# Coconut Oil Cardiovascular Benefits: Myth or Reality?



### Background on Coconut Oil:

- ✓ Edible oil extracted from matured coconuts harvested from the coconut palm (Cocos nucifera).
- ✓ Primary source of fat in the diets of millions, for generations throughout the tropical world.
- ✓ Applications in food, medicine, and industry.
- ✓ Heavily promoted by Coconut oil producers for a variety of health benefits.

#### **Coconut Oil Health Benefits**

- ✓ Cures/reverses Alzheimer's disease
- ✓ Kills Candida fungus
- ✓ Improves Type I and Type II diabetes
- ✓ Improves/heals skin diseases including acne, eczema, psoriasis, rocasea
- ✓ Provides peak performance energy
- ✓ Increases metabolism
- ✓ Helps with hypothyroidism
- ✓ Raises body temperature
- ✓ Conditions and strengthens hair
- ✓ Kills lice
- ✓ Improves dandruff
- ✓ Kills many bacteria AND viruses
- ✓ Promotes weight loss
- ✓ Preserves muscle mass
- ✓ Promotes ketosis

### Why Walk Away



- ✓ Coconut oil high in saturated fats
- ✓ No better than eating butter

### Saturated Fats in Common Vegetable Oils (source: Wikipedia)

Vegetable Oils (not hydrogenated)				
Туре	Saturated Fatty acids	Mono-unsaturated fatty acids	Poly-unsaturated fatty acids	
Canola (rapeseed)	7.365	63.276	28.142	
Coconut	91.000	6.000	3.000	
Corn	11.948	27.576	54.677	
Cottonseed	25.900	17.800	51.900	
Flaxseed/Linseed	6-9	10-22	68-89	
Olive	14.000	72.000	14.000	
Palm	49.300	37.000	9.300	
Peanut	16.900	46.200	32.000	



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# Heavy Saturated Fat Diets = High Cholesterol Levels

- ✓ Saturated fats are found in animal fats, dairy, and tropical oils.
- ✓ Coconut oil has more saturated fat than anything else.



E.g.: Olive and soybean oils = ~15% percent saturated

Beef fat = ~50% saturated

Butter = ~63% saturated

Palm kernel oil = ~49% saturated

Coconut fat is 92%saturated!

✓ Coconut oil has more saturated fat than anything else

### Heavy Saturated Fat Diets = High Cholesterol Levels

Recommendations against the consumption of large amounts of coconut oil:

- ✓ FDA
- ✓ WHO
- ✓ International College of Nutrition
- ✓ Dept. of Health & Human Services
- ✓ British National Health Service
- ✓ Dietitians of Canada
- ✓ ADA
- ✓ AHA

# Heavy Saturated Fat Diets = High Cholesterol Levels

High proportion of lauric acid

- ✓ Increases HDL cholesterol &
- ✓ Increases LDL cholesterol
- Claims that Lauric acid increase good HDL & improves cholesterol ratios are not supported by recent studies

#### **Supporters & Endorsers**

- ✓ Who are the sponsoring organizations of scientific research asserting the benefits of coconut oil for cardiovascular health?
- ✓ Are the studies peer-reviewed?
- ✓ Are they comparing apples to oranges?

#### **Coconut Research Center**

Health Properties of Coconut Oil. Agro Food Industry Hi Tech. May/June 2013 Vol 24n3.

Dietary fats and health: dietary recommendations in the context of scientific evidence. Adv Nutr. 2013 May 1;4(3):294-302. doi: 10.3945/an.113.003657.

Coconut oil predicts a beneficial lipid profile in pre-menopausal women in the Philippines. Asia Pac J Clin Nutr. Author manuscript; available in PMC 2012 January 1. Published in final edited form as: Asia Pac J Clin Nutr. 2011; 20(2): 190–195.

Comparison of native and capric acid-enriched mustard oil effects on oxidative stress and antioxidant protection in rats. Br J Nutr. 2012 Mar;107(6):845-9. Epub 2011 Nov 1.

Influence of coconut oil administration on some hematologic and metabolic parameters in pregnant rats. J Matern Fetal Neonatal Med. 2011 Oct;24(10):1254-8. Epub 2011 Jul 7.

In vivo antinociceptive and anti-inflammatory activities of dried and fermented processed virgin coconut oil. Med Princ Pract. 2011;20(3):231-6. Epub 2011 Mar 29.

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Dietary fatty acids and oxidative stress in the heart mitochondria. Mitochondrion. 2011 Jan;11(1):97-103. Epub 2010 Aug 5.

Successful treatment of severe hypertriglyceridemia with a formula diet rich in omega-3 fatty acids and medium-chain triglycerides. Ann Nutr Metab. 2010;56(3):170-5.

Consumption of coconut milk did not increase cardiovascular disease risk in mice, International Journal of Current Research Vol. 6, pp.063-064, July, 2010

### **Myth of Heart Health Benefits**

- ✓ Coconut oil is new and sexy topic
- ✓ Popular press & new food fads
- ✓ Too many internet experts
- ✓ Self-interested parties promote it



### **In Summary**

- ✓ Coconut oil DOES have some benefits:
  - Medium chain triglycerides (MCTs)are very beneficial and necessary for certain gastrointestinal conditions
  - Coconut <u>water</u> is tasty & beneficial
- ✓ Coconut milk & coconut oil are harmful to humans from a cardiovascular standpoint



### **QUESTIONS & COMMENTS?**

