

ABSTRAK

Pada tahun 2000 hingga 2006, konsumsi Protein Perhari di Jawa Timur menunjukkan penurunan. HSD (*Honestly Significant Difference*) dan LSD (*Least Significant Difference*) merupakan uji yang digunakan untuk membandingkan rerata guna mengetahui rerata manakah yang berbeda pada data. Jika ingin mendapatkan uji manakah yang lebih baik, maka kita dapat menilainya berdasarkan kekuatan efisiensinya. Penelitian ini bertujuan untuk mengetahui uji manakah yang lebih efisien pada data *equal* (jumlah sampel tiap kelompok sama) dan *unequal* (jumlah sampel tiap kelompok tidak sama) yang bersumber dari Rerata Konsumsi Protein Perhari tahun 2003 di Jawa Timur, karena data sekunder tersebut telah memenuhi semua asumsi yang diperlukan.

Penelitian ini tergolong obseravasional analitik. Lokasi Penelitian berada di Propinsi Jawa Timur. Unit sampel dari penelitian ini yaitu konsumsi protein perhari pada beberapa kota dan kabupaten di Jawa Timur. Untuk data *equal*, langsung ditentukan oleh peneliti dengan pertimbangan latar belakang penelitian, sedangkan data *unequal* diambil secara acak. Variabel dalam penelitian ini yaitu kota atau kabupaten di Jawa Timur dan rerata konsumsi perharinya.

Setelah melalui beberapa uji, data *equal* dan *unequal* telah memenuhi syarat untuk dilakukan *Anova* (*Analysis Of Variance*). Keluaran program komputer menghasilkan probabilitas pada data *equal* dan *unequal* masing-masing sebesar 0,001 dan 0,008. Dengan demikian dapat disimpulkan bahwa ada perbedaan rerata konsumsi protein perhari pada data *equal* dan *unequal*. Selanjutnya dilakukan uji HSD dan LSD untuk menentukan pasangan manakah yang reratanya berbeda. Perhitungan kekuatan efisiensi HSD terhadap LSD pada data *equal* dan *unequal* masing-masing sebesar 44,44% dan 42,48%. Hal ini berarti, baik pada data *equal* maupun *unequal* uji LSD lebih efisien daripada HSD berdasarkan besarnya sampel.

Kesimpulan dari penelitian ini menyatakan bahwa ada perbedaan kota atau kabupaten di Jawa Timur yang rerata konsumsi protein perharinya berbeda, dan peneliti menyarankan untuk menggunakan LSD karena lebih efisien daripada HSD jika ditinjau dari segi jumlah sampel yang diperlukan, tentunya dengan syarat sampel berdistribusi normal dan variansnya homogen.

Kata Kunci : Kekuatan Efisiensi, HSD (*Honestly Significant Difference*), LSD (*Least Significant Difference*), *Anova*, Rerata Konsumsi Protein Perhari

ABSTRACT

In 2000 up to 2006, the protein intake on East Java was decreased. HSD (*Honestly Significant Difference*) and LSD (*Least Significant Difference*) were procedure that was used to compare couple means in order to know which were different. If we want to make sure which procedure is better then the other, we should analyze it from its efficiency. The aim of this research is comparing which one more efficient between HSD and LSD on the equal and unequal data. Both of them rearranged from Average Daily Protein Intake on 2003 in East Java. The reason why the 2003 data was used in this research was all of the assumptions have been completed.

This research included as observational annalistic. The place where this research was done was in East Java's Province. The sample unit of this research was the daily protein intake on each regency in East Java. The 1st data was decided by the researcher directly and the 2nd data was chosen randomly. The variables are the average of daily protein intake and the regency OF East Java.

After doing several test for make sure, the equal and unequal data had completed all of the assumption that needed for *Anova (Analysis Of Variance)*. Based on the computer result for equal and unequal data, their each probability are 0,001 and 0,008. It meant there was any difference average of daily protein intake. Next, we used HSD and LSD to decide which the different mean. The calculation of efficiency HSD toward LSD gave result for equal and unequal data on each 44,44% and 42,48%. It mean that LSD more efficient than HSD whether on the equal or unequal data based on number of sample.

In conclusion, this research indicated there was any difference of daily protein intake from equal and unequal data. And the researcher suggested to use LSD for equal or unequal sample because LSD more efficient than HSD based on the number of sample that needed. Of course it should normally distributed and had homogeneous variance.

Key Word : The Efficiency, HSD (*Honestly Significant Difference*), LSD (*Least Significant Difference*), *Anova*, Average Daily Protein Intake