

KARAKTERISASI EKSTRAK KASAR *CURCUMA LONGA* L. SEBAGAI *DRUG DELIVERY SYSTEM* DITINJAU DARI ILMU KEDOKTERAN DAN ISLAM

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Abstrak

Latar Belakang: Sirosis hati merupakan salah satu dari 10 penyebab kematian terbesar di dunia. Kunyit mengandung kurkumin yang berfungsi sebagai hepatoprotektor, namun biobailabilitasnya rendah. Teknologi nanoenkapsulasi dapat meningkatkan bioavailabilitas kurkumin. Firman Allah SWT yang menjelaskan dibolehkannya segala sesuatu bila konteksnya dalam keadaan terpaksa atau darurat “*Sesungguhnya Allah hanya mengharamkan bagimu bangkai, darah, daging babi dan binatang yg (ketika disembelih) disebut (nama) selain Allah. Tetapi barangsiapa dlm keadaan terpaksa (memakannya) sedang ia tdk menginginkannya dan tdk (pula) melampaui batas, maka tdk ada dosa baginya. Sesungguhnya Allah Maha Pengampun lagi Maha Penyayang*” (Q.s. al-Baqarah (2):173).

Metode: Rancangan pada penelitian ini dilakukan secara eksperimental menggunakan ekstrak kasar *Curcuma longa* dilanjutkan dengan proses nanoenkapsulasi.

Hasil: Hasil karakterisasi nanoenkapsulasi ekstrak kasar *Curcuma longa* dengan rasio kitosan dan TPP 5 : 1 menunjukkan nilai absorbansi berbanding lurus dengan konsentrasi ekstrak kasar. Hasil didapatkan dalam ukuran nano namun kurang stabil

Kata kunci: Ekstrak Kasar, *Curcuma longa*, *Drug Delivery System*

CHARACTERIZATION OF CRUDE EXTRACT OF *CURCUMA LONGA* AS DRUG DELIVERY SYSTEM IN REVIEW OF MEDICINE AND ISLAM

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Abstract

Background: Liver cirrhosis is one of the 10 largest causes of death in the world. Turmeric contains curcumin that functions as a hepatoprotector, but its bioavailability is low. Nanoencapsulation technology can increase the bioavailability of curcumin. The Word of Allah SWT which explains the permissibility of all things when the context is in a state of necessity or an emergency "Verily Allah only forbids you carcasses, blood, pork and animals which (when slaughtered) is called (name) besides Allah. But whoever is in a state of being forced to eat it while he does not want it and does not exceed the limit, there is no sin for him. Verily Allah is Oft-Forgiving, Most Merciful "(Q.s al-Baqarah (2): 173).

Method: The design of this experiment was conducted experimentally using crude extract of *Curcuma longa* followed by nanoencapsulation process.

Result: The result of characterization of nanoenkapsulasi crude extract *Curcuma longa* with chitosan ratio and TPP 5: 1 showed absorbance value directly proportional to the concentration of crude extract. Results are obtained in nano size but are less stable

Keywords: Crude Extract, *Curcuma longa*, Hepatoprotector