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## Lampiran 1. Surat Izin Etik Penelitian

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN
KOMITE ETIK PENELITIAN UNIVERSITAS HASANUDDIN
RSPTN UNIVERSITAS HASANUDDIN
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR
Sekretariat : Lantai 2 Gedung Laboratorium Terpadu
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245,
Contact Person: dr. Agussalim Bukhari.,MMed.PhD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-581431

**REKOMENDASI PERSETUJUAN ETIK**
Nomor : 479/UN4.6.4.5.31/ PP36/ 2024

Tanggal: 26 Juni 2024

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

| | | | |
|---|---|---|---|
| No Protokol | UH24060422 | No Sponsor | |
| Peneliti Utama | **Indah Desti Pratiwi, S.ST** | Sponsor | |
| Judul Peneliti | Efek D-psicose terhadap status oksidatif, proliferasi, dan migrasi sel Adenokarsinoma Kolokrektal WiDr | | |
| No Versi Protokol | **1** | Tanggal Versi | **13 Juni 2024** |
| No Versi PSP | | Tanggal Versi | |
| Tempat Penelitian | RS Universitas Hasanuddin Lab HUM-RC Makassar | | |
| Jenis Review | ☐ Exempted<br>☒ Expedited<br>☐ Fullboard Tanggal | Masa Berlaku **26 Juni 2024** sampai **26 Juni 2025** | Frekuensi review lanjutan |
| Ketua KEP Universitas Hasanuddin | **Prof. dr. Muh Nasrum Massi,PhD,SpMK, Subsp. Bakt(K)** | Tanda tangan | |
| Sekretaris KEP Universitas Hasanuddin | **dr. Firdaus Hamid, PhD, SpMK(K)** | Tanda tangan | |

Kewajiban Peneliti Utama:
- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Lapor SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

**Lampiran 2. Surat Izin Penelitian**

KEMENTERIAN PENDIDIKAN KEBUDAYAAN,
RISET DAN TEKNOLOGI
**UNIVERSITAS HASANUDDIN**
**SEKOLAH PASCASARJANA**
JL. PERINTIS KEMERDEKAAN KM. 10, MAKASSAR 90245
TELEPON (0411) 586200, (6 SALURAN), 584200, FAX (0411) 585188
Laman: www.unhas.ac.id

Nomor : 01380/UN4.20.1/PT.01.04/2024 7 Februari 2024
Hal : Permohonan Izin Etik Penelitian

Yth. Ketua Komisi Etik Penelitian Fakultas Kedokteran
Universitas Hasanuddin
Makassar

Dengan hormat disampaikan bahwa mahasiswa Sekolah Pascasarjana Universitas Hasanuddin yang tersebut dibawah ini :

| | |
|---|---|
| Nama | : Indah Desti Pratiwi |
| Nomor Pokok | : P062221002 |
| Program Pendidikan | : Magister (S2) |
| Program Studi | : Ilmu Biomedik |

Bermaksud melakukan penelitian dalam rangka persiapan penulisan tesis terkait dengan judul "Efek D-Psicose terhadap Status Oksidatif Proliferasi dan Migrasi Sel Adenikarsinoma Kolorektal WiDr".

Sehubungan dengan hal tersebut, mohon kiranya yang bersangkutan diberikan izin surat persetujuan etik penelitian dengan menggunakan subyek sel kanker.

Atas perkenan dan kerjasamanya disampaikan terima kasih.

an. Dekan,
Wakil Dekan Bidang Akademik dan
Kemahasiswaan

Prof. Baharuddin Hamzah, ST., M.Arch., Ph.D.
NIP. 196903081995121001

Tembusan:
1. Dekan SPs. Unhas "sebagai laporan";
2. Mahasiswa yang bersangkutan;
3. Pertinggal.

## Lampiran 3. Analisis Data

HG

**Tests of Normality**

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| 0 jam | 0,325 | 3 | | 0,875 | 3 | 0,309 |
| 24 jam | 0,356 | 3 | | 0,816 | 3 | 0,154 |
| 48 jam | 0,364 | 3 | | 0,799 | 3 | 0,113 |
| 72 jam | 0,323 | 3 | | 0,879 | 3 | 0,320 |

a. Lilliefors Significance Correction

**T-Test**

**Paired Samples Statistics**

| | | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | 0 jam | 0,041633 | 3 | 0,0015503 | 0,0008950 |
| | 24 jam | 0,081300 | 3 | 0,0074719 | 0,0043139 |
| Pair 2 | 24 jam | 0,081300 | 3 | 0,0074719 | 0,0043139 |
| | 48 jam | 0,085067 | 3 | 0,0282677 | 0,0163203 |
| Pair 3 | 48 jam | 0,085067 | 3 | 0,0282677 | 0,0163203 |
| | 72 jam | 0,088833 | 3 | 0,0604894 | 0,0349236 |

**Paired Samples Test**

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean | SD | SE | 95% Confidence Interval of the Difference Lower | Upper | | | |
| Pair 1 | 0 jam - 24 jam | -0,0396667 | 0,0086194 | 0,0049764 | -0,0610783 | -0,0182550 | -7,971 | 2 | 0,015 |
| Pair 2 | | | 0,0325322 | 0,0187824 | -0,0845810 | 0,0770477 | -0,201 | 2 | 0,860 |
| Pair 3 | | | 0,0325322 | 0,0187824 | -0,0845810 | 0,0770477 | -0,201 | 2 | 0,860 |

LG

**Tests of Normality**

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| 0 jam | 0,280 | 3 | | 0,938 | 3 | 0,520 |
| 24 jam | 0,348 | 3 | | 0,834 | 3 | 0,198 |
| 48 jam | 0,318 | 3 | | 0,886 | 3 | 0,342 |
| 72 jam | 0,229 | 3 | | 0,981 | 3 | 0,739 |

a. Lilliefors Significance Correction

**T-Test**

**Paired Samples Statistics**

| | | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | 0 jam | 0,041133 | 3 | 0,0009292 | 0,0005364 |
| | 24 jam | 0,054600 | 3 | 0,0140182 | 0,0080934 |
| Pair 2 | 24 jam | 0,054600 | 3 | 0,0140182 | 0,0080934 |
| | 48 jam | 0,048667 | 3 | 0,0070117 | 0,0040482 |
| Pair 3 | 48 jam | 0,048667 | 3 | 0,0070117 | 0,0040482 |
| | 72 jam | 0,042733 | 3 | 0,0010599 | 0,0006119 |

**Paired Samples Test**

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference Lower | Upper | | | |
| Pair 1 | 0 jam - 24 jam | -0,0134667 | 0,0147571 | 0,0085200 | -0,0501254 | 0,0231921 | -1,581 | 2 | 0,255 |
| Pair 2 | 24 jam - 48 jam | 0,0059333 | 0,0070465 | 0,0040683 | -0,0115712 | 0,0234378 | 1,458 | 2 | 0,282 |
| P 3 | | | 0,0070465 | 0,0040683 | -0,0115712 | 0,0234378 | 1,458 | 2 | 0,282 |

Fruk 12,5

**Tests of Normality**

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| 0 jam | 0,238 | 3 | | 0,976 | 3 | 0,702 |
| 24 jam | 0,301 | 3 | | 0,912 | 3 | 0,424 |
| 48 jam | 0,246 | 3 | | 0,970 | 3 | 0,668 |
| 72 jam | 0,235 | 3 | | 0,978 | 3 | 0,716 |

a. Lilliefors Significance Correction

**T-Test**

**Paired Samples Statistics**

| | | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | 0 jam | 0,042200 | 3 | 0,0005568 | 0,0003215 |
| | 24 jam | 0,042533 | 3 | 0,0013614 | 0,0007860 |
| Pair 2 | 24 jam | 0,042533 | 3 | 0,0013614 | 0,0007860 |
| | 48 jam | 0,048633 | 3 | 0,0040867 | 0,0023594 |
| Pair 3 | 48 jam | 0,048633 | 3 | 0,0040867 | 0,0023594 |
| | 72 jam | 0,054733 | 3 | 0,0068252 | 0,0039405 |

**Paired Samples Test**

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | | | | |
| | | Mean | Std. Deviation | Std. Error Mean | Lower | Upper | | | |
| Pair 1 | 0 jam - 24 jam | -0,0003333 | 0,0008145 | 0,0004702 | -0,0023565 | 0,0016899 | -0,709 | 2 | 0,552 |
| Pair 2 | 24 jam - 48 | -0,0061000 | 0,0027418 | 0,0015830 | -0,0129110 | 0,0007110 | -3,853 | 2 | 0,061 |
| | | | 0,0027418 | 0,0015830 | -0,0129110 | 0,0007110 | -3,853 | 2 | 0,061 |

Fruk 25

**Tests of Normality**

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| 0 jam | 0,253 | 3 | | 0,964 | 3 | 0,637 |
| 24 jam | 0,342 | 3 | | 0,845 | 3 | 0,228 |
| 48 jam | 0,188 | 3 | | 0,998 | 3 | 0,911 |
| 72 jam | 0,288 | 3 | | 0,928 | 3 | 0,482 |

a. Lilliefors Significance Correction

**T-Test**

**Paired Samples Statistics**

| | | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | 0 jam | 0,042400 | 3 | 0,0013748 | 0,0007937 |
| | 24 jam | 0,044933 | 3 | 0,0029366 | 0,0016954 |
| Pair 2 | 24 jam | 0,044933 | 3 | 0,0029366 | 0,0016954 |
| | 48 jam | 0,044333 | 3 | 0,0021773 | 0,0012571 |
| Pair 3 | 48 jam | 0,044333 | 3 | 0,0021773 | 0,0012571 |
| | 72 jam | 0,043733 | 3 | 0,0028024 | 0,0016180 |

**Paired Samples Test**

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference Lower | Upper | | | |
| Pair 1 | 0 jam - 24 jam | -0,0025333 | 0,0016197 | 0,0009351 | -0,0065568 | 0,0014902 | -2,709 | 2 | 0,114 |
| Pair 2 | 24 jam - 48 jam | 0,0006000 | 0,0018702 | 0,0010797 | -0,0040457 | 0,0052457 | 0,556 | 2 | 0,634 |
| Pair 3 | 48 - | 0,0006000 | 0,0018702 | 0,0010797 | -0,0040457 | 0,0052457 | 0,556 | 2 | 0,634 |

Psi 12,5

**Tests of Normality**

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| 0 jam | 0,175 | 3 | | 1,000 | 3 | 1,000 |
| 24 jam | 0,259 | 3 | | 0,959 | 3 | 0,610 |
| 48 jam | 0,377 | 3 | | 0,770 | 3 | 0,046 |
| 72 jam | 0,245 | 3 | | 0,970 | 3 | 0,670 |

a. Lilliefors Significance Correction

**T-Test**

**Paired Samples Statistics**

| | | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | 0 jam | 0,044300 | 3 | 0,0003000 | 0,0001732 |
| | 24 jam | 0,059000 | 3 | 0,0132254 | 0,0076357 |
| Pair 2 | 24 jam | 0,059000 | 3 | 0,0132254 | 0,0076357 |
| | 48 jam | 0,057467 | 3 | 0,0041870 | 0,0024174 |
| Pair 3 | 48 jam | 0,057467 | 3 | 0,0041870 | 0,0024174 |
| | 72 jam | 0,055933 | 3 | 0,0087300 | 0,0050403 |

**Paired Samples Test**

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference Lower | Upper | | | |
| Pair 1 | 0 jam - 24 jam | -0,0147000 | 0,0129317 | 0,0074661 | -0,0468242 | 0,0174242 | -1,969 | 2 | 0,188 |
| Pair 2 | 24 jam - 48 | 0,0015333 | 0,0103938 | 0,0060009 | -0,0242863 | 0,0273529 | 0,256 | 2 | 0,822 |
| | | | 0,0103938 | 0,0060009 | -0,0242863 | 0,0273529 | 0,256 | 2 | 0,822 |

**Tests of Normality**

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| 0 jam | 0,330 | 3 | | 0,866 | 3 | 0,286 |
| 24 jam | 0,331 | 3 | | 0,865 | 3 | 0,281 |
| 48 jam | 0,234 | 3 | | 0,978 | 3 | 0,719 |
| 72 jam | 0,212 | 3 | | 0,990 | 3 | 0,813 |

a. Lilliefors Significance Correction

# T-Test

## Paired Samples Statistics

| | | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | 0 jam | 0,041667 | 3 | 0,0026858 | 0,0015506 |
| | 24 jam | 0,046700 | 3 | 0,0030643 | 0,0017692 |
| Pair 2 | 24 jam | 0,046700 | 3 | 0,0030643 | 0,0017692 |
| | 48 jam | 0,044350 | 3 | 0,0017692 | 0,0010214 |
| Pair 3 | 48 jam | 0,044350 | 3 | 0,0017692 | 0,0010214 |
| | 72 jam | 0,042000 | 3 | 0,0026627 | 0,0015373 |

**Paired Samples Test**

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference Lower | Upper | | | |
| Pair 1 | 0 jam - 24 jam | -0,0050333 | 0,0049803 | 0,0028754 | -0,0174051 | 0,0073384 | -1,750 | 2 | 0,222 |
| Pair 2 | 24 jam - 48 | 0,0023500 | 0,0022605 | 0,0013051 | -0,0032655 | 0,0079655 | 1,801 | 2 | 0,214 |
| | | | 0,0022605 | 0,0013051 | -0,0032655 | 0,0079655 | 1,801 | 2 | 0,214 |

Uji Viabilitas

**Descriptives**

Jumlah Sel

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| HG | 2 | 0,2603750 | 0,02315775 | 0,01637500 | 0,0523109 | 0,4684391 | 0,24400 | 0,27675 |
| LG | 2 | 0,1762500 | 0,01414214 | 0,01000000 | 0,0491880 | 0,3033120 | 0,16625 | 0,18625 |
| Fruk 12,5 | 2 | 0,2072500 | 0,02757716 | 0,01950000 | -0,0405210 | 0,4550210 | 0,18775 | 0,22675 |
| Fruk 25 | 2 | 0,2182500 | 0,00388909 | 0,00275000 | 0,1833079 | 0,2531921 | 0,21550 | 0,22100 |
| Psi 12,5 | 2 | 0,1693750 | 0,00689429 | 0,00487500 | 0,1074323 | 0,2313177 | 0,16450 | 0,17425 |
| Psi 25 | 2 | 0,2180000 | 0,01414214 | 0,01000000 | 0,0909380 | 0,3450620 | 0,20800 | 0,22800 |
| Total | 12 | 0,2082500 | 0,03391986 | 0,00979182 | 0,1866983 | 0,2298017 | 0,16450 | 0,27675 |

**NPar Tests**

**Kruskal-Wallis Test**

**Ranks**

| Sampel | | N | Mean Rank |
|---|---|---|---|
| Jumlah Sel | HG | 2 | 11,50 |
| | LG | 2 | 3,00 |
| | Fruk 12,5 | 2 | 7,00 |
| | Fruk 25 | 2 | 7,50 |
| | Psi 12,5 | 2 | 2,00 |
| | Psi 25 | 2 | 8,00 |
| | Total | 12 | |

**Test Statistics[a,b]**

| | Jumlah Sel |
|---|---|
| Chi-Square | 9,385 |
| df | 5 |
| | 0,047 |

pel

**One way**

**Descriptives**

| | | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Lower Bound | Upper Bound | | |
| SOD | HG | 2 | 1,0000 | 0,02828 | 0,02000 | 0,7459 | 1,2541 | 0,98 | 1,02 |
| | LG | 2 | 0,0300 | 0,00990 | 0,00700 | -0,0589 | 0,1189 | 0,02 | 0,04 |
| | Fruk1 | 2 | 0,0200 | 0,00707 | 0,00500 | -0,0435 | 0,0835 | 0,02 | 0,03 |
| | Fruk2 | 2 | 0,0550 | 0,01556 | 0,01100 | -0,0848 | 0,1948 | 0,04 | 0,07 |
| | Psi1 | 2 | 0,3200 | 0,02828 | 0,02000 | 0,0659 | 0,5741 | 0,30 | 0,34 |
| | Psi2 | 2 | 0,0400 | 0,00849 | 0,00600 | -0,0362 | 0,1162 | 0,03 | 0,05 |
| | Total | 12 | 0,2442 | 0,36968 | 0,10672 | 0,0093 | 0,4791 | 0,02 | 1,02 |
| GPx | HG | 2 | 1,0000 | 0,16971 | 0,12000 | -0,5247 | 2,5247 | 0,88 | 1,12 |
| | LG | 2 | 1,5000 | 0,09899 | 0,07000 | 0,6106 | 2,3894 | 1,43 | 1,57 |
| | Fruk1 | 2 | 1,1500 | 0,14142 | 0,10000 | -0,1206 | 2,4206 | 1,05 | 1,25 |
| | Fruk2 | 2 | 2,9000 | 0,07071 | 0,05000 | 2,2647 | 3,5353 | 2,85 | 2,95 |
| | Psi1 | 2 | 10,5700 | 0,12728 | 0,09000 | 9,4264 | 11,7136 | 10,48 | 10,66 |
| | Psi2 | 2 | 6,1500 | 0,21213 | 0,15000 | 4,2441 | 8,0559 | 6,00 | 6,30 |
| | Total | 12 | 3,8783 | 3,62676 | 1,04695 | 1,5740 | 6,1827 | 0,88 | 10,66 |
| CAT | HG | 2 | 1,0000 | 0,09899 | 0,07000 | 0,1106 | 1,8894 | 0,93 | 1,07 |
| | LG | 2 | 9,2900 | 0,41012 | 0,29000 | 5,6052 | 12,9748 | 9,00 | 9,58 |
| | Fruk1 | 2 | 9,4100 | 0,04243 | 0,03000 | 9,0288 | 9,7912 | 9,38 | 9,44 |
| | Fruk2 | 2 | 6,0430 | 0,00424 | 0,00300 | 6,0049 | 6,0811 | 6,04 | 6,05 |
| | Psi1 | 2 | 85,9850 | 8,46407 | 5,98500 | 9,9384 | 162,0316 | 80,00 | 91,97 |
| | Psi2 | 2 | 36,5600 | 0,08485 | 0,06000 | 35,7976 | 37,3224 | 36,50 | 36,62 |
| | Total | 12 | 24,7147 | 31,08185 | 8,97256 | 4,9662 | 44,4631 | 0,93 | 91,97 |

**ANOVA**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| SOD | Between Groups | 1,501 | 5 | 0,300 | 873,661 | 0,000 |
| | Within Groups | 0,002 | 6 | 0,000 | | |
| | Total | 1,503 | 11 | | | |
| GPx | Between Groups | 144,562 | 5 | 28,912 | 1390,021 | 0,000 |
| | Within Groups | 0,125 | 6 | 0,021 | | |
| | Total | 144,687 | 11 | | | |
| CAT | Between Groups | 10555,071 | 5 | 2111,014 | 176,340 | 0,000 |
| | Within Groups | 71,827 | 6 | 11,971 | | |
| | Total | 10626,898 | 11 | | | |

**Post Hoc Tests**

**Multiple Comparisons**

Tukey HSD

| Dependent Variable | | | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval Lower Bound | 95% Confidence Interval Upper Bound |
|---|---|---|---|---|---|---|---|
| SOD | HG | LG | .97000* | 0,01854 | 0,000 | 0,8962 | 1,0438 |
| | | Fruk1 | .98000* | 0,01854 | 0,000 | 0,9062 | 1,0538 |
| | | Fruk2 | .94500* | 0,01854 | 0,000 | 0,8712 | 1,0188 |
| | | Psi1 | .68000* | 0,01854 | 0,000 | 0,6062 | 0,7538 |
| | | Psi2 | .96000* | 0,01854 | 0,000 | 0,8862 | 1,0338 |
| | LG | HG | -.97000* | 0,01854 | 0,000 | -1,0438 | -0,8962 |
| | | Fruk1 | 0,01000 | 0,01854 | 0,992 | -0,0638 | 0,0838 |
| | | Fruk2 | -0,02500 | 0,01854 | 0,754 | -0,0988 | 0,0488 |
| | | Psi1 | -.29000* | 0,01854 | 0,000 | -0,3638 | -0,2162 |
| | | Psi2 | -0,01000 | 0,01854 | 0,992 | -0,0838 | 0,0638 |
| | Fruk1 | HG | -.98000* | 0,01854 | 0,000 | -1,0538 | -0,9062 |
| | | LG | -0,01000 | 0,01854 | 0,992 | -0,0838 | 0,0638 |
| | | Fruk2 | -0,03500 | 0,01854 | 0,484 | -0,1088 | 0,0388 |
| | | Psi1 | -.30000* | 0,01854 | 0,000 | -0,3738 | -0,2262 |
| | | Psi2 | -0,02000 | 0,01854 | 0,874 | -0,0938 | 0,0538 |
| | | | -.94500* | 0,01854 | 0,000 | -1,0188 | -0,8712 |
| | | | 0,02500 | 0,01854 | 0,754 | -0,0488 | 0,0988 |
| | | | 0,03500 | 0,01854 | 0,484 | -0,0388 | 0,1088 |
| | | | -.26500* | 0,01854 | 0,000 | -0,3388 | -0,1912 |
| | | | 0,01500 | 0,01854 | 0,955 | -0,0588 | 0,0888 |
| | | | -.68000* | 0,01854 | 0,000 | -0,7538 | -0,6062 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | LG | .29000* | 0,01854 | 0,000 | 0,2162 | 0,3638 |
| | | Fruk1 | .30000* | 0,01854 | 0,000 | 0,2262 | 0,3738 |
| | | Fruk2 | .26500* | 0,01854 | 0,000 | 0,1912 | 0,3388 |
| | | Psi2 | .28000* | 0,01854 | 0,000 | 0,2062 | 0,3538 |
| | Psi2 | HG | -.96000* | 0,01854 | 0,000 | -1,0338 | -0,8862 |
| | | LG | 0,01000 | 0,01854 | 0,992 | -0,0638 | 0,0838 |
| | | Fruk1 | 0,02000 | 0,01854 | 0,874 | -0,0538 | 0,0938 |
| | | Fruk2 | -0,01500 | 0,01854 | 0,955 | -0,0888 | 0,0588 |
| | | Psi1 | -.28000* | 0,01854 | 0,000 | -0,3538 | -0,2062 |
| GPx | HG | LG | -0,50000 | 0,14422 | 0,087 | -1,0740 | 0,0740 |
| | | Fruk1 | -0,15000 | 0,14422 | 0,888 | -0,7240 | 0,4240 |
| | | Fruk2 | -1.90000* | 0,14422 | 0,000 | -2,4740 | -1,3260 |
| | | Psi1 | -9.57000* | 0,14422 | 0,000 | -10,1440 | -8,9960 |
| | | Psi2 | -5.15000* | 0,14422 | 0,000 | -5,7240 | -4,5760 |
| | LG | HG | 0,50000 | 0,14422 | 0,087 | -0,0740 | 1,0740 |
| | | Fruk1 | 0,35000 | 0,14422 | 0,277 | -0,2240 | 0,9240 |
| | | Fruk2 | -1.40000* | 0,14422 | 0,001 | -1,9740 | -0,8260 |
| | | Psi1 | -9.07000* | 0,14422 | 0,000 | -9,6440 | -8,4960 |
| | | Psi2 | -4.65000* | 0,14422 | 0,000 | -5,2240 | -4,0760 |
| | Fruk1 | HG | 0,15000 | 0,14422 | 0,888 | -0,4240 | 0,7240 |
| | | LG | -0,35000 | 0,14422 | 0,277 | -0,9240 | 0,2240 |
| | | Fruk2 | -1.75000* | 0,14422 | 0,000 | -2,3240 | -1,1760 |
| | | Psi1 | -9.42000* | 0,14422 | 0,000 | -9,9940 | -8,8460 |
| | | Psi2 | -5.00000* | 0,14422 | 0,000 | -5,5740 | -4,4260 |
| | Fruk2 | HG | 1.90000* | 0,14422 | 0,000 | 1,3260 | 2,4740 |
| | | LG | 1.40000* | 0,14422 | 0,001 | 0,8260 | 1,9740 |
| | | Fruk1 | 1.75000* | 0,14422 | 0,000 | 1,1760 | 2,3240 |
| | | Psi1 | -7.67000* | 0,14422 | 0,000 | -8,2440 | -7,0960 |
| | | Psi2 | -3.25000* | 0,14422 | 0,000 | -3,8240 | -2,6760 |
| | Psi1 | HG | 9.57000* | 0,14422 | 0,000 | 8,9960 | 10,1440 |
| | | LG | 9.07000* | 0,14422 | 0,000 | 8,4960 | 9,6440 |
| | | Fruk1 | 9.42000* | 0,14422 | 0,000 | 8,8460 | 9,9940 |
| | | Fruk2 | 7.67000* | 0,14422 | 0,000 | 7,0960 | 8,2440 |
| | | Psi2 | 4.42000* | 0,14422 | 0,000 | 3,8460 | 4,9940 |
| | Psi2 | HG | 5.15000* | 0,14422 | 0,000 | 4,5760 | 5,7240 |
| | | LG | 4.65000* | 0,14422 | 0,000 | 4,0760 | 5,2240 |
| | | | 5.00000* | 0,14422 | 0,000 | 4,4260 | 5,5740 |
| | | | 3.25000* | 0,14422 | 0,000 | 2,6760 | 3,8240 |
| | | | -4.42000* | 0,14422 | 0,000 | -4,9940 | -3,8460 |
| | | | -8,29000 | 3,45995 | 0,287 | -22,0601 | 5,4801 |
| | | | -8,41000 | 3,45995 | 0,276 | -22,1801 | 5,3601 |
| | | | -5,04300 | 3,45995 | 0,699 | -18,8131 | 8,7271 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Psi1 | -84.98500* | 3,45995 | 0,000 | -98,7551 | -71,2149 |
| | Psi2 | -35.56000* | 3,45995 | 0,000 | -49,3301 | -21,7899 |
| LG | HG | 8,29000 | 3,45995 | 0,287 | -5,4801 | 22,0601 |
| | Fruk1 | -0,12000 | 3,45995 | 1,000 | -13,8901 | 13,6501 |
| | Fruk2 | 3,24700 | 3,45995 | 0,922 | -10,5231 | 17,0171 |
| | Psi1 | -76.69500* | 3,45995 | 0,000 | -90,4651 | -62,9249 |
| | Psi2 | -27.27000* | 3,45995 | 0,002 | -41,0401 | -13,4999 |
| Fruk1 | HG | 8,41000 | 3,45995 | 0,276 | -5,3601 | 22,1801 |
| | LG | 0,12000 | 3,45995 | 1,000 | -13,6501 | 13,8901 |
| | Fruk2 | 3,36700 | 3,45995 | 0,911 | -10,4031 | 17,1371 |
| | Psi1 | -76.57500* | 3,45995 | 0,000 | -90,3451 | -62,8049 |
| | Psi2 | -27.15000* | 3,45995 | 0,002 | -40,9201 | -13,3799 |
| Fruk2 | HG | 5,04300 | 3,45995 | 0,699 | -8,7271 | 18,8131 |
| | LG | -3,24700 | 3,45995 | 0,922 | -17,0171 | 10,5231 |
| | Fruk1 | -3,36700 | 3,45995 | 0,911 | -17,1371 | 10,4031 |
| | Psi1 | -79.94200* | 3,45995 | 0,000 | -93,7121 | -66,1719 |
| | Psi2 | -30.51700* | 3,45995 | 0,001 | -44,2871 | -16,7469 |
| Psi1 | HG | 84.98500* | 3,45995 | 0,000 | 71,2149 | 98,7551 |
| | LG | 76.69500* | 3,45995 | 0,000 | 62,9249 | 90,4651 |
| | Fruk1 | 76.57500* | 3,45995 | 0,000 | 62,8049 | 90,3451 |
| | Fruk2 | 79.94200* | 3,45995 | 0,000 | 66,1719 | 93,7121 |
| | Psi2 | 49.42500* | 3,45995 | 0,000 | 35,6549 | 63,1951 |
| Psi2 | HG | 35.56000* | 3,45995 | 0,000 | 21,7899 | 49,3301 |
| | LG | 27.27000* | 3,45995 | 0,002 | 13,4999 | 41,0401 |
| | Fruk1 | 27.15000* | 3,45995 | 0,002 | 13,3799 | 40,9201 |
| | Fruk2 | 30.51700* | 3,45995 | 0,001 | 16,7469 | 44,2871 |
| | | -49.42500* | 3,45995 | 0,000 | -63,1951 | -35,6549 |

ignificant at the 0.05 level.

**Homogeneous Subsets**

**SOD**

Tukey HSD[a]

| Sampel | N | Subset for alpha = 0.05 | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| Fruk1 | 2 | 0,0200 | | |
| LG | 2 | 0,0300 | | |
| Psi2 | 2 | 0,0400 | | |
| Fruk2 | 2 | 0,0550 | | |
| Psi1 | 2 | | 0,3200 | |
| HG | 2 | | | 1,0000 |
| Sig. | | 0,484 | 1,000 | 1,000 |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

**GPx**

Tukey HSD[a]

| Sampel | N | Subset for alpha = 0.05 | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| HG | 2 | 1,0000 | | | |
| Fruk1 | 2 | 1,1500 | | | |
| LG | 2 | 1,5000 | | | |
| Fruk2 | 2 | | 2,9000 | | |
| Psi2 | 2 | | | 6,1500 | |
| Psi1 | 2 | | | | 10,5700 |
| Sig. | | 0,087 | 1,000 | 1,000 | 1,000 |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

**CAT**

Tukey HSD[a]

| Sampel | N | Subset for alpha = 0.05 | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| HG | 2 | 1,0000 | | |
| Fruk2 | 2 | 6,0430 | | |
| | 2 | 9,2900 | | |
| | 2 | 9,4100 | | |
| | 2 | | 36,5600 | |
| | 2 | | | 85,9850 |
| | | 0,276 | 1,000 | 1,000 |

s in homogeneous subsets are displayed.

ic Mean Sample Size = 2.000.