

Coconut Oil

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Overview

- Introduction
- Heart Health
- Weight Loss
- Alzheimer's Disease

Image source: spoonuniversity.com



Nutrition Facts

Oil, coconut

Amount Per 1 tbsp (13.6 g) ▾

Calories 117

| | % Daily Value* | | |
|-------------------------------|----------------|-------------|----|
| Total Fat 14 g | | 21% | |
| Saturated fat 12 g | | 60% | |
| Polyunsaturated fat 0.2 g | | | |
| Monounsaturated fat 0.8 g | | | |
| Cholesterol 0 mg | | 0% | |
| Sodium 0 mg | | 0% | |
| Total Carbohydrate 0 g | | 0% | |
| Dietary fiber 0 g | | 0% | |
| Sugar 0 g | | | |
| Protein 0 g | | 0% | |
| Vitamin A | 0% | Vitamin C | 0% |
| Calcium | 0% | Iron | 0% |
| Vitamin D | 0% | Vitamin B-6 | 0% |
| Vitamin B-12 | 0% | Magnesium | 0% |

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Two Types of Coconut Oil

Refined Coconut Oil

- produced from Copra

Unrefined Coconut Oil

- produced from fresh coconut meat

Coconut Oil and Heart Health

Reduces oxidative stress in heart mitochondrial membranes of rats

- shown to decrease risk of heart disease

Coconut Oil and Heart Health

Cholesterol

- Experiment shows beneficial effect on plasma cholesterol level with consumption of virgin coconut oil
 - Decrease total cholesterol, LDL, VLDL cholesterol
 - Increase HDL cholesterol

Coconut Oil and Heart Health

Cholesterol

- Another similar experiment shows conflicting results
 - Elevated total cholesterol level
 - Intermediate HDL level
 - lack specification for the type of coconut oil used

Coconut Oil and Weight Loss

Medium chain fatty acids (MCFAs)

- 8-14 carbons
- Lauric acid (12:0) main component of coconut oil

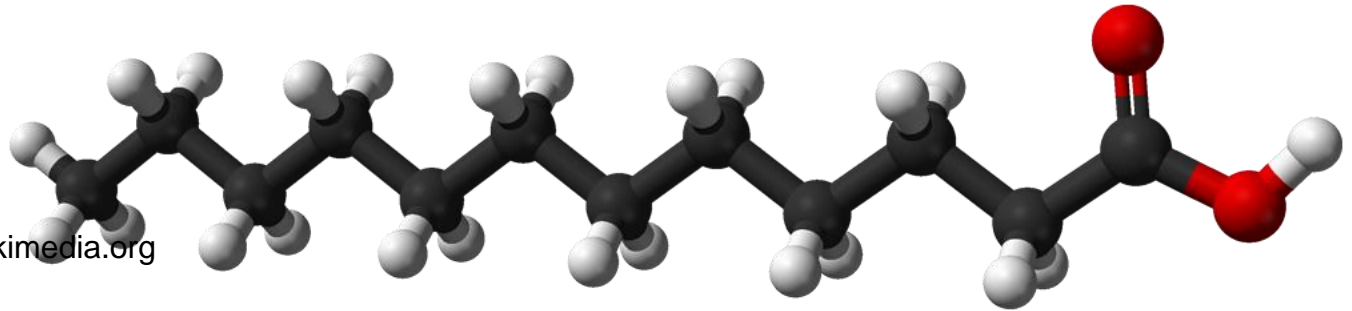


image source: commons.wikimedia.org

Table 1 Main fatty acids present in soy bean and coconut oils

| Fatty acid | Composition (%) | |
|----------------------------------|---------------------------|--------------------------|
| | Soy bean ^a oil | Coconut ^b oil |
| Lauric acid (12:0) | 0 | 49.0 |
| Myristic acid (14:0) | 0.1 | 17.5 |
| Palmitic acid (16:0) | 10.3 | 9.0 |
| Stearic acid (18:0) | 3.8 | 3.0 |
| Oleic acid (18:1 ω -9) | 22.8 | 5.0 |
| Linoleic acid (18:2 ω -6) | 51.0 | 1.8 |
| Total | 100.0 | 100.0 |

Source: SFDK Laboratório de Análise de Produtos Ltda., São Paulo, SP, Brazil

^a *Glycine max* L.

^b *Cocos nucifera* L.

Coconut Oil and Weight Loss

- metabolism is different from long chain fatty acids
 - increase in fatty acid oxidation and thermogenesis
 - higher energy expenditure
 - less fat deposition
- this can lead to weight loss

image source: higherperspective.com



Coconut Oil and Weight Loss

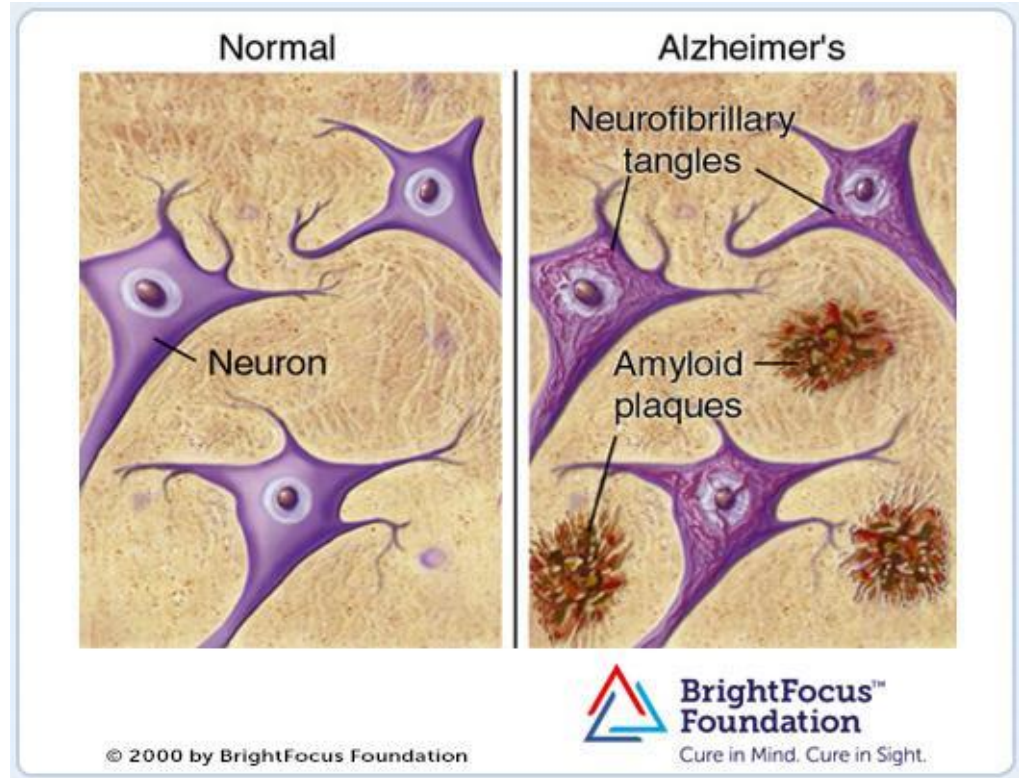
- Wealth of research supports
- Review: MCFA source unknown
- Brazilian women with abdominal obesity



Coconut Oil and the Brain

Coconut Oil and Beta Amyloids

- in vitro study conducted by Memorial University of Newfoundland
- coconut oil affected neurons were able to be alleviated from these effects

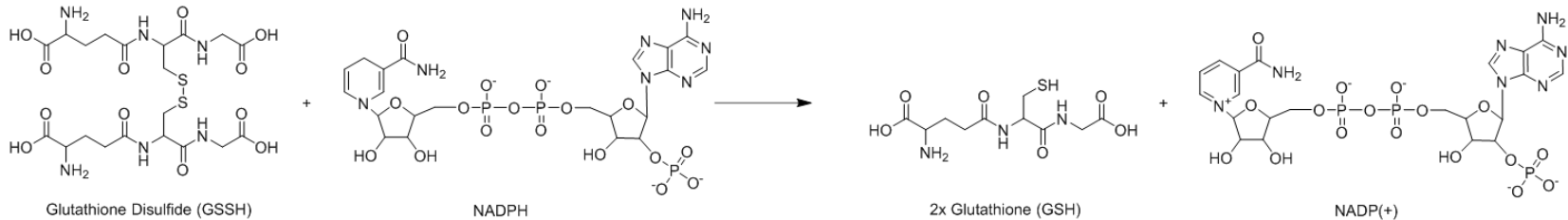


How does this work?

- medium chain triglycerides
- alternative source of energy is very important

Antioxidants

- free radical damage can be combated by antioxidants
- study showed increased antioxidants with consumption of virgin coconut oil
- can create aqueous components



Conclusion

- Heart health/cholesterol
- Weight loss
- Brain health

