

DAFTAR PUSTAKA

- Abourjaili, G., Shtaynberg, N., Wetz, R., Costantino, T., Abela, G.S., 2010. Current concepts in triglyceride metabolism, pathophysiology, and treatment. *Metabolism*. 59: 1210–1220. doi:10.1016/j.metabol.2009.11.014
- Adam, C.L., Williams, P.A., Garden, K.E., Thomson, L.M., Ross, A.W., 2015. Dose-dependent effects of a soluble dietary fibre (pectin) on food intake, adiposity, gut hypertrophy and gut satiety hormone secretion in rats. *PLoS One* 10: 1–14. doi:10.1371/journal.pone.0115438
- Adiningsih, S., 2006. Indonesia Nutritional Pattern in Contributing Prevalence of Obesity: Fight Obesity from Cells to Community. Laboratorium Ilmu Faal FK UNIBRAW.
- Afridi, A.K., Khan, A., 2004. Prevalence and Etiology of Obesity: An Overview. *Pakistan J. Nutr.* 3: 14–25. doi:10.1093/ptj/83.3.276
- Agha, M., Agha, R., 2017. The rising prevalence of obesity : part A : impact on public health. *Int. J. Surg. Oncol.* 2:e17: 1–6.
- American Dietetic Association, 2009. Position of the American Dietetic Association: Weight Management. *J. Am. Diet. Assoc.* 109: 330–346. doi:10.1016/J.JADA.2008.11.041
- Anderson, J.W., Randles, K.M., Kendall, C.W.C., Jenkins, D.J.A., 2004. Carbohydrate and Fiber Recommendations for Individuals with Diabetes: A Quantitative Assessment and Meta-Analysis of the Evidence. *J. Am. Coll. Nutr.* 23: 5–17. doi:10.1080/07315724.2004.10719338
- Arvill, A., Bodin, L., 1995. Effect of short-term ingestion of konjac glucomannan on serum cholesterol in healthy men. *Am. J. Clin. Nutr.* 61: 585–589. doi:10.1093/ajcn/61.3.585
- Asdie, A.H., 2000. Patogenesis dan Terapi Diabetes Mellitus Tipe 2. Medika FK UGM, Yogyakarta.
- Au-Yeung, F., Jovanovski, E., Jenkins, A.L., Zurbau, A., Ho, H.V.T., Vuksan, V., 2017. The effects of gelled konjac glucomannan fibre on appetite and energy intake in healthy individuals: A randomised cross-over trial. *Br. J. Nutr.* 119:

109–116. doi:10.1017/S0007114517003233

- Balcázar-Muñoz, B.R., Martínez-Abundis, E., González-Ortiz, M., 2003. [Effect of oral inulin administration on lipid profile and insulin sensitivity in subjects with obesity and dyslipidemia]. *Rev. Med. Chil.* 131: 597–604.
- Barnes, T.L., French, S.A., Harnack, L.J., Mitchell, N.R., Wolfson, J., 2015. Snacking Behaviors, Diet Quality, and Body Mass Index in a Community Sample of Working Adults. *J. Acad. Nutr. Diet.* 115: 1117–1123. doi:10.1016/j.jand.2015.01.009
- Bédard, A., Hudon, A.M., Drapeau, V., Corneau, L., Dodin, S., Lemieux, S., 2015. Gender differences in the appetite response to a satiating diet. *J. Obes.* 2015. doi:10.1155/2015/140139
- Bertéus Forslund, H., Torgerson, J.S., Sjöström, L., Lindroos, A.K., 2005. Snacking frequency in relation to energy intake and food choices in obese men and women compared to a reference population. *Int. J. Obes.* 29: 711–719. doi:10.1038/sj.ijo.0802950
- Bhattacharjee, P., Mukhopadhyay, S., Joshi, P., Singh, S., 2017. Food habits and obesity: a study in adolescents. *Int. J. Contemp. Pediatr.* 4: 336. doi:10.18203/2349-3291.ijcp20170526
- Binks, M., Neil, P.M.O., 2002. Referral Sources to a Weight Management Program. *Gen Intern Med J.* 17: 596–603.
- Birketvedt, G.S., Shimshi, M., Thom, E., Florholmen, J., 2005. Experiences with three different fiber supplements in weight reduction. *Med. Sci. Monit.* 11: 5–9.
- Blüher, M., 2019. Obesity: global epidemiology and pathogenesis. *Nat. Rev. Endocrinol.* 15: 288–298. doi:10.1038/s41574-019-0176-8
- Blundell, J.E., 1999. The control of appetite: Basic Concept and Practical Implications. *Congr. Rep. Schweiz Med Wochenschr* 129: 182–188.
- BPOM RI, 2016. Peraturan kepala badan pengawas obat dan makanan republik indonesia nomor 13 tahun 2016 tentang pengawasan klaim pada label dan iklan pangan olahan, Badan Pengawas Obat dan Makanan Republik Indonesia. doi:10.1017/CBO9781107415324.004

- B POM RI, 2004. Peraturan Kepala Badan Pengawas Obat dan Makanan RI tentang Ketentuan Pokok Pengawasan Pangan Fungsional.
- Briscoe, C.P., Tadayyon, M., Andrews, J.L., Benson, W.G., Chambers, J.K., Eilert, M.M., Ellis, C., Elshourbagy, N.A., Goetz, A.S., Minnick, D.T., Murdock, P.R., Sauls, H.R., Shabon, U., Spinage, L.D., Strum, J.C., Szekeres, P.G., Tan, K.B., Way, J.M., Ignar, D.M., Wilson, S., Muir, A.I., 2003. The orphan G protein-coupled receptor GPR40 is activated by medium and long chain fatty acids. *J. Biol. Chem.* 278: 11303–11311. doi:10.1074/jbc.M211495200
- Brown, A.J., Goldsworthy, S.M., Barnes, A.A., Eilert, M.M., Tcheang, L., Daniels, D., Muir, A.I., Wigglesworth, M.J., Kinghorn, I., Fraser, N.J., Pike, N.B., Strum, J.C., Stepkowski, K.M., Murdock, P.R., Holder, J.C., Marshall, F.H., Szekeres, P.G., Wilson, S., Ignar, D.M., Foord, S.M., Wise, A., Dowell, S.J., 2003. The orphan G protein-coupled receptors GPR41 and GPR43 are activated by propionate and other short chain carboxylic acids. *J. Biol. Chem.* 278: 11312–11319. doi:10.1074/jbc.M211609200
- Bruzzese, E., Volpicelli, M., Squaglia, M., Tartaglione, A., Guarino, A., 2006. Impact of prebiotics on human health. *Dig. Liver Dis.* 2: 283–287.
- Bubnis, W.A., 2000. Caragenan: functionallity and rheology [WWW Document]. URL <http://www.fmcbiopolymer.com/Food/Ingredients/Carrageenan.aspx> (accessed 1.10.20).
- Burton-Freeman, B., 2000. Dietary Fiber and Energy Regulation. *J. Nutr.* 130: 267S. doi:10.1093/jn/130.2.267S
- Byrne, C.S., Chambers, E.S., Morrison, D.J., Frost, G., 2015. The role of short chain fatty acids in appetite regulation and energy homeostasis. *Int. J. Obes.* 39: 1331–1338. doi:10.1038/ijo.2015.84
- Canfora, E.E., Jocken, J.W., Blaak, E.E., 2015. Short-chain fatty acids in control of body weight and insulin sensitivity. *Nat. Rev. Endocrinol.* 11: 577–591. doi:10.1038/nrendo.2015.128
- Carpentier, C., Cyr, D., Ge, P., Patterson, B.W., Gigue, R., Baillargeon, J., Cyr, D., Patterson, B.W., Gigue, R., 2005. On the suppression of plasma

nonesterified fatty acids by insulin during enhanced intravascular lipolysis in humans. *Am. J. Physiol. Metab.* 289: 849–856. doi:10.1152/ajpendo.00073.2005.

Causey, J.L., Feirtag, J.M., Gallaher, D.D., Tunland, B.C., Slavin, J.L., 2000. Effects of dietary inulin on serum lipids, blood glucose and the gastrointestinal environment in hypercholesterolemic men. *Nutr. Res.* 20: 191–201. doi:10.1016/S0271-5317(99)00152-9

Chambers, E.S., Viardot, A., Psichas, A., Morrison, D.J., Murphy, K.G., Zaccavarghese, S.E.K., Macdougall, K., Preston, T., Tedford, C., Finlayson, G.S., Blundell, J.E., Bell, J.D., Thomas, E.L., Mt-isa, S., Ashby, D., Gibson, G.R., Dhillon, W.S., Bloom, S.R., Morley, W., Clegg, S., Frost, G., 2015. Effects of targeted delivery of propionate to the human colon on appetite regulation, body weight maintenance and adiposity in overweight adults. *Gut Microbiota J.* 64: 1744–1754. doi:10.1136/gutjnl-2014-307913

Cheang, K.-U., Chen, C.-M., Oliver Chen, C.-Y., Liang, F.-Y., Shih, C.-K., Li, S.-C., 2017. Effects of Glucomannan Noodle on Diabetes Risk Factors in Patients with Metabolic Syndrome: A Double-Blinded, Randomized Crossover Controlled Trial. *J. Food Nutr. Res.* 5: 622–628. doi:10.12691/jfnr-5-8-13

Chearskul, S., Ms, S.S., 2007. Preliminary Report Glycemic and Lipid Responses to Glucomannan in Thais with Type 2 Diabetes Mellitus. *J. Med. Assoc. Thail.* 90: 2150–2157.

Chooi, Y.C., Ding, C., Magkos, F., 2019. The epidemiology of obesity. *Metabolism.* 92: 6–10. doi:10.1016/j.metabol.2018.09.005

Das, R., Biswas, S., Banerjee, E.R., 2016. Nutraceutical-prophylactic and Therapeutic Role of Functional Food in Health 6: 1–17. doi:10.4172/2155-9600.1000527

de Boer, A., Ter Horst, G.J., Lorist, M.M., 2013. Physiological and psychosocial age-related changes associated with reduced food intake in older persons. *Ageing Res. Rev.* 12: 316–328. doi:https://doi.org/10.1016/j.arr.2012.08.002

de Luis, D.A., de la Fuente, B., Izaola, O., Conde, R., Gutiérrez, S., Morillo, M.,

- Teba Torres, C., 2011. Double blind randomized clinical trial controlled by placebo with an alpha linoleic acid and prebiotic enriched cookie on risk cardiovascular factor in obese patients | Ensayo clínico aleatorizado doble ciego controlado con placebo con una galleta enriquec. *Nutr. Hosp.* 26: 827–833. doi:10.3305/nh.2011.26.4.5143
- Dehghan, P., Gargari, B.P., Asgharijafarabadi, M., 2013. Effects of High Performance Inulin Supplementation on Glycemic Status and Lipid Profile in Women with Type 2 Diabetes : A Randomized, Placebo-controlled Clinical Trial. *Heal. Promot. Perspectives* 3: 55–63. doi:10.5681/hpp.2013.007
- Delgado, G.T.C., Tamashiro, W.M. da S.C., 2018. Role of prebiotics in regulation of microbiota and prevention of obesity. *Food Res. Int.* 113: 183–188. doi:10.1016/j.foodres.2018.07.013
- Dinoto, A., Watumlawar, C.C., Yopi, 2013. In Vitro Modulation of Human Intestinal Microbiota by Mannoligosaccharides Synthesized from *Amorphophallus muelleri* Glucomannan. *Microbiol. Indones.* 7: 144–151. doi:10.5454/mi.7.4.2
- Drewnowski, A., Popkin, B.M., 1997. The Nutrition Transition: New Trends in the Global Diet. *Nutr. Rev.* 55: 31–43. doi:10.1103/PhysRevD.91.054508
- Everard, A., Lazarevic, V., Derrien, M., Girard, M., Muccioli, G.M., Neyrinck, A.M., Possemiers, S., Van Holle, A., François, P., De Vos, W.M., Delzenne, N.M., Schrenzel, J., Cani, P.D., 2011. Responses of gut microbiota and glucose and lipid metabolism to prebiotics in genetic obese and diet-induced leptin-resistant mice. *Diabetes* 60: 2775–2786. doi:10.2337/db11-0227
- Fernandes, R., Vinicius, A., Mocellin, M.C., Kuntz, M.G.F., Trindade, E.B.S.M., 2017. Effects of inulin-type fructans , galacto-oligosaccharides and related synbiotics on inflammatory markers in adult patients with overweight or obesity: A systematic review. *Clin. Nutr.* 36: 1197–1206. doi:10.1016/j.clnu.2016.10.003
- Flegal, K.M., Ogden, C.L., 2011. Childhood Obesity: Are We All Speaking the Same Language? *Adv. Nutr.* 2: 159S-166S. doi:10.3945/an.111.000307
- Gandy, J.W., Madden, A., Holdsworth, M., 2002. *Gizi & Dietetika*, Edisi 2. ed.

EGC, Jakarta.

- Gao, T., Jiao, Y., Liu, Y., Li, T., Wang, Z., Wang, D., 2019. Protective Effects of Konjac and Inulin Extracts on Type 1 and Type 2 Diabetes. *J. Diabetes Res.* 2019: 1–12. doi:10.1155/2019/3872182
- Ge, H., Li, X., Weiszmann, J., Wang, P., Baribault, H., Chen, J.L., Tian, H., Li, Y., 2008. Activation of G protein-coupled receptor 43 in adipocytes leads to inhibition of lipolysis and suppression of plasma free fatty acids. *Endocrinology* 149: 4519–4526. doi:10.1210/en.2008-0059
- Genta, S., Cabrera, W., Habib, N., Pons, J., Carillo, I.M., Grau, A., Sánchez, S., 2009. Yacon syrup: Beneficial effects on obesity and insulin resistance in humans. *Clin. Nutr.* 28: 182–187. doi:10.1016/j.clnu.2009.01.013
- Gibson, G.R., Probert, H.M., Loo, J. Van, Rastall, R.A., Roberfroid, M.B., 2004. Dietary modulation of the human colonic microbiota : updating the concept of prebiotics. *Nutr. Res. Rev.* 17: 259–275. doi:10.1079/NRR200479
- Gibson, G.R., Roberfroid, M.B., 2008. Handbook of Prebiotics. CRC Press, Boca Roton.
- Gregersen, N.T., Møller, B.K., Raben, A., Kristensen, S.T., Holm, L., Flint, A., Astrup, A., 2011. Determinants of appetite ratings: The role of age, gender, BMI, physical activity, smoking habits, and diet/weight concern. *Food Nutr. Res.* 55: 1–10. doi:10.3402/fnr.v55i0.7028
- Guess, N.D., Dornhorst, A., Oliver, N., Bell, J.D., Thomas, E.L., Frost, G.S., 2015. A randomized controlled trial: the effect of inulin on weight management and ectopic fat in subjects with prediabetes. *Nutr. Metab. (Lond)*. 12: 1–10. doi:10.1186/s12986-015-0033-2
- Guyton, 1990. Cairan-Cairan Tubuh dan Ginjal, in: Andrianto, P. (Ed.), Fisiologi Manusia Dan Mekanisme Penyakit. Buku Kedokteran EGC, Jakarta, pp. 288–194.
- Guyton, A.C., Hall, J. e, 2006. Secretory Functions of the Alimentary Tract, in: Textbook of Medical Physiology. Philadelphia, pp. 86–89. doi:10.1185/03007995.2011.568059
- Hammer, S., Snel, M., Lamb, H.J., Jazet, I.M., van der Meer, R.W., Pijl, H.,

- Meinders, E.A., Romijn, J.A., de Roos, A., Smit, J.W.A., 2008. Prolonged Caloric Restriction in Obese Patients With Type 2 Diabetes Mellitus Decreases Myocardial Triglyceride Content and Improves Myocardial Function. *J. Am. Coll. Cardiol.* 52: 1006–1012. doi:10.1016/j.jacc.2008.04.068
- Handayani, T.D., Harmayani, E., Pranoto, Y., 2015. Glukomanan Porang (*Amorphophallus onchophyllus*): Karakteristik, Potensi Prebiotik, dan Aplikasinya Pada Pembuatan Jelly. Universitas Gadjah Mada.
- Hannon, B.A., Thompson, S. V, Edwards, C.G., Skinner, S.K., Niemi, G.M., Burd, N.A., Holscher, H.D., Teran-garcia, M., Khan, N.A., 2018. Dietary Fiber Is Independently Related to Blood Triglycerides Among Adults with Overweight and Obesity. *Curr. Dev. Nutr.* 1–7. doi:10.1093/cdn/nzy094
- Harmayani, E., Aprilia, V., Marsono, Y., 2014. Characterization of glucomannan from *Amorphophallus onchophyllus* and its prebiotic activity in vivo. *Carbohydr. Polym.* 112: 475–479. doi:10.1016/j.carbpol.2014.06.019
- Harpell, A.R., Blakemore, W.R., 2010. Carrageenan, in: Imeson, A. (Ed.), Food Stabilisers, Thickeners, and Gelling Agents. Blackwell Publishing, United Kingdom, p. 73.
- Howarth, N.C., Saltzman, E., Roberts, S.B., 2001. Dietary Fiber and Weight Regulation. *Nutr. Rev.* 59: 129–139.
- Itoh, Y., Kawamata, Y., Harada, M., Kobayashi, M., Fujii, R., Fukusumi, S., Ogi, K., Hosoya, M., Tanaka, Y., Uejima, H., Tanaka, H., Maruyama, M., Satoh, R., Okubo, S., Kizawa, H., Komatsu, H., Matsumura, F., Noguchi, Y., Shinohara, T., Hinuma, S., Fujisawa, Y., Fujino, M., 2003. Free fatty acids regulate insulin secretion from pancreatic β cells through GPR40. *Nature* 422: 173–176. doi:10.1038/nature01478
- Jeppesen, J., Schaaf, P., Jones, C., Zhou, M.-Y., Chen, Y.-D.I., Reaven, G.M., 1997. Effects of low-fat, high-carbohydrate diets on risk factors for ischemic heart disease in postmenopausal. *Am. J. Clin. Nutr.* 65: 1027–1033.
- Jonker, J.T., Djaber, R., Van, L.D., Hammer, S., Bus, M.T.J., Kerpershoek, G., Kharagjitsingh, A. V, Romijn, A., Bax, J.J., Jukema, J.W., Roos, A. De,

- Smit, J.W.A., Lamb, H.J., 2014. Very-Low-Calorie Diet Increases Myocardial Triglyceride Content and Decreases Diastolic Left Ventricular Function in Type 2 Diabetes With Cardiac Complications. *Diabetes Care* 37: 1–2. doi:10.2337/dc13-1423
- Kaur, N., Gupta, A.K., 2002. Applications of inulin and oligofructose in health and nutrition. *Biosci J.* 27: 703–714.
- Kemenkes RI, 2018a. Laporan Nasional Riset Kesehatan Dasar 2018.
- Kemenkes RI, 2018b. FactSheet Obesitas.
- Klein-platat, C., Drai, J., Oujaa, M., Schlienger, J., Simon, C., 2005. Plasma fatty acid composition is associated with the metabolic syndrome and low-grade inflammation in overweight adolescents. *Am. J. Clin. Nutr.* 1178–1184.
- Kraemer, W.J., Vingren, J.L., Silvestre, R., Spiering, B.A., Hatfield, D.L., Ho, J.Y., Fragala, M.S., Maresh, C.M., Volek, J.S., 2007. Effect of adding exercise to a diet containing glucomannan. *Metabolism* 56: 1149–1158. doi:10.1016/J.METABOL.2007.04.010
- Kusumawardhani, D., A., 2015. Efek Pemberian Makanan Selingan Berbahan Dasar Tepung Gembili (*Dioscorea esculenta*) Terhadap Kadar Total Trigliserida Dan Lingkar Pinggang Pada Orang Dewasa Dengan Status Gizi Berlebih (Overweight) Dan Obesitas. Universitas Gadjah Mada.
- Le Poul, E., Loison, C., Struyf, S., Springael, J.Y., Lannoy, V., Decobecq, M.E., Brezillon, S., Dupriez, V., Vassart, G., Van Damme, J., Parmentier, M., Detheux, M., 2003. Functional characterization of human receptors for short chain fatty acids and their role in polymorphonuclear cell activation. *J. Biol. Chem.* 278: 25481–25489. doi:10.1074/jbc.M301403200
- Leidy, H.J., Campbell, W.W., 2011. The Effect of Eating Frequency on Appetite Control and Food Intake : Brief Synopsis of Controlled Feeding Studies 1 , 2 10–13. doi:10.3945/jn.109.114389.154
- Lemeshow, S., Ogston, S.A., Hosmer, D.W., Klar, J., Lwanga, S.K., 1991. Adequacy of Sample Size in Health Studies. *Biometrics* 47: 347. doi:10.2307/2532527
- Liber, A., Szajewska, H., 2013. Effects of Inulin-Type Fructans on Appetite ,

Energy Intake , and Body Weight in Children and Adults : Systematic Review of Randomized Controlled Trials. *Ann. Nutr. Metab.* 63: 42–54. doi:10.1159/000350312

Linder, M.C., 2010. Biokimia Nutrisi dan Metabolisme. Universitas Indonesia Press, Jakarta.

Liu, S., Willet, W.C., Manson, J.E., Hu, F.B., Rosner, B., Colditz, G., 2003. Relation between changes in intakes of dietary fiber and grain products and changes in weight and development of obesity among. *Am. J. Clin. Nutr.* 78: 920–927.

Ludwig, D.S., Pereira, M.A., Hilner, J.E., Horn, L. Van, Slattery, M.L., Jacobs, D.R., 1999. Dietary Fiber , Weight Gain , and Cardiovascular Disease Risk Factors in Young Adults. *J. Am. Med. Assoc.* 282: 1539–1546.

Maljaars, J., Peters, H.P.F., Masclee, A.M., 2007. Review article: The gastrointestinal tract: Neuroendocrine regulation of satiety and food intake. *Aliment. Pharmacol. Ther.* 26: 241–250. doi:10.1111/j.1365-2036.2007.03550.x

Marsono, Y., 2008. Prospek Pengembangan Makanan Fungsional. *J. Teknol. Pangan dan Gizi* 7: 19–27.

Mateo-Gallego, R., Marco-Benedí, V., Perez-Calahorra, S., Bea, A.M., Baila-Rueda, L., Lamiquiz-Moneo, I., de Castro-Orós, I., Cenarro, A., Civeira, F., 2017. Energy-restricted, high-protein diets more effectively impact cardiometabolic profile in overweight and obese women than lower-protein diets. *Clin. Nutr.* 36: 371–379. doi:10.1016/j.clnu.2016.01.018

Mcorrie, J.W., Mckeown, N.M., 2017. Understanding the Physics of Functional Fibers in the Gastrointestinal Tract: An Evidence-Based Approach to Resolving Enduring Misconceptions about Insoluble and Soluble Fiber. *J. Acad. Nutr. Diet.* 117: 251–264. doi:10.1016/j.jand.2016.09.021

Muhammad, H.F.L., 2018. Obesitas Translasiional: Aspek Klinis dan Molekuler dari Kejadian Obesitas. Gadjah Mada University Press, Yogyakarta.

Murray, R.K., Bender, D.A., Botham, K.M., Kennely, P.J., Rodwell, V.W., Weil, P.A., 2009. Harper ' s Illustrated Biochemistry. The McGraw-Hill

Companies, United States.

- NCEP, 2001. Executive Summary of the Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). *J. Am. Med. Assoc.* 285: 2486–2497. doi:10.1001/jama.285.19.2486
- Njike, V.Y., Smith, T.M., Shuval, O., Shuval, K., Edshteyn, I., Kalantari, V., 2016. Snack Food , Satiety , and Weight. *Am. Soc. Nutr.* 7: 866–878. doi:10.3945/an.115.009340.866
- Odunsi, S.T., Vázquez-Roque, M.I., Camilleri, M., Papathanasopoulos, A., Clark, M.M., Wodrich, L., Lempke, M., McKinzie, S., Ryks, M., Burton, D., Zinsmeister, A.R., 2010. Effect of alginate on satiation, appetite, gastric function, and selected gut satiety hormones in overweight and obesity. *Obesity* 18: 1579–1584. doi:10.1038/oby.2009.421
- OECD, 2019. Heavy Burden of Obesity : The Economics of Prevention A quick guide for policy makers.
- Oliveira, R.P.D.S., Perego, P., De Oliveira, M.N., Converti, A., 2011. Effect of inulin as a prebiotic to improve growth and counts of a probiotic cocktail in fermented skim milk. *LWT - Food Sci. Technol.* 44: 520–523. doi:10.1016/j.lwt.2010.08.024
- Parigi, A. Del, Chen, K., Gautier, J.F., Salbe, A.D., Pratley, R.E., Ravussin, E., Reiman, E.M., Antonio Tataranni, P., 2002. Sex differences in the human brain's response to hunger and satiation. *Am. J. Clin. Nutr.* 75: 1017–1022. doi:10.1093/ajcn/75.6.1017
- Parnell, J.A., Reimer, R.A., 2013. Weight loss during oligofructose supplementation is associated with decreased ghrelin and increased peptide YY in overweight and obese adults 2. *Am. J. Clin. Nutr.* 89: 1751–1759. doi:10.3945/ajcn.2009.27465.Weight
- Pejic, R.N., Lee, D.T., 2006. Hypertriglyceridemia. *J. Am. Board Fam. Med.* 19: 310–316.
- Pi-Sunyer, F.X., 2002. The Obesity Epidemic: Pathophysiology and Consequences of Obesity. *Obes. Res.* 10: 97S-104S.

doi:10.1038/oby.2002.202

Pompei, A., Cordisco, L., Raimondi, S., Amaretti, A., Pagnoni, U.M., Matteuzzi, D., Rossi, M., 2008. In vitro comparison of the prebiotic effects of two inulin-type fructans. *Anaerobe* 14: 280–286.

doi:10.1016/j.anaerobe.2008.07.002

Razny, U., Kiec-wilk, B., Polus, A., Goralska, J., Malczewska-malec, M., Wnek, D., Zdzienicka, A., Gruca, A., Childs, C.E., Kapusta, M., Slowinska-solnica, K., Calder, P.C., Dembinska-kiec, A., 2015. Effect of caloric restriction with or without n-3 polyunsaturated fatty acids on insulin sensitivity in obese subjects: A randomized placebo controlled trial ☆. *BBACLI* 4: 7–13.

doi:10.1016/j.bbacli.2015.05.001

Rozenbloom, S.R., Fernandes, J., Cheng, J., Gloor, G.B., 2017. The acute effects of inulin and resistant-starch on postprandial serum short-chain fatty acids and second-meal glycaemic response in lean and overweight humans. *Eur Food Res Technol* 71: 227–233. doi:10.1038/ejcn.2016.248.

Sáez Belló, M., Segarra Villalba, C., Gras Colomer, E., Frias Ruiz, P., Climente Martí, M., 2014. Effectiveness and safety of Very Low Calory Diets in obese patients. *Farm. Hosp.* 38: 50–56. doi:10.7399/FH.2014.38.1.978

Salazar, N., Dewulf, E.M., Neyrinck, A.M., Bindels, L.B., Cani, P.D., Mahillon, J., Vos, W.M. De, Thissen, J., Delzenne, N.M., Gueimonde, M., Reyes-gavil, C.G.D.L., 2015. Inulin-type fructans modulate intestinal Bi fi dobacterium species populations and decrease fecal short-chain fatty acids in obese women. *Clin. Nutr.* 34: 501–507. doi:10.1016/j.clnu.2014.06.001

Samaha, F.F., Iqbal, N., Seshadri, P., Chicano, K.L., Daily, D.A., McGrory, J., Williams, T., Williams, M., Gracely, E.J., Stern, L., 2003. A low-carbohydrate as compared with a low-fat diet in severe obesity. *N. Engl. J. Med.* 348: 2074–81. doi:10.1056/NEJMoa022637

Sanchez, M., Darimont, C., Panahi, S., Drapeau, V., Marette, A., Taylor, V.H., Dor, J., Tremblay, A., 2017. Effects of a Diet-Based Weight-Reducing Program Eating Behaviour Traits , and Psychosocial Behaviours in Obese Individuals. *Nutrients* 9: 1–17. doi:10.3390/nu9030284

- Saputri, R., 2020. Pengaruh Pemberian Jelly Mengandung Kombinasi Glukomanan Porang Dan Inulin Sebagai Makanan Selingan Terhadap Porsen Lemak Tubuh Dan Kadar Kolesterol Total Pada Orang Dewasa Kelebihan Berat Badan. Universitas Gadjah Mada.
- Schofield, J.D., Liu, Y., Rao-Balakrishna, P., Malik, R.A., Soran, H., 2016. Diabetes Dyslipidemia. *Diabetes Ther.* 7: 203–219. doi:10.1007/s13300-016-0167-x
- Shang, Q., Sun, W., Shan, X., Jiang, H., Cai, C., Hao, J., Li, G., Yu, G., 2017. Carrageenan-induced colitis is associated with decreased population of anti-inflammatory bacterium, *Akkermansia muciniphila*, in the gut microbiota of C57BL/6J mice. *Toxicol. Lett.* 279: 87–95. doi:10.1016/j.toxlet.2017.07.904
- Shearer, G.C., Joles, J.A., Jones, H., Walzem, R.L., Kaysen, G.A., 2000. Estrogen effects on triglyceride metabolism in albuminemic rats. *Kidney Int.* 57: 2268–2274. doi:10.1046/j.1523-1755.2000.00087.x
- Sherwood, L., 2012. Fisiologi Manusia, Edisi 6. ed. EGC, Jakarta.
- Singh, M., 2014. Mood, food and obesity. *Front. Psychol.* 5: 1–35. doi:10.3389/fpsyg.2014.00925
- Smethers, A., Rolls, B., 2018. Dietary Management of Obesity: Cornerstones of Healthy Eating Patterns. *Med Clin North Am* 102: 107–124. doi:10.1016/j.mcna.2017.08.009.DIETARY
- Soegih, R., Rahmat, Wiramihardja, K., 2009. Obesitas, Permasalahan dan Terapi Praktis.
- Sood, N., Baker, W.L., Coleman, C.I., 2008. Effect of glucomannan on plasma lipid and glucose concentrations, body weight, and blood pressure: systematic review and meta-analysis. *Am. J. Clin. Nutr.* 88: 1167–1175.
- Stipanuk, M., Caudill, M., 2000. Biochemical and Physiological Aspects of Human Nutrition. Third Edition. Elsevier Saunders Inc, United States of America.
- Sumarwoto, 2007. Review: Kandungan Mannan Pada Tanaman Iles-Iles. *Bioteknologi* 4: 28–32.
- Sumarwoto, 2004. Beberapa Aspek Argonomi Iles-Iles (*A. muelleri* Blume).

Bogor: Institut Pertanian Bogor.

- Sunarti, 2017. Serat Pangan dalam Penanganan Sindrom Metabolik. UGM Press, Yogyakarta.
- Sunarti, Kusuma, R.J., Rubi, D.S., Sinorita, H., 2014. Effect of Crispy Arrowroot Flake on Waist Circumference, Fasting Glucose and Free Fatty Acid in Type 2 Diabetes Patients. *Pakistan J. Nutr.* 13: 415–421.
- Supariasa, I.D.N., Bakri, B., Fajar, I., 2011. Penilaian Status Gizi. EGC, Jakarta.
- Surampudi, P., Enkhmaa, B., Anuurad, E., Berglund, L., 2016. Lipid Lowering with Soluble Dietary Fiber. *Curr. Atheroscler. Rep.* 18: 1–13. doi:10.1007/s11883-016-0624-z
- Swift, D.L., Johannsen, N.M., Lavie, C.J., Earnest, C.P., Church, T.S., 2014. The role of exercise and physical activity in weight loss and maintenance. *Prog. Cardiovasc. Dis.* 56: 441–447. doi:10.1016/j.pcad.2013.09.012
- Tala, Z., 2009. Manfaat Serat Bagi Kesehatan. USU.
- Tester, R., Al-Ghazzewi, F., 2017. Glucomannans and nutrition. *Food Hydrocoll.* 68: 246–254. doi:10.1016/j.foodhyd.2016.05.017
- TFAH, 2019. The State of Obesity: Better Policies for A Healthier America 2019. Amerika. doi:10.2307/1099957
- Theuwissen, E., Mensink, R.P., 2008. Water-soluble dietary fibers and cardiovascular disease. *Physiol. Behav.* 94: 285–292. doi:10.1016/J.PHYSBEH.2008.01.001
- Tortora, G.J., Derrickson, B., 2009. Principles of Anatomy and Physiology 12th Edition. John Wiley and Sons, Inc, United States of America.
- Tovar, A.R., Caamaño, C., Garcia-padilla, S., García, O.P., Duarte, M.A., Rosado, J.L., 2012. The inclusion of a partial meal replacement with or without inulin to a calorie restricted diet contributes to reach recommended intakes of micronutrients and decrease plasma triglycerides : A randomized clinical trial in obese Mexican women . *Nutr. J.* 11: 1–10. doi:10.1186/1475-2891-11-44
- Townsend, N., Scriven, A., 2014. Individual interventions to treat obesity. *Public Heal. Mini-Guides Obes.* 84–102. doi:10.1016/B978-0-7020-4634-6.00005-4
- Utami, N.N., 2020. Efek Konsumsi Kombinasi Inulin Dan Glukomanan Porang

(*Amorphophallus oncophyllus*) Dalam Jelly Terhadap Indeks Resistensi Insulin Dan Kadar Gula Darah Puasa Pada Orang Dewasa Dengan Kelebihan Berat Badan. Universitas Gadjah Mada.

- Valentine, R.J., Vieira, V.J., Woods, J.A., Evans, E.M., 2009. Stronger relationship between central adiposity and C-reactive protein in older women than men. *Menopause* 16: 84–89. doi:10.1097/gme.0b013e31817fcb8f
- van der Beek, C.M., Canfora, E.E., Kip, A.M., Gorissen, S.H.M., Olde, S.W.M., Eijk, H.M. Van, Holst, J.J., Blaak, E.E., Dejong, C.H.C., Lenaerts, K., 2018. The prebiotic inulin improves substrate metabolism and promotes short-chain fatty acid production in overweight to obese men. *Metabolism* 87: 25–35. doi:10.1016/j.metabol.2018.06.009
- Vuksan, V., Sievenpiper, J.L., Owen, R., Swilley, J.A., Spadafora, P., Jenkins, D.J.A., Vidgen, E., Brighenti, F., Josse, R.G., Leiter, L.A., Xu, Z., Novokmet, R., 2000. Beneficial effects of viscous dietary fiber from Konjac-Mannan in subjects with the insulin resistance syndrome: Results of a controlled metabolic trial. *Diabetes Care* 23: 9–14. doi:10.2337/diacare.23.1.9
- Wanders, A.J., van den Borne, J.J.G.C., de Graaf, C., Hulshof, T., Jonathan, M.C., Kristensen, M., Mars, M., Schols, H.A., Feskens, E.J.M., 2011. Effects of dietary fibre on subjective appetite, energy intake and body weight: a systematic review of randomized controlled trials. *Obes. Rev.* 12: 724–739. doi:10.1111/j.1467-789X.2011.00895.x
- Weisell, R.C., 2002. Body mass index as an indicator of obesity. *Asia Pac. J. Clin. Nutr.* 11: S681–S684. doi:10.1046/j.1440-6047.11.s8.5.x
- WHO, W.P.R., 2000. The Asia-Pacific Perspective : Redefining Obesity and Its Treatment.
- Wilding, J.P.H., 2011. Pathophysiology and aetiology of obesity. *Medicine (Baltimore)*. 39: 6–10. doi:10.1016/j.mpmed.2010.10.002
- Williams, C.M., 1999. Nutritional and Health Benefits of Inulin and Oligofructose Effects of Inulin on Lipid Parameters in Humans. *Am. Soc. Nutr. Sci.* 129: 1471–1473.

- Winarno, F.G., 2002. Kimia Pangan dan Gizi. Gramedia Pustaka Utama, Jakarta.
- Wing, R.R., Phelan, S., 2005. Long-term weight loss maintenance 1– 4. *Am. J. Clin. Nutr.* 82: 222–225.
- Wood, R.J., Fernandez, M.L., Sharman, M.J., Silvestre, R., Greene, C.M., Zern, T.L., Shrestha, S., Judelson, D.A., Gomez, A.L., Kraemer, W.J., Volek, J.S., 2007. Effects of a carbohydrate-restricted diet with and without supplemental soluble fiber on plasma low-density lipoprotein cholesterol and other clinical markers of cardiovascular risk. *Metab. - Clin. Exp.* 56: 58–67. doi:10.1016/j.metabol.2006.08.021
- World Health Organization, 2018. Obesity and Overweight [WWW Document]. URL <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight> (accessed 12.26.19).
- World Health Organization, 2014. Global status report on noncommunicable diseases.
- World Health Organization, 2011. Overweight and Obesity Fact Sheet.
- World Health Organization, 2000. The Asia-Pacific perspective: redefining obesity and its treatment. *Geneva, Switz. World Heal. Organ.* doi:0-9577082-1-1
- Wouters, R., 2010. Inulin, in: Imeson, A. (Ed.), Food Stabilisers, Thickeners, and Gelling Agents. Blackwell Publishing, United Kingdom, p. 180.
- Yamada, K., Tokunaga, Y., Ikeda, A., Ohkura, K.I., Kaku-Ohkura, S., Mamiya, S., Lim, B.O., Tachibana, H., 2003. Effect of dietary fiber on the lipid metabolism and immune function of aged sprague-dawley rats. *Biosci. Biotechnol. Biochem.* 67: 429–433. doi:10.1271/bbb.67.429
- Yannakoulia, M., Poulimeneas, D., Mamalaki, E., Anastasiou, C.A., 2019. Dietary modifications for weight loss and weight loss maintenance. *Metabolism.* 92: 153–162. doi:10.1016/j.metabol.2019.01.001
- Yoshida, M., Vanstone, C.A., Parsons, W.D., Zawistowski, J., Jones, P.J.H., 2006. Effect of plant sterols and glucomannan on lipids in individuals with and without type II diabetes. *Eur. J. Clin. Nutr.* 60: 529–537. doi:10.1038/sj.ejcn.1602347

- Yu, S., Xing, L., Du, Z., Tian, Y., Jing, L., Yan, H., Lin, M., Zhang, B., Liu, S., Pan, Y., Li, C., 2019. Prevalence of Obesity and Associated Risk Factors and Cardiometabolic Comorbidities in Rural Northeast China. *BMC Cardiovasc. Disord.* 19. doi:10.1186/s12872-019-1202-4
- Zechner, R., Zimmermann, R., Eichmann, T.O., Kohlwein, S.D., Haemmerle, G., Lass, A., Madeo, F., 2012. FAT SIGNALS - Lipases and lipolysis in lipid metabolism and signaling. *Cell Metab.* 15: 279–291. doi:10.1016/j.cmet.2011.12.018
- Zhang, F.F., Cudhea, F., Shan, Z., Michaud, D.S., Imamura, F., Eom, H., Ruan, M., Rehm, C.D., Liu, J., Du, M., Kim, D., Lizewski, L., Wilde, P., Mozaffarian, D., 2019. Preventable Cancer Burden Associated With Poor Diet in the United States. *JNCI Cancer Spectr.* 3: 1–9. doi:10.1093/jncics/pkz034
- Zizza, C.A., 2014. Healthy snacking recommendations: One size does not fit all. *Physiol. Behav.* 134: 32–37. doi:10.1016/J.PHYSBEH.2014.01.034