition varies according to a gradient).
- Hydrolysis (any chemical reaction in which a molecule of water breaks one or more chemical bonds).
- Milling (breaking solid materials into smaller pieces by grinding).
- Saponification (conversion of fat, oil, or lipid, into soap and alcohol by the action of aqueous alkali).
- Transesterification (the process of exchanging the organic group of an ester with the organic group of an alcohol).

#### PRODUCTS FROM THE BABASSU PALM

- Biodiesel (a form of diesel fuel derived from plants or animals and consisting of long—chain fatty acid esters).
- Neste Renewable Diesel (NRD is a vegetable oil refining fuel production process).
- Bioplastics (plastic materials produced from renewable biomass sources).
- Cellulosic ethanol (ethanol produced from cellulose rather than from the plant's seeds or fruit).
- Girl Scout Cookies.

Oleochemicals (oleochemistry is the study of vegetable oils and animal oils and fats). Vegetable
oil (mixtures of triglycerides) used for cooking and as fuel (vegetable oil can be used as an
alternative fuel in diesel engines and in heating oil burners), when it is used directly as a fuel, in
either modified or unmodified equipment, it is referred to as straight vegetable oil (SVO) or pure
plant oil (PPO).

# ORGANIZATIONS INVOLVED IN PRODUCTION, PROCESSING AND REGULATION PRODUCERS

<u>Bumitama Agri Ltd</u>, <u>Cargill, Incorporated</u>, <u>Carson Cumberbatch PLC</u>, <u>Equatorial Palm Oil plc (EPO)</u>, <u>FGV Holdings Berhad</u>, <u>Feronia Inc.</u>, <u>IOI Corporation Berhad</u> (IOI), <u>Kuala Lumpur Kepong Berhad</u> (KLK), <u>Sime Darby Berhad</u>, <u>TH Plantations Berhad</u> and <u>Wilmar International Limited</u>.

#### BUYERS AND PROCESSORS

<u>AAK</u>, formerly AarhusKarlshamn, <u>GreenPalm</u> (a certificate—trading program for "sustainably produced" palm oil), <u>Neste Oyj</u> and <u>Unilever plc</u>.

#### GOVERNMENTAL AND NON-GOVERNMENTAL AGENCIES

<u>Federal Land Development Authority</u> (FELDA), <u>Indonesia Commodity and Derivatives Exchange</u> (ICDX), Malaysia Derivatives Exchange (MDEX), also known as Malaysian Distribution Exchange, <u>Malaysian Palm</u> <u>Oil Board</u> (MPOB) and <u>Roundtable on Sustainable Palm Oil</u> (RSPO).

# POLICIES, IMPACTS AND DEBATES

#### **BIODIESEL IMPACTS**

The environmental impact of biodiesel is diverse and not clear cut. An often mentioned incentive for using biodiesel is its capacity to lower greenhouse gas emissions compared to those of fossil fuels. Whether this is true or not depends on many factors.

# BIOFUEL POLICY (MALAYSIA)

The biofuel policy of Malaysia is documented in Malaysia's National Biofuel Policy document.

#### **BIOFUELS ISSUES**

There are various social, economic, environmental and technical issues with biofuel production and use, which have been discussed in the popular media and scientific journals. These include:

- the effect of moderating oil prices
- the "food vs fuel" debate
- poverty reduction potential
- carbon emissions levels
- sustainable biofuel production
- deforestation and soil erosion
- loss of biodiversity
- effect on water resources
- the possible modifications necessary to run the engine on biofuel
- energy balance and efficiency

The <u>International Resource Panel</u>, which provides independent scientific assessments and expert advice on a variety of resource—related themes, assessed the issues relating to biofuel use in its first report in 2009, *Towards Sustainable Production and Use of Resources: Assessing Biofuels*. In it, it outlined the

wider and interrelated factors that need to be considered when deciding on the relative merits of pursuing one biofuel over another.

It concluded that not all biofuels perform equally in terms of their effect on climate, energy security and ecosystems, and suggested that environmental and social effects need to be assessed throughout the entire life—cycle.

# CERTIFIED SUSTAINABLE PALM OIL

Palm oil, produced from the oil palm, is a basic source of income for many farmers in South East Asia, Central and West Africa, and Central America. It is locally used as cooking oil, exported for use in much commercial food and personal care products and is converted into biofuel. It produces up to ten times more oil per unit area than soybeans, rapeseed or sunflowers.

#### **DEFORESTATION**

Rates and causes of deforestation vary from region to region around the world. In 2009,  $\frac{1}{3}$  of the world's forests were located in just ten countries:

- 1. Russia
- 2. Brazil
- 3. Canada
- 4. United States
- 5. China
- 6. Australia
- 7. The Democratic Republic of the Congo
- 8. Indonesia
- 9. India
- 10. Peru

# Southeast Asian Haze

The Southeast Asian haze is a fire—related recurrent transboundary air pollution issue. Haze events, where air quality reaches hazardous levels due to high concentrations of airborne particulate matter from burning biomass, have caused adverse health, environmental and economic impacts in several countries in Southeast Asia.

Caused primarily by slash—and—burn land clearing, the problem flares up every dry season to varying degrees and generally is worst between July and October and during *El Niño* events. Transboundary haze in Southeast Asia has been recorded since 1972 with the 1997 and 2015 events being particularly severe.

# FOOD VS. FUEL

Food versus fuel is the dilemma regarding the risk of diverting farmland or crops for biofuels production to the detriment of the food supply. The biofuel and food price debate involves wide—ranging views, and is a long—standing, controversial one in the literature. There is disagreement about the significance of the issue, what is causing it, and what can or should be done to remedy the situation.

This complexity and uncertainty is due to the large number of impacts and feedback loops that can positively or negatively affect the price system. Moreover, the relative strengths of these positive and negative impacts vary in the short and long terms, and involve delayed effects. The academic side of the debate is also blurred by the use of different economic models and competing forms of statistical analysis.

# SOCIAL AND ENVIRONMENTAL IMPACTS

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# VEGETABLE OILS AS ALTERNATIVE ENERGY

Vegetable oils are increasingly used as a substitute for fossil fuels. Vegetable oils are the basis of biodiesel, which can be used like conventional diesel. Some vegetable oil blends are used in unmodified vehicles, but straight vegetable oil needs specially prepared vehicles which have a method of heating the oil to reduce its viscosity and surface tension. Another alternative is vegetable oil refining.

#### THE HEALTH AND BEAUTY BENEFITS OF BABASSU OIL

Babassu oil is a *non–comedogenic* (won't clog pores) moisturizer which can be a better choice for those with acne prone skin. It is light, melts in contact with the skin and blends well without feeling greasy. It is emollient for both dry and oily skin. It improves overall skin health.

It restores hair elasticity, moisture and shine. It also provides antifungal, antiviral and antimicrobial protection. If you're interested in greater detail, read this PDF on <u>Babassu Oil Health and Beauty</u> Benefits.

Babassu oil is associated with many health benefits, although most of the research has been *ex vivo* and animal studies. More human studies are needed to fully understand these benefits. The most commonly attributed are discussed below:

#### ANTIOXIDANT PROPERTIES

The <u>main fatty acids</u> in babassu oil are <u>lauric and myristic acid</u>, both saturated. These fatty acids are <u>anti–inflammatory</u>, <u>immune–boosting</u>, and moisturizing, making them great for your skin and hair. <u>Lauric</u> acid has antibacterial properties and has been shown to <u>cause cancer cell death</u> in animal and one test–tube <u>study in 2019</u>.

Babassu oil <u>contains oleic acid</u>, a monounsaturated fat that's also found in olive oil and credited with many of olive oil's <u>health benefits</u>. Babassu oil contains other antioxidants, which are compounds that can help reduce <u>cellular damage caused by harmful free radicals</u>, in the form of vitamin E and various *phytosterols*. These antioxidants can help protect the skin against the effects of free radical damage.

Studies into the <u>anti–inflammatory and antioxidant</u> effects of babassu oil on animals have found that the oil could reduce microvascular leakage.

# ANTI-INFLAMMATORY PROPERTIES

Babassu oil and other parts of the palm are used in medicinal treatments by the Indigenous peoples of the Maranhão region to <u>treat skin conditions</u>, <u>wounds</u>, <u>inflammation</u> and stomach problems.

One of the reasons that babassu oil is a popular oil for the skin is that it has anti–inflammatory properties. This means the oil can be applied topically to relieve irritation, swelling and redness from sunburn, and reduce inflammatory skin conditions like eczema, psoriasis and rosacea.

A very recent <u>study published in 2017</u> set out to evaluate the anti–inflammatory activities of babassu oil for topical uses. When applied to mice with ear edema, the researchers found that babassu oil had a significant anti–inflammatory effect.

#### WOUND HEALING

Babassu oil has antibacterial properties. One test—tube <u>study in 2019</u> noted that it killed certain harmful bacteria like *Staphylococcus aureus* (staph) that cause infections. <u>Peer reviewed publications</u> attest to the fact that *lauric* acid has antimicrobial properties that help babassu oil fight bacteria sometimes found on the skin, including *Streptococcus aureus* (strep) and *Staphylococcus aureus* (staph).

Babassu oil also contains *lauric* acid, a medium—chain fatty acid with antibacterial and antimicrobial properties, making it suitable for treating minor wounds, insect bites, stings and burns, and encouraging healing. The oil also forms a protective coat that can defend against damage from UV rays and harmful pollutants.

Components of the babassu plant, including its oil, are also anti–inflammatory and can promote wound healing. In one 2015 study, rats that had babassu aqueous extract applied on open wounds in the cecum (colon) healed faster than the control group. Another study published in 2006 found that babassu oil had a very positive effect on the healing of cuts in rats.

#### MAINTAINS HEALTHY CHOLESTEROL LEVELS

Some research shows that the short—chain and medium—chain fatty acids in babassu oil can help support your cholesterol levels and aid in weight management. *Lauric* acid may increase your HDL (good) cholesterol and reduce your total cholesterol.

Lauric acid and other medium—chain fatty acids are also more readily metabolized by the liver instead of being stored as fat. This faster metabolic process may help support weight loss and maintain a healthy weight.

# CARDIOVASCULAR HEALTH

The healthy balance of essential fats, including *myristic* acid and *oleic* acid, provides cardiovascular benefits, such as helping to reduce LDL (bad) cholesterol and lower blood pressure.

# COMBATS NEURODEGENERATIVE DISEASES

The high concentrations of *lauric* acid and *myristic* acid found in babassu oil also provide cognitive benefits by boosting brain activity. Regular consumption of babassu oil allows the concentrations of *lauric* and *myristic* acid to combat free radicals found in the neural pathways and reduce the deposition of plaque in those areas.

#### NATURAL SKIN MOISTURIZER

This oil is light—weight and non—comedogenic so it makes for an ideal moisturizer for both dry and oily skin since it will not clog pores. It moisturizes skin because it is absorbed quickly, keeping it well hydrated. Not only can this be helpful if you have dry skin but also if you live in a climate that tends to be dry. Regular use of this oil helps improve overall skin health.

Based on the 2014 research study "<u>Evaluation of Babassu oil as skin moisturizer</u>," published in <u>World Journal of Pharmaceutical Sciences</u> (WJPPS), emulsions obtained from babassu oil were most effective in providing necessary moisturizing and nourishing properties to rough skin caused by weather and environmental conditions when compared to other oil emulsions.

Apply babassu oil to lips that are prone to dryness, flaking or chapping. Apply babassu oil to cracked heels to heal and hydrate the skin of your feet. It is an effective and enriching oil to use in massage therapy.

Pregnant women or new moms can use babassu oil on their stretch marks. The oil can improve the skin's elasticity and, over time, could help reduce their appearance. Babassu oil can also reduce the appearance of scars and blemishes, and encourage new cell growth.

#### HAS ANTI-AGING PROPERTIES

Babassu oil is also commonly used for its powerful anti–aging properties, thanks to its high concentrations of Vitamin E, essential fatty acids, *phytosterols* and antioxidants. Using babassu oil in your daily skincare routine can help prevent and reduce the appearance of premature signs of aging, such as wrinkles and fine lines.

# TREATMENT FOR ACNE AND OILY SKIN

Acne is a very common skin condition. Coconut oil is a popular choice for acne because of its antimicrobial and anti–inflammatory actions. Unfortunately, it can clog the pores worsening the condition. Babassu oil offers all of the same healthy skin benefits as coconut oil but it is lightweight and not greasy so it does not clog your pores. One older study found that *lauric* acid present in babassu oil may help reduce inflammation and acne—causing bacteria on the skin. What's more, it does not appear to cause acne.

# PROMOTES HEALTHY NAILS AND CUTICLES

Babassu oil is also used to strengthen nails and soften cuticles. It is a rich source of Vitamin E, which is a vital nutrient for nail health.

# PREVENTS BODY ODOR

Because of its excellent antimicrobial and antibacterial properties, you can use babassu oil as a base for a natural homemade deodorant.

# HEALTHY AND SHINY HAIR

When used in hair treatments, babassu oil can help stimulate blood flow to the hair follicles and hair growth. The fatty acids in the oil also help moisturize damaged and brittle hair, treat split ends and strengthen the strands. Babassu oil can help restore lost moisture and elasticity to dry hair, leaving it with a healthy–looking shine. Lastly, it can add volume without weighing hair down. It can add life to dull hair, keep it hydrated and it can also help keep unruly, frizzy hair under control.

Babassu oil contains amino acids that can work wonders for people with non–bacterial dandruff. Because of its anti–fungal properties, babassu oil can help treat dandruff and other scalp conditions. Hair can be washed by mixing babassu oil into either shampoo or conditioner.

#### BEARD CARE FOR MEN

Help the guy out in your life and make him some custom personal care products as well, such as a beard wash, oil or balm.

#### BABASSU OIL AS FOOD

This oil contains five *amino acids* which are good for overall health. Babassu oil can be easily used as a substitute for coconut oil. I keep some in my kitchen because it is wonderful for vegetable sautéing, greasing pans, and cooking popcorn. It goes with more foods than coconut oil does since its odor and flavor are much milder than coconut's.

# BABASSU OIL FOR SOAP MAKING

Another option is making homemade bar soap. Babassu oil is ideal for this because it has an <u>ideal</u> <u>composition of fatty acids</u> to create the right balance of solid with a nice full and stable lather. You can also use babassu oil instead of Shea butter or in combination in whipped butter recipes.

#### BABASSU OIL AS WOOD POLISH

In addition, I love to use it to rejuvenate my wood cutting boards and wooden utensils. For that matter, you can use it on any wood surface as it makes a wonderful furniture polish. I like to add a little lemon essential oil to it for that purpose.

# BABASSU OIL FOR PET HEALTH

Babassu oil is safe for pets and can improve a pet's health. When ingested, babassu oil can improve digestion and dental hygiene, can balance hormones, strengthen joints and manage weight. It also helps treat dandruff and skin irritation, clean wounds and their ears.

# THERAPEUTIC USES OF BABASSU OIL

The oil can be applied directly to your skin or hair, as a moisturizer or conditioner. Because it melts so easily on the skin, it's also a good carrier oil for <u>essential oils</u>. Furthermore, babassu oil can be substituted for coconut oil in homemade skin and hair care recipes, including soaps, hair masks, or body scrubs.

- 1. Natural Lip Balm: Apply babassu oil to lips that are prone to dryness, flaking or chapping.
- 2. Homemade Lipstick: There are recipes online for lipstick, such as the castor oil used in lipstick.
- 3. **For Dry, Cracked Heels:** Rub babassu oil into your heels before bed. Cover your feet with socks, leave on overnight. Next morning, shower as usual.
- 4. For Stretch Marks: Massage babassu oil directly onto stretch marks.
- 5. **Nail Treatment:** Apply it directly to your fingernails and toenails to strengthen and moisturize them.
- 6. **All Over Moisturizer:** Add 1–2 Tbsp. to bath water for an all–over benefit, or use it as a massage oil, or as a nail and cuticle soak.
- 7. **Hair Moisturizer:** Add a few drops to your shampoo or conditioner. *Be sure it is in liquid state when you do this.*
- 8. **Hair Treatment:** Warm a little babassu oil between your hands and work it into your hair. Use a comb to distribute evenly. The oil will fully absorb after about an hour. Because it takes a while to fully absorb, it is recommended to apply as a conditioner at night.
- **9. Dandruff Treatment:** Massage the oil thoroughly into your scalp and let it work for a while before rinsing it off. You can get even more benefits from babassu oil by adding an anti–fungal essential oil like tea tree into the mix.

# **STORAGE**

Store babassu oil in a cool area that is out of direct sunlight. You can store it in the refrigerator, but it will become a solid, much like coconut oil. Babassu oil is like other oils, it can become rancid. So take care to purchase only what you will use within 1–2 years. I also recommend going with a 100% organic product from a trusted source.

#### **PRECAUTIONS**

Generally speaking, moderate and responsible use of the oil should not cause any negative side effects. These limited side effects can include skin irritation, imbalances in your thyroid, bleeding issues or pregnancy complications. Skin and hair products containing babassu oil are not meant for consumption.

Little is known about the negative effects of babassu oil in pregnant or nursing women. To be safe, you should consult your healthcare provider before using babassu oil if pregnant or breastfeeding.

Additionally, a <u>2007 study</u> suggests that babassu fruit flour may slow your body's blood-clotting ability. If you're taking blood thinners or may be undergoing surgery soon, you should avoid babassu oil, as it may have a similar effect.

There is little evidence that eating babassu fruit and other parts of the plant might also <u>impair your thyroid function</u>, which can be particularly harmful to people with hypothyroidism (Hashimoto's). If you have this condition, it may be best to avoid babassu oil. If you choose to use babassu oil, then you should supplement your nutrition with <u>iodine and avoid naturally occurring goitrogens</u> (foods). Overconsumption of babassu oil may also contribute to weight gain due to its high fat content.

It's difficult to know how much babassu oil enters your bloodstream after you apply it to your skin. Therefore, if you have any concerns about using it, you should talk to your healthcare provider.

# NUTRITION INFORMATION

1 Tbsp. of babassu oil		
Calories	120	
Protein	Og	
Fat	14g	
Carbohydrates	Og	
Fiber	Og	
Sugar	Og	
Babassu oil is a good source of Vitamin E		