

Drugs



Cocoa butter

IDENTIFICATION

Name Cocoa butter

Accession Number DB11086

Type Biotech

Groups Approved

Description Cocoa butter is an edible natural fat obtained from the *Theobroma cocoa* seeds that is predominantly found in dark chocolate [4]. It is a rich source of monounsaturated and saturated fatty acids [A33040] that mainly contains approximately 33% [Oleic Acid](#), 25% [Palmitic Acid](#), and 33% [Stearic acid](#) [4] but does not contain caffeine or theobromine. Fat cocoa solids, including cocoa butter, have lower phenolic content than non-fat cocoa solids but may contain some polyphenols of different structures of flavonoids with antioxidant properties [6].

Cocoa butter is included in chocolate and other food products, and can also be found in over-the-counter skin products such as lotions, creams, and bars intended to maintain skin softness. While cocoa butter has skin moisturizing properties, it was not shown to reduce the likelihood of developing of striae gravidarum, or stretch marks, in a double-blind, randomized clinical trial of women in the first trimester [4]. Still, it is a common active ingredient for prevention of skin dryness in cosmetic and skincare products. Oftentimes cocoa butter is used in over-the-counter pharmaceutical products and suppositories. The lipid-lowering effects of cocoa butter have been studied and investigated, as fatty acid constituents of cocoa butter are known to exhibit lipid-lowering properties. Dyslipidemia is characterized by elevated levels of plasma triglyceride and very-low-density lipoprotein (VLDL) cholesterol due to overproduction of large triglyceride-enriched VLDL cholesterol particles [4]. Cocoa butter has shown to reduce VLDL cholesterol levels in animal studies, suggesting its potential use in lipid disorders.

Synonyms Cacao butter

Cacao seed oil, fermented

Oil, cocoa butter

Oil,cocoa butter

Theobroma cacao (cocoa) seed butter

Theobroma cacao oil

Theobroma oil

Over the Counter Products

Show entries

Search

NAME	DOSAGE	STRENGTH	ROUTE	LABELLER	MARKETING	MARKETING	
					START	END	
Dermatitica Synergy for treatment of	Oil	3.2 mg/50mL	Topical	Phytopia Co., Ltd.	2016-04-01	Not applicable	

NAME	DOSAGE	STRENGTH	ROUTE	LABELLER	MARKETING START	MARKETING END			
Marks Remover									
Suppo H Sup 1000mg	Suppository	1 g	Rectal	Produits Aloex Ltee	1996-06-27	1997-09-11			
Suppo-H 1000mg/sup	Suppository	1 g	Rectal	Santrel International Inc.	1992-12-31	1999-12-31			
Terrasil Fissures Formula	Ointment	50 g/100g	Topical	Aidance Skincare & Topical Solutions, LLC	2014-06-10	Not applicable			

Showing 1 to 5 of 5 entries

Mixture Products

Show entries

NAME	INGREDIENTS	DOSAGE	ROUTE	LABELLER	MARKETING START	MARKETING END			
Apz Hemorrhoidal Suppositories	Cocoa butter (85.5 %) + Phenylephrine hydrochloride (0.25 %)	Suppository	Rectal	Apz Pharmaceutical Corporation	Not applicable	Not applicable			
Atopic Healer Synergy	Cocoa butter (4.9 mg/50mL) + Balsam of Peru (3.6 mg/50mL)	Oil	Topical	Phytopia Co., Ltd.	2016-04-01	Not applicable			
Avedana Hemorrhoidal	Cocoa butter (88.5 g/100g) + Phenylephrine hydrochloride (.26 g/100g)	Suppository	Rectal	Unipack	2014-09-18	Not applicable			
Averteax	Cocoa butter (2.5 mg/1g) + Zinc oxide (0.15 mg/1g)	Ointment	Topical	Camellix, LLC	2014-01-01	Not applicable			
Averteax	Cocoa butter (2.5 mg/1g) + Zinc oxide (0.15 mg/1g)	Cream	Topical	Camellix, LLC	2014-01-01	Not applicable			
Calmol 4	Cocoa butter (2052 mg/1) + Zinc oxide (270 mg/1)	Suppository	Rectal	Resical Inc.	2006-05-13	Not applicable			
Care One Hemorrhoidal	Cocoa butter (2137.5 mg/1) + Phenylephrine hydrochloride (75 mg/1) + Shark liver oil (6.375 mg/1)	Suppository	Rectal	American Sales Company	2003-12-09	2015-09-01			

NAME	INGREDIENTS	DOSAGE	ROUTE	LABELLER	MARKETING START	MARKETING END	
	hydrochloride (6.5 mg/1)						
CareOne Hemorrhoidal	Cocoa butter (2.135 g/2.5g) + Phenylephrine hydrochloride (.0065 g/2.5g)	Suppository	Rectal	American Sales Company	2013-01-02	2017-12-28	
Cocoa Butter, Phenylephrine Hydrochloride	Cocoa butter (850 mg/1g) + Phenylephrine hydrochloride (2.5 mg/1g)	Suppository	Rectal	Target Corporation.	2011-07-01	Not applicable	

Showing 1 to 10 of 92 entries

[1](#)
[2](#)
[3](#)
[4](#)
[5](#)
[...](#)
[10](#)

Categories[Antipruritics and Local](#)[Fats](#)[Food and Beverages](#)[Anesthetics](#)[Food](#)[Lipids](#)[Diet, Food, and Nutrition](#)[Physiological Phenomena](#)**UNII**[512OYT1CRR](#)**CAS number**

8002-31-1

PHARMACOLOGY**Indication**

Indicated for topical use in over-the-counter skin products for the treatment of skin dryness and reduction of striae gravidarum (stretch marks).

Pharmacodynamics

In a rat study, treatment with 10% cocoa butter has been shown to lower liver cholesterol and triglyceride levels without affecting the serum cholesterol levels [1]. Supplementation of cocoa butter reduced the level of creatinine *in vitro*, suggesting that cocoa butter may also be beneficial to renal function via antioxidant effects [1].

Mechanism of action

Cocoa butter is comprised of saturated fatty acids that exert a neutral cholesterolemic response in humans [5]. [Stearic acid](#) is one of the major constituents in cocoa butter that is a non-atherogenic type of dietary saturated fat [4]. Although it is a saturated fatty acid known to elevate plasma lipids and lipoproteins, stearic acid from plant sources differs from animal-derived sources of stearic acid [5]. Possible explanations for this unique property may include chain length, inefficient absorption, metabolism kinetics, and hepatic desaturation of stearic into oleic acid [5]. Apart from its lipid-lowering actions, stearic acid may also mediate actions on hemostasis and thrombosis which still remain inconclusive [4]. *In vitro*, stearic acid was demonstrated to promote platelet aggregation and factor VII coagulant activity; however *in vivo* preliminary studies mixed results [5].

Cocoa butter may contain flavonoids that elicit antioxidant, anti-platelet, anti-inflammatory effects, as well as possibly increasing HDL, lowering blood pressure, and improving endothelial function [4]. They inhibit lipid peroxidation, scavenge reactive oxygen species, and attenuate photochemical overproduction of ROS thus minimize UV-induced photodamage and signs of aging on the skin [3].

Absorption

Cocoa butter displays poor bioavailability and low absorption compared to other oils [1].

Volume of distribution

No pharmacokinetic data available.


Protein binding

No pharmacokinetic data available.

Metabolism

Drugs



Route of elimination No pharmacokinetic data available. 

Half life No pharmacokinetic data available.

Clearance No pharmacokinetic data available.

Toxicity No toxicokinetic data available.

Affected organisms Not Available

Pathways Not Available

Pharmacogenomic Effects/ADRs  Not Available

INTERACTIONS

Drug Interactions  Not Available

Food Interactions Not Available

REFERENCES

General References

1. Yildirim E, Cinar M, Yalcinkaya I, Ekici H, Atmaca N, Guncum E: Effect of cocoa butter and sunflower oil supplementation on performance, immunoglobulin, and antioxidant vitamin status of rats. Biomed Res Int. 2014;2014:606575. doi: 10.1155/2014/606575. Epub 2014 Jul 16. [\[PubMed:25136602\]](#)
2. Osman H, Usta IM, Rubeiz N, Abu-Rustum R, Charara I, Nassar AH: Cocoa butter lotion for prevention of striae gravidarum: a double-blind, randomised and placebo-controlled trial. BJOG. 2008 Aug;115(9):1138-42. doi: 10.1111/j.1471-0528.2008.01796.x. [\[PubMed:18715434\]](#)
3. Scapagnini G, Davinelli S, Di Renzo L, De Lorenzo A, Olarte HH, Micali G, Cicero AF, Gonzalez S: Cocoa bioactive compounds: significance and potential for the maintenance of skin health. Nutrients. 2014 Aug 11;6(8):3202-13. doi: 10.3390/nu6083202. [\[PubMed:25116848\]](#)
4. Ding EL, Hutfless SM, Ding X, Girotra S: Chocolate and prevention of cardiovascular disease: a systematic review. Nutr Metab (Lond). 2006 Jan 3;3:2. doi: 10.1186/1743-7075-3-2. [\[PubMed:16390538\]](#)
5. Steinberg FM, Bearden MM, Keen CL: Cocoa and chocolate flavonoids: implications for cardiovascular health. J Am Diet Assoc. 2003 Feb;103(2):215-23. doi: 10.1053/jada.2003.50028. [\[PubMed:12589329\]](#)
6. Jalil AM, Ismail A: Polyphenols in cocoa and cocoa products: is there a link between antioxidant properties and health? Molecules. 2008 Sep 16;13(9):2190-219. [\[PubMed:18830150\]](#)

External Links PubChem Substance [347911109](#)

Wikipedia [Cocoa butter](#)

AHFS Codes 84:08.00 — Antipruritics and Local Anesthetics

CLINICAL TRIALS

Clinical Trials 

Show entries

Search

PHASE	STATUS	PURPOSE	CONDITIONS	COUNT
1	Recruiting	Other	High Blood Pressure (Hypertension) / Hypertension, Essential	1
4	Completed	Treatment	Complications; Cesarean Section	1

PHASE	STATUS	PURPOSE	CONDITIONS	COUNT
Not Available	Completed	Prevention	Anaesthesia therapy / Disorder of Shoulder	1

Drugs



PHARMACOECONOMICS

Manufacturers Not Available**Packagers** Not Available**Dosage forms** Show entriesSearch

FORM	ROUTE	STRENGTH
Oil	Topical	
Cream	Topical	
Ointment	Topical	
Suppository	Rectal	
Gel	Topical	
Kit		
Oil	Topical	3.2 mg/50mL
Suppository	Rectal	1 g
Ointment	Topical	50 g/100g

Showing 1 to 9 of 9 entries

1

Prices Not Available**Patents** Not Available

PROPERTIES

State Not Available**Experimental Properties** Not Available

TAXONOMY

Classification Not classified

Drug created on December 03, 2015 09:51 / Updated on April 13, 2019 18:38

About[About DrugBank](#)[DrugBank Blog](#)[Wishart Research Group](#)[Terms of Use](#)[Privacy Policy](#)**Support**[FAQ](#)[Help](#)[Email Support](#)**Commercial Products**[API Pricing](#)

This project is supported by the [Canadian Institutes of Health Research](#) (award #111062), [Alberta Innovates - Health Solutions](#), and by [The Metabolomics Innovation Centre \(TMIC\)](#), a nationally-funded research and core facility that supports a wide range of cutting-edge metabolomic studies. TMIC is funded by [Genome Alberta](#), [Genome British Columbia](#), and [Genome Canada](#), a not-for-profit organization that is leading Canada's national genomics strategy with funding from the federal government. Maintenance, support, and commercial licensing is provided by [OMx Personal Health Analytics, Inc.](#) Designed by [Educe Design & Innovation Inc.](#)



Drugs ▾

