

DAFTAR PUSTAKA

- Arini, F. A. (2010). *Pengukuran Antropometri dan hubungannya dengan Gloden Standar Persen Lemak Tubuh Bioelectrical Impedance Analysis Studi Validasi Pada Anak Sekolah Dasar Tahun 2010*.
<https://id.scribd.com/document/426193474/tanita-pdf>
- AssayGenie. (2021). *Human TNF-Alpha Pharmagenia ELISA Kit* (p. KIT).
- Baratawidjaja, K. G., dan R. (2012). *Imunologi Dasar*. Badan Penerbit FKUI. Jakarta. 259-282.
http://repository.umsida.ac.id/bitstream/handle/123456789/2510/j.DAFTAR_PUSTAKA.pdf?sequence=10&isAllowed=y
- Bernardi, S., Marcuzzi, A., Piscianz, E., Tommasini, A., & Fabris, B. (2018). The complex interplay between lipids, immune system and interleukins in cardio-metabolic diseases. *International Journal of Molecular Sciences*, 19(12), 1–24. <https://doi.org/10.3390/ijms19124058>
- Bhupathiraju, S. N., & Hu, F. B. (2016). *Cardiovascular Complications*. 1723–1736. <https://doi.org/10.1161/CIRCRESAHA.115.306825>
- Cahyaningrum. (2015). Leptin sebagai indikator obesitas, Sandubaya Mataram. *Jurnal Kesehatan Prima*, 1(1), 1364–1371.
- Campanati, A., Paolinelli, M., Diotallevi, F., Martina, E., Molinelli, E., Offidani, A., Campanati, A., Paolinelli, M., & Diotallevi, F. (2019). treatment of psoriasis Ac ce pt us cr t. *Expert Opinion on Drug Metabolism & Toxicology*, 0(0), 1. <https://doi.org/10.1080/17425255.2019.1681969>
- Carreras-torres, R., Johansson, M., Haycock, P. C., Relton, C. L., Smith, G. D., Brennan, P., & Martin, R. M. (2020). *Role of obesity in smoking behaviour : Mendelian randomisation study in UK Biobank*.
<https://doi.org/10.1136/bmj.k1767>
- Clair, C., Chiolero, A., Faeh, D., Cornuz, J., Marques-vidal, P., Paccaud, F., Mooser, V., Waeber, G., & Vollenweider, P. (2011). *Dose-dependent positive association between cigarette smoking , abdominal obesity and body fat : cross-sectional data from a population-based survey*.
<https://doi.org/10.1186/1471-2458-11-23>
- Cruceriu, D., Baldasici, O., & Balacescu, O. (2019). *The dual role of tumor necrosis factor-alpha (TNF- α) in breast cancer : molecular insights and therapeutic approaches*.
- Dietze, E. C., Chavez, T. A., & Seewaldt, V. L. (2017). Obesity and Triple-

- Negative Breast Cancer: Disparities, Controversies, and Biology. *The American Journal of Pathology*.
<https://doi.org/10.1016/j.ajpath.2017.09.018>
- Dioni, S., Rini, E. A., & Yerizel, E. (2020). Hubungan Kadar Plasma Chemerin dengan Homeostasis Model Assessment Insulin Resistance pada Remaja Obesitas. *Sari Pediatri*, 22(1), 24.
<https://doi.org/10.14238/sp22.1.2020.24-9>
- Direktorat P2PTM Kemenkes RI. (2018). *Bagaimana cara menghitung IMT (Indeks Massa Tubuh) ? - Direktorat P2PTM*. Indeks Massa Tubuh.
- Elisa, K. (2018). *11 Tips Memiliki Elisa Kit Yang Tepat*. <https://indogen.id/11-tips-memilih-elisa-kit-yang-tepat/>
- Fadaei, R., Bagheri, N., Heidarian, E., Nouri, A., Hesari, Z., Moradi, N., Ahmadi, A., & Ahmadi, R. (2020). Serum levels of IL-32 in patients with type 2 diabetes mellitus and its relationship with TNF- α and IL-6. *Cytokine*, 125(August 2019), 154832.
<https://doi.org/10.1016/j.cyto.2019.154832>
- Fatmah. (2006). Respons Imunitas yang Rendah pada Tubuh Manusia Usia Lanjut. *Makara Kesehatan*, 10(1), 47–53.
- Gan, S. D., Patel, K. R., & Elisa, S. (2013). *Enzyme Immunoassay and Enzyme-Linked Immunosorbent Assay*. 133(9), e12-3.
<https://doi.org/10.1038/jid.2013.287>
- Haris, S., & Tambunan, T. (2009). *Hipertensi pada Sindrom Metabolik*. 11(4), 257–263.
- Heriansyah, T. (2014). Hubungan Indeks Massa Tubuh Dengan Jumlah Circulating Endothelial Cell. *Jurnal Kedokteran Syiah Kuala*, 14(1), 1–6.
- Hotamisligil, G. S., Shargill, N. S., & Spiegelman, B. M. (1993). 9. H. Semb, J. Peterson, J. Tavernier, T. Olivecrona, *J. Biol. Chem.* 262, 8390 (1987). 259(January), 87–92.
- Huffman, D. M., & Barzilai, N. (2009). Role of visceral adipose tissue in aging. *Biochimica et Biophysica Acta - General Subjects*, 1790(10), 1117–1123.
<https://doi.org/10.1016/j.bbagen.2009.01.008>
- I Putu Budi Wibawa, I. M. B. (2008). *CORRELATION OF IL-6 WITH SERUM IRON IN ANAEMIA*. 9, 36–46.
- Jati, L. (2014). Perbedaan Asupan Lemak, Lingkar Pinggang Dan Persentase Lemak Tubuh Pada Wanita Dislipidemia Dan Non Dislipidemia. *Jurnal Kesehatan Masyarakat (e-Journal)*, 2(5), 292–299.

- Jura, M., & Kozak, L. P. (2016). *Obesity and related consequences to ageing. August 2015*. <https://doi.org/10.1007/s11357-016-9884-3>
- Kamso, S., Dharmayati, P., Lubis, U., Juwita, R., Kurnia, Y., & Besral, R. (2011). Prevalensi dan Determinan Sindrom Metabolik pada Kelompok Eksekutif di Jakarta dan Sekitarnya Prevalency and Determinant Metabolic Syndrome on Executive Group in Jakarta and Nearby Areas. *FKM Universitas Indonesia*, 1, 85–90.
- Kieftedejong, J., & Asllanaj, E. (2018). *Toappearin: Maturitas*.
- Konieczny, M. (2020). *Effect of a Six-Week Intermittent Fasting Intervention Program on the Composition of the Human Body in Women over 60 Years of Age*.
- Lee, W. (2016). *Body Fatness Charts Based on BMI and Waist Circumference*. 24(1), 245–249. <https://doi.org/10.1002/oby.21307>
- Lie, S. A., Meyer, H. E., Øyen, J., Gjesdal, C. G., & Nyga, O. K. (2014). *Smoking and Body Fat Mass in Relation to Bone Mineral Density and Hip Fracture : The Hordaland Health Study*. 9(3). <https://doi.org/10.1371/journal.pone.0092882>
- Lim, J. U., Lee, J. H., Kim, J. S., Hwang, Y. Il, Kim, T., Yong, S., & Yoo, K. H. (2017). *Comparison of World Health Organization and Asia-Pacific body mass index classifications in COPD patients*. 2465–2475.
- Linda, A., Michaelsson, K., Derberg, S. S., Larsson, A., Johansson, L., Kullberg, J., Md, H. A., & Ma, J. S. (2019). *ventricular mass*. 1699–1704. <https://doi.org/10.1097/HJH.0000000000002095>
- Malara, M., Kęska, A., Tkaczyk, J., & Lutoslawska, G. (2015). Body shape index versus body mass index as correlates of health risk in young healthy sedentary men. *Journal of Translational Medicine*, 13(1), 1–5. <https://doi.org/10.1186/s12967-015-0426-z>
- Merdita, I. G. O. J., Agustini, N. I. B., & Wulansari, N. T. (2013). Hubungan Kadar Lemak Tubuh Dengan Ketahanan Kardiovaskular Pada Mahasiswa Tingkat III Ilmu Keperawatan STIKES Bali. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- Midah, Z., Fajriansyah, F., Makmun, A., & Rasfahyana, R. (2021). Hubungan Obesitas dan Stress Oksidatif. *UMI Medical Journal*, 6(1), 62–69. <https://doi.org/10.33096/umj.v6i1.140>
- Molintao. (2019). HUBUNGAN KOMPETENSI IBU, AKTIVITAS FISIK, DAN KONSUMSI JUNK FOOD DENGAN KEJADIAN OBESITAS PADA

BALITA. *Ayan*, 8(5), 55.

- Mukiwanti. (2017). Hubungan rasio lingkaran pinggang pinggul dan indeks massa tubuh terhadap tekanan darah pada middle age (45-59 tahun) di desa polaman kota semarang. *Jurnal Kesehatan Masyarakat*, 2(September), 679–686.
- Müller, W., Fürhapter, A., Helmut, R., Timothy, A., & Nanna, G. L. (2019). Relative Body Weight and Standardised Brightness - Mode Ultrasound Measurement of Subcutaneous Fat in Athletes : An International Multicentre Reliability Study , Under the Auspices of the IOC Medical Commission. *Sports Medicine*, *mm*. <https://doi.org/10.1007/s40279-019-01192-9>
- Nani Wahyuni, E. A. M. (2016). HUBUNGAN LINGKAR PINGGANG DAN RASIO LINGKAR PINGGANG PANGGUL DENGAN KADAR SERUM HIGH SENSITIVITY C-REACTIVE PROTEIN (hsCRP) PADA REMAJA OBESITAS. *Nature*, 184(4681), 156. <https://doi.org/10.1038/184156a0>
- Nugraha, A., Riyadi, M. A., & Prakoso, T. (2016). *RANCANG BANGUN ALAT PENGUKUR PERSENTASE LEMAK TUBUH DENGAN METODE WHOLE BODY MEASUREMENT BIOELECTRICAL IMPEDANCE ANALYSIS (BIA) EMPAT ELEKTRODA BERBASIS MIKROKONTROLER ATMEGA 32 Metode*.
- Nugroho, A. M. A., Kinasih, A., & Messakh, S. T. (2018). Gambaran Aktivitas Fisik Siswa Dengan Imt Kategori Gemuk Di Sekolah Dasar Desa Butuh. *Jurnal Mitra Pendidikan*, 2(8), 730–737.
- Ostrow, V., Wu, S., Aguilar, A., Bonner, R., Suarez, E., & Luca, F. De. (2011). Association between Oxidative Stress and Masked Hypertension in a Multi-Ethnic Population of Obese Children and Adolescents. *The Journal of Pediatrics*, 158(4), 628-633.e1. <https://doi.org/10.1016/j.jpeds.2010.09.081>
- Owolabi, E. O., Ter Goon, D., & Adeniyi, O. V. (2017). Central obesity and normal-weight central obesity among adults attending healthcare facilities in Buffalo City Metropolitan Municipality, South Africa: A cross-sectional study. *Journal of Health, Population and Nutrition*, 36(1), 1–10. <https://doi.org/10.1186/s41043-017-0133-x>
- Pada, K., Futsal, A., & Fik, M. (2015). *Program Studi Ilmu Keolahragaan Fakultas Ilmu Keolahragaan Universitas Negeri Makassar. Pembimbing I*.
- Qatanani, M., & Lazar, M. A. (2007). Mechanisms of obesity-associated insulin resistance: Many choices on the menu. *Genes and Development*,

- 21(12), 1443–1455. <https://doi.org/10.1101/gad.1550907>
- Rahmawati, A. (2013). MEKANISME TERJADINYA INFLAMASI DAN STRES OKSIDATIF PADA OBESITAS. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- Reinders, I., Visser, M., & Schaap, L. (2017). *Body weight and body composition in old age and their relationship with frailty*. 11–15. <https://doi.org/10.1097/MCO.0000000000000332>
- Rianti, R. A. (2013). *Gambaran Jumlah Eritrosit pada Penderita Leukemia di RSUD Jend. A. Yani Kota Metro tahun 2017-2018*.
- Saha, P., & Smith, A. (2018). *Editorial*. 2542–2543. <https://doi.org/10.1186/ar4064>
- Sander, C., Ueck, P., Mergl, R., Hegerl, U., & Himmerich, H. (2017). *Aktivitas fisik pada pasien depresi dan non-depresi dengan obesitas*. <https://doi.org/10.1007/s40519-016-0347-8>
- Sapti, M. (2019). MEKANISME TERJADINYA INFLAMASI DAN STRES OKSIDATIF PADA OBESITAS. *Kemampuan Koneksi Matematis (Tinjauan Terhadap Pendekatan Pembelajaran Savi)*, 53(9), 1689–1699.
- Shita, A. D. P. (2015). Perubahan Level TNF- α dan IL-1 pada Kondisi Diabetes Mellitus. *Prosiding Dentistry Scientific Meeting II, Fakultas Kedokteran Gigi, Universitas JEMBER*, 1, 1–7.
- Sigra, Tasmini, Ahmad, A. (2018). *Hubungan Obesitas Terhadap Kadar Tumor Necrosis Faktor-Alfa (TNF-Alfa)*.
- Sri Rahayu, M. (2018). Hubungan Indeks Massa Tubuh Dengan Penyakit Jantung Koroner Di Rumah Sakit Umum Cut Meutia Kabupaten Aceh Utara. *AVERROUS: Jurnal Kedokteran Dan Kesehatan Malikussaleh*, 2(1), 7. <https://doi.org/10.29103/averrous.v2i1.400>
- Stefanaki, C., Pervanidou, P., Boschiero, D., & Chrousos, G. P. (2018). *Chronic stress and body composition disorders : implications for health and disease. c*.
- Stergios A. Jannis k, C. S. (2017). *Adipose tissue, obesity and non-alcoholic fatty liver disease*. *June*, 92–108. <https://doi.org/10.23736/S0391-1977.16.02563-3>
- Suci, P. (2014). *Korelasi Antara Kadar TNF-Alfa dengan Lingkar Pinggang, Indeks, Massa Tubuh, dan Level Viseral Fat Pada Civitas Akademik Universitas Hasaunuddin*. [https://www.scribd.com/document/325436181/Korelasi-Tnf- \$\alpha\$ -Dengan-](https://www.scribd.com/document/325436181/Korelasi-Tnf-α-Dengan-)

Lingkar-Pinggang-Skripsi

- Supit, I. A., Pangemanan, D. H. C., & Marunduh, S. R. (2015). Profil Tumor Necrosis Factor (Tnf-A) Berdasarkan Indeks Massa Tubuh (Imt) Pada Mahasiswa Fakultas Kedokteran Unsrat Angkatan 2014. *Jurnal E-Biomedik*, 3(2). <https://doi.org/10.35790/ebm.3.2.2015.8621>
- Suryadinata, R. V., & Sukarno, D. A. (2019). Pengaruh Aktivitas Fisik Terhadap Risiko Obesitas Pada Usia Dewasa. *The Indonesian Journal of Public Health*, 14(1), 104–114. <https://doi.org/10.20473/ijph.v14il.2019.106-116>
- Susantini, P. (2021). Hubungan Indeks Masa Tubuh (IMT) dengan Persen Lemak Tubuh, dan Lemak Visceral di Kota Semarang. *Jurnal Gizi*, 10(1), 51. <https://doi.org/10.26714/jg.10.1.2021.51-59>
- Susantiningih, T., & Mustofa, S. (2018). Ekspresi IL-6 dan TNF- α Pada Obesitas IL-6 and TNF- α Expression in Obesity. *JK Unila*, 2(2), 174–180.
- Suwinawati, E., Ardiani, H., & Ratnawati, R. (2020). Hubungan Obesitas Dengan Kejadian Diabetes Melitus Tipe 2 Di Posbindu PTM Puskesmas Kendal Kabupaten Ngawi. *Journal of Health Science and Prevention*, 4(2), 79–84. <https://doi.org/10.29080/jhsp.v4i2.388>
- Syari, F. R., Hendrianingtyas, M., & Retnoningrum, D. (2019). HUBUNGAN LINGKAR PINGGANG DAN VISCERAL FAT DENGAN. 8(2), 701–712.
- Taufik, Liong Boy Kurniawan, M. A. (2020). OBESITAS SENTRAL SECARA SIGNIFIKAN BERHUBUNGAN DENGAN KADAR SOLUBLE TRANSFERRIN RECEPTOR (sTfR). 2(2021), 1318–1322.
- Tendean, B. A., Pangemanan, D. H. C., & Sapulete, I. M. (2018). Perbandingan Persentase Lemak Tubuh Sebelum dan Setelah Melakukan Senam Zumba pada Wanita Dewasa. *Jurnal E-Biomedik*, 6(2), 145–149. <https://doi.org/10.35790/ebm.6.2.2018.22110>
- Tenri E, A. I. (2018). Karya akhir Kadar, Analisis Necrosis, Tumor Alpha, Factor Paru, Kanker Washing, Bronchial Lung, I N Patient, Cancer Kartini, Dewi S R I Studi, Program Patologi, Ilmu Kedokteran, Fakultas Hasanuddin, Universitas. *Makassar*, 1.
- Tina, A. R. (2021). ANALISIS HUBUNGAN BERBAGAI PENGUKURAN INDEKS OBESITAS DENGAN KADAR INTERLEUKIN-6 PADA SUBJEK OBESITAS SENTRAL DAN NON OBESITAS SENTRAL. <https://emea.mitsubishielectric.com/ar/products-solutions/factory-automation/index.html>

- Toril, G., Id, K., Dharmage, S., Janson, C., Malinovski, A., Skulstad, S. M., Bertelsen, R. J., Real, F. G., Schlu, V., Sa, L., Holm, M., & Garcia, J. (2020). *PLOS ONE Parents' smoking onset before conception as related to body mass index and fat mass in adult offspring: Findings from the RHINESSA generation study*. 1–20.
<https://doi.org/10.1371/journal.pone.0235632>
- Wayan, N., Purwaningsih, D., Irawati, D., & Ekawanti, A. (2018). *Hubungan antara Rasio Lingkar Pinggang terhadap Tinggi Badan dengan Konsentrasi Trigliserida dan Kolesterol HDL Pada Lansia*. 7(4), 13–18.
- Wijayanti, D. W. I. N., Kedokteran, P. S., Kedokteran, F., & Diponegoro, U. (2017). *LEMAK TUBUH SKINFOLD CALIPER DENGAN METODE BIOELECTRICAL IMPEDANCE ANALYSIS LAPORAN HASIL*.
- World Health Organization. (2010). Section 4 : Guide to Physical Measurements (Step 2) Overview. In World Health Organization (Ed.), *STEPwise approach to surveillance of chronic non-communicable disease manual* (5th ed., Issue Step 2, pp. 3–4). World Health Organization.
- Yarla, N. S., Polito, A., & Peluso, I. (2018). *Effects of Olive Oil on TNF- and IL-6 in Humans : Implication Endocrine , Metabolic & Immune Disorders Drug Targets*. 63–74.
<https://doi.org/10.2174/1871530317666171120150329>
- Yu, F. (2012). *Increased Ferritin Concentrations Correlate with Insulin Resistance in Female Type 2 Diabetic Patients*. 32–40.
<https://doi.org/10.1159/000339265>
- Yulia Fitri, Nunung Sri Mulyani, Ramlan Silaban, Z. (2013). *PENGARUH LATIHAN FISIK (SENAM JANTUNG SEHAT) TERHADAP KADAR TNF- α DAN KADAR GULA DARAH PADA PENDERITA OBESITAS*. *Journal of JCS Cardiologists*, 21(2), 356–358.
https://doi.org/10.1253/jjcsc.21.2_356
- Yuwono, T. (2002). *Biologi Molekular Triwibowo Yuwono*.
<http://sastramangutama.badungkab.go.id/inlislite3/opac/detail-opac?id=21823>

LAMPIRAN

Curriculum Vitae

Data Pribadi

Nama Lengkap : Sunarto
Tempat, Tanggal Lahir : Bajiminasa, 09 Juni 1989
Jenis Kelamin : Laki-laki
Agama : Islam
Handphone : 085299831425
Status : Belum Nikah
Email : sunarto822@gmail.com
Alamat : Jl. Trikora Kel. Wosi Kec. Manokwari Barat
Kab. Manokwari Prov. Papua Barat

Data Pendidikan

Sekolah Dasar : SD 85 BINGKARONGO (1996-2003)
SMP : SMPN 2 PALAMPANG (2003-2006)
SMA : SMAN 1 RILAU ALE (2006-2009)
Perguruan Tinggi : D3 Univ. Indonesia Timur Makassar (2009-2012)
S1 Univ. Pejuang Republik Indonesia (2015-2016)

1. Master Table Penelitian

KODE SPESIMEN	JENIS KELAMIN	UMUR (TAHUN)	IMT kg/m ²	LINGKAR PINGGANG	%LEMAK TUBUH	LEMAK VISERAL	STATUS	TNF- Alfa pg/ml
1	L	25	28,71	103	14,7	21	OB	0,55
4	L	37	33,48	100	43,6	26	OB	4,71
6	L	33	21,01	88	11,5	12	OB	1,06
7	L	36	21,96	74	17	4	OB	3,92
12	L	35	23,21	77	9,3	5	OB	2,99
18	L	26	34,48	107,5	43,1	30	OB	6,89
19	L	27	29,59	89	28,4	13	OB	12,42
21	L	27	28,64	105	31,5	15	OB	3,26
22	L	36	25,59	100	42,6	19	OB	4,715
23	L	36	25,05	90	37,7	13	OB	4,03
24	L	39	24,81	81	33,7	6	OB	7,85
28	L	30	25,64	88	24,5	8	OB	4,17
34	L	33	28,4	97	41	13	OB	1,28
35	L	38	30,05	99,5	29,4	14	OB	0,43
36	L	32	26,93	87	23,8	7	OB	7,77
55	L	29	21,19	66	33,7	7	OB	3,9
58	L	29	30,13	101,5	32,4	18	OB	5,73
59	L	30	25,67	98	44,3	28	OB	1,87
60	L	29	25,93	84,5	27,1	10	OB	3,94
63	L	30	22,94	81	23,5	7	OB	1,57
72	L	28	19,73	77	26,9	3	OB	5,35
5	P	34	28,08	95	43,1	19	OB	2,12
14	P	34	29,55	85	36	15	OB	2,24
15	P	38	31,33	96,5	31	15	OB	8,917
17	P	29	47,61	136,5	49,7	30	OB	1,23
20	P	35	31,75	102	42,2	27	OB	3,98
26	P	29	21,53	80	14,4	4	OB	0,73
30	P	39	22,14	80	36,7	9	OB	5,15
37	P	39	32,37	97	31,2	15	OB	3,37
39	P	32	20,73	71	28,2	3	OB	3,73
44	P	34	24,31	73	32,9	6	OB	5,24
46	P	28	24,78	82	41,2	13	OB	3,09
49	P	34	28,8	92	34,8	9	OB	4,58
50	P	23	22,75	81	33,5	5	OB	4,2

69	P	31	20,78	80	24,7	9	OB	5,66
79	P	37	22,13	73	28,7	3	OB	11,51
9	L	33	4,48	96	31	17	Non-OB	4,48
31	L	37	6,46	78	21,6	5	Non-OB	6,46
41	L	25	6,66	77	28,6	5	Non-OB	6,66
47	L	32	5,3	71	29,5	4	Non-OB	5,3
66	L	30	2,01	88	43,4	23	Non-OB	2,01
67	L	27	1,92	91,5	31,1	16	Non-OB	1,92
70	L	31	2,35	99	24	7	Non-OB	2,35
71	L	31	0,43	110	44,7	30	Non-OB	0,43
73	L	38	3,05	75	21,4	6	Non-OB	3,05
75	L	29	6,45	68	26,7	4	Non-OB	6,45
78	L	33	4,73	97	43,4	21	Non-OB	4,73
81	L	27	2,35	80	18,2	4	Non-OB	2,35
82	L	27	7,44	71	29,3	5	Non-OB	7,44
83	L	29	4,73	88	39,5	15	Non-OB	4,73
8	P	28	0,65	79	36	13	Non-OB	0,65
13	P	31	3,1	83	20,9	8	Non-OB	3,1
25	P	31	6,07	94,5	32,2	23	Non-OB	6,07
27	P	40	4,49	93,5	41	19	Non-OB	4,49
32	P	29	0,16	68	14,6	3	Non-OB	0,16
33	P	33	1,32	98	41	25	Non-OB	1,32
40	P	29	5,02	88	23,7	7	Non-OB	5,02
42	P	36	4,18	83	38,8	11	Non-OB	4,18
45	P	27	3,44	87	39	14	Non-OB	3,44
48	P	27	4,79	73	33,7	7	Non-OB	4,79
51	P	24	2,16	77	28,8	5	Non-OB	2,16
52	P	24	5,99	71	35,6	7	Non-OB	5,99
53	P	29	4,77	69	20,2	2	Non-OB	4,77
54	P	36	4,54	88	41,6	19	Non-OB	4,54
56	P	32	4,79	68	29,9	4	Non-OB	4,79
57	P	33	4,65	83	27,6	10	Non-OB	4,65
74	P	25	6,26	77	21,5	6	Non-OB	6,26
76	P	34	0,47	80	34,5	7	Non-OB	0,47
77	P	32	1,29	85	28,1	12	Non-OB	1,29
80	P	28	2,12	73,5	33,9	6	Non-OB	2,12

2. Statistik Deskriptif

Descriptives

		Statistic	Std. Error	
Umur	Mean	31.4000	.50562	
	95% Confidence Interval for Mean	Lower Bound	30.3913	
		Upper Bound	32.4087	
	5% Trimmed Mean	31.3810		
	Median	31.0000		
	Variance	17.896		
	Std. Deviation	4.23033		
	Minimum	23.00		
	Maximum	40.00		
	Range	17.00		
	Interquartile Range	6.25		
	Skewness	.155	.287	
	Kurtosis	-.799	.566	
IMT	Mean	15.5771	1.46371	
	95% Confidence Interval for Mean	Lower Bound	12.6571	
		Upper Bound	18.4972	
	5% Trimmed Mean	15.1946		
	Median	20.2300		
	Variance	149.972		
	Std. Deviation	12.24629		

	Minimum		.16	
	Maximum		47.61	
	Range		47.45	
	Interquartile Range		21.25	
	Skewness		.257	.287
	Kurtosis		-1.250	.566
Lingkar_Pinggang	Mean		86.0857	1.50740
	95% Confidence Interval for Mean	Lower Bound	83.0785	
		Upper Bound	89.0929	
	5% Trimmed Mean		85.4524	
	Median		84.7500	
	Variance		159.058	
	Std. Deviation		12.61181	
	Minimum		66.00	
	Maximum		136.50	
	Range		70.50	
	Interquartile Range		19.13	
	Skewness		.965	.287
	Kurtosis		2.214	.566
Lemak_Tubuh	Mean		31.5714	1.05782
	95% Confidence Interval for Mean	Lower Bound	29.4611	
		Upper Bound	33.6817	
	5% Trimmed Mean		31.8571	

	Median		31.3500	
	Variance		78.329	
	Std. Deviation		8.85035	
	Minimum		9.30	
	Maximum		49.70	
	Range		40.40	
	Interquartile Range		12.93	
	Skewness		-.325	.287
	Kurtosis		-.324	.566
Lemak_Visceral	Mean		11.8714	.92154
	95% Confidence Interval for Mean	Lower Bound	10.0330	
		Upper Bound	13.7099	
	5% Trimmed Mean		11.3889	
	Median		9.5000	
	Variance		59.447	
	Std. Deviation		7.71019	
	Minimum		2.00	
	Maximum		30.00	
	Range		28.00	
	Interquartile Range		10.50	
	Skewness		.853	.287
	Kurtosis		-.213	.566
TNF_Alfa	Mean		4.0396	.29459

95% Confidence Interval for Mean	Lower Bound	3.4519	
	Upper Bound	4.6273	
5% Trimmed Mean		3.8848	
Median		4.1000	
Variance		6.075	
Std. Deviation		2.46473	
Minimum		.16	
Maximum		12.42	
Range		12.26	
Interquartile Range		3.14	
Skewness		.871	.287
Kurtosis		1.587	.566

3. Uji Normalitas (Shapiro Wilk)

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Umur	.115	70	.023	.973	70	.143
IMT	.238	70	.000	.867	70	.000
Lingkar_Pinggang	.085	70	.200*	.940	70	.002
Lemak_Tubuh	.085	70	.200*	.978	70	.260
Lemak_Visceral	.165	70	.000	.901	70	.000
TNF_Alfa	.095	70	.198	.944	70	.003

4. **Uji *Mann-Whitney U* (Perbedaan Kadar TNF alfa berdasarkan Jenis Kelamin dan Status Obesitas)**

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of TNF_Alfa is the same across categories of Jenis_Kelamin.	Independent-Samples Mann-Whitney U Test	.703	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of TNF_Alfa is the same across categories of Status.	Independent-Samples Mann-Whitney U Test	.925	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

5. Uji Korelasi Spearman

Correlations

			IMT	Lingkar_Pinggang	Lemak_Tubuh	Lemak_Visceral	TNF_Alfa
Spearman's rho	IMT	Correlation Coefficient	1.000	.380**	.173	.245*	.242*
		Sig. (2-tailed)	.	.001	.151	.041	.044
		N	70	70	70	70	70
	Lingkar_Pinggang	Correlation Coefficient	.380**	1.000	.527**	.866**	-.226
		Sig. (2-tailed)	.001	.	.000	.000	.060
		N	70	70	70	70	70
	Lemak_Tubuh	Correlation Coefficient	.173	.527**	1.000	.738**	-.112
		Sig. (2-tailed)	.151	.000	.	.000	.355
		N	70	70	70	70	70
	Lemak_Visceral	Correlation Coefficient	.245*	.866**	.738**	1.000	-.220
		Sig. (2-tailed)	.041	.000	.000	.	.068
		N	70	70	70	70	70
	TNF_Alfa	Correlation Coefficient	.242*	-.226	-.112	-.220	1.000
		Sig. (2-tailed)	.044	.060	.355	.068	.
		N	70	70	70	70	70

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

6. Dokumentasi



