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**PIMPINAN UMUM/ PENANGGUNG JAWAB**  
Dekan Fakultas Matematika dan Ilmu Pengetahuan Alam  
Universitas Islam Indonesia

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## **ASPEK FARMAKOLOGI TETRAHIDROKURKUMIN: METABOLIT UTAMA KURKUMIN**

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### **ABSTRACT**

Tetrahydrocurcumin is a main metabolite product from biotransformation process of curcumin in the body. Biotransformation of curcumin is fast and occurred during absorption process in gastrointestinal tract. The biotransformation of curcumin to tetrahydrocurcumin and the stability of tetrahydrocurcumin play important roles in the biological effects of curcumin in the body. The present article discussed about the pharmacological aspects of tetrahydrocurcumin. Tetrahydrocurcumin was reported possessing several pharmacological activities such as: antioxidant, anti-inflammatory, hepatoprotector, anti-allergy, protective for atherosclerosis and renal damage, and also anticarcinogenesis. It's main pharmacological activity is antioxidant, which is underlying and responsible for the other activities. The antioxidant activity of tetrahydrocurcumin was reported better than this of curcumin. The main factors for the antioxidant or free radical scavenger effects of tetrahydrocurcumin are it's aromatic/phenolic hydroxy and  $\beta$ -diketon moieties.

Key words : tetrahydrokurkumin, curcumin, pharmacology, antioxidant