

## DAFTAR PUSTAKA

- Abdou, S.M., El-Boghdady, N.A., El-Maksoud, A., Awatif, M., Khairy, S.A., El-Sawalhi, M.M., 2019. Evaluation of insulin-like growth factor-1, total ghrelin, and insulin resistance in nutritionally stunted Egyptian children. Bull. Fac. Pharm. Cairo Univ. 57, 55–65.
- Abuya, B.A., Ciera, J., Kimani-Murage, E., 2012. Effect of mother's education on child's nutritional status in the slums of Nairobi. BMC Pediatr. 12, 1–10.
- Adriani, M., Wirjatmadi, B., 2014. *The effect of adding zinc to vitamin A on IGF-1, bone age and linear growth in stunted children*. J. Trace Elem. Med. Biol. 28, 431–435.
- Ahmed, S.F., Farquharson, C., 2010. *The effect of GH and IGF1 on linear growth and skeletal development and their modulation by SOCS proteins*. J. Endocrinol. 206, 249.
- Asres, G., Eidelman, A.I., 2011. Nutritional assessment of Ethiopian Beta-Israel children: a cross-sectional survey. Breastfeed. Med. 6, 171–176.
- Bailey, D. B., Burchinal, M. R., & McWilliam, R. A., 1993. *Age of Peers and Early Childhood Development. Child Development*, 64, 848–862.
- Ban, B., Zhao, Q., 2018. *Nutritional Regulation of Growth Hormone/Insulin-like Growth Factor-1 Axis*. Nutr. Food Sci. Int. J. 7, 154–156.
- Batubara, J.R., Tridjaja, B., Pulungan, A.B., 2015. *Buku ajar endokrinologi anak*.
- Bidlingmaier M, Friedrich N, Emeny RT, Spranger J, Wolthers OD, Roswall J, Körner A, Obermayer-Pietsch B, Hübener C, Dahlgren J, Frystyk J. *Reference intervals for insulin-like growth factor-1 (igf-i) from birth to senescence: results from a multicenter study using a new automated chemiluminescence IGF-I immunoassay conforming to recent international recommendations*. The Journal of Clinical Endocrinology & Metabolism. 2014 May 1;99(5):1712-21
- Blum, W.F., Alherbish, A., Alsagheir, A., El Awwa, A., Kaplan, W., Koledova, E., Savage, M.O., 2018. *The growth hormone–insulin-like growth factor-I axis in the diagnosis and treatment of growth disorders*. Endocr. Connect. 7, R212–R222.

- Blum, W.F., Böttcher, C., Wudy, S.A., 2011. *Insulin-Like Growth Factors and Their Binding Proteins*. Diagn. Endocr. Funct. Child. Adolesc. 157.
- Clayton, P.E., Hall, C.M., 2004. *Insulin-like growth factor I levels in healthy children*. Horm. Res. Paediatr. 62, 2–7.
- Cohen P, Bright GM, Rogol AD, Kappelgaard A-M, Rosenfeld RG, Group ANCT. Effects of dose and gender on the growth and growth factor response to GH in GH-deficient children: implications for efficacy and safety. J Clin Endocrinol Metab. 2002;87(1):90–98.
- Cooke, D.W., Divall, S.A., Radovick, S., 2011. *Normal and aberrant growth in children*, in: *Williams Textbook of Endocrinology*. Elsevier, pp. 964–1073.
- De Onis, M., Branca, F., 2016. *Childhood stunting: a global perspective*. Matern. Child. Nutr. 12, 12–26.
- De Onis, M., Dewey, K.G., Borghi, E., Onyango, A.W., Blössner, M., Daelmans, B., Piwoz, E., Branca, F., 2013. The World Health Organization's global target for reducing childhood stunting by 2025: rationale and proposed actions. Wiley Online Library.
- DeBoer, M.D., Scharf, R.J., Leite, A.M., Férrer, A., Havit, A., Pinkerton, R., Lima, A.A., Guerrant, R.L., 2017. Systemic inflammation, growth factors, and linear growth in the setting of infection and malnutrition. Nutrition 33, 248–253.
- Fazeli, P.K., Klibanski, A., 2014. *Determinants of growth hormone resistance in malnutrition*. J. Endocrinol. 220, R57.
- Figueiredo, Í.L., Frota, P.B., da Cunha, D.G., da Silva Raposo, R., Canuto, K.M., de Andrade, G.M., Sousa, N., Moore, S.R., Anstead, G.M., Alvarez-Leite, J.I., 2016. Prolonged maternal separation induces undernutrition and systemic inflammation with disrupted hippocampal development in mice. Nutrition 32, 1019–1027.
- Govoni, K.E., Lee, S.K., Chung, Y.-S., Behringer, R.R., Wergedal, J.E., Baylink, D.J., Mohan, S., 2007. *Disruption of insulin-like growth factor-I expression in type IIa1 collagen-expressing cells reduces bone length and width in mice*. Physiol. Genomics 30, 354–362.
- Guha N., 2013. *Assays for GH, IGF-1, and IGF Binding Protein-3*. Springer Science, pp. 117–125.
- Habimana, S., Biracyaza, E., 2019. Risk factors of stunting among children under 5 years of age in the eastern and western

- provinces of Rwanda: analysis of Rwanda demographic and health survey 2014/2015. *Pediatr. Health Med. Ther.* 10, 115.
- Hawkes, C.P., Grimberg, A., 2015. *Insulin-like growth factor-I is a marker for the nutritional state*. *Pediatr. Endocrinol. Rev.* PER 13, 499.
- Hossain, M., et. al., 2017. *Evidence-based approaches to childhood stunting in low and middle income countries: a systematic review*. *Arch. Dis. Child.* 102, 903–909.
- IDAI, 2017. *Perawakan Pendek pada Anak dan Remaja di Indonesia*.
- Juuls, Anders., 2003. *Serum levels of insulin-like growth factor I and its binding proteins in health and disease*. *Growth Hormone & IGF Research* 13. 113–170.
- Hossain, M., Choudhury, N., Abdullah, K.A.B., Mondal, P., Jackson, A.A., Walson, J., Ahmed, T., 2017. *Evidence-based approaches to childhood stunting in low and middle income countries: a systematic review*. *Arch. Dis. Child.* 102, 903–909.
- Kementerian Kesehatan RI 2014, *PERMENKES RI NO. 66 TAHUN 2014 tentang pemantauan pertumbuhan, perkembangan, dan gangguan tumbuh kembang anak*, Percetakan Negara, Jakarta.
- Kementerian Kesehatan, RI Direktorat Gizi Masyarakat 2017, *Hasil pemantauan status gizi (PSG) tahun 2017*, Percetakan Negara, Jakarta.
- Kementerian Kesehatan RI, Badan Penelitian dan Pengembangan Kesehatan 2018, *Hasil utama RISKESDAS 2018*, Percetakan Negara, Jakarta.
- Kementerian Kesehatan RI, Pusat Data dan Informasi 2016, *Situasi balita pendek (stunting) di Indonesia*, Percetakan Negara, Jakarta.
- Kementerian Kesehatan RI, Pusat Data dan Informasi 2018, *Situasi balita pendek (stunting) di Indonesia*, Percetakan Negara, Jakarta.
- Lassi, Z.S., Das, J.K., Zahid, G., Imdad, A., Bhutta, Z.A., 2013. Impact of education and provision of complementary feeding on growth and morbidity in children less than 2 years of age in developing countries: a systematic review. *BMC Public Health* 13, 1–10.
- Leroy, J.L., Fronville, E.A., 2019. *Perspective: what does stunting really mean? A critical review of the evidence*. *Adv. Nutr.* 10, 196–204.

- Li, Z., Kim, R., Vollmer, S., Subramanian, S.V., 2020. Factors associated with child stunting, wasting, and underweight in 35 low-and middle-income countries. *JAMA Netw. Open* 3, e203386–e203386.
- Liu, J.-P., et. al., 1993. *Mice carrying null mutations of the genes encoding insulin-like growth factor I (Igf-1) and type 1 IGF receptor (Igf1r)*. Cell 75, 59–72.
- Liu, Z., et. al., 2016a. *DMP-1-mediated Ghr gene recombination compromises skeletal development and impairs skeletal response to intermittent PTH*. FASEB Journal 30, 635–652.
- Liu, Z., Mohan, S., & Yakar S., 2016b. *Does the GH/IGF-1 axis contribute to skeletal sexual dimorphism? Evidence from mouse astudies*. Growth Hormone and IGF Research 27, 7–17.
- Livingstone, C., 2012. *The insulin-like growth factor system and nutritional assessment*. Scientifica 2012.
- Löfqvist C, Andersson E, Gelander L, Rosberg S, Blum WF, Wikland KA. Reference values for IGF-I throughout childhood and adolescence: a model that accounts simultaneously for the effect of gender, age, and puberty. *J Clin Endocrinol Metab*. 2001;86(12):5870–5876.
- Makoka, D., Masibo, P.K., 2015. Is there a threshold level of maternal education sufficient to reduce child undernutrition? Evidence from Malawi, Tanzania and Zimbabwe. *BMC Pediatr.* 15, 1–10.
- Mengiste, L.A., Worku, Y., Aynalem, Y.A., Shiferaw, W.S., 2020. Prevalence of Stunting and Its Associated Factors Among Children Aged 6–59 Months in Angolela Tera District, Northeast Ethiopia. *Nutr. Diet. Suppl.* 12, 311–319.
- Mushtaq, T., Bijman, P., Ahmed, S.F., Farquharson, C., 2004. *Insulin-like growth factor-I augments chondrocyte hypertrophy and reverses glucocorticoid-mediated growth retardation in fetal mice metatarsal cultures*. *Endocrinology* 145, 2478–2486.
- Nwosu B.U., Lee M.M., 2008. *Evaluation of short and tall stature in children*. Am Fam Physician 78, 597-604.
- Oktiva, B.R., Adriani, M., 2017. *Perbedaan Kadar Zinc Rambut pada Anak Stunting dan Non Stunting Usia 12-24 Bulan di Kelurahan Tambak Wedi Kenjeran, Surabaya*. Amerta Nutr. 1, 133–142.

- Park, S.-G., Choi, H.-N., Yang, H.-R., Yim, J.-E., 2017. *Effects of zinc supplementation on catch-up growth in children with failure to thrive*. Nutr. Res. Pract. 11, 487–491.
- Prendergast, A.J., Humphrey, J.H., 2014. *The stunting syndrome in developing countries*. Paediatr. Int. Child Health 34, 250–265.
- Racine, H.L., Serrat M.A., 2020, *The action of IGF-1 in the growth plate and its role in postnatal bone elongation*. Curr. Osteoporosis. Rep.
- Scheven, B.A., Hamilton, N.J., 1991. *Longitudinal bone growth in vitro: effects of insulin-like growth factor I and growth hormone*. Eur. J. Endocrinol. 124, 602–607.
- Sheng, et. al., 2013. *Disruption of the insulin-like growth factor-1 gene in osteocytes impairs developmental bone growth in mice*. Bone. 52, 133–144.
- Sims, N.A., Clément-Lacroix, P., Da Ponte, F., Bouali, Y., Binart, N., Moriggl, R., Goffin, V., Coschigano, K., Gaillard-Kelly, M., Kopchick, J., 2000. *Bone homeostasis in growth hormone receptor-null mice is restored by IGF-I but independent of STAT5*. J. Clin. Invest. 106, 1095–1103.
- Singh D, Sanyal S, Chattopadhyay N. The role of estrogen in bone growth and formation: changes at puberty. Cell Health Cytoskelet. 2010;3:1–12.
- Tahimic, et. al., 2013. *Anabolic effects of IG-1 signaling on the skeleton*. Frontiers 4, 1–11.
- Takayanagi, et. al., 2002. *Induction and activation of the transcription factor NFATc1 (NFAT2) integrate RANKL signaling in terminal differentiation of osteoclast*. Developmental Cell 3, 889–901.
- Tanuwidjaya, S., 2012. *Konsep umum tumbuh kembang dalam Buku Ajar I Ilmu Perkembangan Anak dan Remaja*. Jkt. Sagung Seto.
- Tessema, M., Gunaratna, N.S., Brouwer, I.D., Donato, K., Cohen, J.L., McConnell, M., Belachew, T., Belayneh, D., De Groote, H., 2018. *Associations among high-quality protein and energy intake, serum transthyretin, serum amino acids and linear growth of children in Ethiopia*. Nutrients 10, 1776.
- Tridjaja, B., 2013. *Short stature (perawakan pendek) diagnosis dan tatalaksana*. Best Pract. Pediatr. Jkt. BP IDAI 11–8.

- Utami, R.A., Setiawan, A., Fitriyani, P., 2019. Identifying causal risk factors for stunting in children under five years of age in South Jakarta, Indonesia. *Enfermeria Clin.* 29, 606–611.
- Van der Eerden, BCJ., Karperien M, Wit JT., 2003. *Systemic and local regulation of the growth plate.* Endocrine Reviews. 24, 782–801.
- Wang, X., Xing, K.H., Qi, J., Guan, Y., Zhang, J., 2013. *Analysis of the relationship of insulin-like growth factor-1 to the growth velocity and feeding of healthy infants.* Growth Horm. IGF Res. 23, 215–219.
- Wei, C., Gregory, J.W., 2009. *Physiology of normal growth.* Paediatr. Child Health 19, 236–240.
- WHO, 2018. *Levels and trends in child malnutrition: Key findings of the 2018 Edition of the Joint Child Malnutrition Estimates.* Geneva.
- WHO, 2010. *Country Profile Indicators Interpretation Guide.*
- WHO, 2019. Levels and trends in child malnutrition: key findings of the 2019 edition.
- Witkowska-Sędek E, Rumińska M, Majcher A, Pyrżak B. Gender-Dependent Growth and Insulin-Like Growth Factor-1 Responses to Growth Hormone Therapy in Prepubertal Growth Hormone-Deficient Children. In: Advances in Medicine and Medical Research. Springer; 2018. p. 65–73.
- Yakar, S., et.al., 2009. *Serum IGF-1 determines skeletal strength by regulating subperiosteal expansion and trait interactions.* J. Bone Miner. Res. 24, 1481–1492.
- Yakar, S., Werner, H., Rosen, C.J., 2018. *Insulin-like growth factors: actions on the skeleton.* J. Mol. Endocrinol. 61, T115.
- Zhang, et. al., 2002. *Osteoblast-specific knockout of the insulin-like growth factor (IGF) receptor gene reveals an essential role of IGF signaling in bone matrix mineralization.* J. Biol. Chem. 277, 44005–44012.
- Zhao, et. al., 2000. *Targeted overexpression of insulin-like growth factor I to osteoblasts of transgenic mice: increased trabecular bone volume without increased osteoblast proliferation.* Endocrinology 141, 2674–2682.

**Lampiran 1. Naskah penjelasan untuk mendapatkan persetujuan dari subjek penelitian (informasi untuk subjek).**

**ANALISIS KADAR IGF-1 (*INSULIN-LIKE GROWTH FACTOR-1*) PADA ANAK DENGAN PERAWAKAN PENDEK**

Assalamu'alaikum/selamat pagi bapak/ibu, saya dr. Purnamasari, residen dari Departemen Ilmu Kesehatan Anak RS Dr. Wahidin Sudirohusodo yang akan melayani bapak/ibu.

Saya akan memaparkan sedikit tentang perawakan pendek. Perawakan pendek pada anak merupakan bentuk kekurangan gizi yang paling banyak ditemukan secara global. Kondisi anak dengan *stunting* merupakan bagian dari gangguan pertumbuhan linear. *Stunting* merupakan suatu kondisi malnutrisi dimana tinggi badan anak lebih pendek daripada tinggi badan anak seusianya. *Stunting* menunjukkan adanya kondisi malnutrisi yang telah berlangsung lama.

Anak dengan gizi buruk mengalami gangguan pertumbuhan dan perkembangan, yang dipengaruhi oleh berbagai faktor, antara lain faktor genetik, lingkungan, nutrisi yang mencakup makronutrien dan mikronutrien, stimulasi, dan hormonal. Hormon yang mempengaruhi adalah hormon pertumbuhan, yakni IGF-1 (*Insulin-like Growth Factor-1*).

*Stunting* adalah sindrom di mana gagalnya pertumbuhan linear menjadi tanda adanya berbagai kelainan patologis yang berkaitan dengan morbiditas dan mortalitas, hilangnya potensi pertumbuhan fisik, penurunan neurodevelopmental dan fungsi kognitif dan peningkatan resiko penyakit kronis saat dewasa.

Terdapat hubungan erat antara produksi IGF-1 yang dipengaruhi oleh keadaan gizi buruk dengan perawakan pendek. Anak yang mengalami *stunting* tidak mendapatkan asupan asam amino esensial yang adekuat, dan memiliki asam amino di sirkulasi yang rendah. Ketika *intake* protein dan asam amino esensial tidak adekuat, kadar serum IGF-1

menjadi rendah sebab IGF-1 ini merupakan protein, sehingga pada gilirannya mengganggu pertumbuhan pada anak. Selain itu, terjadi sejumlah perubahan baik di tingkat seluler maupun biomolekuler akibat gizi buruk ini dikaitkan dengan produksi IGF-1.

Penanganan *stunting* ditekankan pada identifikasi dan intervensi dini, yang ditujukan untuk memaksimalkan tumbuh kejar serta meminimalkan dampak negatif yang mungkin terjadi akibat *stunting*. Saat ini belum ada marker biokimia yang cukup spesifik yang digunakan sebagai skrining untuk malnutrisi, yang memberikan informasi tentang status gizi dan dalam monitoring pemberian nutrisi.

Sehingga diharapkan IGF-1 ini dapat digunakan sebagai penanda biokimia tambahan untuk menguatkan diagnosis klinis, menjadi indikator klinis penyakit, sebagai dasar untuk tatalaksana dini serta monitoring keberhasilan terapi pada anak dengan perawakan pendek disamping penilaian antropometri. Dengan demikian, perlu dilakukan penelitian untuk mengetahui kadar IGF-1 pada anak dengan perawakan pendek.

Pengukuran kadar IGF-1 pada penelitian ini menggunakan serum darah anak. Apabila bapak/ibu menyetujui anaknya diikutkan dalam penelitian ini, ibu/bapak dipersilahkan menandatangani lembar persetujuan penelitian yang sudah disiapkan.

Keikutsertaan anak bapak/ibu dalam penelitian ini bersifat sukarela tanpa paksaan, karena itu bapak/ibu bisa menolak ikut atau berhenti tanpa takut akan kehilangan hak untuk mendapatkan pelayanan kesehatan yang dibutuhkan oleh anak bapak/ibu. Bila bapak/ibu setuju berpartisipasi dalam penelitian ini, maka diharapkan dapat menandatangani formulir persetujuan (terlampir). Untuk mengetahui secara mendetail mengenai penelitian ini atau ada hal-hal yang belum jelas, maka dapat menghubungi saya di nomor telepon 081343895054.

Semua data dari penelitian ini akan dicatat dan dipublikasikan tanpa membuka data pribadi anak bapak/ibu. Data dari penelitian ini akan

dikumpulkan dan disimpan dalam file manual maupun elektronik, diaudit dan diproses serta dipresentasikan pada :

- Forum Ilmiah Program Pendidikan Dokter Spesialis Anak FK-UNHAS.
- Publikasi pada jurnal ilmiah dalam maupun luar negeri.

Setelah membaca dan mengerti penjelasan yang kami berikan, besar harapan kami bapak/ib bersedia berpartisipasi dalam penelitian ini. Atas waktu dan kerjasamanya kami mengucapkan banyak terima kasih.

Wassalam.

Tanda tangan / identitas peneliti

Nama : Purnamasari Natsir Putri

Alamat : Perumahan Manggala Permai Blok A1/4, Perumnas  
Antang

**Lampiran 2. FORMULIR PERSETUJUAN MENGIKUTI PENELITIAN  
SETELAH MENDAPAT PENJELASAN.**

Setelah membaca dan mendengarkan penjelasan mengenai penelitian :

**ANALISIS KADAR IGF-1 PADA ANAK  
DENGAN PERAWAKAN PENDEK**

Maka saya (orang tua/wali) yang bertanda tangan di bawah ini :

Nama : .....

Umur : .....

Alamat : .....

dengan ini menyatakan secara sukarela tanpa paksaan setuju untuk mengikutkan anak saya dalam penelitian ini :

Nama : .....

Umur : .....

Demikian surat persetujuan ini dibuat dengan sebenarnya untuk digunakan sebagaimana mestinya.

Orang tua

Saksi I

Saksi II

( ) ( ) ( )

Makassar, .....

Peneliti,

Penanggung Jawab Medis,

**(dr. Purnamasari Natsir P) (Dr.dr.Martira Maddeppungeng,Sp.A(K))**

Perumahan Manggala Permai  
AI/4, Makassar, 081343895054

Bumi Permata Sudiang Blok E1/7  
Makassar, 081342903666

**Lampiran 3. REFERENSI NILAI IGF-1 BERDASARKAN UMUR DAN JENIS KELAMIN BERDASARKAN LMS CHART**

LMS Charts

LMS Charts										
IGF-I Males					IGF-I Females					
Age, y	LMS Parameter ( $\lambda = 0.4568$ )		Percentiles			LMS Parameter ( $\lambda = 0.4595$ )		Percentiles		
	$\mu$	$\sigma$	2.5%	50%	97.5%	$\mu$	$\sigma$	2.5%	50%	97.5%
0	77.3625	0.4262	27.0	77.4	157.0	58.5742	0.4662	17.9	58.6	125.6
1	83.0813	0.4187	29.7	83.1	166.8	62.3128	0.4589	19.5	62.3	132.3
2	92.5995	0.4113	33.9	92.6	183.9	69.1965	0.4516	22.2	69.2	145.4
3	104.0358	0.4038	39.0	104.0	204.5	78.9225	0.4444	25.9	78.9	164.2
4	115.7263	0.3964	44.3	115.7	225.0	91.1878	0.4371	30.7	91.2	187.8
5	127.6126	0.3890	50.0	127.6	245.5	105.1525	0.4299	36.2	105.2	214.4
6	140.3556	0.3817	56.2	140.4	267.1	119.1360	0.4227	42.0	119.1	240.4
7	155.0333	0.3744	63.4	155.0	291.9	134.9677	0.4156	48.6	135.0	269.6
8	173.3780	0.3673	72.4	173.4	323.1	154.3755	0.4085	56.9	154.4	305.3
9	196.1267	0.3602	83.6	196.1	361.6	178.4732	0.4015	67.2	178.5	349.4
10	222.8130	0.3532	96.9	222.8	406.6	206.5732	0.3945	79.5	206.6	400.3
11	251.5695	0.3463	111.6	251.6	454.4	235.8698	0.3877	92.6	235.9	452.6
12	278.8827	0.3396	126.1	278.9	498.7	262.6764	0.3809	105.3	262.7	499.1
13	300.7811	0.3330	138.6	300.8	532.5	283.4969	0.3742	115.9	283.5	533.4
14	314.4302	0.3265	147.5	314.4	551.2	296.2184	0.3677	123.4	296.2	552.0
15	318.7692	0.3202	152.2	318.8	553.5	300.1497	0.3614	127.4	300.1	554.2
16	314.9775	0.3141	152.9	315.0	541.8	295.9452	0.3553	127.9	295.9	541.5
17	305.3809	0.3082	150.6	305.4	520.6	285.1932	0.3495	125.3	285.2	517.3
18	292.0343	0.3026	146.2	292.0	493.6	270.0078	0.3440	120.5	270.0	485.8
19	276.0573	0.2972	140.2	276.1	462.7	252.5661	0.3387	114.4	252.6	450.8
20	258.5452	0.2922	133.1	258.5	430.0	234.7593	0.3338	107.8	234.8	416.0
21–25	217.1600	0.2809	115.2	217.2	354.8	196.2189	0.3230	92.9	196.2	342.0
26–30	176.8353	0.2645	97.9	176.8	281.6	158.6612	0.3073	78.4	158.7	270.0
31–35	156.4434	0.2566	88.3	156.4	246.0	144.6606	0.2988	73.1	144.7	243.0
36–40	147.8521	0.2571	83.4	147.9	232.7	135.6504	0.2964	69.0	135.7	227.0
41–45	135.7125	0.2654	74.9	135.7	216.4	121.6626	0.2990	61.5	121.7	204.4
46–50	125.7431	0.2798	66.9	125.7	205.1	114.5344	0.3059	56.8	114.5	194.5
51–55	119.3813	0.2977	60.6	119.4	200.3	109.8845	0.3163	53.0	109.9	189.6
56–60	112.5445	0.3161	54.3	112.5	194.2	98.0102	0.3289	45.6	98.0	172.4
61–65	105.9676	0.3335	48.8	106.0	187.7	94.1497	0.3425	42.2	94.1	169.0
66–70	105.7704	0.3492	46.5	105.8	191.9	88.7193	0.3559	38.3	88.7	162.5
71–75	96.7081	0.3633	40.9	96.7	179.2	88.2148	0.3688	36.6	88.2	164.7
76–80	91.1025	0.3762	37.1	91.1	172.0	86.7241	0.3811	34.7	86.7	164.8
81–85	86.0783	0.3885	33.8	86.1	165.4	89.1368	0.3933	34.4	89.1	172.4
86–90	84.9649	0.4003	32.2	85.0	166.1	90.2972	0.4054	33.6	90.3	177.8

The variables  $\mu$  and  $\sigma$  as well as the estimated percentiles (2.5%, 50%, and 97.5%) are provided. Note that an extended version of this table providing the data split by smaller increments in age and also providing the exact number of subjects of each sex falling into each age group is given in Supplemental Tables 15 and 16.