



DAFTAR PUSTAKA

- Aswatini, Noveria, M. & Fitranita. 2008. Konsumsi Sayur dan Buah di Masyarakat Dalam Konteks Pemenuhan Gizi Seimbang. *Jurnal Kependudukan Indonesia*, III: 97–119.
- Avonts, D., Sercu, M., Heyerick, P., Vandermeeren, I., Meheus, A. & Piot, P. 1990. Incidence of uncomplicated genital infections in women using oral contraception or an intrauterine device: a prospective study. *Sexually transmitted diseases*, 17: 23.
- Badan Penelitian dan Pengembangan Kesehatan. 2013. *Riset Kesehatan Dasar (RISKESDAS) 2013*.
- Bagaitkar, J., Demuth, D.R. & Scott, D.A. 2008. Tobacco use increases susceptibility to bacterial infection. *BioMed Central*, 18: 12.
- Bautista, C.T., Wurapa, E., Sateren, W.B., Morris, S., Hollingsworth, B. & Sanchez, J.L. 2016. Bacterial vaginosis: a synthesis of the literature on etiology, prevalence, risk factors, and relationship with chlamydia and gonorrhea infections. *Military Medical Research*, 13: 4.
- Behrman, J.R. & Deolalikar, A.B. 1988. Health and nutrition. In K. J. Arrow & M. D. Intriligator, eds. *Handbook of Development Economics*. Amsterdam: Elsevier B.V.: 631–711.
- Bendich, A. 2001. Micronutrients in women's health and immune function. *Nutrition*, 17: 858–867.
- Bhagavan, N. V. 2002a. CHAPTER 18 - Lipids I: Fatty Acids and Eicosanoids. In *Medical Biochemistry (Fourth Edition)*. San Diego: Academic Press: 365–399.
- Bhagavan, N. V. 2002b. CHAPTER 38 - Vitamin Metabolism. In *Medical Biochemistry (Fourth Edition)*. San Diego: Academic Press: 901–928.
- Birkinshaw, R.W., Kjer-Nielsen, L., Eckle, S.B.G., McCluskey, J. & Rossjohn, J. 2014. MAITs, MR1 and vitamin B metabolites. *Current Opinion in Immunology*, 26: 7–13.
- Bodnar, L.M., Krohn, M. a. & Simhan, H.N. 2009. Maternal vitamin D deficiency is associated with bacterial vaginosis in the first trimester of pregnancy. *The Journal of Nutrition*, 139: 1157–1161.
- Branca, F., 1997. Calcium, micronutrients and physical activity to maximize bone mass during growth. Rome, Italy: The National Institute of Nutrition.
- Le Bourhis, L., Martin, E., Péguillet, I., Guihot, A., Froux, N., Coré, M., Lévy, E., Dusseaux, M., Meyssonier, V., Premel, V., Ngo, C., Riteau, B., Duban, L., Robert, D., Huang, S., Rottman, M., Soudais, C. & Lantz, O. 2010. Antimicrobial activity of mucosal-associated invariant T cells. *Nature immunology*, 11: 701–708.
- Bretelle, F., Rozenberg, P., Pascal, A., Favre, R., Bohec, C., Loundou, A., Senat, M.V., Aissi, G., Lesavre, N., Brunet, J., Heckenroth, H., Luton, D., Raoult, D. & Fenollar, F. 2015. High *Atopobium vaginae* and *Gardnerella vaginalis* vaginal loads are associated with preterm birth. *Clinical Infectious Diseases*, 60: 860–867.



- Briefel, R.R. & Johnson, C.L. 2004. Secular Trends in Dietary Intake in the United States*. *The Annual Review of Nutrition*, 24: 401–431.
- Brotman, R.M., He, X., Gajer, P., Fadrosh, D., Sharma, E., Mongodin, E.F., Ravel, J., Glover, E.D. & Rath, J.M. 2014. Association between cigarette smoking and the vaginal microbiota: a pilot study. *BioMed Central Infectious Disease*, 14: 471.
- Brotman, R.M., Klebanoff, M. A., Nansel, T.R., Andrews, W.W., Schwebke, J.R., Zhang, J., Yu, K.F., Zenilman, J.M. & Scharfstein, D.O. 2008. A longitudinal study of vaginal douching and bacterial vaginosis - A marginal structural modeling analysis. *American Journal of Epidemiology*, 168: 188–196.
- Calzolari, E., Masciangelo, R., Milite, V. & Verteramo, R. .2000. Bacterial vaginosis and contraceptive methods. *International Journal of Gynecology and Obstetrics*, 70: 341–346.
- Cauci, S., Driussi, S., De Santo, D., Penacchioni, P., Iannicelli, T., Lanzafame, P., De Seta, F., Quadrifoglio, F., De Aloysio, D. & Guaschino, S. 2002. Prevalence of bacterial vaginosis and vaginal flora changes in peri- and postmenopausal women. *Journal of Clinical Microbiology*, 40: 2147–2152.
- Chaigne-Delalande, B., Li, F.-Y., O'Connor, G.M., Lukacs, M.J., Jiang, P., Zheng, L., Shatzer, A., Biancalana, M., Pittaluga, S., Matthews, H.F., Jancel, T.J., Bleesing, J.J., Marsh, R.A., Kuijpers, T.W., Nichols, K.E., Lucas, C.L., Nagpal, S., Mehmet, H., Su, H.C., Cohen, J.I., Uzel, G. & Lenardo, M.J. 2013. Mg²⁺ regulates cytotoxic functions of NK and CD8 T cells in chronic EBV infection through NKG2D. *Science*, 341: 186–191.
- Chandra, R.K. & Sudhakaran, L. 2014. Regulation of immune responses by Vitamin B6. *Immunological Reviews*, 143: 131–137.
- Chen, Z., Zhang, Z., Zhang, H. & Xie, B. 2015. Analysis of the oxidative stress status in nonspecific vaginitis and its role in vaginal epithelial cells apoptosis. *BioMed Research International*, 2015: 1–7.
- Cherpes, T.L., Meyn, L. a, Krohn, M. a, Lurie, J.G. & Hillier, S.L. 2003. Association between acquisition of herpes simplex virus type 2 in women and bacterial vaginosis. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*, 37: 319–325.
- Christian, P., Labrique, A.B., Ali, H., Richman, M.J., Wu, L., Rashid, M. & West Jr., K.P. 2011. Maternal vitamin A and beta-carotene supplementation and risk of bacterial vaginosis: a randomized controlled trial in rural Bangladesh. *Am J Clinical Nutrition*, 94: 1643–1649.
- Clokie, M.R.J., Millard, A.D., Letarov, A. V & Heaphy, S. .2011. Phages in nature. *Bacteriophage*, 1: 31–45.
- D'Elia, J.A. & Weinrauch, L.A. 2018. Calcium Ion Channels : Roles in Infection and Sepsis Mechanisms of Calcium Channel Blocker Benefits in Immunocompromised Patients at Risk for Infection. *International Journal of Molecular Sciences*, 19: 1–17.
- Departemen Kesehatan. 2005. *Daftar Komposisi Bahan Makanan*. Subdit Gizi Klinis, Jakarta.
- Dewi, N.A. .2017. *Hubungan Tingkat Asupan Gizi Makro dengan Kejadian Vaginosis Bakterial*. Universitas Gadjah Mada.



- Dinas Kesehatan Daerah Istimewa Yogyakarta. 2013. Profil Kesehatan Daerah Istimewa Yogyakarta 2013. *Dinas Kesehatan Daerah Istimewa Yogyakarta*: 1–84.
- Dinas Kesehatan Kabupaten Gunungkidul. 2016. Profil Dinas Kesehatan Kabupaten Gunungkidul Tahun 2016. *Dinas Kesehatan Kabupaten Gunungkidul*.
- Dinas Kesehatan Kabupaten Gunungkidul. 2015. Profil Kesehatan Kabupaten Gunungkidul 2015. *Dinas Kesehatan Kabupaten Gunungkidul*
- Dunlop, A.L., Taylor, R.N., Tangpricha, V., Fortunato, S. & Menon, R. .2011. Maternal vitamin D, folate, and polyunsaturated fatty acid status and bacterial vaginosis during pregnancy. *Infectious Diseases in Obstetrics and Gynecology*, 2011.
- Fethers, K. a, Fairley, C.K., Morton, A., Hocking, J.S., Hopkins, C., Kennedy, L.J., Fehler, G. & Bradshaw, C.S. 2009. Early sexual experiences and risk factors for bacterial vaginosis. *The Journal of infectious diseases*, 200: 1662–70.
- Forsum, U., Holst, E., Larsson, P.G., Vasquez, A., Jakobsson, T. & Mattsby-Baltzer, I. .2005. Bacterial vaginosis - A microbiological and immunological enigma. *APMIS*, 113: 81–90.
- Ganz, T. .2009. Iron in innate immunity: starve the invaders. *Current Opinion in Immunology*, 21: 63–67.
- Gropper, S.S. & Smith, J.L. .2013. *Advanced Nutrition and Human Metabolism*. 6th ed. Belmont, CA: Cengage Learning.
- Han, S.N., Adolfsson, O., Lee, C.K., Prolla, T.A., Ordovas, J. & Meydani, S.N. 2004. Vitamin E and gene expression in immune cells. *Annals New York Academy of Sciences*, 1031: 96–101.
- Han, S.N., Wu, D., Ha, W.K., Beharka, A., Smith, D.E., Bender, B.S. & Meydani, S.N. .2000. Vitamin E supplementation increases T helper 1 cytokine production in old mice infected with influenza virus. *Immunology*, 100: 487–493.
- Hardinsyah, Riyadi, H. & Napitupulu, V. 2012. Kecukupan energi, protein, lemak dan karbohidrat. *Departemen Gizi FK UI*: 1–26.
- Hay, P. .2010. Bacterial vaginosis. *Medicine*, 38: 281–285.
- Hemalatha, R., Ramalaxmi, B.A., Swetha, G.K., Rao, M., Charyulu, S. & Kumar, D. .2012. Nutritional status, bacterial vaginosis and cervical colonization in women living in an urban slum in India. *International Journal of Nutrition and Metabolism*, 4: 77–82.
- Hensel, K.J., Randis, T.M., Gelber, S.E. & Ratner, A.J. 2011. Pregnancy-specific association of vitamin D deficiency and bacterial vaginosis. *American Journal of Obstetrics and Gynecology*, 204: 41.e1-41.e9.
- Hillier, S., Marazzo, J. & Holmes, K.K. 2008. Bacterial Vaginosis. In K. K. Holmes, P. F. Sparling, W. E. Stamm, P. Piot, J. N. Wasserheit, L. Corey, M. S. Cohen, & D. H. Watts, eds. *Sexually Transmitted Disease*. New York: McGraw-Hill Companies, Inc.: 737–768.
- Hillier, S.L., Critchlow, C.W., Stevens, C.E., Roberts, M.C., Wolner-Hanssen, P., Eschenbach, D. a & Holmes, K.K. 1991. Microbiological, epidemiological and clinical correlates of vaginal colonisation by *Mobiluncus* species.



- Genitourinary medicine*, 67: 26–31.
- Hillier, S.L., Nugent, R.P., Eschenbach, D.A., Krohn, M.A., Gibbs, R.S., Martin, D.H., Cotch, M.F., Edelman, R., Pastorek, J.G., Rao, A.V., McNellis, D., Regan, J.A., Carey, J.C. & Klebanoff, M.A. 1995. Association between bacterial vaginosis and preterm delivery of a low- birth-weight infant. *The New England Journal of Medicine*, 333: 1737–1742.
- Hogenauer, C. & Hammer, H. 2010. Maldigestion and Malabsorption. In M. Feldman, L. Friedman, & L. Brandt, eds. *Sleisenger and Fordtran's Gastrointestinal and Liver Disease, 9th ed.* Philadelphia: Saunders: 1735–1768.
- Holzman, C., Leventhal, J.M., Qiu, H., Jones, N.M. & Wang, J. .2001. Factors linked to bacterial vaginosis in nonpregnant women. *American Journal of Public Health*, 91: 1664–1670.
- Hutchinson, K.B., Kip, K.E. & Ness, R.B. .2007. Vaginal douching and development of bacterial vaginosis among women with normal and abnormal vaginal microflora. *Sexually transmitted diseases*, 34: 671–675.
- Jespers, V., Crucitti, T., Joris, M., Verheist, R., Mwaura, M., Mandaliya, K., Ndayisaba, G.F., Delany-Moretiwe, S., Verstraelen, H., Hardy, L., Buve, A. & van de Wijgert, J. 2014. Prevalence and correlates of bacterial vaginosis in different sub-populations of women in sub-Saharan Africa: A cross-sectional study. *PLoS ONE*, 9: e109670.
- Joesoef, M.R., Karundeng, A., Runtupalit, C., Moran, J.S., Lewis, J.S. & Ryan, C.A. 2001. High rate of bacterial vaginosis among women with intrauterine devices in Manado, Indonesia. *Contraception*, 64: 169–172.
- Kenyon, C., Colebunders, R. & Crucitti, T. 2013. The global epidemiology of bacterial vaginosis: A systematic review. *American Journal of Obstetrics and Gynecology*, 209: 505–523.
- Kilic, A.O., Pavlova, S.I., Alpay, S., Kilic, S.S. & Tao, L.I.N. 2001. Comparative Study of Vaginal Lactobacillus Phages Isolated from Women in the United States and Turkey: Prevalence, Morphology, Host Range, and DNA Homology. *Clinical and Diagnostic Laboratory Immunology*, 8: 31–9.
- Kim, G. & Bae, J.-H. 2016. Vitamin D and atopic dermatitis: A systematic review and meta-analysis. *Nutrition*: 1–8.
- Koumans, E.H., Sternberg, M., Bruce, C., McQuillan, G., Kendrick, J., Sutton, M. & Markowitz, L.E. .2007. The prevalence of bacterial vaginosis in the United States, 2001-2004; associations with symptoms, sexual behaviors, and reproductive health. *Sexually transmitted diseases*, 34: 864–869.
- Kunisawa, J. .2016. Immunity and Nutrition: the Role of Vitamins. In *Encyclopedia of Immunobiology*. Oxford: Academic Press: 120–126.
- Kunisawa, J. & Kiyono, H. 2013. Vitamin-mediated regulation of intestinal immunity. *Frontiers in Immunology*, 4: 1–6.
- Lee, K., Kim, K., Kim, H., Seo, J. & Song, S. 2014. Association between dietary calcium and phosphorus intakes , dietary calcium / phosphorus ratio and bone mass in the Korean population. *Nutrition Journal*, 13: 114.
- Livengood, C.H. 2009. Bacterial vaginosis: an overview for 2009. *Reviews in obstetrics & gynecology*, 2: 28–37.



- Maggini, S., Wintergerst, E.S., Beveridge, S. & Hornig, D.H. 2007. Selected vitamins and trace elements support immune function by strengthening epithelial barriers and cellular and humoral immune responses. *British Journal of Nutrition*, 98: 29–35.
- Mahmud, M.K. & Zulfianto, N.A. 2009. Tabel Komposisi Pangan Indonesia (TKPI). : 1–31.
- Martin, H.L., Richardson, B.A., Nyange, P.M., Lavreys, L., Hillier, S.L., Chohan, B., Mandaliya, K., Bwayo, J. & Kreiss, J. .1999. Vaginal Lactobacilli , Microbial Flora , and Risk of Human Immunodeficiency Virus Type 1 and Sexually Transmitted Disease Acquisition. *The Journal of infectious diseases*, 180: 1863–1868.
- Martino, J.L. & Vermund, S.H. .2008. Vaginal Douching: Evidence for Risks or Benefits to Women’s Health. *Epidemiologic Review*, 24: 109–124.
- Mattsby-Baltzer, I., Platz-Christensen, J.J., Hosseini, N. & Rosen, P. 1998. IL-1 β , IL-6, TNF α , fetal fibronectin, and endotoxin in the lower genital tract of pregnant women with bacterial vaginosis.pdf. *Acta Obstetrica et Gynecologica Scandinavica*, 77: 701–706.
- McGregor, J.A. .2000. Bacterial Vaginosis in Pregnancy. *Obstetrical & Gynecological Survey*, 55.
- Menteri Kesehatan RI. 2013. Permenkes RI NO 75 Tahun 2013 tentang Angka Kecukupan Gizi yang Dianjurkan bagi Bangsa Indonesia. *Kementrian Kesehatan Republik Indonesia: Jakarta*.
- Meydani, S.N., Leka, L.S., Fine, B.C., Dallal, G.E., Keusch, G.T., Singh, M.F. & Hamer, D.H. .2004. Vitamin E and Respiratory Tract Infections in Elderly Nursing Home Residents: A Randomized Controlled Trial. *The Journal of the American Medical Association*, 292: 828–836.
- Moiseenok, A.G., Komar, V.I., Khomich, T.I., Kanunnikova, N.P. & Slyshenkov, V.S. .2000. Pantothenic acid in maintaining thiol and immune homeostasis. *BioFactors*, 11: 53–55.
- Morris, M., Nicoll, a, Simms, I., Wilson, J. & Catchpole, M. .2001. Bacterial vaginosis: a public health review. *BJOG: an international journal of obstetrics and gynaecology*, 108: 439–450.
- Neggers, Y.H., Nansel, T.R., Andrews, W.W., Schwebke, J.R., Yu, K., Goldenberg, R.L. & Klebanoff, M. a. .2007. Dietary intake of selected nutrients affects bacterial vaginosis in women. *The Journal of Nutrition*, 137: 2128–33.
- Nelson, D.B. & Macones, G. 2002. Bacterial vaginosis in pregnancy: Current findings and future directions. *Epidemiologic Reviews*, 24: 102–108.
- Nelson, D.L. & Cox, M.M. 2013. Enzymes. In *Lehninger Principle of Biochemistry*. New York: W.H. Freeman and Company: 191.
- Nugent, R.P., Krohn, M.A. & Hillier, S.L. .1991. Reliability of Diagnosing Bacterial Vaginosis Is Improved by Standardized Method of Gram Stain Interpretation a. *Journal of Clinical Microbiology*, 29: 297–301.
- Ocviyanti, D., Rosana, Y., Olivia, S. & Darmawan, F. .2010. Risk factors for bacterial vaginosis among Indonesian women. *Medical Journal of Indonesia*, 19: 130–135.
- Ortiz-Andrellucchi, A., Doreste-Alonso, J., Henri’quez-Sa’nchez, P., Cetin, I., &



- Serra-Majem, L. 2009. Dietary assessment methods for micronutrient intake in pregnant women: a systematic review. *British Journal of Nutrition*, 102: S64-S86.
- Ouyang, X., Zhang, R., Yang, J., Li, Q., Qin, L., Zhu, C., Liu, J., Ning, H., Shin, M.S., Gupta, M., Qi, C., He, J.C., Lira, S.A., Iii, H.C.M., Ozato, K., Mayer, L. & Xiong, H. 2011. Transcription factor IRF8 directs a silencing programme for TH 17 cell differentiation. *Nature Communications*, 2: 312–314.
- Pavlova, S.I., Kilig, A.O., Mou, S.M. & Tao, L. 1997. Phage Infection in Vaginal Lactobacilli: An In Vitro Study. *Infectious Diseases in Obstetrics and Gynecology*, 44: 36–44.
- Pavlova, S.I. & Tao, L. 2000. Induction of vaginal Lactobacillus phages by the cigarette smoke chemical benzo[a]pyrene diol epoxide. *Mutation Research*, 466: 57–62.
- Pellat-deceunynck, C., Wietzerbin, J. & Drapier, J. .1994. Nicotinamide inhibits nitric oxide synthase mRNA induction in activated macrophages. *Biochemical Journal*, 297: 53–58.
- Perkkiö, M. V, Jansson, L.T., Dallman, P.R., Siimes, M.A. & Savilahti, E. .1987. sigA- and IgM-Containing Cells in the Intestinal Mucosa of Iron-deficient Rats. *The American Journal of Clinical Nutrition*, 46: 341–345.
- Prasad, P. & Kochhar, A. .2015. Interplay of vitamin D and metabolic syndrome: A review. *Diabetes Metab Syndr*, 10: 105–112.
- Rezk, M., Sayyed, T., Masood, A. & Dawood, R. 2017. Risk of bacterial vaginosis , Trichomonas vaginalis and Candida albicans infection among new users of combined hormonal contraception vs LNG-IUS. *The European Journal of Contraception & Reproductive Health Care*, 22: 344–348.
- Saha, A.R., Hadden, E.M. & Hadden, J.W. .1995. Zinc induces thymulin secretion from human thymic epithelial cells. *International Journal of Immunopharmacology*, 17: 729–733.
- Schorah, C. J., Tormey, W. P., Brooks, G. H., Robertshaw, A. M., Young, G. A., Talukder, R., & Kelly, J. F. 1981. The effect of vitamin C supplements on body weight, serum proteins, and general health of an elderly population. *The American Journal of Clinical Nutrition*, 34, 871–876.
- Schwebke, J.R., Muzny, C. a. & Josey, W.E. .2014. Role of Gardnerella vaginalis in the pathogenesis of bacterial vaginosis: A conceptual model. *Journal of Infectious Diseases*, 210: 338–343.
- Shoubnikova, M., Hellberg, D., Nilsson, S. & Mårdh, P.-A. .1997. Contraceptive use in women with bacterial vaginosis. *Contraception*, 55: 355–358.
- Sirishinha, S. .2015. The pleiotropic role of vitamin A in regulating mucosal immunity. *Asian Pacific Journal of Allergy and Immunology*, 33: 71–89.
- Smart, S., Singal, A & Mindel, A. 2004. Social and sexual risk factors for bacterial vaginosis. *Sexually transmitted infections*, 80: 58–62.
- Sorice, A., Guerriero, E., Capone, F., Colonna, G., Castello, G. & Costantini, S. 2014. Ascorbic acid: its role in immune system and chronic inflammation diseases. *Mini reviews in medicinal chemistry*, 14: 444–52.
- Spiegel, C.A. .1991. Bacterial vaginosis. *Clinical Microbiology Reviews*, 4: 485–502.



- Spinas, E., Saggini, A., Kritas, S.K., Cerulli, G., Caraffa, A., Antinolfi, P., Pantalone, A., Frydas, A., Tei, M., Speziali, A., Saggini, R., Pandolfi, F. & Conti, P. 2015. Crosstalk Between Vitamin B and Immunity. *Journal of Biological Regulators and Homeostatic Agents*, 29: 283–288.
- Thoma, M.E., Klebanoff, M. A, Rovner, A.J., Nansel, T.R., Neggers, Y., Andrews, W.W. & Schwebke, J.R. .2011. Bacterial Vaginosis Is Associated with Variation in Dietary Indices. *The Journal of Nutrition*, (February): 1698–1704.
- Thompson, F.E. & Subar, A.F. 2017. Chapter 1 - Dietary Assessment Methodology. In C. J. Boushey, & M. G. Ferruzzi *Nutrition in the Prevention and Treatment of Disease (Fourth Edition)*. Academic Press: 5–48.
- Thorsen, P., Vogel, I.D.A., Molsted, K., Jacobsson, B.O., Arpi, M., Møller, B.R. & Jeune, B. 2006. Risk factors for bacterial vaginosis in pregnancy: a population-based study on Danish women. *Acta Obstetricia et Gynecologica*, 85: 906–11.
- Traber, M.G. & Stevens, J.F. 2011. Free Radical Biology & Medicine Vitamins C and E : Bene fi cial effects from a mechanistic perspective. *Free Radical Biology and Medicine*, 51: 1000–1013.
- Turner, A.N., Carr Reese, P., Chen, P.L., Kwok, C., Jackson, R.D., Klebanoff, M. A, Fichorova, R., Chipato, T. & Morrison, C.S. 2016. Serum vitamin D status and bacterial vaginosis prevalence and incidence in Zimbabwean women. *American journal of obstetrics and gynecology*, 215: 332.e1-332.e10.
- Verdrengh, M. & Tarkowski, A. .2005. Riboflavin in innate and acquired immune responses. *Inflammation Research*, 54: 390–393.
- Verstraelen, H., Delanghe, J., Roelens, K., Blot, S., Claeys, G. & Temmerman, M. .2005. Subclinical iron deficiency is a strong predictor of bacterial vaginosis in early pregnancy. *BMC infectious diseases*, 5: 55.
- Vig, M. & Kinet, J. .2009. Calcium signaling in immune cells. *Nature Immunology*, 10: 21–28.
- Ward, R.J., Crichton, R.R., Taylor, D.L., Della Corte, L., Srail, S.K. & Dexter, D.T. 2011. Iron and the immune system. *Journal of neural transmission*, 118: 315–328.
- Watts, D.H., Krohn, M.A., Hillier, S.L. & Eschenbach, D.A. 1990. Bacterial Vaginosis as a Risk Factor for Post- Cesarean Endometritis. *Obstetrics & Gynecology*, 75.
- White, J.H. .2008. Vitamin D signaling, infectious diseases, and regulation of innate immunity. *Infection and Immunity*, 76: 3837–3843.
- Whitney, E. & Rolfes, S.R. .2016a. An Overview of Nutrition. In *Understanding Nutrition*. Stamford: Cengage Learning: 8.
- Whitney, E. & Rolfes, S.R. .2016b. The Carbohydrates: Sugars, Starches, and Fibers. In *Understanding Nutrition*. Stamford: Cengage Learning: 99.
- Wibowo, N., Irwinda, R., Berguna, J.S.N. & Azmi, M. .2015. Association between Folic Acid and Zinc Concentration with Incidence of Bacterial Vaginosis in The First Trimester of Pregnancy. *Jurnal Kedokteran Indonesia*, 3: 165–168.
- Williams, A.E. .2012a. Basic concepts in Mucosal Immunology. In A. E. Williams, ed. *Immunology: Mucosal and Body Surface Defences*. West Sussex, UK: John Wiley & Sons: 111–132.
- Williams, A.E. .2012b. Immunology of the Urogenital Tract and Conjunctiva. In A.



- E. Williams, ed. *Immunology: Mucosal and Body Surface Defences*. West Sussex, UK: John Wiley & Sons: 177–195.
- Wintergerst, E.S., Maggini, S. & Hornig, D.H. 2007. Contribution of selected vitamins and trace elements to immune function. *Annals of Nutrition and Metabolism*, 51: 301–323.
- Witasari, U., Rahmawaty, S., Zulaekah, S., 2009. Hubungan Tingkat Pengetahuan, Asupan Karbohidrat, dan Serat dengan Pengendalian Kadar Glukosa Darah pada Penderita Diabetes Melitus Tipe 2. *Terbitan Berkala Ilmiah*, 10: 2.
- Witkin, S.S., Linhares, I.M., Giraldo, P. & Ledger, W.J. .2007. An Altered Immunity Hypothesis for the Development of Symptomatic Bacterial Vaginosis. *Clinical Infectious Diseases*, 44: 554–557.
- Xia, W., Hilgenbrink, A.R., Matteson, E.L., Lockwood, M.B., Cheng, J.X. & Low, P.S. 2009. A functional folate receptor is induced during macrophage activation and can be used to target drugs to activated macrophages. *Blood*, 113: 438–446.
- Yasodhara, P., Raghunath, M., Sreeramulu, D., Venu, L., Hemalatha, R. & Krishna, T.P. .2006. Local immunity in Indian women with bacterial vaginosis. *Journal of Reproductive Immunology*, 70: 133–141.
- Young, V.R. 1994. Adult amino acid requirements the case for a major revision in current recommendations. *The Journal of Nutrition*, 124: 1517S–1523S.