

## INTISARI

*Virgin Coconut Oil* (VCO) yang tersedia melimpah di Indonesia, memiliki potensi dalam memperbaiki kualitas serta penampilan kulit karena komponen bioaktif yang cukup banyak. *Review* ini bertujuan untuk mengulas formulasi sediaan topikal yang memanfaatkan VCO untuk mendapatkan sediaan yang stabil dan mengulas aktivitas bahan baku VCO berdasarkan uji *in vitro* dan *in vivo* pada kulit secara khusus.

*Review* berbentuk *narrative review* dengan data sekunder dari berbagai literatur. Literatur diperoleh dari hasil pencarian kata kunci pada database Scopus, ScienceDirect, Wiley, dan Google Scholar. Literatur dikumpulkan, diidentifikasi, diseleksi, dianalisis, dan di-review.

Hasil *review*, menunjukkan bahwa antibakteri, antiinflamasi, antioksidan, dan pelembab pada VCO berperan dalam mempercepat proses perbaikan kulit. VCO telah digunakan sebagai zat aktif dalam sediaan krim, lotion, emulgel dan sebagai bahan eksipien dalam emulsi. Formulasi emulsi topikal VCO perlu memperhatikan komposisi surfaktan dan minyak, nilai HLB surfaktan, kecepatan homogenasi, dan ukuran *droplet*. Emulsi dengan ukuran *droplet* mikro sesuai untuk topikal karena akan memberikan stabilitas sediaan yang baik dan mencegah efek sistemik pada sediaan kosmetik.

**Kata kunci:** VCO, aktivitas, formulasi topikal, kosmetik

## ABSTRACT

*Virgin Coconut Oil (VCO) that is abundant in Indonesia, has the potential to repair and increase the quality also the appearance of the skin because of its rich bioactive compounds. The aim of this review is to discuss the topical formulation which use VCO to get stable formulation and discuss the activity of the main compound of VCO based on in vitro and in vivo test, particularly on skin.*

*This is a narrative review which is formed by secondary data from different literature. The literature were found by keywords on Scopus, ScienceDirect, Wiley, and Google Scholar databases. Those literatures were collected, identified, selected, analyzed, and reviewed.*

*The results showed that anti-bacteria, anti-inflammatory, antioxidant, and moisturize in VCO played a role in fasten the skin refinement process. VCO has been used in cream, lotion, emulgel formulation as active ingredients also in emulsion as excipients. Topical emulsion of VCO had to consider about the amount of composition of oil and surfactant, HLB value, speed of homogenizer, and droplet size. Emulsion's droplet with micro size is suited for topical formulation because it would make an optimal stability of the emulsion also prevented the systemic effect in cosmetic formulation.*

**Keywords:** VCO, activity, topical formulation, cosmetic