

ABSTRACT

Wibowo, Wiwit Mukti. 2012. **Effect of Vitamin E (α -Tocoferol) in DMEM media (Dulbeccos Modified Eagles Medium) on cell proliferation Culture Primary Hamster Lung Fetus**, Thesis, Department of Biology Faculty of Science and Technology State Islamic University of Malang Maulana Malik Ibrahim. Biology Advisor: Kiptiyah, M. Si.; Religion Advisor: Amalia Fitri Andriani, M. Si.

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Vitamin E is a vitamin that has Phythyl chain consisting of three isoprenoid, and are hydrophobic. Vitamin E can get into the cell membrane, and then work with transduktor to activate the receptor molecule that binds to the ligand in the form of the enzyme protein kinase. The enzyme protein kinase that is activated boom will activate the transcription factor protein. Protein transcription factor binds to the promoter segman will trigger the course of transcription so that the cell cycle becomes faster and be quicker confluent cells. This study aims to determine the effect of vitamin E (α -Tocoferol) in DMEM medium (Dulbeccos Modified Eagles Medium) on cell proliferation of primary cultured fetal hamster lung.

This study is an experimental study using the (Completely Randomized Design) with 6 treatments and 4 replications. Analysis of data using a single ANAVA 1%, if there is a very real difference then proceed with further testing LSD (Smallest Real Difference), BNJ (Beda Real Honest), and UJD (Duncan Test Distance) 1%. The treatments that are used are vitamin E (α -Tocoferol) with a concentration of P0 (control), P1 (25 μ M), P2 (50 μ M), P3 (75 μ M), P4 (100 μ M), and P5 (125 μ M). The samples used are fetal lung cells 2-day-old hamsters that were cultured in DMEM medium + 20% FBS. Lung cells were then incubated in fetal hamster CO2 incubator with 37 ° C for 96 hours, then observed confluent, and abnormalities of cell viability of primary cultured fetal hamster lung.

The results showed that there is the effect of giving vitamin E (α -Tocoferol) in DMEM medium (Dulbeccos Modified Eagles Medium) on cell proliferation of primary cultured fetal hamster lung. In this research shows that vitamin E (α -Tocoferol) in medium (Dulbeccos Modified Eagles Medium) effect on cell proliferation of primary cultured fetal lung hamster.ditemukan at treatment P1 (25 μ M) to confluent, viability P2 (50 μ M), and abnormality of P1 (25 μ M).