

## Daftar Pustaka

- Abdelkarim, D. O., Mohamed Ahmed, I. A., Ahmed, K. A., Younis, M., Yehia, H. M., Zein El-Abedein, A. I., & Alhamdan, A. (2022). Extending the Shelf Life of Fresh Khalal Barhi Dates via an Optimized Postharvest Ultrasonic Treatment. *Plants*, 11(15), 1–17. <https://doi.org/10.3390/plants11152029>
- Agustina, M., Yuviska, I. A., Putri, R. D., & Evayanti, Y. (2021). the Effect of Giving Curma on Asi Production in Number Women. *JOURNAL OF Community Health Issues*, 1(April), 1–5.
- Alwafi, D. I. (2020). *FORMULASI KOMBUCHA KURMA SUKKARI (Phoenix dactylifera L.) (KAJIAN KONSENTRASI KURMA: GULA TERHADAP AKTIVITAS ANTIOKSIDAN DAN KARAKTERISTIK KIMIAWI)*. Universitas Brawijaya.
- Amalia, A., & Tjiptaningrum, A. (2016). Diagnosis dan Tatalaksana Anemia Defisiensi Besi Diagnosis and Management of Iron Deficiency Anemia. *Majority*, 5, 166–169.
- Apriyanti, D., Lathifah, N. S., & Utami, V. W. (2022). Pemberian Buah Kurma Terhadap Peningkatan Kadar Hemoglobin Pada Remaja Putri. *Midwifery Journal*, 2(1), 31–36. <http://www.ejurnalmalahayati.ac.id/index.php/MJ/article/view/3391>
- Bakri, S. H., Kebidanan, A., & Makassar, M. (2021). *PENGARUH PEMBERIAN MAKANAN TAMBAHAN ( MT ) TERHADAP PENINGKATAN BERAT BADAN , KADAR HEMOGLOBIN ( Hb ) DAN*. 4(1), 19–23.
- Cholifah, N., & Anisa, W. (2018). *APLIKASI PEMBERIAN MADU TERHADAP PENINGKATAN HEMOGLOBIN ( HB ) PADA REMAJA PUTRI YANG MENGALAMI ANEMIA*. September 2006, 533–539.
- Dagne, S., Menber, Y., Wassihun, Y., Dires, G., Abera, A., Adane, S., Linger, M., & Haile, Z. T. (2021). Chronic Energy Deficiency and Its Determinant Factors among Adults Aged 18-59 Years in Ethiopia: A Cross-Sectional Study. *Journal of Nutrition and Metabolism*, 2021. <https://doi.org/10.1155/2021/8850241>
- Dameuli, S., Ariyadi, T., & Nuroini, F. (2018). Perbedaan Kadar Hemoglobin Menggunakan Hb Meter, Spektrofotomet Er Dan Hematology Analyzer Pada Sampel Segera Diperiksa Dan Ditunda 20 Jam. *Jurnal Program Studi D IV Analisis Kesehatan Fakultas Ilmu Keperawatan Dan Kesehatan Universitas Muhammadiyah Semarang*, 1–6. <http://repository.unimus.ac.id>
- Daysema, S. D., Warouw, S. M., & Rompis, J. (2016). *Gambaran prevalensi malaria pada anak SD YAPIS 2 di Desa Maro Kecamatan Merauke Kabupaten Merauke Papua*. 4, 2–6.
- Dewanti, A. M. (2019). *PENGARUH KONSENTRASI SARI LEMON (Citrus medica var lemon) DAN YOGURT KEDELAI TERHADAP KARAKTERISTIK SMOOTHIES BUAH BISBUL (Diospyros blancoi A.DC) [UNIVERSITAS PASUNDAN BANDUNG]*. <https://doi.org/10.31227/osf.io/n4f68>
- Fadila, F., Wasita, B., & Dirgahayu, P. (2018). Pengaruh Kurma (Phoenix Dactylifera L.) Terhadap Berat Badan Tikus Putih Jantan (Rattus Novergicus). *Jurnal Kesehatan Kusuma Husada*, 1, 181–188. <https://doi.org/10.34035/jk.v9i2.278>

- Fajriyah, N. N., & Fitriyanto, M. L. H. (2016). Gambaran Tingkat Pengetahuan Tentang Anemia Pada Remaja Putri. *Jurnal Ilmu Kesehatan (JIK)*, IX. <https://doi.org/10.5694/j.1326-5377.1950.tb80301.x>
- Firdaus, A. M. Yunanta. (2019). PENGETAHUAN DAN SIKAP REMAJA TERHADAP PENGGUNAAN NAPZA DI SEKOLAH MENENGAH ATAS DI KOTA SEMARANG. *Jurnal Keperawatan Jiwa*, 6(1), 1. <https://doi.org/10.26714/jkj.6.1.2018.1-7>
- Fitria, & Muwaidah. (2020). PENGARUH PEMBERIAN KURMA DAN MADU TERHADAP PENINGKATAN HB PADA REMAJA PUTRI. *Infokes: Info Kesehatan*, 10(2).
- Fitriani, As'ad, S., Wardihan, A., Ahmad, M., Usman, A. N., & Hidayanty, H. (2021). PENAMBAHAN KURMA SUKKARI (*phoenix dactylifera L*) dan SUPLEMENTASI FE DALAM MENINGKATKAN KADAR HEMOGLOBIN PADA REMAJA PUTRI DENGAN ANEMIA. 4(1), 6.
- Ghnimi, S., Umer, S., Karim, A., & Kamal-Eldin, A. (2017). Date fruit (*Phoenix dactylifera L.*): An underutilized food seeking industrial valorization. *NFS Journal*, 6, 1–10. <https://doi.org/10.1016/j.nfs.2016.12.001>
- Handayani, R., Dhasefa, D. A., Sari, M. W., Sukmawan, M. S., & Rofiah, N. (2020). Pembuatan Smoothies Mangga Sebagai Imun Booster Bagi Warga Kota Kulon Kabupaten Garut. *Pengabdian Kepada Masyarakat*, 3, 59–63. <https://www.jurnal.polsri.ac.id/index.php/aptekmas/article/view/2962>
- Hayati, S. (2020). UJI EFEKTIVITAS EKSTRAK BIJI KURMA AJWA (*Phoenix dactylifera L*) TERHADAP PENINGKATAN KADAR HEMOGLOBIN PADA MENCIT PUTIH JANTAN (*Mus musculus*). <http://repository.um-palembang.ac.id/id/eprint/12068/>
- Hidayah, M., & Nurlinda, A. (2018). PENGARUH PEMBERIAN KURMA AJWA (*Phoenix dactylifera L*) TERHADAP PERUBAHAN BERAT BADAN IBU HAMIL PREHIPERTENSI DI RSIA MASYITA DAN PUSKESMAS KASSI-KASSI MAKASSAR. *Jurnal Ilmiah Kesehatan Diagnosis Volume 12 Nomor 5 Tahun 2018*, 12, 537–541.
- Hustagol, manna wulandari. (2019). Pengaruh Pemberian Stick Ikan Tamban Terhadap Peningkatan Status Gizi (Imt Dan Lila) Remaja Putri Yang Underweight Di SMA Muhammadiyah Lubuk Pakam Deli Serdang. *Kementerian Kesehatan Republik Indonesia Politeknik Kesehatan Medan*.
- Indartanti, D., & Kartini, A. (2014). Hubungan Status Gizi dengan Kejadian Anemia pada Remaja Putri. *Journal of Nutrition College*, 3(2), 33–39. <https://doi.org/10.36998/jkmm.v8i2.108>
- Irma, I., Hadju, V., & Zainal, Z. (2019). Pengaruh Konsumsi Nutri Rice Terhadap Kadar Albumin Berat Badan Dan Lingkar Lengan Atas (Lila) Pada Remaja Kurang Energi Kronik (Kek) Di Pondok Pesantren Putri Yatama Mandiri Kabupaten Gowa. *Jurnal Kesehatan Masyarakat Maritim*, 2(1), 121–131. <https://doi.org/10.30597/jkmm.v2i1.10066>
- Kalsum, U., & Halim, R. (2016). KEBIASAAN SARAPAN PAGI BERHUBUNGAN DENGAN KEJADIAN ANEMIA PADA REMAJA DI SMA NEGERI 8 MUARO JAMBI. 18(1), 09–19.
- KEMENKES, R. (2018). PROFIL KESEHATAN 2017. In *Ministry of Health Indonesia*.

- Kemenkes RI. (2019). Angka Kecukupan Gizi Masyarakat Indonesia. *Menteri Kesehatan Republik Indonesia Peraturan Menteri Kesehatan Republik Indonesia, Nomor 65(879)*, 2004–2006.
- Kresnadipayana, D., & Lestari, D. (2017). Penentuan Kadar Boraks pada Kurma (*Phoenix dactylifera*) dengan metode Spektrofotometri UV-vis. *Jurnal Wiyata*, 4(1), 23–30.
- Krishnaa, P. K., & Priya, A. J. (2017). Effect of Dates in Milk on Haemoglobin Level of Blood. *Journal of Food Composition and Analysis*, 9(9), 1536–1537. <https://doi.org/10.1006/jfca.1999.0867>
- Kumalasari, D., Kameliawati, F., Mukhlis, H., & Kristanti, D. A. (2019). *Pola Menstruasi dengan Kejadian Anemia pada Remaja Desi*. 1, 187–192.
- Kurniasih, E., Kuswari, M., & Nuzrina, R. (2018). Hubungan Asupan Zat Gizi Maro (Protein, Lemak, Karbohidrat) Dan Zat Gizi Mikro (Zat Besi, Asam Folat, Vitamin B12) Dengan Kadar Hemoglobin Atlet Futsal Putri Universitas Pendidikan Indonesia Bandung. *Program Studi Gizi, Fakultas Ilmu-Ilmu Kesehatan, Universitas Esa Unggul Jakarta Barat*, 12, 1–17.
- Lestari, D. P., As'ad, S., Ahmad, M., Usman, A. N., Hidayanti, H., & Rafi'a, S. (2021). Dates Innovation to Increase Adolescent Hemoglobin Levels. *Women and Societal Perspective On Quality of Life (WOSQUAL) 2021*, 3, 10.
- LPB, L. P. B. P. dan P. K. (2018). *Laporan Provinsi Papua Barat Riskesdas 2018*.
- Marwari, R. J., Ekawati, E. R., & Santoso, S. D. (2022). Pada Pasien Gagal Ginjal Kronik Pre Dan Post. *Jurnal SainHealth*, 6(2), 39–44.
- Mawaddah, S., & Vopy. (2020). pengaruh Pemberian Sari Kurma Terhadap Peningkatan Kadar Hemoglobin Pada Remaja Putri Yang Mengalami Anemia. *Media Informasi*, 15(2), 160–164. <https://doi.org/10.37160/bmi.v15i2.385>
- Mawitjere, M. C. L., Amisi, M. D., & Sanggelorang, Y. (2021). Gambaran asupan zat gizi makro mahasiswa semester IV Fakultas Kesehatan Masyarakat Universitas Sam Ratulangu saat pembatasan pandemi Covid-19. *Jurnal Kesehatan Masyarakat*, 10(2), 1–11.
- Monika, H., Djogo, A., Betan, Y., & Letor, Y. M. K. (2021). Prevalensi Anemia Remaja Putri Selama Masa Pandemi Covid -19 Di Kota Kupang. *JURNAL ILMIAH OBSGIN : Jurnal Ilmiah Ilmu Kebidanan & Kandungan P-ISSN : 1979-3340 e-ISSN : 2685-7987*, 13(4), 86–92. <https://stikes-nhm.e-journal.id/JOB/article/view/562>
- Muhammad, A. (2012). *RANCANG BANGUN SISTEM PENGUKURAN KADAR HEMOGLOBIN DARAH BERBASIS MIKROKONTROLER*.
- Mukkadas, H., Cristian B, I. M., & Salma, W. O. (2021). Analysis of the Characteristics of Chronic Energy Deficiency in Pregnant Women during the Covid 19 Pandemic. *Jurnal Kesehatan Komunitas*, 7(2), 170–175. <https://doi.org/10.25311/keskom.vol7.iss2.941>
- Mutmaina, R. (2021). *PENGARUH PEMBERIAN MADU KELOR TERHADAP KADAR HEMOGLOBIN DAN INDEKS ERITROSIT PADA IBU HAMIL ANEMIA DI PUSKESMAS TURIKALE DAN PUSKESMAS LAU KABUPATEN MAROS*.
- Mutmainnah, Patimah, S., & Septiyanti. (2021). Hubungan kurang energi kronik (kek) dan wasting dengan kejadian anemia pada remaja putri di kabupaten majene. 1(5),

561–569.

- Ningrum, Y. S., Nurhayati, E., & Aryani, F. (2018). *HUBUNGAN ANTARA KEKURANGAN ENERGI KRONIS (KEK) DENGAN ANEMIA PADA REMAJA DI SMK KESEHATAN BANTUL*.
- Norsiah, W. (2015). PERBEDAAN KADAR HEMOGLOBIN METODE SIANMETHEMOGLOBIN DENGAN DAN TANPA SENTRIFUGASI PADA SAMPEL LEUKOSITOSIS. *Jurnal Analis Kesehatan*, 1(April 2014), 72–83.
- Novita, R. A., Mutiyani, M., Moviana, Y., Isdiany, N., Qoltsum, A., & Nurrofawansari. (2019). Peranan Smoothies Kurma Terhadap Tekanan Darah Penderita Prehipertensi. *Jurnal Riset Kesehatan Poltekkes Kemenkes Bandung*, 11, 1–12.
- Novitasari, S. (2014). *HUBUNGAN TINGKAT ASUPAN PROTEIN, ZAT BESI, VITAMIN C DAN SENG DENGAN KADAR HEMOGLOBIN PADA REMAJA PUTRI DI SMA BATIK 1 SURAKARTA*.
- Ome-Kaius, M., Unger, H. W., Singirok, D., Wangnapi, R. A., Hanieh, S., Umbers, A. J., Elizah, J., Siba, P., Mueller, I., & Rogerson, S. J. (2015). Determining effects of areca (betel) nut chewing in a prospective cohort of pregnant women in Madang Province, Papua New Guinea. *BMC Pregnancy and Childbirth*, 15(1), 1–9. <https://doi.org/10.1186/s12884-015-0615-z>
- Paramita, F., Katmawanti, S., Kurniawan, A., & Komariyah, P. N. (2020). Analisis Sensori Smoothies dengan Penambahan Chia Seeds sebagai Pangan Tinggi Serat. *Indonesian Journal of Public Health*, 5(2), 90–97.
- Permatasari, W. M. (2016). Hubungan antara Status Gizi, Siklus dan Lama Menstruasi dengan Kejadian Anemia Remaja Putri di SMA Negeri 3 Surabaya. *Perpustakaan Universitas Airlangga*, 1–108.
- Pulungan, Z. S. A., Ahmady, & Purnomo, E. (2021). Kurma Sebagai Alternatif untuk Meningkatkan Kadar Hemoglobin Ibu Hamil dengan Anemia Zulhaini Sartika Aliaman Pulungan. *Jurnal Penelitian Kesehatan Suara Forikes*, 12(4), 337–340. <http://dx.doi.org/10.33846/sf12327>
- Purba, R. B., Rumagit, F. A., Laoh, J. M., & Sineke, M. E. (2022). Asupan Zat Gizi dan Pendapatan Keluarga dengan Kejadian Kurang Energi Kronik (KEK) pada Siswa Putri di SMA N 1 Belang. *Prosiding Semnas*, 1(2), 430–440.
- Purmilasari, L. B. (2018). PERBEDAAN PENINGKATAN KADAR HEMOGLOBIN SEBELUM DAN SESUDAH MENKONSUMSI KURMA PADA MAHASISWI PSIK UNIVERSITAS MUHAMMADIYAH MALANG. In *University of Muhammadiyah Malang*. University of Muhammadiyah Malang.
- Putri, M. C., Angraini, D. I., & Hanriko, R. (2019). Hubungan Asupan Makan dengan Kejadian Kurang Energi Kronis (KEK) pada Wanita Usia Subur (WUS) di Kecamatan Terbanggi Besar Kabupaten Lampung Tengah. *Journal Agromedicine*, 6(1), 105–113. <https://juke.kedokteran.unila.ac.id/index.php/agro/article/view/2260/pdf>
- Rahayu, D. (2018). *Pengaruh Infeksi Kecacingan terhadap Kadar Hemoglobin pada Remaja Putri dengan Anemia*. 1(2).
- Rahmadita, Z. A. (2019). *PENGARUH PEMBERIAN SARI KACANG HIJAU TERHADAP KADAR HEMOGLOBIN PADA REMAJA PUTRI*.

- Resmi, D. C., & Fibrinika Tuta Setiani. (2020). Literatur Review : Penerapan Terapi Non Farmakologis Terhadap Peningkatan Kadar Hemoglobin Pada Remaja Putri Dengan Anemia. *Jurnal Ilmiah Kesehatan*, 44–52.
- Restuti, A. N., & Susindra, Y. (2017). Hubungan Antara Asupan Zat Gizi Dan Status Gizi Dengan Kejadian Anemia Pada Remaja Putri. *Jurnal Ilmiah Inovasi*, 16(3), 74–80. <https://doi.org/10.25047/jii.v16i3.305>
- Roosley, I. P. T. (2016). Strategi dalam penanggulangan pencegahan anemia pada kehamilan. *Jurnal Ilmiah Widya*, 3(3), 1–9.
- Safitri, & Julaecha. (2021a). *Konsumsi Buah Kurma Meningkatkan Kadar*. 6(1), 127–134.
- Safitri, & Julaecha. (2021b). KONSUMSI BUAH KURMA MENINGKATKAN KADAR HEMOGLOBIN PADA REMAJA PUTRI. *Jurnal Endurance : Kajian Ilmiah Problema Kesehatan*, 6(1), 127–134.
- Sarumaha, O. (2018). Pengaruh Pemberian Siomay Ikan Gabus Terhadap Status Gizi (Imt Dan Lila) Pada Wanita Usia Subur Yang Kekurangan Energi Kronik Di Kelurahan Paluh Kemiri. *Politeknik Kesehatan Medan*, 13(1), 1689–1699.
- Satriani. (2018). Analisis Determinan Anemia pada Remaja Putri (15-18 Tahun) di Kecamatan Tamalate Kabupaten Jeneponto. *Tesis*, 1–179.
- SDKI. (2017). *Survei Demografi dan Kesehatan Indonesia 2017*.
- Sello, L., Mappaware, Kn. A., Aminuddin, Asni, S. N., Nilawati, A., & Latief, S. (2020). *Pengaruh Pemberian Kurma Ajwa ( Phoenix Dactylifera L ) Terhadap Hasil Luaran Perinatal Pada Wanita Risiko Preeklampsia*. 3(3), 267–272.
- Setiawan, A., Merta, I. W., Sudarmanto, I. G., Denpasar, P., Teknologi, J., & Medis, L. (2019). Gambaran Indeks Eritrosit Dalam Penentuan Jenis Anemia Pada Penderita Gagal Ginjal Kronik Di Rsud Sanjiwani Gianyar. *Ejournal.Poltekkes-Denpasar.Ac.Id*, 7(2), 130–137. <http://ejournal.poltekkes-denpasar.ac.id/index.php/M>
- Setiyawan, & Windyastuti, E. (2018). Pengaruh Jus Buah Kurma Terhadap Kadar Hemoglobin Dan Jumlah Sel Darah Pada Pasien Kanker Paru Dengan Kemoterapi. *Profesi (Profesional Islam): Media Publikasi Penelitian*, 15(2), 18. <https://doi.org/10.26576/profesi.249>
- Sheikh, B. Y., Zihad, S. M. N. K., Sifat, N., Uddin, S. J., Shilpi, J. A., Hamdi, O. A. A., Hossain, H., Rouf, R., & Jahan, I. A. (2016). Comparative study of neuropharmacological, analgesic properties and phenolic profile of Ajwah, Safawy and Sukkari cultivars of date palm (*Phoenix dactylifera*). *Oriental Pharmacy and Experimental Medicine*, 16(3), 175–183. <https://doi.org/10.1007/s13596-016-0239-5>
- Sholica, C. A., & Muniroh, L. (2019). HUBUNGAN ASUPAN ZAT BESI , PROTEIN , VITAMIN C DAN POLA MENSTRUASI DENGAN KADAR HEMOGLOBIN PADA REMAJA PUTRI. *Media Gizi Indonesia*, 14(2), 147–153.
- Siddeeg, A., Zeng, X. A., Ammar, A. F., & Han, Z. (2019). Sugar profile, volatile compounds, composition and antioxidant activity of Sukkari date palm fruit. *Journal of Food Science and Technology*, 56(2), 754–762. <https://doi.org/10.1007/s13197-018-3534-y>

- Simanjuntak, T. P., & Tallesang, C. N. (2018). Analisis Kadar Hemoglobin Tikus Putih Betina (*Rattus norvegicus*) Sebelum dan Sesudah Intervensi Pemberian Ekstrak Buah Pinang (*Areca catechu* L.). *Bunga Rampai Saintifika Fk Uki (Nomor 7)*, 25–30. <http://repository.uki.ac.id/967>
- Sosa-Moreno, A., Reinoso-Gonzalez, S., & Mendez, M. A. (2020). Anemia in women of reproductive age in Ecuador: Data from a national survey. *PLoS ONE*, 15(9 September 2020), 1–15. <https://doi.org/10.1371/journal.pone.0239585>
- Sudaryono, T. (2017). Rancang bangun alat pengukur kalori makanan pintar berbasis smartphone android. *Universitas Muhammadiyah Surakarta*.
- Syafira, D. (2022). *Efektifitas Temulawak dan Madu Terhadap perubahan nafsu makan Pada An. R Di PMB Yunita Vero Miza Amd. Keb Bandar Lampung*. 14, 1–23.
- Ta'ati, S. (2013). *HUBUNGAN ANTARA PENYAKIT MALARIA DENGAN KEJADIAN ANEMIA PADA BALITA DI PUSKESMAS WANGGAR KABUPATEN NABIRE PAPUA*.
- Telisa, I., & Eliza, E. (2020). Asupan zat gizi makro, asupan zat besi, kadar haemoglobin dan risiko kurang energi kronis pada remaja putri. *Action: Aceh Nutrition Journal*, 5(1), 80. <https://doi.org/10.30867/action.v5i1.241>
- Utami, N., & Graharti, R. (2017a). Kurma (*Phoenix dactylifera*) dalam Terapi Anemia Defisiensi Besi Dates in The treatment of Iron-Deficiency Anemia. *Jurnal Kedokteran Universitas Lampung*, 1(3), 591–597. <http://juke.kedokteran.unila.ac.id/index.php/JK/article/view/1726/0>
- Utami, N., & Graharti, R. (2017b). Kurma (*Phoenix dactylifera*) dalam Terapi Anemia Defisiensi Besi Dates in The treatment of Iron-Deficiency Anemia. *Jurnal Kedokteran Universitas Lampung*, 1, 591–597.
- Wahyuni, E. S. (2021). Pengaruh Suplementasi Fe dan Vitamin C terhadap Hemoglobin dan Indeks Eritrosit Remaja Putri. *Jurnal Kesehatan*, 12(2), 162. <https://doi.org/10.26630/jk.v12i2.2482>
- Wati, S. W., Sulistiani, R. P., & Ayuningtyas, R. A. (2022). Hubungan Asupan Zat Besi , Protein , Vitamin C dan Status Gizi dengan Kadar Hemoglobin pada Mahasiswa Universitas Muhammadiyah Semarang. *Prosiding Seminar Nasional Unimus*, 5, 1367–1376.
- WHO. (2021). Global Nutrition Report. In *Global Nutrition Report* (Issue June). [http://www.segeplan.gob.gt/2.0/index.php?option=com\\_content&view=article&id=472&Itemid=472](http://www.segeplan.gob.gt/2.0/index.php?option=com_content&view=article&id=472&Itemid=472)
- Widhiyanti, F., Dewi, Y. L. R., & Qadrijati, I. (2020). Path Analysis on the Fad Diets and other Factors Affecting the Risk of Chronic Energy Deficiency among Adolescent Females at the Boarding School. *Journal of Maternal and Child Health*, 5(3), 251–264. <https://doi.org/10.26911/thejmch.2020.05.03.04>
- Widowati, R., Kundaryanti, R., & Lestari, P. P. (2019). *Pengaruh Pemberian Sari Kurma Terhadap Peningkatan Kadar Hemoglobin Ibu Hamil*. 5(2), 60–65.
- Widya Larasati, E. (2018). Hubungan antara Kekurangan Energi Kronis (KEK) terhadap Kejadian Anemia pada Ibu Hamil di RSKDIA Siti Fatimah Makassar 2018. *Jurnal Kesehatan Delima Pelamonia*, 2(2), 131–134. <https://doi.org/10.37337/jkdp.v2i2.79>
- Wubie, A., Seid, O., Eshetie, S., Dagne, S., Member, Y., Wasihun, Y., & Petrucka, P.

(2020). Determinants of chronic energy deficiency among non-pregnant and non-lactating women of reproductive age in rural Kebeles of Dera District, North West Ethiopia, 2019: Unmatched case control study. *PLoS ONE*, *15*(10 October), 1–12. <https://doi.org/10.1371/journal.pone.0241341>

Zaki, I., & Sari, H. P. (2019). Edukasi Gizi Berbasis Media Sosial Meningkatkan Pengetahuan Dan Asupan Energi- Protein Remaja Putri Dengan Kurang Energi Kronik (Kek). *Gizi Indonesia*, *42*(2), 111. <https://doi.org/10.36457/gizindo.v42i2.469>

## LEMBAR REKOMENDASI PERSETUJUAN ETIK

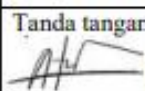



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN  
RISET, DAN TEKNOLOGI  
UNIVERSITAS HASANUDDIN  
FAKULTAS KESEHATAN MASYARAKAT  
Jln. Perintis Kemerdekaan Km. 10 Makassar 90245, Telp. (0411) 585658,  
E-mail : [fkunhas@gmail.com](mailto:fkunhas@gmail.com), website: <https://fkunhas.ac.id/>

**REKOMENDASI PERSETUJUAN ETIK**Nomor : **12132/UN4.14.1/TP.01.02/2022**

Tanggal : 17 Oktober 2022

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

|                                   |  |   |  |
|-----------------------------------|--|---|--|
| No. Protokol                      | 101022092268   | No. Sponsor Protokol  |  |
| Peneliti Utama                    | Dyan Puji Lestari  | Sponsor   | Pribadi  |
| Judul Peneliti                    | <b>Pengaruh Smoothies Kurma pada Remaja Dengan KEK (Kekurangan Energi Kronis) dan Anemia di Prodi D-III Kebidanan Manokwari Tahun 2022</b> |   |  |
| No. Versi Protokol                | 1  | Tanggal Versi   | 10 Oktober 2022  |
| No. Versi PSP                     | 1  | Tanggal Versi   | 10 Oktober 2022  |
| Tempat Penelitian                 | <b>Prodi D-III Kebidanan Manokwari</b>   |   |  |
| Judul Review                      | <input type="checkbox"/> Exempted<br><input checked="" type="checkbox"/> Expedited<br><input type="checkbox"/> Fullboard                   | Masa Berlaku<br><b>17 Oktober 2022 Sampai 17 Oktober 2023</b> | Frekuensi review lanjutan  |
| Ketua Komisi Etik Penelitian      | Nama :<br>Prof.dr. Veni Hadju, M.Sc, Ph.D  | Tanda tangan  | <br>Tanggal<br>17 Oktober 2022 |
| Sekretaris komisi Etik Penelitian | Nama :<br>Dr. Wahiduddin, SKM., M.Kes  | Tanda tangan  | <br>Tanggal<br>17 Oktober 2022 |

Kewajiban Peneliti Utama :

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



## SURAT IZIN PENELITIAN DARI FAKULTAS



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,  
RISET DAN TEKNOLOGI  
UNIVERSITAS HASANUDDIN  
SEKOLAH PASCASARJANA

Jalan Perintis Kemerdekaan km. 10 Makassar 90245 Telp.: (0411) 585034, 585036  
Fax.: (0411) 585868, E-mail: [info@pasca.unhas.ac.id](mailto:info@pasca.unhas.ac.id), <http://pasca.unhas.ac.id>

---

Nomor : 5680/UN4.20.1/PT.01.04/2022 13 Oktober 2022  
Perihal : Permohonan Izin Penelitian

Yth. Direktur Poltekkes Kemenkes Sorong  
Papua Barat

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

Nama : Dyan Puji Lestari  
Nomor Pokok : P102202060  
Program Pendidikan : Magister (S2)  
Program Studi : Ilmu Kebidanan

Bermaksud melakukan penelitian dalam rangka persiapan penulisan tesis terkait dengan judul "Pengaruh smoothies kurma pada remaja dengan KEK (Kekurangan Energi Kronis) dan anemia di Prodi D-III Kebidanan Manokwari Tahun 2022".

Sehubungan dengan hal tersebut, mohon kiranya yang bersangkutan diberikan izin untuk melakukan penelitian di instansi yang Bapak/Ibu pimpin.

Atas perkenan dan kerjasamanya diucapkan terima kasih.

an, Dekan  
Wakil Dekan Bidang Akademik dan  
Kemahasiswaan



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

Tembusan Yth:

1. Dekan SPs Unhas "sebagai laporan";
2. Mahasiswa yang bersangkutan;
3. Arsip.

**SURAT KETERANGAN TELAH SELESAI MELAKUKAN PENELITIAN**



**KEMENTERIAN KESEHATAN REPUBLIK INDONESIA  
DIREKTORAT JENDRAL TENAGA KESEHATAN  
POLITEKNIK KESEHATAN KEMENKES SORONG  
PROGRAM STUDI DIII KEBIDANAN MANOKWARI**

Alamat : Jln. Stamef Riyadi Kampung Ambon Atas. ☎ (0986) 214012, fax. 211457, - Manokwari Prov. Papua Barat 98311



Manokwari, 22 Desember 2022

Nomor : UM.01.05/V.03.2/ 521 /2022  
Lampiran : -  
Perihal : Surat Keterangan Telah Selesai Penelitian

Kepada Yth :  
Ketua Program Studi S2 Ilmu Kebidanan  
Sekolah Pascasarjana Universitas Hasanuddin  
Di –  
Tempat

Dengan hormat,

Sehubungan dengan adanya surat pengantar dari sekolah pascasarjana ilmu kebidanan Universitas Hasanuddin Makassar atas nama :

Nama : Dyan Puji Lestari  
NIM : P102202060  
Jurusan : S2 Ilmu Kebidanan  
Judul Penelitian : Pengaruh *Smoothies* Kurma Pada Remaja Dengan KEK (Kekurangan Energi Kronis) Dan Anemia di Prodi D-III Kebidanan Manokwari Tahun 2022

Dengan ini kami menyampaikan bahwa mahasiswa/i tersebut telah menyelesaikan penelitian di Prodi D-III Kebidanan Mnaokwari Poltekkes Kemenkes Sorong untuk keperluan menyelesaikan penelitian Tesis.

Demikian surat ini dibuat untuk dipergunakan sebagaimana mestinya, atas perhatian kami ucapkan terima kasih.

Mengetahui,  
Ketua Program Studi D-III Kebidanan



Yuni Subhi Isnaini, S.ST, M.Keb  
NIP : 19750630 200012 2 001

## HASIL LABORATORIUM UJI ENERGI, KARBOHIDRAT, PROTEIN, LEMAK, VITAMIN C



**LABORATORIUM BIOKIMIA**  
**FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM**  
**UNIVERSITAS HASANUDDIN**

Kampus UNHAS Tamalanrea, Jl. Perintis Kemerdekaan KM. 10, Makassar 90245  
Telp/Fax : 0411-586498

### **LAPORAN HASIL ANALISIS** **No. 09-LHA/II/BK/K/FMIPA-UH/2022**

Nama/NIM : Dyan Puji Lestari/P102202060  
Asal Institusi : Sekolah Pascasarjana S2 Kebidanan UNHAS  
Jenis Sampel : Smothies Kurma (Susu UHT dan Kurma)  
Jumlah : 1 sampel  
Analisis : Energi, Karbohidrat, Protein, Lemak, Vitamin C, Berat Jenis

| No | Kode Sampel    | Karbohidrat<br>(gr/100 gr) | Lemak<br>(gr/100 gr) | Protein<br>(gr/100 gr) | Vitamin C<br>(gr/100 gr) | Berat jenis<br>(gr/L) | Energi<br>(kkal/kg) |
|----|----------------|----------------------------|----------------------|------------------------|--------------------------|-----------------------|---------------------|
| 1  | Smothies Kurma | 19.23                      | 0.84                 | 3.62                   | 0.056                    | 877.640               | 813                 |

Makassar, 2 February 2022

PLP Lab. Biokimia

Mahdalia, S.Si, M.Si

NIP. 19750826 199601 2 001

## HASIL LABORATORIUM UJI FE



LABORATORIUM PENELITIAN DAN PENGEMBANGAN SAINS  
 FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM  
 UNIVERSITAS HASANUDDIN  
 Jl. Perintis Kemerdekaan Km. 10 Tamalanrea, Makassar 90245  
 Telp. 0411-586016 • Fax. 0411-588551 • Email : lpps.fmipa.unhas@gmail.com

**LAPORAN HASIL PENGUJIAN**  
**CERTIFICATE OF ANALYSIS**

Nomor Pekerjaan : LPPS.AJ-2201-7/1

- I. Pelanggan / Principal**
- 1.1 Nama / Name : Dyan Puji Lestari  
 1.2 Alamat / Address : S2 Ilmu Kebidanan Unhas  
 1.3 Telepon / Phone : 081248194297  
 1.4 Personil Penghubung / Contact Person :-  
 1.5 Email / Email : dyanlestari56@gmail.com
- II. Contoh Uji / Sample**
- 2.1 Kode Sampel / Sample Code :-  
 2.2 Kemasan / Packaging : Botol Kaca  
 2.3 Nama Sampel / Sample Name : Minuman (UHT & Kurma)  
 2.4 Keterangan Lain / Other Information :-  
 2.5 Tanggal Sampling / Date of Sampling : 17 Januari 2022  
 2.6 Diterima / Date of Received : 17 Januari 2022  
 2.7 Tanggal Uji / Date of Analysis : 26 Januari 2022  
 2.8 Jenis Uji / Type of Analysis : Logam Fe dengan AAS

**III. Hasil Uji / Result**

| Nama sampel           | Konsentrasi Logam<br>(mg/mL-ppm) |
|-----------------------|----------------------------------|
|                       | Fe                               |
| Minuman (UHT & Kurma) | 2.30                             |



17 Januari 2022

Penanggung Jawab Mutu

Dr. Suk Hariani Soekamto, MS

081215 198702 2 001

**Catatan:**

- Hasil Uji hanya berlaku untuk contoh tersebut di atas
- Dilarang mengutip/menyalin sebagian isi hasil uji ini

**LEMBAR PENGISIAN**  
**TES KADAR HEMOGLOBIN**

**“Pengaruh Smoothies Kurma Terhadap Kadar Hemoglobin, Indeks Eritrosit, Indeks Massa Tubuh(IMT), dan Lingkar Lengan Atas(LILA) Pada Remaja Putri Dengan Kekurangan Energi Kronis(KEK) Dan Anemia di Prodi D-III Kebidanan Manokwari”**

Nomor / Kode responden : (diisi oleh peneliti)

Tanggal mulai penelitian : (diisi oleh peneliti)

Tanggal akhir penelitian : (diisi oleh peneliti)

Data umum

1. Nama : (Inisial)

2. Usia : (Tahun)

Data Khusus

a. Data IMT

1. Pretest

a) Tinggi Badan : cm

b) Berat Badan : kg

c) LILA : Cm

2. Posttest

a) Tinggi Badan : cm

b) Berat Badan : kg

c) LILA : Cm

b. Data Kadar Hemoglobin

1. Pretest

Kadar Hemoglobin : gr/dl

2. Posttest

Kadar Hemoglobin : gr/dl

c. Data indeks eritrosit

1. Pretest

MCV : fl

MCH : pg

MCHC : gr/dl

2. Posttest

MCV : fl

MCH : pg

MCHC : gr/dl

### KUEISIONER KARAKTERISTIK RESPONDEN

**Nomor / Kode Responden** : (diisi oleh peneliti)  
**Nama** : (inisial)  
**Usia** :  
**Pekerjaan Orang Tua** : ( PNS/ ABRI/ Polisi/ Wiraswasta/ Tidak Bekerja)\*  
**Pendapatan Orang Tua** : ( 1. ≤ Rp. 3.200.000/ 2. > Rp 3.200.000)  
**No HP / WA aktif** :  
**Tanggal Penelitian** :

1. Apakah anda mengalami telah mengalami menstruasi ?
  - a. Ya
  - b. Tidak
2. Berapa lama anda mengalami menstruasi?
  - a. < 3 hari
  - b. 3-10 hari
  - c. > 10 Hari
3. Apakah anda pernah melakukan pemeriksaan hemoglobin dalam 6 bulan terakhir?
  - a. Ya
  - b. Tidak
4. Apakah anda pernah mengalami anemia ?
  - a. Ya
  - b. TidakJika Ya, Kapan anda mengalami? .....
5. Apakah anda memiliki Riwayat penyakit menahun?
  - a. Ya
  - b. TidakJika Ya, Sebutkan .....
6. Apakah saat ini anda sedang mengkonsumsi vitamin / Tabetl Fe?
  - a. Ya
  - b. Tidak
7. Apakah anda mengkonsumsi Pinang?
  - a. Ya
  - b. Tidak
8. Jika Ya apakah anda sering mengkonsumsi?
  - a. Setiap Hari
  - b. Kadang-kadang
9. Apakah anda pernah mengkomsumsi susu?
  - a. Ya
  - b. Tidak
10. Apakah anda memiliki alergi terhadap susu sapi?
  - a. Ya
  - b. Tidak
11. Apakah anda pernah mengkonsumsi kurma?
  - a. Ya
  - b. Tidak
12. Apakah anda memiliki alergi terhadap kurma?
  - a. Ya
  - b. Tidak

**LEMBAR OBSERVASI KEPATUHAN**

**KONSUMSI SMOOTHIES KURMA**

- 1. Nama :
- 2. Usia :
- 3. Tingkat :
- 4. No. Telp / WA :

| Konsumsi<br>Smoothies<br>Kurma | Hari Ke - |    |    |    |    |    |    |    |    |    |
|--------------------------------|-----------|----|----|----|----|----|----|----|----|----|
|                                | 1         | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
|                                | 11        | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|                                | 21        | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|                                | 31        | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
|                                | 41        | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
|                                | 51        | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |

Catatan :   $\checkmark$  **Habis diminum**

**x** **Tidak diminum**

Lampiran 9

**PENCATATAN FOOD RECALL 2x 24JAM**

No. Responden : .....

Nama Responden : .....

Tanggal lahir / Usia : .....

BB/TB : .....kg.....cm

Food Recall hari ke- : .....

| <b>Waktu Makan</b> | <b>Menu</b> | <b>Bahan Makanan</b> | <b>URT</b> | <b>Berat (gram)</b> |
|--------------------|-------------|----------------------|------------|---------------------|
| <b>Pagi</b>        |             |                      |            |                     |
|                    |             |                      |            |                     |
|                    |             |                      |            |                     |
|                    |             |                      |            |                     |
| <b>Selingan</b>    |             |                      |            |                     |
|                    |             |                      |            |                     |
|                    |             |                      |            |                     |
| <b>Siang</b>       |             |                      |            |                     |
|                    |             |                      |            |                     |
|                    |             |                      |            |                     |
|                    |             |                      |            |                     |
| <b>Selingan</b>    |             |                      |            |                     |
|                    |             |                      |            |                     |
|                    |             |                      |            |                     |
| <b>Malam</b>       |             |                      |            |                     |
|                    |             |                      |            |                     |
|                    |             |                      |            |                     |
|                    |             |                      |            |                     |
| <b>Selingan</b>    |             |                      |            |                     |
|                    |             |                      |            |                     |
|                    |             |                      |            |                     |



## **NASKAH PENJELASAN UNTUK MENDAPATKAN PERSETUJUAN DARI SUBJEK PENELITIAN**

Assalamu'alaikum Wr.Wb

Salam Sejahtera

Nama saya Dyan Puji Lestari NIM. P102202060, saya adalah seorang Mahasiswa Magister Ilmu Kebidanan Sekolah Pascasarjana Universitas Hasanuddin. Saya sedang melakukan penelitian sebagai bagian dari tugas akhir program pendidikan dengan judul tesis "Pengaruh Smoothies Kurma Terhadap Kadar Hemoglobin, Indeks Eritrosit, Indeks Massa Tubuh (IMT), dan Lingkar Lengan Atas (LILA) Pada Remaja Putri Dengan Kekurangan Energi Kronis (KEK) Dan Anemia di Prodi D-III Kebidanan Manokwari".

Saya akan melakukan penelitian dengan memberikan minuman smoothies kurma dan memberikan lembar persetujuan menjadi subjek dalam penelitian ini. Kemudian, saya akan melakukan pemeriksaan sebanyak 2 kali yaitu saat kontak pertama, dilakukan pengukuran IMT dengan melakukan penimbangan berat badan dan pengukuran tinggi badan kemudian dilakukan pemeriksaan LILA dengan cara mengukur Lingkar lengan atas menggunakan pita pengukur, serta pengambilan sampel darah pada bagian vena mediana untuk pemeriksaan kadar hemoglobin dan indeks eritrosit yang dilakukan oleh petugas lab. Pemeriksaan kadar hemoglobin, indeks eritrosit, LILA dan Pemeriksaan IMT yang kedua akan dilakukan setelah selesai pemberian intervensi. Subjek yang terpilih akan diberikan intervensi dengan mengkonsumsi smoothies kurma secara rutin selama 60 hari dengan dosis 1 x 150 mL yang sudah dikemas dalam botol. Dalam penelitian ini, kurma yang digunakan adalah varian sukari dan susu UHT yang digunakan adalah merk Ultramilk vanilla

Subjek akan dinyatakan *drop out* apabila tidak mengembalikan *informed consent* atau formulir yang telah diberikan. Peneliti akan menjaga kerahasiaan jika bersedia menjadi responden dalam penelitian ini. Saya sebagai peneliti sangat berharap dapat mengikuti penelitian ini tanpa paksaan apapun. Penelitian ini tidak menimbulkan efek samping atau akibat yang merugikan bagi responden (remaja), namun mungkin akan memberikan perasaan tidak enak (sedikit sakit namun hanya bersifat sementara) pada responden (remaja) Ketika dilakukan proses pengambilan sampel darah. Identitas responden (remaja) maupun data lainnya serta semua informasi yang diberikan akan dijamin kerahasiaannya dengan menyamarkan identitas dan dibuat dalam *logbook*, data yang disajikan hanya untuk kepentingan penelitian serta pengembangan ilmu.

Apabila subjek ingin mengundurkan diri selama proses penelitian ini berlangsung jika ada hal-hal yang kurang berkenan, subjek dapat mengungkapkan langsung atau menghubungi saya. Jika bersedia mengikuti penelitian ini, silahkan menandatangani lembar persetujuan responden. Apabila terdapat hal-hal yang kurang jelas, responden (remaja) dapat menanyakan langsung kepada saya atau menghubungi saya melalui nomor **0812-4819-4297**.

Demikian penyampaian dari saya, atas segala perhatian dan kerjasamanya saya ucapkan terimakasih.

Manokwari, Oktober 2022

Penanggung jawab Peneliti

Hormat Saya,

Nama : Dyan Puji Lestari

Alamat :

No. Telepon : 0812-4819-4297

(Dyan Puji Lestari)

**LEMBAR PERSETUJUAN MENJADI RESPONDEN**

**“Pengaruh Smoothies Kurma Terhadap Kadar Hemoglobin, Indeks Eritrosit, Indeks Massa Tubuh(IMT), dan Lingkar Lengan Atas(LILA) Pada Remaja Putri Dengan Kekurangan Energi Kronis(KEK) Dan Anemia di Prodi D-III Kebidanan Manokwari”**

Yang bertanda tangan di bawah ini :

Nama :

Usia :

Alamat :

Menyatakan dengan sesungguhnya bahwa saya telah mendapatkan penjelasan dan kesempatan bertanya hal-hal yang belum saya mengerti tentang penelitian ini. Penjelasan tersebut meliputi tujuan, manfaat serta efek yang ditimbulkan penelitian ini, prosedur penelitian ini membutuhkan waktu 60 hari.

Setelah mendapat penjelasan tersebut, maka dengan ini saya menyatakan **SETUJU** untuk ikut serta dalam penelitian ini dan bersedia mengikuti proses pengambilan sampel darah secara sukarela dan tanpa paksaan. Saya berhak mengundurkan diri bila alasan sehubungan dengan Kesehatan saya.

Demikian pernyataan ini saya buat dengan penuh kesadaran dan tanpa ada paksaan apapun.

Manokwari, 2022

Yang memberi pernyataan,

Yang menyatakan,

Materai 10.000

(Dyan Puji Lestari)

(.....)

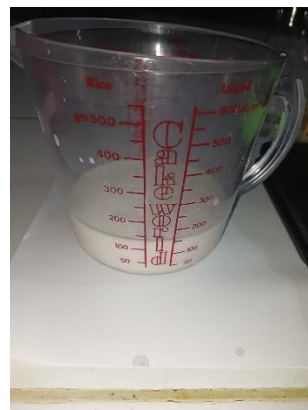
**DOKUMENTASI PROSES PEMBUATAN SMOOTHIES KURMA**



Gambar 1  
Persiapan alat



Gambar 2  
Kupas Kurma dan Pisahkan Bijinya



Gambar 3  
Siapkan susu UHT 150 ML



Gambar 4  
Masukkan semua bahan



Gambar 5  
Blender semua bahan hingga halus



Gambar 6  
Timbang Smoothies kurma 150 ml



Gambar 7  
Smoothies kurma siap disajikan

**DOKUMENTASI PENELITIAN**



**Master Tabel Uji Organoleptik Smoothies Kurma**

| no responden | Sampel K1 |       |       |         | Sampel K2 |       |       |         |
|--------------|-----------|-------|-------|---------|-----------|-------|-------|---------|
|              | Rasa      | Aroma | Warna | Tekstur | Rasa      | Aroma | Warna | Tekstur |
| 1            | 3         | 3     | 2     | 3       | 3         | 3     | 3     | 3       |
| 2            | 4         | 3     | 3     | 3       | 3         | 4     | 3     | 3       |
| 3            | 3         | 4     | 1     | 4       | 4         | 3     | 3     | 1       |
| 4            | 3         | 4     | 1     | 3       | 2         | 4     | 3     | 2       |
| 5            | 4         | 3     | 3     | 3       | 3         | 3     | 4     | 3       |
| 6            | 3         | 3     | 3     | 2       | 3         | 3     | 3     | 2       |
| 7            | 4         | 3     | 3     | 4       | 2         | 3     | 4     | 3       |
| 8            | 3         | 3     | 3     | 2       | 4         | 2     | 4     | 3       |
| 9            | 2         | 4     | 2     | 2       | 3         | 3     | 3     | 3       |
| 10           | 3         | 3     | 3     | 3       | 4         | 3     | 4     | 3       |
| 11           | 4         | 3     | 2     | 3       | 3         | 2     | 4     | 3       |
| 12           | 3         | 3     | 2     | 2       | 3         | 2     | 4     | 3       |
| 13           | 3         | 3     | 2     | 1       | 3         | 3     | 4     | 1       |
| 14           | 4         | 3     | 3     | 3       | 4         | 2     | 4     | 2       |
| 15           | 3         | 3     | 3     | 3       | 2         | 2     | 2     | 2       |
| 16           | 4         | 2     | 2     | 3       | 4         | 1     | 3     | 3       |
| 17           | 3         | 3     | 3     | 3       | 4         | 2     | 4     | 3       |
| 18           | 3         | 3     | 2     | 2       | 3         | 2     | 3     | 3       |
| 19           | 3         | 3     | 2     | 2       | 3         | 3     | 3     | 2       |
| 20           | 2         | 3     | 3     | 2       | 3         | 2     | 4     | 3       |
| 21           | 3         | 2     | 3     | 3       | 4         | 4     | 4     | 3       |
| 22           | 3         | 3     | 3     | 2       | 3         | 2     | 2     | 3       |
| 23           | 2         | 3     | 3     | 2       | 3         | 2     | 2     | 2       |
| 24           | 3         | 3     | 3     | 3       | 3         | 3     | 4     | 3       |
| 25           | 3         | 2     | 2     | 2       | 2         | 2     | 3     | 3       |

**MASTER TABEL KARAKTERISTIK RESPONDEN**

| <b>NO</b>         | <b>NAMA</b> | <b>UMUR</b> | <b>LAMANYA<br/>MENSTRUASI</b> | <b>PENDAPATAN<br/>ORANG TUA</b> |
|-------------------|-------------|-------------|-------------------------------|---------------------------------|
| <b>Intervensi</b> |             |             |                               |                                 |
| 1.                | Nn. NAF     | 19          | > 10                          | < 3.2 juta                      |
| 2.                | Nn.RT       | 21          | >10                           | > 3.2 juta                      |
| 3.                | Nn. MCM     | 20          | 3-10                          | < 3.2 Juta                      |
| 4.                | Nn. IF      | 21          | 3-10                          | < 3.2 juta                      |
| 5.                | Nn. AW      | 19          | 3-10                          | > 3.2 juta                      |
| 6.                | Nn. AW      | 19          | 3-10                          | > 3.2 juta                      |
| 7.                | Nn. A K     | 19          | 3-10                          | < 3.2 Juta                      |
| 8.                | Nn. F.M     | 20          | 3-10                          | < 3.2 Juta                      |
| 9.                | Nn. F.A     | 20          | 3-10                          | < 3.2 Juta                      |
| 10.               | Nn. MW      | 20          | 3-10                          | < 3.2 Juta                      |
| 11.               | Nn. FWK     | 20          | 3-10                          | < 3.2 Juta                      |
| 12.               | Nn. NS      | 19          | 3-10                          | < 3.2 Juta                      |
| 13.               | Nn. DCNM    | 19          | 3-10                          | > 3.2 juta                      |
| 14.               | Nn. OYU     | 20          | 3-10                          | < 3.2 Juta                      |
| <b>Kontrol</b>    |             |             |                               |                                 |
| 15.               | Nn. MH      | 19          | >10                           | > 3.2                           |
| 16.               | Nn.PA       | 19          | 3-10                          | < 3.2                           |
| 17.               | Nn. DVAW    | 19          | 3-10                          | < 3.2                           |
| 18.               | Nn. D       | 19          | 3-10                          | < 3.2                           |
| 19.               | Nn. PDS     | 19          | 3-10                          | < 3.2                           |
| 20.               | Nn. NF      | 19          | 3-10                          | < 3.2                           |
| 21.               | Nn. WS      | 19          | 3-10                          | < 3.2                           |
| 22.               | Nn. RB      | 19          | 3-10                          | < 3.2                           |
| 23.               | Nn. TYR     | 19          | 3-10                          | < 3.2                           |
| 24.               | Nn. AO      | 19          | 3-10                          | < 3.2                           |
| 25.               | Nn. MIH     | 20          | 3-10                          | < 3.2                           |
| 26.               | Nn.VSA      | 19          | 3-10                          | < 3.2                           |
| 27.               | Nn.MDA      | 20          | 3-10                          | < 3.2                           |
| 28.               | Nn.SEK      | 19          | 3-10                          | < 3.2                           |

## Lampiran 16

| NO                | NAMA     | KEK SEBELUM |       |      |      | KEK SESUDAH |       |      |      | KADAR HEMOGLOBIN |         | INDEKS ERITROSIT SEBELUM |      |      | INDEKS ERITROSIT SESUDAH |      |      |
|-------------------|----------|-------------|-------|------|------|-------------|-------|------|------|------------------|---------|--------------------------|------|------|--------------------------|------|------|
|                   |          | BB          | TB    | IMT  | LILA | BB          | TB    | IMT  | LILA | SEBELUM          | SESUDAH | MCV                      | MCH  | MCHC | MCV                      | MCH  | MCHC |
| <b>INTERVENSI</b> |          |             |       |      |      |             |       |      |      |                  |         |                          |      |      |                          |      |      |
| 1.                | Nn. NAF  | 44          | 156   | 18.1 | 22,5 | 44,6        | 156   | 18.3 | 22,7 | 11,3             | 12,4    | 71.6                     | 30   | 24.8 | 92.1                     | 32.8 | 29.5 |
| 2.                | Nn. RT   | 45          | 159   | 17.8 | 21,5 | 45,2        | 159   | 17.9 | 21,8 | 11.4             | 10.7    | 78.2                     | 30.8 | 23.1 | 73.6                     | 31.2 | 26.1 |
| 3.                | Nn. MCM  | 49          | 163   | 18.4 | 22,5 | 49,6        | 163   | 18,7 | 22,8 | 10,8             | 11,6    | 74.4                     | 29.6 | 26.7 | 73.6                     | 31.2 | 26.1 |
| 4.                | Nn. IF   | 43,1        | 155   | 17.9 | 23,3 | 43,5        | 155   | 18.1 | 23,5 | 11.8             | 12.9    | 73.6                     | 31.2 | 26.1 | 85.8                     | 31.6 | 27.1 |
| 5.                | Nn. AW   | 41,6        | 152   | 18.0 | 23   | 42          | 152   | 18.2 | 23,3 | 11.7             | 11,7    | 77                       | 30.6 | 29   | 77.6                     | 32   | 26   |
| 6.                | Nn. AW   | 42          | 152   | 18.2 | 23   | 42,5        | 152   | 18.4 | 23,2 | 11,6             | 12,3    | 71                       | 33   | 30   | 91.7                     | 32.8 | 30.1 |
| 7.                | Nn. A K  | 39          | 151   | 17.1 | 22,5 | 39,8        | 151   | 17.5 | 22,8 | 9                | 9.4     | 73.5                     | 29   | 21.3 | 75.5                     | 29.9 | 22.5 |
| 8.                | Nn. F.M  | 46,4        | 161   | 17.9 | 22,3 | 46,7        | 161   | 18   | 22,6 | 11               | 13,9    | 73.9                     | 29.7 | 22   | 91.3                     | 32.3 | 29.5 |
| 9.                | Nn. F.A  | 47          | 160   | 18.4 | 22,5 | 47,4        | 160   | 18.5 | 22,5 | 10.5             | 11,9    | 73.5                     | 29   | 21.3 | 74.3                     | 31.0 | 23   |
| 10.               | Nn. MW   | 41          | 157   | 16.6 | 22,5 | 41,8        | 157   | 17   | 22,5 | 11,4             | 12,2    | 77.6                     | 32   | 26   | 85.4                     | 31.8 | 27.2 |
| 11.               | Nn. FWK  | 45          | 159   | 17.8 | 23   | 46          | 159   | 18.2 | 23,2 | 11,3             | 12,3    | 74.4                     | 29.6 | 26.7 | 89.9                     | 32.0 | 28.7 |
| 12.               | Nn. NS   | 53          | 173   | 17.7 | 23,2 | 53,4        | 173   | 17,8 | 23,5 | 10,7             | 12      | 73.9                     | 29.7 | 22   | 85.4                     | 31.8 | 27.2 |
| 13.               | Nn. DCNM | 42          | 152   | 18.2 | 22,5 | 42,3        | 152   | 18.3 | 22,7 | 11,4             | 12,2    | 77                       | 30.6 | 29   | 89.9                     | 32.0 | 28.7 |
| 14.               | Nn. OYU  | 42          | 152   | 18.2 | 23,3 | 42,5        | 152   | 18.4 | 23,5 | 11               | 12,1    | 73.9                     | 29.7 | 22   | 90.2                     | 32.6 | 29.4 |
| <b>KONTROL</b>    |          |             |       |      |      |             |       |      |      |                  |         |                          |      |      |                          |      |      |
| 15.               | Nn. MH   | 41          | 150   | 18.2 | 22   | 41,1        | 150   | 18,3 | 22   | 6,4              | 6,6     | 53,9                     | 27   | 14.6 | 69,3                     | 28.2 | 18.6 |
| 16.               | Nn. PA   | 42,6        | 152.5 | 18.3 | 20.5 | 42,8        | 152.5 | 18,4 | 20.5 | 7,8              | 8,1     | 62,5                     | 26.5 | 16.6 | 71,4                     | 28.2 | 25.6 |
| 17.               | Nn. DVAW | 41,2        | 152   | 17.8 | 22   | 41,3        | 152   | 17.9 | 22   | 11,3             | 11,6    | 74.4                     | 29.6 | 26.7 | 78.8                     | 32.3 | 25.4 |
| 18.               | Nn. D    | 38,1        | 148   | 17.4 | 21   | 38,2        | 148   | 17,4 | 21   | 10,8             | 10,9    | 71,4                     | 28.2 | 25.6 | 62,5                     | 26.5 | 16.6 |
| 19.               | Nn. PDS  | 41,2        | 152   | 17.8 | 21   | 41,2        | 152   | 17,8 | 21   | 11,4             | 11,4    | 78.8                     | 32.3 | 25.4 | 73.9                     | 29.7 | 22   |
| 20.               | Nn. NF   | 42,6        | 152.5 | 18.3 | 20.5 | 42,7        | 152.5 | 18,4 | 20.5 | 11               | 11,2    | 73.9                     | 29.7 | 22   | 87.2                     | 32.6 | 28.4 |
| 21.               | Nn. WS   | 39          | 155   | 16.2 | 20   | 39,1        | 155   | 16,3 | 20   | 11,4             | 10,9    | 74.4                     | 29.6 | 26.7 | 77                       | 30.6 | 29   |
| 22.               | Nn. RB   | 41,2        | 152   | 17.8 | 21,4 | 41,3        | 152   | 17,9 | 21,5 | 10,7             | 10,8    | 77                       | 30.6 | 29   | 71.6                     | 30   | 24.8 |



|     |         |      |       |      |      |      |       |      |      |      |      |      |      |      |      |      |      |
|-----|---------|------|-------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|
| 23. | Nn. TYR | 38,1 | 155   | 15.9 | 20.5 | 38,2 | 155   | 15,9 | 20.5 | 11,1 | 11,1 | 73.5 | 29   | 21.3 | 74.4 | 29.6 | 26.7 |
| 24. | Nn. AO  | 41   | 147   | 18   | 21.5 | 41,5 | 147   | 18,2 | 21.6 | 10,8 | 10,6 | 71.6 | 30   | 24.8 | 78.8 | 32.3 | 25.4 |
| 25. | Nn. MIH | 42,4 | 151,8 | 18.4 | 22,3 | 42,5 | 151,8 | 18,4 | 22,3 | 11,3 | 11,5 | 74.4 | 29.6 | 26.7 | 71.6 | 30   | 24.8 |
| 26. | Nn.VSA  | 41,3 | 151   | 18.1 | 21,6 | 41,4 | 151   | 18,2 | 21,6 | 11,8 | 12   | 73.6 | 31.2 | 26.1 | 85.1 | 32.3 | 27.5 |
| 27. | Nn.MDA  | 42,7 | 150.8 | 18.3 | 22,6 | 43   | 150.8 | 18,9 | 22,8 | 10,7 | 10,5 | 73.9 | 29.7 | 22   | 73.9 | 29.7 | 22   |
| 28. | Nn.SEK  | 41,2 | 152   | 17.8 | 21,7 | 41,3 | 152   | 17,9 | 21,8 | 11   | 11,2 | 71.4 | 28.2 | 25.6 | 78.8 | 32.3 | 25.4 |

## KARAKTERISTIK RESPONDEN

### Crosstab

|          |                   | _responden        |          |          |        |        |
|----------|-------------------|-------------------|----------|----------|--------|--------|
|          |                   | 19 tahun          | 20 tahun | 21 tahun | Total  |        |
| kelompok | intervensi        | Count             | 6        | 6        | 2      | 14     |
|          |                   | Expected Count    | 9.0      | 4.0      | 1.0    | 14.0   |
|          |                   | % within kelompok | 42.9%    | 42.9%    | 14.3%  | 100.0% |
|          |                   | % of Total        | 21.4%    | 21.4%    | 7.1%   | 50.0%  |
|          | kontrol           | Count             | 12       | 2        | 0      | 14     |
|          |                   | Expected Count    | 9.0      | 4.0      | 1.0    | 14.0   |
|          |                   | % within kelompok | 85.7%    | 14.3%    | 0.0%   | 100.0% |
|          |                   | % of Total        | 42.9%    | 7.1%     | 0.0%   | 50.0%  |
| Total    | Count             | 18                | 8        | 2        | 28     |        |
|          | Expected Count    | 18.0              | 8.0      | 2.0      | 28.0   |        |
|          | % within kelompok | 64.3%             | 28.6%    | 7.1%     | 100.0% |        |
|          | % of Total        | 64.3%             | 28.6%    | 7.1%     | 100.0% |        |

### Chi-Square Tests

|                              | Value              | df | Asymptotic<br>Significance (2-<br>sided) |
|------------------------------|--------------------|----|--|
| Pearson Chi-Square           | 6.000 <sup>a</sup> | 2  | .050                                     |
| Likelihood Ratio             | 6.904              | 2  | .032                                     |
| Linear-by-Linear Association | 5.684              | 1  | .017                                     |
| N of Valid Cases             | 28                 |    |  |

a. 4 cells (66,7%) have expected count less than 5. The minimum expected count is 1,00.

### Crosstab

|          |            | pendapatan_orang_tua |             |       |        |
|----------|------------|----------------------|-------------|-------|--------|
|          |            | < 3.200.000          | ≥ 3.200.000 | Total |        |
| kelompok | intervensi | Count                | 10          | 4     | 14     |
|          |            | Expected Count       | 11.5        | 2.5   | 14.0   |
|          |            | % within kelompok    | 71.4%       | 28.6% | 100.0% |
|          |            | % of Total           | 35.7%       | 14.3% | 50.0%  |
|          | kontrol    | Count                | 13          | 1     | 14     |

|       |                   |       |       |        |
|-------|-------------------|-------|-------|--------|
|       | Expected Count    | 11.5  | 2.5   | 14.0   |
|       | % within kelompok | 92.9% | 7.1%  | 100.0% |
|       | % of Total        | 46.4% | 3.6%  | 50.0%  |
| Total | Count             | 23    | 5     | 28     |
|       | Expected Count    | 23.0  | 5.0   | 28.0   |
|       | % within kelompok | 82.1% | 17.9% | 100.0% |
|       | % of Total        | 82.1% | 17.9% | 100.0% |

### Chi-Square Tests

|                                    | Value              | df | Asymptotic<br>Significance (2-<br>sided) | Exact Sig. (2-<br>sided) | Exact Sig. (1-<br>sided) |
|------------------------------------|--------------------|----|--|--------------------------|--------------------------|
| Pearson Chi-Square                 | 2.191 <sup>a</sup> | 1  | .139                                     |                          |                          |
| Continuity Correction <sup>b</sup> | .974               | 1  | .324                                     |                          |                          |
| Likelihood Ratio                   | 2.320              | 1  | .128                                     |                          |                          |
| Fisher's Exact Test                |                    |    |  | .326                     | .163                     |
| Linear-by-Linear Association       | 2.113              | 1  | .146                                     |                          |                          |
| N of Valid Cases                   | 28                 |    |  |                          |                          |

a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 2,50.

b. Computed only for a 2x2 tabel

### kelompok \* lamanya\_menstruasi Crosstabulation

|          |                   | lamanya_menstruasi |           | Total  |        |
|----------|-------------------|--------------------|-----------|--------|--------|
|          |                   | 3- 10 hari         | > 10 hari |        |        |
| kelompok | intervensi        | Count              | 12        | 2      | 14     |
|          |                   | Expected Count     | 12.5      | 1.5    | 14.0   |
|          |                   | % within kelompok  | 85.7%     | 14.3%  | 100.0% |
|          |                   | % of Total         | 42.9%     | 7.1%   | 50.0%  |
|          | kontrol           | Count              | 13        | 1      | 14     |
|          |                   | Expected Count     | 12.5      | 1.5    | 14.0   |
|          |                   | % within kelompok  | 92.9%     | 7.1%   | 100.0% |
|          |                   | % of Total         | 46.4%     | 3.6%   | 50.0%  |
| Total    | Count             | 25                 | 3         | 28     |        |
|          | Expected Count    | 25.0               | 3.0       | 28.0   |        |
|          | % within kelompok | 89.3%              | 10.7%     | 100.0% |        |
|          | % of Total        | 89.3%              | 10.7%     | 100.0% |        |

### Chi-Square Tests

|                                    | Value             | df | Asymptotic<br>Significance (2-<br>sided) | Exact Sig. (2-<br>sided) | Exact Sig. (1-<br>sided) |
|------------------------------------|-------------------|----|--|--------------------------|--------------------------|
| Pearson Chi-Square                 | .373 <sup>a</sup> | 1  | .541                                     |                          |                          |
| Continuity Correction <sup>b</sup> | .000              | 1  | 1.000                                    |                          |                          |
| Likelihood Ratio                   | .380              | 1  | .538                                     |                          |                          |
| Fisher's Exact Test                |                   |    |  | 1.000                    | .500                     |
| Linear-by-Linear Association       | .360              | 1  | .549                                     |                          |                          |
| N of Valid Cases                   | 28                |    |  |                          |                          |

a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 1,50.

b. Computed only for a 2x2 tabel

## DATA KEK (IMT DAN LILA)

### Tests of Normality

|                            | Kolmogorov-Smirnov <sup>a</sup> |    |                   | Shapiro-Wilk |    |      |
|----------------------------|---------------------------------|----|-------------------|--------------|----|------|
|                            | Statistic                       | df | Sig.              | Statistic    | df | Sig. |
| IMT_SEBELUM_INTERVEN<br>SI | .223                            | 14 | .058              | .838         | 14 | .015 |
| IMT_SESUDAH_INTERVEN<br>SI | .168                            | 14 | .200 <sup>*</sup> | .913         | 14 | .176 |
| iMT_SEBELUM_KONTROL        | .319                            | 14 | .000              | .749         | 14 | .001 |
| IMT_SESUDAH_KONTROL        | .232                            | 14 | .040              | .885         | 14 | .067 |

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

## Mann-Whitney Test

|             |            | Ranks |           |              |
|-------------|------------|-------|-----------|--------------|
|             | KELOMPOK   | N     | Mean Rank | Sum of Ranks |
| IMT_SEBELUM | INTERVENSI | 14    | 14.82     | 207.50       |
|             | KONTROL    | 14    | 14.18     | 198.50       |
|             | Total      | 28    |           |              |

### Test Statistics<sup>a</sup>

| IMT_SEBELUM    |         |
|----------------|---------|
| Mann-Whitney U | 93.500  |
| Wilcoxon W     | 198.500 |
| Z              | -.208   |

|                                |                   |
|--------------------------------|-------------------|
| Asymp. Sig. (2-tailed)         | .835              |
| Exact Sig. [2*(1-tailed Sig.)] | .839 <sup>b</sup> |

a. Grouping Variabel: KELOMPOK

b. Not corrected for ties.

## Mann-Whitney Test

|             |            | Ranks |           |              |
|-------------|------------|-------|-----------|--------------|
|             | KELOMPOK   | N     | Mean Rank | Sum of Ranks |
| IMT_SESUDAH | INTERVENSI | 14    | 15.00     | 210.00       |
|             | KONTROL    | 14    | 14.00     | 196.00       |
|             | Total      | 28    |           |              |

### Test Statistics<sup>a</sup>

| IMT_SESUDAH                    |                   |
|--------------------------------|-------------------|
| Mann-Whitney U                 | 91.000            |
| Wilcoxon W                     | 196.000           |
| Z                              | -.323             |
| Asymp. Sig. (2-tailed)         | .746              |
| Exact Sig. [2*(1-tailed Sig.)] | .769 <sup>b</sup> |

a. Grouping Variabel: KELOMPOK

b. Not corrected for ties.

## Wilcoxon Signed Ranks Test

|                      |                | Ranks           |           |              |
|----------------------|----------------|-----------------|-----------|--------------|
|                      |                | N               | Mean Rank | Sum of Ranks |
| IMT_SESUDAH_INTERVEN | Negative Ranks | 0 <sup>a</sup>  | .00       | .00          |
| SI -                 | Positive Ranks | 14 <sup>b</sup> | 7.50      | 105.00       |
| IMT_SEBELUM_INTERVEN | Ties           | 0 <sup>c</sup>  |           |              |
| SI                   | Total          | 14              |           |              |

a. IMT\_SESUDAH\_INTERVENSI < IMT\_SEBELUM\_INTERVENSI

b. IMT\_SESUDAH\_INTERVENSI > IMT\_SEBELUM\_INTERVENSI

c. IMT\_SESUDAH\_INTERVENSI = IMT\_SEBELUM\_INTERVENSI

### Test Statistics<sup>a</sup>

|               |
|---------------|
| IMT_SESUDAH   |
| _INTERVENSI - |
| IMT_SEBELUM   |
| _INTERVENSI   |

|                        |                     |
|------------------------|---------------------|
| Z                      | -3.332 <sup>b</sup> |
| Asymp. Sig. (2-tailed) | .001                |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

## Wilcoxon Signed Ranks Test

|                       |                | Ranks           |           |              |
|-----------------------|----------------|-----------------|-----------|--------------|
|                       |                | N               | Mean Rank | Sum of Ranks |
| IMT_SESUDAH_KONTROL   | Negative Ranks | 0 <sup>a</sup>  | .00       | .00          |
| - iMT_SEBELUM_KONTROL | Positive Ranks | 10 <sup>b</sup> | 5.50      | 55.00        |
|                       | Ties           | 4 <sup>c</sup>  |           |              |
|                       | Total          | 14              |           |              |

a. IMT\_SESUDAH\_KONTROL < iMT\_SEBELUM\_KONTROL

b. IMT\_SESUDAH\_KONTROL > iMT\_SEBELUM\_KONTROL

c. IMT\_SESUDAH\_KONTROL = iMT\_SEBELUM\_KONTROL

### Test Statistics<sup>a</sup>

|                        |  | IMT_SESUDAH<br>_KONTROL -<br>iMT_SEBELUM<br>_KONTROL |  |
|------------------------|--|--|--|
| Z                      |  | -2.970 <sup>b</sup>                                  |  |
| Asymp. Sig. (2-tailed) |  | .003   |  |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

### Descriptives

|                      |                             | Statistic   | Std. Error |
|----------------------|-----------------------------|-------------|------------|
| LILA_SEBELUM_INTERVE | Mean                        | 22.686      | .1300      |
| NSI                  | 95% Confidence Interval for | Lower Bound | 22.405     |
|                      | Mean                        | Upper Bound | 22.967     |
|                      | 5% Trimmed Mean             | 22.717      |            |
|                      | Median                      | 22.500      |            |
|                      | Variance                    | .237        |            |
|                      | Std. Deviation              | .4865       |            |
|                      | Minimum                     | 21.5        |            |
|                      | Maximum                     | 23.3        |            |
|                      | Range                       | 1.8         |            |

|                      |                             |                             |             |        |       |
|----------------------|-----------------------------|-----------------------------|-------------|--------|-------|
|                      | Interquartile Range         |                             | .6          |        |       |
|                      | Skewness                    |                             | -.834       | .597   |       |
|                      | Kurtosis                    |                             | 1.379       | 1.154  |       |
| LILA_SESUDAH_INTERVE | Mean                        |                             | 22.900      | .1313  |       |
| NSI                  | 95% Confidence Interval for | Lower Bound                 | 22.616      |        |       |
|                      | Mean                        | Upper Bound                 | 23.184      |        |       |
|                      | 5% Trimmed Mean             |                             | 22.928      |        |       |
|                      | Median                      |                             | 22.800      |        |       |
|                      | Variance                    |                             | .242        |        |       |
|                      | Std. Deviation              |                             | .4915       |        |       |
|                      | Minimum                     |                             | 21.8        |        |       |
|                      | Maximum                     |                             | 23.5        |        |       |
|                      | Range                       |                             | 1.7         |        |       |
|                      | Interquartile Range         |                             | .8          |        |       |
|                      | Skewness                    |                             | -.558       | .597   |       |
|                      | Kurtosis                    |                             | .265        | 1.154  |       |
|                      | LILA_SEBELUM_KONTROL        | Mean                        |             | 21.329 | .2063 |
|                      |                             | 95% Confidence Interval for | Lower Bound | 20.883 |       |
| Mean                 |                             | Upper Bound                 | 21.774      |        |       |
| 5% Trimmed Mean      |                             |                             | 21.332      |        |       |
| Median               |                             |                             | 21.450      |        |       |
| Variance             |                             |                             | .596        |        |       |
| Std. Deviation       |                             |                             | .7720       |        |       |
| Minimum              |                             |                             | 20.0        |        |       |
| Maximum              |                             |                             | 22.6        |        |       |
| Range                |                             |                             | 2.6         |        |       |
| Interquartile Range  |                             |                             | 1.5         |        |       |
| Skewness             |                             |                             | -.091       | .597   |       |
| Kurtosis             |                             |                             | -.917       | 1.154  |       |
| LILA_SESUDAH_KONTROL |                             | Mean                        |             | 21.364 | .2152 |
|                      |                             | 95% Confidence Interval for | Lower Bound | 20.899 |       |
|                      | Mean                        | Upper Bound                 | 21.829      |        |       |
|                      | 5% Trimmed Mean             |                             | 21.360      |        |       |
|                      | Median                      |                             | 21.550      |        |       |
|                      | Variance                    |                             | .649        |        |       |
|                      | Std. Deviation              |                             | .8054       |        |       |
|                      | Minimum                     |                             | 20.0        |        |       |
|                      | Maximum                     |                             | 22.8        |        |       |
|                      | Range                       |                             | 2.8         |        |       |
|                      | Interquartile Range         |                             | 1.5         |        |       |

|          |       |       |
|----------|-------|-------|
| Skewness | -.029 | .597  |
| Kurtosis | -.770 | 1.154 |

### Tests of Normality

|                             | Kolmogorov-Smirnov <sup>a</sup> |    |                   | Shapiro-Wilk |    |      |
|-----------------------------|---------------------------------|----|-------------------|--------------|----|------|
|                             | Statistic                       | df | Sig.              | Statistic    | df | Sig. |
| LILA_SEBELUM_INTERVE<br>NSI | .220                            | 14 | .065              | .872         | 14 | .044 |
| LILA_SESUDAH_INTERVE<br>NSI | .158                            | 14 | .200 <sup>*</sup> | .915         | 14 | .185 |
| LILA_SEBELUM_KONTROL        | .144                            | 14 | .200 <sup>*</sup> | .965         | 14 | .805 |
| LILA_SESUDAH_KONTROL        | .144                            | 14 | .200 <sup>*</sup> | .965         | 14 | .798 |

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

## Mann-Whitney Test

### Ranks

|              | KELOMPOK   | N  | Mean Rank | Sum of Ranks |
|--------------|------------|----|-----------|--------------|
| LILA_SEBELUM | INTERVENSI | 14 | 20.50     | 287.00       |
|              | KONTROL    | 14 | 8.50      | 119.00       |
|              | Total      | 28 |           |              |

### Test Statistics<sup>a</sup>

| LILA_SEBELUM                   |                   |
|--------------------------------|-------------------|
| Mann-Whitney U                 | 14.000            |
| Wilcoxon W                     | 119.000           |
| Z                              | -3.885            |
| Asymp. Sig. (2-tailed)         | .000              |
| Exact Sig. [2*(1-tailed Sig.)] | .000 <sup>b</sup> |

a. Grouping Variabel: KELOMPOK

b. Not corrected for ties.

## Mann-Whitney Test

### Ranks

|  | KELOMPOK | N | Mean Rank | Sum of Ranks |
|--|----------|---|-----------|--------------|
|--|----------|---|-----------|--------------|



|              |            |    |       |        |
|--------------|------------|----|-------|--------|
| LILA_SESUDAH | INTERVENSI | 14 | 20.75 | 290.50 |
|              | KONTROL    | 14 | 8.25  | 115.50 |
|              | Total      | 28 |       |        |

### Test Statistics<sup>a</sup>

| LILA_SESUDAH                   |                   |
|--------------------------------|-------------------|
| Mann-Whitney U                 | 10.500            |
| Wilcoxon W                     | 115.500           |
| Z                              | -4.031            |
| Asymp. Sig. (2-tailed)         | .000              |
| Exact Sig. [2*(1-tailed Sig.)] | .000 <sup>b</sup> |

a. Grouping Variabel: KELOMPOK

b. Not corrected for ties.

### Wilcoxon Signed Ranks Test

#### Ranks

|                       |                | N               | Mean Rank | Sum of Ranks |
|-----------------------|----------------|-----------------|-----------|--------------|
| LILA_SESUDAH_INTERVE  | Negative Ranks | 0 <sup>a</sup>  | .00       | .00          |
| NSI -                 | Positive Ranks | 12 <sup>b</sup> | 6.50      | 78.00        |
| LILA_SEBELUM_INTERVEN | Ties           | 2 <sup>c</sup>  |           |              |
| SI                    | Total          | 14              |           |              |

a. LILA\_SESUDAH\_INTERVENSI < LILA\_SEBELUM\_INTERVENSI

b. LILA\_SESUDAH\_INTERVENSI > LILA\_SEBELUM\_INTERVENSI

c. LILA\_SESUDAH\_INTERVENSI = LILA\_SEBELUM\_INTERVENSI

### Test Statistics<sup>a</sup>

| LILA_SESUDAH<br>_INTERVENSI -<br>LILA_SEBELUM<br>_INTERVENSI |                     |
|--|---------------------|
| Z  | -3.145 <sup>b</sup> |
| Asymp. Sig. (2-tailed)                                       | .002                |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

## T-Test

### Paired Samples Statistics

|        |                      | Mean   | N  | Std. Deviation | Std. Error Mean |
|--------|----------------------|--------|----|----------------|-----------------|
| Pair 1 | LILA_SEBELUM_KONTROL | 21.329 | 14 | .7720          | .2063           |
|        | LILA_SESUDAH_KONTROL | 21.364 | 14 | .8054          | .2152           |

### Paired Samples Correlations

|        |   | N  | Correlation | Sig. |
|--------|---|----|-------------|------|
| Pair 1 | LILA_SEBELUM_KONTROL<br>&<br>LILA_SESUDAH_KONTROL | 14 | .998        | .000 |

### Paired Samples Test

|        |  | Paired Differences |                |                 |   |       |        |    |                 |  |
|--------|--|--------------------|----------------|-----------------|---|-------|--------|----|-----------------|--|
|        |  | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |       | t      | df | Sig. (2-tailed) |  |
|        |  |                    |                |                 | Lower                                     | Upper |        |    |                 |  |
| Pair 1 | LILA_SEBELUM_KONTROL -<br>LILA_SESUDAH_KONTROL | -.0357             | .0633          | .0169           | -.0723                                    | .0009 | -2.110 | 13 | .055            |  |

## KADAR HEMOGLOBIN

### Descriptives

|                     |   | Statistic                               | Std. Error |      |
|---------------------|---|---|------------|------|
| HB_SEBELUM_INTERVEN | Mean                                    | 11.06                                   | .189       |      |
| SI                  | 95% Confidence Interval for Lower Bound | 10.66                                   |            |      |
|                     | Mean Upper Bound                        | 11.47                                   |            |      |
|                     | 5% Trimmed Mean                         | 11.14                                   |            |      |
|                     | Median                                  | 11.30                                   |            |      |
|                     | Variance                                | .498                                    |            |      |
|                     | Std. Deviation                          | .706                                    |            |      |
|                     | Minimum                                 | 9                                       |            |      |
|                     | Maximum                                 | 12                                      |            |      |
|                     | Range                                   | 3                                       |            |      |
|                     | Interquartile Range                     | 1                                       |            |      |
|                     | Skewness                                | -2.068                                  | .597       |      |
|                     | Kurtosis                                | 5.474                                   | 1.154      |      |
|                     | HB_SESUDAH_iINTERVEN                    | Mean                                    | 11.97      | .273 |
|                     | SI                                      | 95% Confidence Interval for Lower Bound | 11.38      |      |
| Mean Upper Bound    |   | 12.56                                   |            |      |
| 5% Trimmed Mean     |   | 12.01                                   |            |      |
| Median              |   | 12.15                                   |            |      |
| Variance            |   | 1.042                                   |            |      |
| Std. Deviation      |   | 1.021                                   |            |      |
| Minimum             |   | 9                                       |            |      |
| Maximum             |   | 14                                      |            |      |
| Range               |   | 5                                       |            |      |
| Interquartile Range |   | 1                                       |            |      |
| Skewness            |   | -.926                                   | .597       |      |
| Kurtosis            |   | 3.032                                   | 1.154      |      |
| HB_SEBELUM_KONTROL  |   | Mean                                    | 10.54      | .405 |
|                     |   | 95% Confidence Interval for Lower Bound | 9.66       |      |
|                     | Mean Upper Bound                        | 11.41                                   |            |      |
|                     | 5% Trimmed Mean                         | 10.70                                   |            |      |
|                     | Median                                  | 11.00                                   |            |      |
|                     | Variance                                | 2.292                                   |            |      |
|                     | Std. Deviation                          | 1.514                                   |            |      |
|                     | Minimum                                 | 6                                       |            |      |
|                     | Maximum                                 | 12                                      |            |      |
|                     | Range                                   | 5                                       |            |      |
|                     | Interquartile Range                     | 1                                       |            |      |

|                    |                                  |             |       |
|--------------------|----------------------------------|-------------|-------|
|                    | Skewness                         | -2.240      | .597  |
|                    | Kurtosis                         | 4.387       | 1.154 |
| HB_SESUDAH_KONTROL | Mean                             | 10.60       | .391  |
|                    | 95% Confidence Interval for Mean | Lower Bound | 9.75  |
|                    |                                  | Upper Bound | 11.45 |
|                    | 5% Trimmed Mean                  | 10.74       |       |
|                    | Median                           | 11.00       |       |
|                    | Variance                         | 2.143       |       |
|                    | Std. Deviation                   | 1.464       |       |
|                    | Minimum                          | 7           |       |
|                    | Maximum                          | 12          |       |
|                    | Range                            | 5           |       |
|                    | Interquartile Range              | 1           |       |
|                    | Skewness                         | -2.117      | .597  |
|                    | Kurtosis                         | 4.188       | 1.154 |

### Tests of Normality

|                        | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |      |
|------------------------|---------------------------------|----|------|--------------|----|------|
|                        | Statistic                       | df | Sig. | Statistic    | df | Sig. |
| HB_SEBELUM_INTERVENSI  | .202                            | 14 | .125 | .801         | 14 | .005 |
| HB_SESUDAH_iINTERVENSI | .215                            | 14 | .078 | .886         | 14 | .070 |
| HB_SEBELUM_KONTROL     | .400                            | 14 | .000 | .648         | 14 | .000 |
| HB_SESUDAH_KONTROL     | .330                            | 14 | .000 | .715         | 14 | .001 |

a. Lilliefors Significance Correction

### Mann-Whitney Test

|            |            | Ranks |           |              |
|------------|------------|-------|-----------|--------------|
|            | KELOMPOK   | N     | Mean Rank | Sum of Ranks |
| HB_SEBELUM | INTERVENSI | 14    | 16.18     | 226.50       |
|            | KONTROL    | 14    | 12.82     | 179.50       |
|            | Total      | 28    |           |              |

### Test Statistics<sup>a</sup>

|                |  | HB_SEBELUM |
|----------------|--|------------|
| Mann-Whitney U |  | 74.500     |

|                                |                   |
|--------------------------------|-------------------|
| Wilcoxon W                     | 179.500           |
| Z                              | -1.087            |
| Asymp. Sig. (2-tailed)         | .277              |
| Exact Sig. [2*(1-tailed Sig.)] | .285 <sup>b</sup> |

a. Grouping Variabel: KELOMPOK

b. Not corrected for ties.

|            |            | Ranks |           |              |
|------------|------------|-------|-----------|--------------|
|            | KELOMPOK   | N     | Mean Rank | Sum of Ranks |
| HB_SESUDAH | INTERVENSI | 14    | 19.64     | 275.00       |
|            | KONTROL    | 14    | 9.36      | 131.00       |
|            | Total      | 28    |           |              |

### Test Statistics<sup>a</sup>

| HB_SESUDAH_<br>iINTERVENSI -<br>HB_SEBELUM_<br>INTERVENSI |                     |
|---|---------------------|
| Z   | -3.013 <sup>b</sup> |
| Asymp. Sig. (2-tailed)                                    | .003                |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

## Wilcoxon Signed Ranks Test

|                      |                | Ranks          |           |              |
|----------------------|----------------|----------------|-----------|--------------|
|                      |                | N              | Mean Rank | Sum of Ranks |
| HB_SESUDAH_KONTROL - | Negative Ranks | 3 <sup>a</sup> | 8.00      | 24.00        |
| HB_SEBELUM_KONTROL   | Positive Ranks | 9 <sup>b</sup> | 6.00      | 54.00        |
|                      | Ties           | 2 <sup>c</sup> |           |              |
|                      | Total          | 14             |           |              |

a. HB\_SESUDAH\_KONTROL < HB\_SEBELUM\_KONTROL

b. HB\_SESUDAH\_KONTROL > HB\_SEBELUM\_KONTROL

c. HB\_SESUDAH\_KONTROL = HB\_SEBELUM\_KONTROL

### Test Statistics<sup>a</sup>

HB\_SESUDAH\_  
KONTROL -  
HB\_SEBELUM\_  
KONTROL

|                        |                     |
|------------------------|---------------------|
| Z                      | -1.204 <sup>b</sup> |
| Asymp. Sig. (2-tailed) | .229                |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

### Mann-Whitney Test

#### Ranks

|              | KELOMPOK   | N  | Mean Rank | Sum of Ranks |
|--------------|------------|----|-----------|--------------|
| HB_PERBEDAAN | INTERVENSI | 14 | 19.79     | 277.00       |
|              | KONTROL    | 14 | 9.21      | 129.00       |
|              | Total      | 28 |           |              |

### Test Statistics<sup>a</sup>

HB\_PERBEDAA  
N

|                                |                   |
|--------------------------------|-------------------|
| Mann-Whitney U                 | 24.000            |
| Wilcoxon W                     | 129.000           |
| Z                              | -3.417            |
| Asymp. Sig. (2-tailed)         | .001              |
| Exact Sig. [2*(1-tailed Sig.)] | .000 <sup>b</sup> |

a. Grouping Variabel: KELOMPOK

b. Not corrected for ties.

### INDEKS ERITROSIT

#### Descriptives

|                     |   | Statistic | Std. Error |
|---------------------|---|-----------|------------|
| MCV_SEBELUM_INTERVE | Mean                                    | 74.5357   | .57585     |
| NSI                 | 95% Confidence Interval for Lower Bound | 73.2917   |            |
|                     | Mean Upper Bound                        | 75.7798   |            |
|                     | 5% Trimmed Mean                         | 74.5286   |            |

|                     |                             |             |         |         |
|---------------------|-----------------------------|-------------|---------|---------|
|                     | Median                      |             | 73.9000 |         |
|                     | Variance                    |             | 4.642   |         |
|                     | Std. Deviation              |             | 2.15464 |         |
|                     | Minimum                     |             | 71.00   |         |
|                     | Maximum                     |             | 78.20   |         |
|                     | Range                       |             | 7.20    |         |
|                     | Interquartile Range         |             | 3.50    |         |
|                     | Skewness                    |             | .310    | .597    |
|                     | Kurtosis                    |             | -.568   | 1.154   |
| MCV_SESUDAH_INTERVE | Mean                        |             | 84.0214 | 1.98487 |
| NSI                 | 95% Confidence Interval for | Lower Bound | 79.7334 |         |
|                     | Mean                        | Upper Bound | 88.3095 |         |
|                     | 5% Trimmed Mean             |             | 84.1516 |         |
|                     | Median                      |             | 85.6000 |         |
|                     | Variance                    |             | 55.156  |         |
|                     | Std. Deviation              |             | 7.42669 |         |
|                     | Minimum                     |             | 73.60   |         |
|                     | Maximum                     |             | 92.10   |         |
|                     | Range                       |             | 18.50   |         |
|                     | Interquartile Range         |             | 15.27   |         |
|                     | Skewness                    |             | -.449   | .597    |
|                     | Kurtosis                    |             | -1.673  | 1.154   |
|                     | MCV_SEBELUM_KONTROL         | Mean        |         | 71.7643 |
|                     | 95% Confidence Interval for | Lower Bound | 68.1178 |         |
|                     | Mean                        | Upper Bound | 75.4107 |         |
|                     | 5% Trimmed Mean             |             | 72.3659 |         |
|                     | Median                      |             | 73.7500 |         |
|                     | Variance                    |             | 39.886  |         |
|                     | Std. Deviation              |             | 6.31550 |         |
|                     | Minimum                     |             | 53.90   |         |
|                     | Maximum                     |             | 78.80   |         |
|                     | Range                       |             | 24.90   |         |
|                     | Interquartile Range         |             | 3.00    |         |
|                     | Skewness                    |             | -2.109  | .597    |
|                     | Kurtosis                    |             | 4.823   | 1.154   |
|                     | MCV_SESUDAH_KONTRO          | Mean        |         | 75.3071 |
| L                   | 95% Confidence Interval for | Lower Bound | 71.6399 |         |
|                     | Mean                        | Upper Bound | 78.9744 |         |
|                     | 5% Trimmed Mean             |             | 75.3579 |         |
|                     | Median                      |             | 74.1500 |         |

|                     |         |       |
|---------------------|---------|-------|
| Variance            | 40.342  |       |
| Std. Deviation      | 6.35156 |       |
| Minimum             | 62.50   |       |
| Maximum             | 87.20   |       |
| Range               | 24.70   |       |
| Interquartile Range | 7.25    |       |
| Skewness            | .094    | .597  |
| Kurtosis            | .557    | 1.154 |

### Tests of Normality

|                            | Kolmogorov-Smirnov <sup>a</sup> |    |                   | Shapiro-Wilk |    |      |
|----------------------------|---------------------------------|----|-------------------|--------------|----|------|
|                            | Statistic                       | df | Sig.              | Statistic    | df | Sig. |
| MCV_SEBELUM_INTERVE<br>NSI | .239                            | 14 | .029              | .907         | 14 | .143 |
| MCV_SESUDAH_INTERVE<br>NSI | .216                            | 14 | .074              | .831         | 14 | .012 |
| MCV_SEBELUM_KONTROL        | .334                            | 14 | .000              | .737         | 14 | .001 |
| MCV_SESUDAH_KONTRO<br>L    | .148                            | 14 | .200 <sup>*</sup> | .962         | 14 | .756 |

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

### Wilcoxon Signed Ranks Test

#### Ranks

|                     |                | N               | Mean Rank | Sum of Ranks |
|---------------------|----------------|-----------------|-----------|--------------|
| MCV_SESUDAH_INTERVE | Negative Ranks | 2 <sup>a</sup>  | 3.75      | 7.50         |
| NSI -               | Positive Ranks | 12 <sup>b</sup> | 8.13      | 97.50        |
| MCV_SEBELUM_INTERVE | Ties           | 0 <sup>c</sup>  |           |              |
| NSI                 | Total          | 14              |           |              |

a. MCV\_SESUDAH\_INTERVENS I < MCV\_SEBELUM\_INTERVENS I

b. MCV\_SESUDAH\_INTERVENS I > MCV\_SEBELUM\_INTERVENS I

c. MCV\_SESUDAH\_INTERVENS I = MCV\_SEBELUM\_INTERVENS I

#### Test Statistics<sup>a</sup>



|                        |                     |
|------------------------|---------------------|
|                        | MCV_SESUDA          |
|                        | H_INTERVENSI        |
|                        | -                   |
|                        | MCV_SEBELU          |
|                        | M_INTERVENSI        |
| Z                      | -2.826 <sup>b</sup> |
| Asymp. Sig. (2-tailed) | .005                |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

### Ranks

|                     |                | N              | Mean Rank | Sum of Ranks |
|---------------------|----------------|----------------|-----------|--------------|
| MCV_SESUDAH_KONTROL | Negative Ranks | 4 <sup>a</sup> | 5.88      | 23.50        |
| -                   | Positive Ranks | 9 <sup>b</sup> | 7.50      | 67.50        |
| MCV_SEBELUM_KONTROL | Ties           | 1 <sup>c</sup> |           |              |
|                     | Total          | 14             |           |              |

a. MCV\_SESUDAH\_KONTROL < MCV\_SEBELUM\_KONTROL

b. MCV\_SESUDAH\_KONTROL > MCV\_SEBELUM\_KONTROL

c. MCV\_SESUDAH\_KONTROL = MCV\_SEBELUM\_KONTROL

### Test Statistics<sup>a</sup>

|                        |                     |
|------------------------|---------------------|
|                        | MCV_SESUDA          |
|                        | H_KONTROL -         |
|                        | MCV_SEBELU          |
|                        | M_KONTROL           |
| Z                      | -1.538 <sup>b</sup> |
| Asymp. Sig. (2-tailed) | .124                |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

### Mann-Whitney Test

|             |            | Ranks |           |              |
|-------------|------------|-------|-----------|--------------|
|             | KELOMPOK   | N     | Mean Rank | Sum of Ranks |
| MCV_SEBELUM | INTERVENSI | 14    | 16.07     | 225.00       |
|             | KONTROL    | 14    | 12.93     | 181.00       |
|             | Total      | 28    |           |              |

### Test Statistics<sup>a</sup>

MCV\_SEBELU

M

|                                |                   |
|--------------------------------|-------------------|
| Mann-Whitney U                 | 76.000            |
| Wilcoxon W                     | 181.000           |
| Z                              | -1.018            |
| Asymp. Sig. (2-tailed)         | .309              |
| Exact Sig. [2*(1-tailed Sig.)] | .329 <sup>b</sup> |

a. Grouping Variabel: KELOMPOK

b. Not corrected for ties.

### Ranks

|             | KELOMPOK   | N  | Mean Rank | Sum of Ranks |
|-------------|------------|----|-----------|--------------|
| MCV_SESUDAH | INTERVENSI | 14 | 18.71     | 262.00       |
|             | KONTROL    | 14 | 10.29     | 144.00       |
|             | Total      | 28 |           |              |

### Test Statistics<sup>a</sup>

MCV\_SESUDA

H

|                                |                   |
|--------------------------------|-------------------|
| Mann-Whitney U                 | 39.000            |
| Wilcoxon W                     | 144.000           |
| Z                              | -2.714            |
| Asymp. Sig. (2-tailed)         | .007              |
| Exact Sig. [2*(1-tailed Sig.)] | .006 <sup>b</sup> |

a. Grouping Variabel: KELOMPOK

b. Not corrected for ties.

### Descriptives

|                     |                             | Statistic | Std. Error |
|---------------------|-----------------------------|-----------|------------|
| MCH_SEBELUM_INTERVE | Mean                        | 25.0000   | .82215     |
| NSI                 | 95% Confidence Interval for |           |            |
|                     | Lower Bound                 | 23.2238   |            |
|                     | Upper Bound                 | 26.7762   |            |
|                     | 5% Trimmed Mean             | 24.9278   |            |
|                     | Median                      | 25.4000   |            |
|                     | Variance                    | 9.463     |            |

|                     |                             |             |         |         |
|---------------------|-----------------------------|-------------|---------|---------|
|                     | Std. Deviation              |             | 3.07621 |         |
|                     | Minimum                     |             | 21.30   |         |
|                     | Maximum                     |             | 30.00   |         |
|                     | Range                       |             | 8.70    |         |
|                     | Interquartile Range         |             | 5.27    |         |
|                     | Skewness                    |             | .234    | .597    |
|                     | Kurtosis                    |             | -1.399  | 1.154   |
| MCH_SESUDAH_INTERVE | Mean                        |             | 27.2214 | .62864  |
| NSI                 | 95% Confidence Interval for | Lower Bound | 25.8633 |         |
|                     | Mean                        | Upper Bound | 28.5795 |         |
|                     | 5% Trimmed Mean             |             | 27.3238 |         |
|                     | Median                      |             | 27.2000 |         |
|                     | Variance                    |             | 5.533   |         |
|                     | Std. Deviation              |             | 2.35214 |         |
|                     | Minimum                     |             | 22.50   |         |
|                     | Maximum                     |             | 30.10   |         |
|                     | Range                       |             | 7.60    |         |
|                     | Interquartile Range         |             | 3.35    |         |
|                     | Skewness                    |             | -.833   | .597    |
|                     | Kurtosis                    |             | .055    | 1.154   |
| MCH_SEBELUM_KONTRO  | Mean                        |             | 23.7929 | 1.09145 |
| L                   | 95% Confidence Interval for | Lower Bound | 21.4349 |         |
|                     | Mean                        | Upper Bound | 26.1508 |         |
|                     | 5% Trimmed Mean             |             | 24.0143 |         |
|                     | Median                      |             | 25.5000 |         |
|                     | Variance                    |             | 16.678  |         |
|                     | Std. Deviation              |             | 4.08383 |         |
|                     | Minimum                     |             | 14.60   |         |
|                     | Maximum                     |             | 29.00   |         |
|                     | Range                       |             | 14.40   |         |
|                     | Interquartile Range         |             | 4.88    |         |
|                     | Skewness                    |             | -1.228  | .597    |
|                     | Kurtosis                    |             | .948    | 1.154   |
| MCH_SESUDAH_KONTRO  | Mean                        |             | 24.4429 | .94577  |
| L                   | 95% Confidence Interval for | Lower Bound | 22.3997 |         |
|                     | Mean                        | Upper Bound | 26.4861 |         |
|                     | 5% Trimmed Mean             |             | 24.6254 |         |
|                     | Median                      |             | 25.4000 |         |
|                     | Variance                    |             | 12.523  |         |
|                     | Std. Deviation              |             | 3.53873 |         |

|                     |        |       |
|---------------------|--------|-------|
| Minimum             | 16.60  |       |
| Maximum             | 29.00  |       |
| Range               | 12.40  |       |
| Interquartile Range | 4.90   |       |
| Skewness            | -1.033 | .597  |
| Kurtosis            | .697   | 1.154 |

### Tests of Normality

|                        | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|------------------------|---------------------------------|----|-------|--------------|----|------|
|                        | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| MCH_SEBELUM_INTERVENSI | .192                            | 14 | .170  | .900         | 14 | .112 |
| MCH_SESUDAH_INTERVENSI | .164                            | 14 | .200* | .899         | 14 | .110 |
| MCH_SEBELUM_KONTROL    | .240                            | 14 | .028  | .861         | 14 | .031 |
| MCH_SESUDAH_KONTROL    | .254                            | 14 | .014  | .900         | 14 | .113 |

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

### Mann-Whitney Test

|             |            | Ranks |           |              |
|-------------|------------|-------|-----------|--------------|
|             | KELOMPOK   | N     | Mean Rank | Sum of Ranks |
| MCH_SEBELUM | INTERVENSI | 14    | 15.36     | 215.00       |
|             | KONTROL    | 14    | 13.64     | 191.00       |
|             | Total      | 28    |           |              |

### Test Statistics<sup>a</sup>

| MCH_SEBELUM                    |                   |
|--------------------------------|-------------------|
| M                              |                   |
| Mann-Whitney U                 | 86.000            |
| Wilcoxon W                     | 191.000           |
| Z                              | -.555             |
| Asymp. Sig. (2-tailed)         | .579              |
| Exact Sig. [2*(1-tailed Sig.)] | .603 <sup>b</sup> |

a. Grouping Variabel: KELOMPOK

b. Not corrected for ties.

## T-Test

### Independent Samples Test

|                 |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |        |                 |                 |                       |   |         |
|-----------------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|---------|
|                 |                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |         |
|                 |                             |   |      |                              |        |                 |                 |                       | Lower                                     | Upper   |
| MCH_SESU<br>DAH | Equal variances assumed     | 1.469                                   | .236 | 2.447                        | 26     | .021            | 2.77857         | 1.13563               | .44425                                    | 5.11290 |
|                 | Equal variances not assumed |   |      | 2.447                        | 22.611 | .023            | 2.77857         | 1.13563               | .42710                                    | 5.13004 |

### Group Statistics

|             | KELOMPOK   | N  | Mean    | Std. Deviation | Std. Error Mean |
|-------------|------------|----|---------|----------------|-----------------|
| MCH_SESUDAH | INTERVENSI | 14 | 27.2214 | 2.35214        | .62864          |
|             | KONTROL    | 14 | 24.4429 | 3.53873        | .94577          |

### Paired Samples Statistics

|        |                            | Mean    | N  | Std. Deviation | Std. Error Mean |
|--------|----------------------------|---------|----|----------------|-----------------|
| Pair 1 | MCH_SEBELUM_INTERVE<br>NSI | 25.0000 | 14 | 3.07621        | .82215          |
|        | MCH_SESUDAH_INTERVE<br>NSI | 27.2214 | 14 | 2.35214        | .62864          |

### Paired Samples Correlations

|  | N | Correlation | Sig. |
|--|---|-------------|------|
|--|---|-------------|------|

|        |  |    |      |      |
|--------|--|----|------|------|
| Pair 1 | MCH_SEBELUM_INTERVE<br>NSI &<br>MCH_SESUDAH_INTERVE<br>NSI | 14 | .397 | .160 |
|--------|--|----|------|------|

### Paired Samples Test

|        |   | Paired Differences |                |                 |   |         |        |    |                 |  |
|--------|---|--------------------|----------------|-----------------|---|---------|--------|----|-----------------|--|
|        |   | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |         | t      | df | Sig. (2-tailed) |  |
|        |   |                    |                |                 | Lower                                     | Upper   |        |    |                 |  |
| Pair 1 | MCH_SEBELUM_INTERVENSI<br>-<br>MCH_SESUDAH_INTERVENSI | -2.22143           | 3.04181        | .81296          | -3.97771                                  | -.46514 | -2.733 | 13 | .017            |  |

### Wilcoxon Signed Ranks Test

#### Ranks

|                     |                | N              | Mean Rank | Sum of Ranks |
|---------------------|----------------|----------------|-----------|--------------|
| MCH_SESUDAH_KONTROL | Negative Ranks | 6 <sup>a</sup> | 6.25      | 37.50        |
| L -                 | Positive Ranks | 7 <sup>b</sup> | 7.64      | 53.50        |
| MCH_SEBELUM_KONTROL | Ties           | 1 <sup>c</sup> |           |              |
| Total               |                | 14             |           |              |

a. MCH\_SESUDAH\_KONTROL < MCH\_SEBELUM\_KONTROL

b. MCH\_SESUDAH\_KONTROL > MCH\_SEBELUM\_KONTROL

c. MCH\_SESUDAH\_KONTROL = MCH\_SEBELUM\_KONTROL

### Test Statistics<sup>a</sup>

MCH\_SESUDA

H\_KONTROL -

MCH\_SEBELU

M\_KONTROL

|                        |                    |
|------------------------|--------------------|
| Z                      | -.559 <sup>b</sup> |
| Asymp. Sig. (2-tailed) | .576               |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

## Descriptives

|                     |                             | Statistic   | Std. Error |
|---------------------|-----------------------------|-------------|------------|
| MCHC_SEBELUM_INTERV | Mean                        | 30.3214     | .30512     |
| ENSI                | 95% Confidence Interval for | Lower Bound | 29.6623    |
|                     | Mean                        | Upper Bound | 30.9806    |
|                     | 5% Trimmed Mean             | 30.2460     |            |
|                     | Median                      | 29.8500     |            |
|                     | Variance                    | 1.303       |            |
|                     | Std. Deviation              | 1.14164     |            |
|                     | Minimum                     | 29.00       |            |
|                     | Maximum                     | 33.00       |            |
|                     | Range                       | 4.00        |            |
|                     | Interquartile Range         | 1.30        |            |
|                     | Skewness                    | 1.125       | .597       |
|                     | Kurtosis                    | .998        | 1.154      |
|                     | MCHC_SESUDAH_INTERV         | Mean        | 31.7857    |
| ENSI                | 95% Confidence Interval for | Lower Bound | 31.3323    |
|                     | Mean                        | Upper Bound | 32.2391    |
|                     | 5% Trimmed Mean             | 31.8341     |            |
|                     | Median                      | 31.9000     |            |
|                     | Variance                    | .617        |            |
|                     | Std. Deviation              | .78530      |            |
|                     | Minimum                     | 29.90       |            |
|                     | Maximum                     | 32.80       |            |
|                     | Range                       | 2.90        |            |
|                     | Interquartile Range         | 1.18        |            |
|                     | Skewness                    | -.891       | .597       |
|                     | Kurtosis                    | 1.274       | 1.154      |
|                     | MCHC_SEBELUM_KONTR          | Mean        | 29.3714    |
| OL                  | 95% Confidence Interval for | Lower Bound | 28.4806    |
|                     | Mean                        | Upper Bound | 30.2623    |
|                     | 5% Trimmed Mean             | 29.3683     |            |
|                     | Median                      | 29.6000     |            |
|                     | Variance                    | 2.381       |            |
|                     | Std. Deviation              | 1.54294     |            |
|                     | Minimum                     | 26.50       |            |
|                     | Maximum                     | 32.30       |            |
|                     | Range                       | 5.80        |            |
|                     | Interquartile Range         | 1.95        |            |
|                     | Skewness                    | -.167       | .597       |



|                     |                             |                             |             |        |        |
|---------------------|-----------------------------|-----------------------------|-------------|--------|--------|
|                     | Kurtosis                    |                             | .275        | 1.154  |        |
| MCHC_SESUDAH_KONTR  | Mean                        |                             | 30.3071     | .50290 |        |
| OL                  | 95% Confidence Interval for | Lower Bound                 | 29.2207     |        |        |
|                     | Mean                        | Upper Bound                 | 31.3936     |        |        |
|                     | 5% Trimmed Mean             |                             | 30.3913     |        |        |
|                     | Median                      |                             | 30.0000     |        |        |
|                     | Variance                    |                             | 3.541       |        |        |
|                     | Std. Deviation              |                             | 1.88168     |        |        |
|                     | Minimum                     |                             | 26.50       |        |        |
|                     | Maximum                     |                             | 32.60       |        |        |
|                     | Range                       |                             | 6.10        |        |        |
|                     | Interquartile Range         |                             | 3.05        |        |        |
|                     | Skewness                    |                             | -.418       | .597   |        |
|                     | Kurtosis                    |                             | -.514       | 1.154  |        |
|                     | MCH_SELISIH_INTERVENS       | Mean                        |             | 1.4643 | .28567 |
|                     | I                           | 95% Confidence Interval for | Lower Bound | .8471  |        |
| Mean                |                             | Upper Bound                 | 2.0814      |        |        |
| 5% Trimmed Mean     |                             |                             | 1.4770      |        |        |
| Median              |                             |                             | 1.5000      |        |        |
| Variance            |                             |                             | 1.142       |        |        |
| Std. Deviation      |                             |                             | 1.06887     |        |        |
| Minimum             |                             |                             | -.20        |        |        |
| Maximum             |                             |                             | 2.90        |        |        |
| Range               |                             |                             | 3.10        |        |        |
| Interquartile Range |                             |                             | 2.05        |        |        |
| Skewness            |                             |                             | -.277       | .597   |        |
| Kurtosis            |                             |                             | -1.204      | 1.154  |        |
| MCH_SELISIH_KONTROL |                             | Mean                        |             | .9357  | .48387 |
|                     |                             | 95% Confidence Interval for | Lower Bound | -.1096 |        |
|                     | Mean                        | Upper Bound                 | 1.9811      |        |        |
|                     | 5% Trimmed Mean             |                             | .9563       |        |        |
|                     | Median                      |                             | 1.0500      |        |        |
|                     | Variance                    |                             | 3.278       |        |        |
|                     | Std. Deviation              |                             | 1.81049     |        |        |
|                     | Minimum                     |                             | -2.60       |        |        |
|                     | Maximum                     |                             | 4.10        |        |        |
|                     | Range                       |                             | 6.70        |        |        |
|                     | Interquartile Range         |                             | 2.55        |        |        |
|                     | Skewness                    |                             | -.293       | .597   |        |
|                     | Kurtosis                    |                             | .027        | 1.154  |        |

### Tests of Normality

|                             | Kolmogorov-Smirnov <sup>a</sup> |    |                   | Shapiro-Wilk |    |      |
|-----------------------------|---------------------------------|----|-------------------|--------------|----|------|
|                             | Statistic                       | df | Sig.              | Statistic    | df | Sig. |
| MCHC_SEBELUM_INTERV<br>ENSI | .207                            | 14 | .107              | .893         | 14 | .090 |
| MCHC_SESUDAH_INTERV<br>ENSI | .150                            | 14 | .200 <sup>*</sup> | .931         | 14 | .311 |
| MCHC_SEBELUM_KONTR<br>OL    | .202                            | 14 | .127              | .959         | 14 | .705 |
| MCHC_SESUDAH_KONTR<br>OL    | .212                            | 14 | .087              | .903         | 14 | .123 |
| MCH_SELISIH_INTERVENS<br>I  | .126                            | 14 | .200 <sup>*</sup> | .933         | 14 | .333 |
| MCH_SELISIH_KONTROL         | .098                            | 14 | .200 <sup>*</sup> | .985         | 14 | .993 |

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

### T-Test

#### Paired Samples Statistics

|        |                             | Mean    | N  | Std. Deviation | Std. Error Mean |
|--------|-----------------------------|---------|----|----------------|-----------------|
| Pair 1 | MCHC_SEBELUM_INTERV<br>ENSI | 30.3214 | 14 | 1.14164        | .30512          |
|        | MCHC_SESUDAH_INTERV<br>ENSI | 31.7857 | 14 | .78530         | .20988          |

#### Paired Samples Correlations

|        |  | N  | Correlation | Sig. |
|--------|--|----|-------------|------|
| Pair 1 | MCHC_SEBELUM_INTERV<br>ENSI &<br>MCHC_SESUDAH_INTERV<br>ENSI | 14 | .434        | .121 |

### Paired Samples Test

|        |  | Paired Differences |                |                 |   |         |        |    |                 |
|--------|--|--------------------|----------------|-----------------|---|---------|--------|----|-----------------|
|        |  | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |         | t      | df | Sig. (2-tailed) |
|        |  |                    |                |                 | Lower                                     | Upper   |        |    |                 |
| Pair 1 | MCHC_SEBELUM_INTERVEN<br>SI -<br>MCHC_SESUDAH_INTERVEN<br>SI | -1.46429           | 1.06887        | .28567          | -2.08143                                  | -.84714 | -5.126 | 13 | .000            |

### Paired Samples Statistics

|        |                          | Mean    | N  | Std. Deviation | Std. Error Mean |
|--------|--------------------------|---------|----|----------------|-----------------|
| Pair 1 | MCHC_SEBELUM_KONTR<br>OL | 29.3714 | 14 | 1.54294        | .41237          |
|        | MCHC_SESUDAH_KONTR<br>OL | 30.3071 | 14 | 1.88168        | .50290          |

### Paired Samples Correlations

|        |  | N  | Correlation | Sig. |
|--------|--|----|-------------|------|
| Pair 1 | MCHC_SEBELUM_KONTR<br>OL &<br>MCHC_SESUDAH_KONTR<br>OL | 14 | .455        | .102 |

### Paired Samples Test

|        |                      | Paired Differences |                |                 |          |        |   |    |                 |  |
|--------|----------------------|--------------------|----------------|-----------------|----------|--------|---|----|-----------------|--|
|        |                      |                    |                |                 |          |        | 95% Confidence Interval of the Difference |    |                 |  |
|        |                      | Mean               | Std. Deviation | Std. Error Mean | Lower    | Upper  | t   | df | Sig. (2-tailed) |  |
| Pair 1 | MCHC_SEBELUM_KONTROL | -1.93571           | 1.81049        | .48387          | -1.98106 | .10963 | -1.934                                    | 13 | .075            |  |
|        | -                    |                    |                |                 |          |        |   |    |                 |  |
|        | MCHC_SESUDAH_KONTROL |                    |                |                 |          |        |   |    |                 |  |

### Group Statistics

|              |            | KELOMPOK | N  | Mean    | Std. Deviation | Std. Error Mean |
|--------------|------------|----------|----|---------|----------------|-----------------|
| MCHC_SEBELUM | INTERVENSI |          | 14 | 30.3214 | 1.14164        | .30512          |
|              | KONTROL    |          | 14 | 29.3714 | 1.54294        | .41237          |

### Independent Samples Test

|                  |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |        |                 |                 |                       |   |         |
|------------------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|---------|
|                  |                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |         |
|                  |                             |   |      |                              |        |                 |                 |                       | Lower                                     | Upper   |
| MCHC_S<br>EBELUM | Equal variances assumed     | .569                                    | .458 | 1.852                        | 26     | .075            | .95000          | .51298                | -.10444                                   | 2.00444 |
|                  | Equal variances not assumed |   |      | 1.852                        | 23.952 | .076            | .95000          | .51298                | -.10884                                   | 2.00884 |

### Group Statistics

|              | KELOMPOK   | N  | Mean    | Std. Deviation | Std. Error Mean |
|--------------|------------|----|---------|----------------|-----------------|
| MCHC_SESUDAH | INTERVENSI | 14 | 31.7857 | .78530         | .20988          |
|              | KONTROL    | 14 | 30.3071 | 1.88168        | .50290          |

### Independent Samples Test

|              |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |        |                 |                 |                       |   |         |
|--------------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|---------|
|              |                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |         |
|              |                             |   |      |                              |        |                 |                 |                       | Lower                                     | Upper   |
| MCHC_SESUDAH | Equal variances assumed     | 9.013                                   | .006 | 2.713                        | 26     | .012            | 1.47857         | .54494                | .35843                                    | 2.59871 |
|              | Equal variances not assumed |   |      | 2.713                        | 17.395 | .015            | 1.47857         | .54494                | .33084                                    | 2.62631 |

