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**4/1/24**

ABSI in the Medical Literature:

Allometric Anthropometric Research Publications:

**ABSI references to 3/24:**[**https://drjessekrakauer.com/absi.html**](https://drjessekrakauer.com/absi.html)

**https://en.wikipedia.org/wiki/Body\_shape\_index**

**ABSI = WC weight-2/3height5/6 = WC/(BMI2/3height1/2)**

**A1. Krakauer NY, Krakauer JC. A new body shape index predicts mortality hazard independently of body mass index. PLoS One. 2012;7(7):e39504. doi: 10.1371/journal.pone.0039504. Epub 2012 Jul 18. PMID: 22815707; PMCID: PMC3399847.**

**Annotation: A body shape index (ABSI) is a power law based on weight and height that normalizes waist circumference (WC) for weight and height. In a large USA population sample, mortality increased significantly with ABSI and independently from BMI.  Since publication, over 360,000 views to this article and over 600 citations have been reported at the PLoS One web site.**

**A2. Krakauer NY, Krakauer JC. Dynamic association of mortality hazard with body shape. PLoS One. 2014 Feb 20;9(2):e88793. doi: 10.1371/journal.pone.0088793. PMID: 24586394; PMCID: PMC3930607.**

**In a British population study we found that elevated ABSI predicted mortality up to 20 years later. We also show that the direction of change in ABSI over time predicted mortality, with rise in ABSI leading to higher mortality. We also show that ABSI predicts mortality better than BMI, height/ WC ratio and WC/ hip circumference ratio.**

**A3. Krakauer NY, Krakauer JC (2014) Expansion of Waist Circumference in Medical Literature: Potential Clinical Application of a Body Shape Index. J Obes Weight Loss Ther 4:216. doi:10.4172/2165-7904.1000216**

**We show how BMI has become synonymous with obesity in the medical literature. We review a number of studies where ABSI could contribute to evaluation including “locomotive” disorders in the elderly, diabetes prediction, indications for bariatric surgery and others.**

**A4. Krakauer JC, Krakauer NY. Combining Body Mass and Shape Indices in Clinical Practice. Case Rep Med. 2016;2016:1526175. doi: 10.1155/2016/1526175. Epub 2016 Feb 29. PMID: 27034680; PMCID: PMC4789401**.

**Several case reports from the author’s endocrine practice are presented to illustrate clinical use of ABSI in combination with BMI.**

**A5. Krakauer NY, Krakauer JC. An Anthropometric Risk Index Based on**

**Combining Height, Weight, Waist, and Hip Measurements. J Obes. 2016;2016:8094275. doi: 10.1155/2016/8094275. Epub 2016 Oct 18. PMID: 27830087; PMCID: PMC5088335.**

**Annotation: HI  (Hip Index)  is a power law of hip circumference for a given  BMI.  We propose an anthropometric risk index (ARI) which allows the combination of risk prediction from the 4 measures: Height, BMI, ABSI, HI.  ARI predicted risk  more strongly than single anthropometric indices and was shown to perform well in risk prediction when applied to a second large population survey with cardiovascular and mortality  outcomes. [ARI can be computed with or without Hip Index]**

**A6. Krakauer NY, Krakauer JC. Anthropometrics, Metabolic Syndrome, and Mortality Hazard (2018). Journal of Obesity. 2018;2018:9241904. doi:10.1155/2018/9241904.**

**Annotation: For NHANES data, ARI was found to be positively correlated with each component of MS, suggesting connections between the two entities as measures of cardio-metabolic risk. ARI and MS were both significant predictors of mortality hazard. Although the association of ARI with mortality hazard was stronger than that of MS, a combined model with both ARI and MS score as predictors improved predictive ability over either construct in isolation.  {note ARI can be computed with or without hip circumference}**

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**A7. Krakauer NY, Krakauer JC. Association of Body Shape Index (ABSI) with Hand Grip Strength. Int J Environ Res Public Health. 2020 Sep 17;17(18):E6797. doi: 10.3390/ijerph17186797. PMID: 32957738.**

**A8. Krakauer, N.Y.; Krakauer, J.C. Association of X-ray Absorptiometry Body Composition Measurements with Basic Anthropometrics and Mortality Hazard. Int. J. Environ. Res. Public Health 2021, 18, 7927.**

**Annotation: This study brings together allometric anthropometrics and body composition.  Remarkably, directly measured body composition parameters such as %fat can be accurately predicted from height, BMI and ABSI, and overall mortality risk is better predicted by anthropometrics than by body composition.  However, both low limb non-fat tissue (skeletal muscle) and high trunk non fat tissue (perhaps a marker of enlarged internal organs) predict mortality.  The allometric methods in this paper allow combination of body composition and anthropometrics to better estimate mortality risk**

**A9. Krakauer NY, Krakauer JC. Diet Composition, Anthropometrics, and Mortality Risk. Int J Environ Res Public Health. 2022 Oct 8;19(19):12885. doi: 10.3390/ijerph191912885. PMID: 36232184; PMCID: PMC9566505. (ARIC)**

**Major studies for citation**

**Christakoudi S, Tsilidis KK, Muller DC, et al. A Body Shape Index (ABSI) achieves better mortality risk stratification than alternative indices of abdominal obesity: results from a large European cohort. *Sci Rep*. 2020;10(1):14541. Published 2020 Sep 3. doi:10.1038/s41598-020-71302-5**

**Annotation: Gold standard UK Biobank data, and advanced biostatistics A series of companion papers now published by the first author covering associations with cancer, cancer genetics, body composition, gonadal steroids and common biochemistry and hematology parameters.**

**Nagayama D, Sugiura T, Choi SY, Shirai K. Various Obesity Indices and Arterial Function Evaluated with CAVI - Is Waist Circumference Adequate to Define Metabolic Syndrome? Vasc Health Risk Manag. 2022 Sep 12;18:721-733. doi: 10.2147/VHRM.S378288. PMID: 36120718; PMCID: PMC9480599**.

**Nagayama D, Fujishiro K, Watanabe Y, Yamaguchi T, Suzuki K, Saiki A, Shirai K. A Body Shape Index (ABSI) as a Variant of Conicity Index Not Affected by the Obesity Paradox: A Cross-Sectional Study Using Arterial Stiffness Parameter. J Pers Med. 2022 Dec 5;12(12):2014. doi: 10.3390/jpm12122014. PMID: 36556235; PMCID: PMC9783005.**

Reviews

**R1. Ji M, Zhang S, An R.**[**Effectiveness of A Body Shape Index (ABSI) in predicting chronic diseases and mortality: a systematic review and meta-analysis.**](https://www.ncbi.nlm.nih.gov/pubmed/29349876)**Obes Rev. 2018 Jan 19. doi: 10.1111/obr.12666. [Epub ahead of print] Review. PubMed PMID: 29349876.**

**R2. Krakauer NY, Krakauer JC.**[**Untangling Waist Circumference and Hip Circumference from Body Mass Index with a Body Shape Index, Hip Index, and Anthropometric Risk Indicator.**](https://www.ncbi.nlm.nih.gov/pubmed/29649376)**Metab Syndr Relat Disord. 2018 May;16(4):160-165. doi: 10.1089/met.2017.0166. Epub 2018 Mar 13. PubMed PMID: 29649376.**

**R3. Churilla JR.**[**Anthropometrics and Allometry: Beyond Body Mass Index.**](https://www.ncbi.nlm.nih.gov/pubmed/29584551)**Metab Syndr Relat Disord. 2018 Mar 27. doi: 10.1089/met.2018.0031. [Epub ahead of print] PubMed PMID: 29584551.**

**R4. Krakauer NY,Krakauer JC. The New Anthropometrics and Abdominal Obesity: A BodyShape Index, Hip Index, and Anthropometric Risk Index, Chapter 2 in Nutrition in the Prevention and Treatment of Abdominal Obesity. 2019 Elsevier** [**https://doi.org/10.1016/B978-0-12-816093-0.00002-1free**](https://doi.org/10.1016/B978-0-12-816093-0.00002-1free) **at**[**https://nirkrakauer.net/papers/anthropometrics\_chapter\_2018.pdf**](https://nirkrakauer.net/papers/anthropometrics_chapter_2018.pdf)

**The original ABSI calculator and risk instrument is available at:** [**https://nirkrakauer.net/sw/absi-calculator.html**](https://nirkrakauer.net/sw/absi-calculator.html)**​**

**The ABSI calculator with Hip Index and risk instrument is available at:**

**https://nirkrakauer.net/sw/ari-calculator.html**

Collaborations

**C1. Mameli C, Krakauer JC, Krakauer NY, Bosetti A, Ferrari CM, Schneider L, Borsani B, Arrigoni S, Pendezza E, Zuccotti GV. Effects of a multidisciplinary weight loss intervention in overweight and obese children and adolescents: 11 years of experience. PLoS One. 2017 Jul 13;12(7):e0181095. doi: 10.1371/journal.pone.0181095. PMID: 28704494; PMCID: PMC5509286**.

**C2. Consalvo V, Krakauer JC, Krakauer NY, Canero A, Romano M, Salsano V. ABSI (A Body Shape Index) and ARI (Anthropometric Risk Indicator) in Bariatric Surgery. First Application on a Bariatric Cohort and Possible Clinical Use. Obes Surg. 2018 Jul;28(7):1966-1973. doi: 10.1007/s11695-018-3117-z. PMID: 29376202.**

**C3. Bertoli S, Leone A, Krakauer NY, Bedogni G, Vanzulli A, Redaelli VI, De Amicis R, Vignati L, Krakauer JC, Battezzati A. Association of Body Shape Index (ABSI) with cardio-metabolic risk factors: A cross-sectional study of 6081 Caucasian adults. PLoS One. 2017 Sep 25;12(9):e0185013. doi: 10.1371/journal.pone.0185013. PMID: 28945809; PMCID: PMC5612697.**

**C4. Mameli C, Krakauer NY, Krakauer JC, Bosetti A, Ferrari CM, Moiana N, et al. (2018) The association between a body shape index and cardiovascular risk in overweight and obese children and adolescents. PLoS ONE 13(1): e0190426. https://doi.org/10.1371/journal.pone.0190426**

**C5. Gomez-Peralta F, Abreu C, Cruz-Bravo M, Alcarria E, Gutierrez-Buey G, Krakauer NY, Krakauer JC. Relationship between "a body shape index (ABSI)" and body composition in obese patients with type 2 diabetes. Diabetol Metab Syndr. 2018 Mar 20;10:21. doi: 10.1186/s13098-018-0323-8. PMID: 29568333; PMCID: PMC5859756..**

**C6. Gallè F, Krakauer JC, Krakauer NY, Valerio G, Liguori G. Can an Exercise-Based Educational and Motivational Intervention be Durably Effective in Changing Compliance to Physical Activity and Anthropometric Risk in People with Type 2 Diabetes? A Follow-Up Study. Int J Environ Res Public Health. 2019 Feb 27;16(5):701. doi: 10.3390/ijerph16050701. PMID: 30818773; PMCID: PMC6427192.**

**C 7. Hoermann R, Fui MNT, Krakauer JC, Krakauer NY, Grossmann M. A body shape index (ABSI) reflects body composition changes in response to testosterone treatment in obese men. Int J Obes (Lond). 2019 Nov;43(11):2210-2216. doi: 10.1038/s41366-018-0311-y. Epub 2019 Jan 8. PMID: 30622310.**

**C 8. Anoop S, Krakauer J, Krakauer N, Misra A. A Body shape index significantly predicts MRI-defined abdominal adipose tissue depots in non-obese Asian Indians with type 2 diabetes mellitus. BMJ Open Diabetes Res Care. 2020 Oct;8(1):e001324. doi: 10.1136/bmjdrc-2020-001324. PMID: 33051279; PMCID: PMC7554502.**

**C 9.** **Corbatón-Anchuelo A, Krakauer JC, Serrano-García I, Krakauer NY, Martínez-Larrad MT, Serrano-Ríos M. A Body Shape Index (ABSI) and Hip Index (HI) Adjust Waist and Hip Circumferences for Body Mass Index, But Only ABSI Predicts High Cardiovascular Risk in the Spanish Caucasian Population. Metab Syndr Relat Disord. 2021 Mar 11. doi: 10.1089/met.2020.0129. Epub ahead of print. PMID: 33709800.**

**C10. Ferreira HS, Soares ML, Krakauer NY, Santos EA, Krakauer JC, Uchôa TC, Santos TR, Dos Anjos LA. What is the best anthropometric predictor for identifying higher risk for cardiovascular diseases in afro-descendant Brazilian women? A cross-sectional population-based study. Am J Hum Biol. 2022 Mar;34(3):e23652. doi: 10.1002/ajhb.23652. Epub 2021 Jul 22. PMID: 34292635.**

**C 11.Kjaergaard AD, Krakauer J, Krakauer N, Teumer A, Winkler TW, Ellervik C. Allometric body shape indices, T2D and kidney function: A two-sample Mendelian randomization study. Diabetes Obes Metab. 2023 Feb 28. doi: 10.1111/dom.15037. Epub ahead of print. PMID: 36855799.**

**C12. Nagayama D, Krakauer JC, Krakauer NY, Sugiura T, Watanabe Y, Shimizu K, Saiki A, Suzuki K, Fujishiro K, Shirai K. Cumulative Cigarette Consumption is Associated with Cardio-Ankle Vascular Index (CAVI) Mediated by Abdominal Obesity Assessed by A Body Shape Index (ABSI): A Cross-Sectional Study. J Atheroscler Thromb. 2023 May 18. doi: 10.5551/jat.64221. Epub ahead of print. PMID: 37197950.**

ABSI in the Medical Literature:

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| 1. | **Abete I, Arriola L, Etxezarreta N, Mozo I, Moreno-Iribas C, Amiano P, Egüés N, Goyenechea E, Lopez de Munain A, Martinez M, Travier N, Navarro C, Chirlaque MD, Tormo MJ, Gavrila D, Huerta JM, Sánchez MJ, Molina-Montes E, Requena M, Jiménez-Hernández MD, Ardanaz E, Barricarte A, Quiros JR, Rodriguez L, Dorronsoro M. Association between different obesity measures and the risk of stroke in the EPIC Spanish cohort. Eur J Nutr. 2015 Apr;54(3):365-75. doi: 10.1007/s00394-014-0716-x. Epub 2014 Jun 6. PMID: 24903807.** |
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| 2. | **Biolo G, Di Girolamo FG, Breglia A, Chiuc M, Baglio V, Vinci P, Toigo G, Lucchin L, Jurdana M, Pražnikar ZJ, Petelin A, Mazzucco S, Situlin R. Inverse relationship between "a body shape index" (ABSI) and fat-free mass in women and men: Insights into mechanisms of sarcopenic obesity. Clin Nutr. 2015 Apr;34(2):323-7. doi: 10.1016/j.clnu.2014.03.015. Epub 2014 Apr 13. PMID: 24814384.** |
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| 3. | **Haghighatdoost F, Sarrafzadegan N, Mohammadifard N, Asgary S, Boshtam M, Azadbakht L. Assessing body shape index as a risk predictor for cardiovascular diseases and metabolic syndrome among Iranian adults. Nutrition. 2014 Jun;30(6):636-44. doi: 10.1016/j.nut.2013.10.021. Epub 2013 Nov 1. PMID: 24800666**. |
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| 4. | **Cheung YB. "A Body Shape Index" in middle-age and older Indonesian population: scaling exponents and association with incident hypertension. PLoS One. 2014 Jan 15;9(1):e85421. doi: 10.1371/journal.pone.0085421. PMID: 24454862; PMCID: PMC3893209.** |
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| 5. | **Eom BW, Joo J, Yoon HM, Ryu KW, Kim YW, Lee JH. A body shape index has a good correlation with postoperative complications in gastric cancer surgery. Ann Surg Oncol. 2014 Apr;21(4):1115-22. doi: 10.1245/s10434-013-3409-4. Epub 2013 Dec 4. PMID: 24306666.** |
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| 6. | **Song X, Jousilahti P, Stehouwer CD, Söderberg S, Onat A, Laatikainen T, Yudkin JS, Dankner R, Morris R, Tuomilehto J, Qiao Q. Comparison of various surrogate obesity indicators as predictors of cardiovascular mortality in four European populations. Eur J Clin Nutr. 2013 Dec;67(12):1298-302. doi: 10.1038/ejcn.2013.203. Epub 2013 Oct 23. PMID: 24149442.** |
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| 7. | .**He S, Chen X. Could the new body shape index predict the new onset of diabetes mellitus in the Chinese population? PLoS One. 2013;8(1):e50573. doi: 10.1371/journal.pone.0050573. Epub 2013 Jan 30. PMID: 23382801; PMCID: PMC3559745.** |
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| 8. | **Duncan MJ, Mota J, Vale S, Santos MP, Ribeiro JC. Associations between body mass index, waist circumference and body shape index with resting blood pressure in Portuguese adolescents. Ann Hum Biol. 2013 Mar;40(2):163-7. doi: 10.3109/03014460.2012.752861. Epub 2013 Jan 18. PMID: 23327095.**  |
| 9.  | **Bozorgmanesh M, Sardarinia M, Hajsheikholeslami F, Azizi F, Hadaegh F. CVD-predictive performances of "a body shape index" versus simple anthropometric measures: Tehran lipid and glucose study. Eur J Nutr. 2016 Feb;55(1):147-57. doi: 10.1007/s00394-015-0833-1. Epub 2015 Jan 18. PMID: 25596850.** |

10. **Xu Y, Yan W, Cheung YB. Body shape indices and cardiometabolic risk in adolescents. Ann Hum Biol. 2015 Jan;42(1):70-5. doi: 10.3109/03014460.2014.903998. Epub 2014 Apr 15. PMID: 24734976.. (corr with A1c)**

# 11. Malara M, Kęska A, Tkaczyk J, Lutosławska G. Body shape index versus body mass index as correlates of health risk in young healthy sedentary men. J Transl Med. 2015 Feb 27;13:75. doi: 10.1186/s12967-015-0426-z. PMID: 25890016; PMCID: PMC4355423. (insulin level non HDL, 114 men)

# 12. Wierup Ia, Carlsson AC, Wändell P, Riserus U, Ärnlöv J, Borné Y. Low anthropometric measures and mortality--results from the Malmö Diet and Cancer Study. Ann Med. 2015 Jun;47(4):325-31. doi: 10.3109/07853890.2015.1042029. Epub 2015 May 18. PMID: 25982798.

# 13. Fujita M, Sato Y, Nagashima K, Takahashi S, Hata A (2015) Predictive Power of a Body Shape Index for Development of Diabetes, Hypertension, and Dyslipidemia in Japanese Adults: A Retrospective Cohort Study. PLoS ONE 10(6): e0128972. doi:10.1371/journal.pone.0128972

15. Oslopov V.N., Bogoyavlenskaya O.V. Body Shape Index — a Novel Premature Death Risk Factor. *Kazan Med Zh.* 2015; 96 (2): 253-256. doi:10.17750/KMJ2015-253 (In Russ.)

16. **Gurecká R, Koborová I, Šebek J, Šebeková K. Presence of Cardiometabolic Risk Factors Is Not Associated with Microalbuminuria in 14-to-20-Years Old Slovak Adolescents: A Cross-Sectional, Population Study. PLoS One. 2015 Jun 5;10(6):e0129311. doi: 10.1371/journal.pone.0129311. PMID: 26046923; PMCID: PMC4489371.**

17. **Achim Peters, Bruce S. McEwen (2015, Stress habituation, body shape and cardiovascular mortality. Neuroscience & Biobehavioral Reviews** [**doi:10.1016/j.neubiorev.2015.07.001**](http://dx.doi.org/10.1016/j.neubiorev.2015.07.001)

**18. Dhana K, Kavousi M, Ikram MA, Tiemeier HW, Hofman A, Franco OH. Body shape index in comparison with other anthropometric measures in prediction of total and cause-specific mortality. J Epidemiol Community Health. 2016 Jan;70(1):90-6. doi: 10.1136/jech-2014-205257. Epub 2015 Jul 9. PMID: 26160362.**

19. **Chang Y, Guo X, Chen Y, Guo L, Li Z, Yu S, Yang H, Sun Y. A body shape index and body roundness index: two new body indices to identify diabetes mellitus among rural populations in northeast China. BMC Public Health. 2015 Aug 19;15:794. doi: 10.1186/s12889-015-2150-2. PMID: 26286520; PMCID: PMC4544789**.

20. **Dhana K, Ikram MA, Hofman A, Franco OH, Kavousi M. Anthropometric measures in cardiovascular disease prediction: comparison of laboratory-based versus non-laboratory-based model. Heart. 2015 Mar;101(5):377-83. doi: 10.1136/heartjnl-2014-306704. Epub 2014 Dec 11. PMID: 25502814.**

21 **Kabat GC, Xue X, Kamensky V, Lane D, Bea JW, Chen C, Qi L, Stefanick ML, Chlebowski RT, Wactawski-Wende J, Wassertheil-Smoller S, Rohan TE. Risk of breast, endometrial, colorectal, and renal cancers in postmenopausal women in association with a body shape index and other anthropometric measures. Cancer Causes Control. 2015 Feb;26(2):219-229. doi: 10.1007/s10552-014-0501-4. Epub 2014 Nov 28. Erratum in: Cancer Causes Control. 2017 Jul 27;: PMID: 25430815.**

22 **Sowmya S, Thomas T, Bharathi AV, Sucharita S. A body shape index and heart rate variability in healthy indians with low body mass index. J Nutr Metab. 2014;2014:865313. doi: 10.1155/2014/865313. Epub 2014 Oct 2. PMID: 25371818; PMCID: PMC4202247.**

23. **Brown RC, Tey SL, Gray AR, Chisholm A, Smith C, Fleming E, Parnell W. Association of Nut Consumption with Cardiometabolic Risk Factors in the 2008/2009 New Zealand Adult Nutrition Survey. Nutrients. 2015 Sep 8;7(9):7523-42. doi: 10.3390/nu7095351. PMID: 26371037; PMCID: PMC4586546.**

24 **Rondanelli M, Klersy C, Perna S, Faliva MA, Montorfano G, Roderi P, Colombo I, Corsetto PA, Fioravanti M, Solerte SB, Rizzo AM. Effects of two-months balanced diet in metabolically healthy obesity: lipid correlations with gender and BMI-related differences. Lipids Health Dis. 2015 Oct 29;14:139. doi: 10.1186/s12944-015-0131-1. PMID: 26511930; PMCID: PMC4625883. (ABSI lower with diet, standard lipid profile worse)**

25**. Rahman SA, Adjeroh D (2015) Surface-Based Body Shape Index and Its Relationship with All-Cause Mortality. PLoS ONE 10(12): e0144639. doi:10.1371/journal.pone.0144639**

# 7. Traissac et al.(2015) Abdominal vs. overall obesity among women in a nutrition transition context: geographic and socio-economic patterns of abdominal-only obesity in Tunisia. Population Health Metrics (2015) 13:1 DOI: 10.1186/s12963-015-0035-3 no ABSI

# 28. [Effects of new body shape index on prevalence of diabetes mellitus and fasting blood glucose] ZHONGHUA YI XUE ZA ZHI 95(14):1066-9 · MARCH 2015

1. **Xia C, Amador C, Huffman J, Trochet H, Campbell A, Porteous D; Generation Scotland; Hastie ND, Hayward C, Vitart V, Navarro P, Haley CS. Pedigree- and SNP-Associated Genetics and Recent Environment are the Major Contributors to Anthropometric and Cardiometabolic Trait Variation. PLoS Genet. 2016 Feb 2;12(2):e1005804. doi: 10.1371/journal.pgen.1005804. Erratum in: PLoS Genet. 2017 Feb 14;13(2):e1006608. PMID: 26836320; PMCID: PMC4737500.**
2. [Suchert V](http://www.ncbi.nlm.nih.gov/pubmed/?term=Suchert%20V%5bAuthor%5d&cauthor=true&cauthor_uid=26854729) ,[Hanewinkel R](http://www.ncbi.nlm.nih.gov/pubmed/?term=Hanewinkel%20R%5bAuthor%5d&cauthor=true&cauthor_uid=26854729%22), [Isensee B](http://www.ncbi.nlm.nih.gov/pubmed/?term=Isensee%20B%5bAuthor%5d&cauthor=true&cauthor_uid=26854729). (2016) Screen time, weight status and the self-concept of physical attractiveness in adolescents. 48:11-17. doi: 10.1016/j.adolescence.2016.01.005. [Epub ahead of print] – abstract no ABSI
3. **Tay L, Ding YY, Leung BP, Ismail NH, Yeo A, Yew S, Tay KS, Tan CH, Chong MS. Sex-specific differences in risk factors for sarcopenia amongst community-dwelling older adults. Age (Dordr). 2015 Dec;37(6):121. doi: 10.1007/s11357-015-9860-3. Epub 2015 Nov 25. PMID: 26607157; PMCID: PMC5005859.**
4. **Vaziri Y, Bulduk S, Shadman Z, Bulduk EO, Hedayati M, Koc H, Er F, Erdogan CS. Lean Body Mass as a Predictive Value of Hypertension in Young Adults, in Ankara, Turkey. Iran J Public Health. 2015 Dec;44(12):1643-54. PMID: 26811815; PMCID: PMC4724737. (R2 = 0 for ABSI,BP!)**
5. **Bouchi R, Asakawa M, Ohara N, Nakano Y, Takeuchi T, Murakami M, Sasahara Y, Numasawa M, Minami I, Izumiyama H, Hashimoto K, Yoshimoto T, Ogawa Y. Indirect measure of visceral adiposity 'A Body Shape Index' (ABSI) is associated with arterial stiffness in patients with type 2 diabetes. BMJ Open Diabetes Res Care. 2016 Mar 18;4(1):e000188. doi: 10.1136/bmjdrc-2015-000188. PMID: 27026809; PMCID: PMC4800068.**
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7. **Thomson CA, Garcia DO, Wertheim BC, Hingle MD, Bea JW, Zaslavsky O, Caire-Juvera G, Rohan T, Vitolins MZ, Thompson PA, Lewis CE. Body shape, adiposity index, and mortality in postmenopausal women: Findings from the Women's Health Initiative. Obesity (Silver Spring). 2016 May;24(5):1061-9. doi: 10.1002/oby.21461. Epub 2016 Mar 15. PMID: 26991923; PMCID: PMC5014350.**
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# Anthropometric Parameter That Best Predicts the Relationship Between Obesity and Osteoporosis in Kidney Transplant Recipients

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**See Calibration of allometric body shape indices for UK Biobank participants, supplementary material pg 10**

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YEAR={2022},

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Maddodi S et al. Int J Adv Med. 2022 Jun;9(6):642-646
http://www.ijmedicine.com pISSN 2349-3925 | eISSN 2349-3933
Original Research Article
Visceral obesity assessment in type 2 diabetes mellitus using a body shape index may be better as compared to body mass index
Suhas Maddodi\*, S. K. Gautam (150 pts, not in medline)
in assessing cardiovascular risk.
Keywords: Type 2 diabetes mellitus, Obesity, ABSI, BMI, Waist circumference, ABSI z score
Department of Medicine, KPS Institute of Medicine, GSVM Medical College, Kanpur, Uttar Pradesh, India
Received: 22 April 2022
Accepted: 09 May 2022
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