

## 引用文献

### 糖尿病 (表 1)

1. Colditz GA, Manson JE, Stampfer MJ, Rosner B, Willett WC, Speizer FE. Diet and risk of clinical diabetes in women. *Am J Clin Nutr* 1992;55:1018-23.
2. Salmeron J, Ascherio A, Rimm EB, Colditz GA, Spiegelman D, Jenkins DJ, Stampfer MJ, Wing AL, Willett WC. Dietary fiber, glycemic load, and risk of NIDDM in men. *Diabetes Care* 1997;20:545-50.
3. Salmeron J, Manson JE, Stampfer MJ, Colditz GA, Wing AL, Willett WC. Dietary fiber, glycemic load, and risk of non-insulin-dependent diabetes mellitus in women. *JAMA* 1997;277:472-7.
4. Meyer KA, Kushi LH, Jacobs DR Jr, Slavin J, Sellers TA, Folsom AR. Carbohydrates, dietary fiber, and incident type 2 diabetes in older women. *Am J Clin Nutr* 2000;71:921-30.
5. Stevens J, Ahn K, Juhaeri, Houston D, Steffan L, Couper D. Dietary fiber intake and glycemic index and incidence of diabetes in African-American and white adults: The ARIC study. *Diabetes Care* 2002;25:1715-21.
6. Mantonen J, Knekt P, Jarvinen R, Aromaa A, Reunanen A. Whole-grain and fiber intake and the incidence of type 2 diabetes. *Am J Clin Nutr* 2003;77:622-9.
7. Hodge AM, English DR, O'Dea K, Giles GG. Glycemic index and dietary fiber and the risk of type 2 diabetes. *Diabetes Care* 2004;27:2701-6.
8. Schulze MB, Liu S, Rimm EB, Manson JE, Willett WC, Hu FB. Glycemic index, glycemic load, and dietary fiber intake and incidence of type 2 diabetes in younger and middle-aged women. *Am J Clin Nutr* 2004;80:348-56.
9. Barclay AW, Flood VM, Rochtchina E, Mitchell P, Brand-Miller JC. Glycemic index, dietary fiber, and risk of type 2 diabetes in a cohort of older Australians. *Diabetes Care* 2007;30:2811-3.
10. Schulze MB, Schulz M, Heidemann C, Schienkiewitz A, Hoffmann K, Boeing H. Fiber and magnesium intake and incidence of type 2 diabetes: a prospective study and meta-analysis. *Arch Intern Med* 2007;167:956-65.
11. Hu FB, Manson JE, Stampfer MJ, Colditz G, Liu S, Solomon CG, Willett WC. Diet, lifestyle, and the risk of type 2 diabetes mellitus in women. *N Engl J Med* 2001;345:790-7.
12. Krishnan S, Rosenberg L, Singer M, Hu FB, Djousse L, Cupples LA, Palmer JR. Glycemic Index, Glycemic Load, and Cereal Fiber Intake and Risk of Type 2 Diabetes in US Black Women. *Arch Intern Med* 2007;167:2304-9.
13. Zhang C, Liu S, Solomon CG, Hu FB. Dietary fiber intake, dietary glycemic load, and the risk for gestational diabetes mellitus. *Diabetes Care* 2006;29:2223-30.

### 循環器疾患 (表 2)

14. Bazzano LA, He J, Ogden LG, Loria CM, Whelton PK. Dietary fiber intake and reduced risk of coronary heart disease in US men and women: the National Health and Nutrition Examination Survey I Epidemiologic Follow-up Study. *Arch Intern Med* 2003;163:1897-904.
15. Mozaffarian D, Kumanyika SK, Lemaitre RN, Olson JL, Burke GL, Siscovick DS. Cereal, fruit, and vegetable fiber intake and the risk of cardiovascular disease in elderly individuals. *JAMA* 2003;289:1659-66.
16. Liu S, Buring JE, Sesso HD, Rimm EB, Willett WC, Manson JE. A prospective study of dietary fiber intake and risk of cardiovascular disease among women. *J Am Coll Cardiol* 2002;39:49-56.
17. Ascherio A, Rimm EB, Hernan MA, Giovannucci EL, Kawachi I, Stampfer MJ, Willett WC. Intake of potassium, magnesium, calcium, and fiber and risk of stroke among US men. *Circulation* 1998;98:1198-204.
18. Oh K, Hu FB, Cho E, Rexrode KM, Stampfer MJ, Manson JE, Liu S, Willett WC. Carbohydrate intake, glycemic index, glycemic load, and dietary fiber in relation to risk of stroke in women. *Am J Epidemiol* 2005;161:161-9.
19. Humble CG, Malarcher AM, Tyroler HA.

- Dietary fiber and coronary heart disease in middle-aged hypercholesterolemic men. Am J Prev Med 1993;9:197-202.
20. Pietinen P, Rimm EB, Korhonen P, Hartman AM, Willett WC, Albanes D, Virtamo J. Intake of dietary fiber and risk of coronary heart disease in a cohort of Finnish men. The Alpha-Tocopherol, Beta-Carotene Cancer Prevention Study. Circulation 1996;94:2720-7.
21. Rimm EB, Ascherio A, Giovannucci E, Spiegelman D, Stampfer MJ, Willett WC. Vegetable, fruit, and cereal fiber intake and risk of coronary heart disease among men. JAMA 1996;275:447-51.
22. Todd S, Woodward M, Tunstall-Pedoe H, Bolton-Smith C. Dietary antioxidant vitamins and fiber in the etiology of cardiovascular disease and all-causes mortality: results from the Scottish Heart Health Study. Am J Epidemiol 1999;150:1073-80.
23. Wolk A, Manson JE, Stampfer MJ, Colditz GA, Hu FB, Speizer FE, Hennekens CH, Willett WC. Long-term intake of dietary fiber and decreased risk of coronary heart disease among women. JAMA 1999;281:1998-2004.
24. Pereira MA, O'Reilly E, Augustsson K, Fraser GE, Goldbourt U, Heitmann BL, Hallmans G, Knekt P, Liu S, Pietinen P, Spiegelman D, Stevens J, Virtamo J, Willett WC, Ascherio A. Dietary fiber and risk of coronary heart disease: a pooled analysis of cohort studies. Arch Intern Med 2004;164:370-6.
25. Kromhout D, de Lezenne Coulander C. Diet, prevalence and 10-year mortality from coronary heart disease in 871 middle-aged men. The Zutphen Study. Am J Epidemiol 1984;119:733-41.
26. Kushi LH, Lew RA, Stare FJ, Ellison CR, el Lozy M, Bourke G, Daly L, Graham I, Hickey N, Mulcahy R, et al. Diet and 20-year mortality from coronary heart disease. The Ireland-Boston Diet-Heart Study. N Engl J Med 1985;312:811-8.
27. Pietinen P, Rimm EB, Korhonen P, Hartman AM, Willett WC, Albanes D, Virtamo J. Intake of dietary fiber and risk of coronary heart disease in a cohort of Finnish men. The Alpha-Tocopherol, Beta-Carotene Cancer Prevention Study. Circulation 1996;94:2720-7.
28. Kromhout D, Bloomberg BP, Feskens EJ, Hertog MG, Menotti A, Blackburn H. Alcohol, fish, fibre and antioxidant vitamins intake do not explain population differences in coronary heart disease mortality. Int J Epidemiol 1996;25:753-9.
29. Liu S, Buring JE, Sesso HD, Rimm EB, Willett WC, Manson JE. A prospective study of dietary fiber intake and risk of cardiovascular disease among women. J Am Coll Cardiol 2002;39:49-56.
30. Khaw KT, Barrett-Connor E. Dietary fiber and reduced ischemic heart disease mortality rates in men and women: a 12-year prospective study. Am J Epidemiol 1987;126:1093-102.
31. Mann JI, Appleby PN, Key TJ, Thorogood M. Dietary determinants of ischaemic heart disease in health conscious individuals. Heart 1997;78:450-5.
- がん（表3）
- （子宮）
32. Jain MG, Rohan TE, Howe GR, Miller AB. A cohort study of nutritional factors and endometrial cancer. Eur J Epidemiol 2000;16:899-905.
- （肺臓）
33. Stolzenberg-Solomon RZ, Pietinen P, Taylor PR, Virtamo J, Albanes D. Prospective study of diet and pancreatic cancer in male smokers. Am J Epidemiol 2002;155:783-92.
- （卵巣）
34. Kushi LH, Mink PJ, Folsom AR, Anderson KE, Zheng W, Lazovich D, Sellers TA. Prospective study of diet and ovarian cancer. Am J Epidemiol 1999;149:21-31.
35. Silvera SA, Jain M, Howe GR, Miller AB, Rohan TE. Dietary fiber intake and ovarian cancer risk: a prospective cohort study. Cancer Causes Control 2007;18:335-41.
- （乳房）
36. Graham S, Zielezny M, Marshall J, Priore R, Freudenheim J, Brasure J, Haughey B, Nasca P, Zdeb M. Diet in the epidemiology of postmenopausal breast cancer in the New

- York State Cohort. *Am J Epidemiol* 1992;136:1327-37.
37. Willett WC, Hunter DJ, Stampfer MJ, Colditz G, Manson JE, Spiegelman D, Rosner B, Hennekens CH, Speizer FE. Dietary fat and fiber in relation to risk of breast cancer. An 8-year follow-up. *JAMA* 1992;268:2037-44.
38. Rohan TE, Howe GR, Friedenreich CM, Jain M, Miller AB. Dietary fiber, vitamins A, C, and E, and risk of breast cancer: a cohort study. *Cancer Causes Control* 1993;4:29-37.
39. Kushi LH, Potter JD, Bostick RM, Drinkard CR, Sellers TA, Gapstur SM, Cerhan JR, Folsom AR. Dietary fat and risk of breast cancer according to hormone receptor status. *Cancer Epidemiol Biomarkers Prev* 1995;4:11-9.
40. Jarvinen R, Knekt P, Seppanen R, Teppo L. Diet and breast cancer risk in a cohort of Finnish women. *Cancer Lett* 1997;114:251-3.
41. Verhoeven DT, Assen N, Goldbohm RA, Dorant E, van 't Veer P, Sturmans F, Hermus RJ, van den Brandt PA. Vitamins C and E, retinol, beta-carotene and dietary fibre in relation to breast cancer risk: a prospective cohort study. *Br J Cancer* 1997;75:149-55.
42. Horn-Ross PL, Hoggatt KJ, West DW, Krone MR, Stewart SL, Anton H, Bernstein CL, Deapen D, Peel D, Pinder R, Reynolds P, Ross RK, Wright W, Ziogas A. Recent diet and breast cancer risk: the California Teachers Study (USA). *Cancer Causes Control* 2002;13:407-15.
43. Sieri S, Krogh V, Muti P, Micheli A, Pala V, Crosignani P, Berrino F. Fat and protein intake and subsequent breast cancer risk in postmenopausal women. *Nutr Cancer* 2002;42:10-7.
44. Terry P, Jain M, Miller AB, Howe GR, Rohan TE. No association among total dietary fiber, fiber fractions, and risk of breast cancer. *Cancer Epidemiol Biomarkers Prev* 2002;11:1507-8.
45. Cho E, Spiegelman D, Hunter DJ, Chen WY, Colditz GA, Willett WC. Premenopausal dietary carbohydrate, glycemic index, glycemic load, and fiber in relation to risk of breast cancer. *Cancer Epidemiol Biomarkers Prev* 2003;12:1153-8.
46. Holmes MD, Liu S, Hankinson SE, Colditz GA, Hunter DJ, Willett WC. Dietary carbohydrates, fiber, and breast cancer risk. *Am J Epidemiol* 2004;159:732-9.
47. Mattisson I, Wirfalt E, Johansson U, Gullberg B, Olsson H, Berglund G. Intakes of plant foods, fibre and fat and risk of breast cancer--a prospective study in the Malmo Diet and Cancer cohort. *Br J Cancer* 2004;90:122-7.
48. Giles GG, Simpson JA, English DR, Hodge AM, Gertig DM, Macinnis RJ, Hopper JL. Dietary carbohydrate, fibre, glycaemic index, glycaemic load and the risk of postmenopausal breast cancer. *Int J Cancer* 2006;118:1843-7.
49. Cade JE, Burley VJ, Greenwood DC; UK Women's Cohort Study Steering Group. Dietary fibre and risk of breast cancer in the UK Women's Cohort Study. *Int J Epidemiol* 2007;36:431-8.
50. Suzuki R, Rylander-Rudqvist T, Ye W, Saji S, Adlercreutz H, Wolk A. Dietary fiber intake and risk of postmenopausal breast cancer defined by estrogen and progesterone receptor status--a prospective cohort study among Swedish women. *Int J Cancer* 2008;122:403-12.
- (結腸・直腸)
51. Park Y, Hunter DJ, Spiegelman D, Bergkvist L, Berrino F, van den Brandt PA, Buring JE, Colditz GA, Freudenheim JL, Fuchs CS, Giovannucci E, Goldbohm RA, Graham S, Harnack L, Hartman AM, Jacobs DR Jr, Kato I, Krogh V, Leitzmann MF, McCullough ML, Miller AB, Pietinen P, Rohan TE, Schatzkin A, Willett WC, Wolk A, Zeleniuch-Jacquotte A, Zhang SM, Smith-Warner SA. Dietary fiber intake and risk of colorectal cancer: a pooled analysis of prospective cohort studies. *JAMA* 2005;294:2849-57.
52. Bingham SA, Day NE, Luben R, Ferrari P, Slimani N, Norat T, Clavel-Chapelon F, Kesse E, Nieters A, Boeing H, Tjonneland A, Overvad K, Martinez C, Dorronsoro M, Gonzalez CA, Key TJ, Trichopoulou A, Naska A, Vineis P, Tumino R, Krogh V, Bueno-de-Mesquita HB, Peeters PH, Berglund G, Hallmans G, Lund E, Skeie G,

- Kaaks R, Riboli E; European Prospective Investigation into Cancer and Nutrition. Dietary fibre in food and protection against colorectal cancer in the European Prospective Investigation into Cancer and Nutrition (EPIC): an observational study. *Lancet* 2003;361:1496-501.
53. Bingham SA, Norat T, Moskal A, Ferrari P, Slimani N, Clavel-Chapelon F, Kesse E, Nieters A, Boeing H, Tjønneland A, Overvad K, Martinez C, Dorronsoro M, Gonzalez CA, Ardanaz E, Navarro C, Quiros JR, Key TJ, Day NE, Trichopoulou A, Naska A, Krogh V, Tumino R, Palli D, Panico S, Vineis P, Bueno-de-Mesquita HB, Ocke MC, Peeters PH, Berglund G, Hallmans G, Lund E, Skeie G, Kaaks R, Riboli E. Is the association with fiber from foods in colorectal cancer confounded by folate intake? *Cancer Epidemiol Biomarkers Prev* 2005;14:1552-6.
54. Lin J, Zhang SM, Cook NR, Rexrode KM, Liu S, Manson JE, Lee IM, Buring JE. Dietary intakes of fruit, vegetables, and fiber, and risk of colorectal cancer in a prospective cohort of women (United States). *Cancer Causes Control* 2005;16:225-33.
55. Michels KB, Fuchs CS, Giovannucci E, Colditz GA, Hunter DJ, Stampfer MJ, Willett WC. Fiber intake and incidence of colorectal cancer among 76,947 women and 47,279 men. *Cancer Epidemiol Biomarkers Prev* 2005;14:842-9.
56. Lin J, Zhang SM, Cook NR, Rexrode KM, Liu S, Manson JE, Lee IM, Buring JE. Dietary intakes of fruit, vegetables, and fiber, and risk of colorectal cancer in a prospective cohort of women (United States). *Cancer Causes Control* 2005;16:225-33.
57. Michels KB, Fuchs CS, Giovannucci E, Colditz GA, Hunter DJ, Stampfer MJ, Willett WC. Fiber intake and incidence of colorectal cancer among 76,947 women and 47,279 men. *Cancer Epidemiol Biomarkers Prev* 2005;14:842-9.
58. Otani T, Iwasaki M, Ishihara J, Sasazuki S, Inoue M, Tsugane S; Japan Public Health Center-Based Prospective Study Group. Dietary fiber intake and subsequent risk of colorectal cancer: the Japan Public Health Center-based prospective study. *Int J Epidemiol* 2006;35:1475-80.
59. Shin A, Li H, Shu XO, Yang G, Gao YT, Zheng W. Dietary intake of calcium, fiber and other micronutrients in relation to colorectal cancer risk: Results from the Shanghai Women's Health Study. *Int J Cancer* 2006;119:2938-42.
60. Nomura AM, Hankin JH, Henderson BE, Wilkens LR, Murphy SP, Pike MC, Le Marchand L, Stram DO, Monroe KR, Kolonel LN. Dietary fiber and colorectal cancer risk: the multiethnic cohort study. *Cancer Causes Control* 2007;18:753-64.
61. Schatzkin A, Mouw T, Park Y, Subar AF, Kipnis V, Hollenbeck A, Leitzmann MF, Thompson FE. Dietary fiber and whole-grain consumption in relation to colorectal cancer in the NIH-AARP Diet and Health Study. *Am J Clin Nutr* 2007;85:1353-60.
62. Wakai K, Date C, Fukui M, Tamakoshi K, Watanabe Y, Hayakawa N, Kojima M, Kawado M, Suzuki K, Hashimoto S, Tokudome S, Ozasa K, Suzuki S, Toyoshima H, Ito Y, Tamakoshi A; JACC Study Group. Dietary fiber and risk of colorectal cancer in the Japan collaborative cohort study. *Cancer Epidemiol Biomarkers Prev* 2007;16:668-75.
63. Willett WC, Stampfer MJ, Colditz GA, Rosner BA, Speizer FE. Relation of meat, fat, and fiber intake to the risk of colon cancer in a prospective study among women. *N Engl J Med* 1990;323:1664-72.
64. Sellers TA, Bazyk AE, Bostick RM, Kushi LH, Olson JE, Anderson KE, Lazovich D, Folsom AR. Diet and risk of colon cancer in a large prospective study of older women: an analysis stratified on family history (Iowa, United States). *Cancer Causes Control* 1998;9:357-67.
- (参考：直腸・結腸がんのプール分析で使用された論文)
65. Fuchs CS, Giovannucci EL, Colditz GA, Hunter DJ, Stampfer MJ, Rosner B, Speizer FE, Willett WC. Dietary fiber and the risk of colorectal cancer and adenoma in women. *N Engl J Med* 1999;340:169-76.
66. Terry P, Giovannucci E, Michels KB, Bergkvist L, Hansen H, Holmberg L, Wolk A.

- Fruit, vegetables, dietary fiber, and risk of colorectal cancer. *J Natl Cancer Inst* 2001;93:525-33.
67. Mai V, Flood A, Peters U, Lacey JV Jr, Schairer C, Schatzkin A. Dietary fibre and risk of colorectal cancer in the Breast Cancer Detection Demonstration Project (BCDDP) follow-up cohort. *Int J Epidemiol* 2003;32:234-9.
68. McCullough ML, Robertson AS, Chao A, Jacobs EJ, Stampfer MJ, Jacobs DR, Diver WR, Calle EE, Thun MJ. A prospective study of whole grains, fruits, vegetables and colon cancer risk. *Cancer Causes Control* 2003;14:959-70.
69. Sieri S, Krogh V, Muti P, Micheli A, Pala V, Crosignani P, Berrino F. Fat and protein intake and subsequent breast cancer risk in postmenopausal women. *Nutr Cancer* 2002;42:10-7.
70. van den Brandt PA, Goldbohm RA, van 't Veer P, Volovics A, Hermus RJ, Sturmans F. A large-scale prospective cohort study on diet and cancer in The Netherlands. *J Clin Epidemiol* 1990;43:285-95.
71. Bandera EV, Freudenheim JL, Marshall JR, Zielezny M, Priore RL, Brasure J, Baptiste M, Graham S. Diet and alcohol consumption and lung cancer risk in the New York State Cohort (United States). *Cancer Causes Control* 1997;8:828-40.
72. Terry P, Jain M, Miller AB, Howe GR, Rohan TE. Dietary intake of folic acid and colorectal cancer risk in a cohort of women. *Int J Cancer* 2002;97:864-7.
73. Steinmetz KA, Kushi LH, Bostick RM, Folsom AR, Potter JD. Vegetables, fruit, and colon cancer in the Iowa Women's Health Study. *Am J Epidemiol* 1994;139:1-15.
74. Giovannucci E, Rimm EB, Stampfer MJ, Colditz GA, Ascherio A, Willett WC. Intake of fat, meat, and fiber in relation to risk of colon cancer in men. *Cancer Res* 1994;54:2390-7.
75. Kato I, Akhmedkhanov A, Koenig K, Toniolo PG, Shore RE, Riboli E. Prospective study of diet and female colorectal cancer: the New York University Women's Health Study. *Nutr Cancer* 1997;28:276-81.
76. Pietinen P, Malila N, Virtanen M, Hartman TJ, Tangrea JA, Albanes D, Virtamo J. Diet and risk of colorectal cancer in a cohort of Finnish men. *Cancer Causes Control* 1999;10:387-96.
77. Higginbotham S, Zhang ZF, Lee IM, Cook NR, Giovannucci E, Buring JE, Liu S; Women's Health Study. Dietary glycemic load and risk of colorectal cancer in the Women's Health Study. *J Natl Cancer Inst* 2004;96:229-33.

#### 血圧(表4)

78. Streppel MT, Arends LR, van 't Veer P, Grobbee DE, Geleijnse JM. Dietary fiber and blood pressure: a meta-analysis of randomized placebo-controlled trials. *Arch Intern Med* 2005;165:150-6.
79. Whelton SP, Hyre AD, Pedersen B, Yi Y, Whelton PK, He J. Effect of dietary fiber intake on blood pressure: a meta-analysis of randomized, controlled clinical trials. *J Hypertens* 2005;23:475-81.
- (参考: Whelton et al のメタ・アナリシスで使われた論文)
80. He J, Streiffer RH, Muntner P, Krousel-Wood MA, Whelton PK. Effect of dietary fiber intake on blood pressure: a randomized, double-blind, placebo-controlled trial. *J Hypertens* 2004;22(1):73-80.
81. Schlamowitz P, Halberg T, Warnøe O, Wilstrup F, Ryttig K. Treatment of mild to moderate hypertension with dietary fibre. *Lancet* 1987;2(8559):622-3.
82. Brussaard JH, van Raaij JM, Stasse-Wolthuis M, Katan MB, Hautvast JG. Blood pressure and diet in normotensive volunteers: absence of an effect of dietary fiber, protein, or fat. *Am J Clin Nutr* 1981;34(10):2023-9.
83. Arvill A, Bodin L. Effect of short-term ingestion of konjac glucomannan on serum cholesterol in healthy men. *Am J Clin Nutr* 1995;61(3):585-9.
84. Birketvedt GS, Aaseth J, Florholmen JR, Ryttig K. Long-term effect of fibre supplement and reduced energy intake on body weight and blood lipids in overweight subjects. *Acta Medica (Hradec Kralove)* 2000;43(4):129-32.

85. Burke V, Hodgson JM, Beilin LJ, Giangiulioi N, Rogers P, Pudsey IB. Dietary protein and soluble fiber reduce ambulatory blood pressure in treated hypertensives. *Hypertension* 2001;38(4):821-6.
86. Eliasson K, Ryttig KR, Hylander B, Rössner S. A dietary fibre supplement in the treatment of mild hypertension. A randomized, double-blind, placebo-controlled trial. *J Hypertens* 1992;10(2):195-9.
87. Fehily AM, Burr ML, Butland BK, Eastham RD. A randomised controlled trial to investigate the effect of a high fibre diet on blood pressure and plasma fibrinogen. *J Epidemiol Community Health* 1986;40(4):334-7.
88. Hagander B, Asp NG, Ekman R, Nilsson-Ehle P, Scherstén B. Dietary fibre enrichment, blood pressure, lipoprotein profile and gut hormones in NIDDM patients. *Eur J Clin Nutr* 1989;43(1):35-44.
89. Keenan JM, Pins JJ, Frazel C, Moran A, Turnquist L. Oat ingestion reduces systolic and diastolic blood pressure in patients with mild or borderline hypertension: a pilot trial. *J Fam Pract* 2002;51(4):369.
90. Little P, Girling G, Hasler A, Trafford A, Craven A. A controlled trial of a low sodium, low fat, high fibre diet in treated hypertensive patients: the efficacy of multiple dietary intervention. *Postgrad Med J* 1990;66(778):616-21.
91. Margetts BM, Beilin LJ, Vandongen R, Armstrong BK. A randomized controlled trial of the effect of dietary fibre on blood pressure. *Clin Sci (Lond)* 1987;72(3):343-50.
92. Nami R, Gallo V, Pavese G, Panza F, Gennari C. Antihypertensive activity of a vegetable fibre preparation: a preliminary, double-blind, placebo-controlled study. *Eur J Clin Nutr* 1995;49 Suppl 3:S201-6.
93. Onning G, Wallmark A, Persson M, Akesson B, Elmståhl S, Oste R. Consumption of oat milk for 5 weeks lowers serum cholesterol and LDL cholesterol in free-living men with moderate hypercholesterolemia. *Ann Nutr Metab* 1999;43(5):301-9.
94. Rigaud D, Ryttig KR, Angel LA, Apfelbaum M. Overweight treated with energy restriction and a dietary fibre supplement: a 6-month randomized, double-blind, placebo-controlled trial. *Int J Obes* 1990;14(9):763-9.
95. Rössner S, von Zweigbergk D, Ohlin A, Ryttig K. Weight reduction with dietary fibre supplements. Results of two double-blind randomized studies. *Acta Med Scand* 1987;222(1):83-8.
96. Rössner S, Andersson IL, Ryttig K. Effects of a dietary fibre supplement to a weight reduction programme on blood pressure. A randomized, double-blind, placebo-controlled study. *Acta Med Scand* 1988;223(4):353-7.
97. Ryttig KR, Tellnes G, Haegh L, Bøe E, Fagerthun H. A dietary fibre supplement and weight maintenance after weight reduction: a randomized, double-blind, placebo-controlled long-term trial. *Int J Obes* 1989;13(2):165-71.
98. Ryttig KR, Lammert O, Nielsen E, Garby L, Poulsen K. The effect of a soluble dietary fibre supplement on 24-hour energy expenditure during a standardized physical activity programme. *Int J Obes* 1990;14(5):451-5.
99. Solum TT, Ryttig KR, Solum E, Larsen S. The influence of a high-fibre diet on body weight, serum lipids and blood pressure in slightly overweight persons. A randomized, double-blind, placebo-controlled investigation with diet and fibre tablets (DumoVital). *Int J Obes* 1987;11 Suppl 1:67-71.
100. Swain JF, Rouse IL, Curley CB, Sacks FM. Comparison of the effects of oat bran and low-fiber wheat on serum lipoprotein levels and blood pressure. *N Engl J Med* 1990;322(3):147-52.
101. Törrönen R, Kansanen L, Uusitupa M, Hänninen O, Myllymäki O, Härkönen H, Mälkkilä Y. Effects of an oat bran concentrate on serum lipids in free-living men with mild to moderate hypercholesterolaemia. *Eur J Clin Nutr* 1992;46(9):621-7.
102. Van Horn L, Moag-Stahlberg A, Liu KA, Ballew C, Ruth K, Hughes R, Stamler J. Effects on serum lipids of adding instant oats to usual American diets. *Am J Public Health* 1991;81(2):183-8.

(参考: Streppel et al のメタ・アナリシスで使われた論文)

103. Kelsay JL, Behall KM, Prather ES. Effect of fiber from fruits and vegetables on metabolic responses of human subjects I. Bowel transit time, number of defecations, fecal weight, urinary excretions of energy and nitrogen and apparent digestibilities of energy, nitrogen, and fat. *Am J Clin Nutr* 1978;31(7):1149-53.
104. Brussaard JH, van Raaij JM, Stasse-Wolthuis M, Katan MB, Hautvast JG. Blood pressure and diet in normotensive volunteers: absence of an effect of dietary fiber, protein, or fat. *Am J Clin Nutr* 1981;34(10):2023-9.
105. Onning G, Wallmark A, Persson M, Akesson B, Elmståhl S, Oste R. Consumption of oat milk for 5 weeks lowers serum cholesterol and LDL cholesterol in free-living men with moderate hypercholesterolemia. *Ann Nutr Metab* 1999;43(5):301-9.
106. Saltzman E, Das SK, Lichtenstein AH, Dallal GE, Corrales A, Schaefer EJ, Greenberg AS, Roberts SB. An oat-containing hypocaloric diet reduces systolic blood pressure and improves lipid profile beyond effects of weight loss in men and women. *J Nutr* 2001;131(5):1465-70.
107. Rigaud D, Ryttig KR, Angel LA, Apfelbaum M. Overweight treated with energy restriction and a dietary fibre supplement: a 6-month randomized, double-blind, placebo-controlled trial. *Int J Obes* 1990;14(9):763-9.
108. Eliasson K, Ryttig KR, Hylander B, Rössner S. A dietary fibre supplement in the treatment of mild hypertension. A randomized, double-blind, placebo-controlled trial. *J Hypertens* 1992;10(2):195-9. Fehily AM, Burr ML, Butland BK, Eastham RD. A randomised controlled trial to investigate the effect of a high fibre diet on blood pressure and plasma fibrinogen. *J Epidemiol Community Health* 1986;40(4):334-7.
109. Margetts BM, Beilin LJ, Vandongen R, Armstrong BK. A randomized controlled trial of the effect of dietary fibre on blood pressure. *Clin Sci (Lond)* 1987;72(3):343-50.
110. Schlamowitz P, Halberg T, Warnøe O, Wilstrup F, Ryttig K. Treatment of mild to moderate hypertension with dietary fibre. *Lancet* 1987;2(8559):622-3.
111. Solum TT, Ryttig KR, Solum E, Larsen S. The influence of a high-fibre diet on body weight, serum lipids and blood pressure in slightly overweight persons. A randomized, double-blind, placebo-controlled investigation with diet and fibre tablets (DumoVital). *Int J Obes* 1987;11 Suppl 1:67-71.
112. Rössner S, von Zweigbergk D, Ohlin A, Ryttig K. Weight reduction with dietary fibre supplements. Results of two double-blind randomized studies. *Acta Med Scand* 1987;222(1):83-8.
113. Rössner S, Andersson IL, Ryttig K. Effects of a dietary fibre supplement to a weight reduction programme on blood pressure. A randomized, double-blind, placebo-controlled study. *Acta Med Scand* 1988;223(4):353-7.
114. Ryttig KR, Tellnes G, Haegh L, Bøe E, Fagerthun H. A dietary fibre supplement and weight maintenance after weight reduction: a randomized, double-blind, placebo-controlled long-term trial. *Int J Obes* 1989;13(2):165-71.
115. Uusitupa M, Siitonen O, Savolainen K, Silvasti M, Penttilä I, Parviainen M. Metabolic and nutritional effects of long-term use of guar gum in the treatment of noninsulin-dependent diabetes of poor metabolic control. *Am J Clin Nutr* 1989;49(2):345-51.
116. Swain JF, Rouse IL, Curley CB, Sacks FM. Comparison of the effects of oat bran and low-fiber wheat on serum lipoprotein levels and blood pressure. *N Engl J Med* 1990;322(3):147-52.
117. Singh RB, Rastogi SS, Singh R, Ghosh S, Niaz MA. Effects of guava intake on serum total and high-density lipoprotein cholesterol levels and on systemic blood pressure. *Am J Cardiol* 1992;70(15):1287-91.
118. Burke V, Hodgson JM, Beilin LJ, Giangulioi N, Rogers P, Puddey IB. Dietary protein and soluble fiber reduce ambulatory blood pressure in treated hypertensives. *Hypertension* 2001;38(4):821-6.
119. Jenkins DJ, Kendall CW, Popovich DG, Vidgen E, Mehling CC, Vuksan V, Ransom TP, Rao AV, Rosenberg-Zand R, Tariq N, Corey P, Jones PJ, Raeini M, Story JA, Furumoto EJ, Illingworth DR, Pappu AS,

- Connelly PW. Effect of a very-high-fiber vegetable, fruit, and nut diet on serum lipids and colonic function. *Metabolism* 2001;50(4):494-503.
120. Jenkins DJ, Kendall CW, Vuksan V, Vidgen E, Parker T, Faulkner D, Mehling CC, Garsetti M, Testolin G, Cunnane SC, Ryan MA, Corey PN. Soluble fiber intake at a dose approved by the US Food and Drug Administration for a claim of health benefits: serum lipid risk factors for cardiovascular disease assessed in a randomized controlled crossover trial. *Am J Clin Nutr* 2002;75(5):834-9.
121. Pins JJ, Geleva D, Keenan JM, Frazel C, O'Connor PJ, Cherney LM. Do whole-grain oat cereals reduce the need for antihypertensive medications and improve blood pressure control? *J Fam Pract* 2002;51(4):353-9.
122. He J, Streiffer RH, Muntner P, Krousel-Wood MA, Whelton PK. Effect of dietary fiber intake on blood pressure: a randomized, double-blind, placebo-controlled trial. *J Hypertens* 2004;22(1):73-80.
- hypercholesterolemic people. *Am J Clin Nutr* 1991;54(5):841-5.
128. Davidson MH, Dugan LD, Burns JH, Bova J, Story K, Drennan KB. The hypocholesterolemic effects of beta-glucan in oatmeal and oat bran. A dose-controlled study. *JAMA* 1991;265(14):1833-9.
129. Anderson JW, Gilinsky NH, Deakins DA, Smith SF, O'Neal DS, Dillon DW, Oeltgen PR. Lipid responses of hypercholesterolemic men to oat-bran and wheat-bran intake. *Am J Clin Nutr* 1991;54(4):678-83.
130. Anderson JW, Spencer DB, Hamilton CC, Smith SF, Tietyen J, Bryant CA, Oeltgen P. Oat-bran cereal lowers serum total and LDL cholesterol in hypercholesterolemic men. *Am J Clin Nutr* 1990;52(3):495-9.
131. Bremer JM, Scott RS, Lintott CJ. Oat bran and cholesterol reduction: evidence against specific effect. *Aust N Z J Med* 1991;21(4):422-6.
132. Demark-Wahnefried W, Bowering J, Cohen PS. Reduced serum cholesterol with dietary change using fat-modified and oat bran supplemented diets. *J Am Diet Assoc* 1990;90(2):223-9.
133. Gold KV, Davidson DM. Oat bran as a cholesterol-reducing dietary adjunct in a young, healthy population. *West J Med* 1988;148(3):299-302.
134. Gormley TR, Kevany J, O'Donnell B, McFarlane R. Investigation of the potential of porridge as a hypocholesterolaemic agent. *Int J Food Sci Technol* 1978;2:85-91.
135. Kashtan H, Stern HS, Jenkins DJ, Jenkins AL, Hay K, Marcon N, Minkin S, Bruce WR. Wheat-bran and oat-bran supplements' effects on blood lipids and lipoproteins. *Am J Clin Nutr* 1992;55(5):976-80.
136. Keenan JM, Wenz JB, Myers S, Ripsin C, Huang ZQ. Randomized, controlled, crossover trial of oat bran in hypercholesterolemic subjects. *J Fam Pract* 1991;33(6):600-8.
137. Lepre F, Crane S. Effect of oatbran on mild hyperlipidaemia. *Med J Aust* 1992;157(5):305-8.
138. O'Brien LT, Barnard RJ, Hall JA, Pritikin N. Effects of a high-complex-carbohydrate

#### コレステロール（表5）

123. Brown L, Rosner B, Willett WW, Sacks FM. Cholesterol-lowering effects of dietary fiber: a meta-analysis. *Am J Clin Nutr* 1999;69:30-42.
- （参考：メタ・アナリシスで使われた論文）
124. Bell LP, Hectorn KJ, Reynolds H, Hunninghake DB. Cholesterol-lowering effects of soluble-fiber cereals as part of a prudent diet for patients with mild to moderate hypercholesterolemia. *Am J Clin Nutr* 1990;52(6):1020-6.
125. Kestin M, Moss R, Clifton PM, Nestel PJ. Comparative effects of three cereal brans on plasma lipids, blood pressure, and glucose metabolism in mildly hypercholesterolemic men. *Am J Clin Nutr* 1990;52(4):661-6.
126. Van Horn LV, Liu K, Parker D, Emidy L, Liao YL, Pan WH, Giumenti D, Hewitt J, Stamler J. Serum lipid response to oat product intake with a fat-modified diet. *J Am Diet Assoc* 1986;86(6):759-64.
127. Leadbetter J, Ball MJ, Mann JI. Effects of increasing quantities of oat bran in

- low-cholesterol diet plus bran supplement on serum lipids. *J Appl Nutr* 1985;37:26-34.
139. Poulter N, Chang CL, Cuff A, Poulter C, Sever P, Thom S. Lipid profiles after the daily consumption of an oat-based cereal: a controlled crossover trial. *Am J Clin Nutr* 1994;59(1):66-9.
140. Stewart FM, Neutze JM, Newsome-White R. The addition of oatbran to a low fat diet has no effect on lipid values in hypercholesterolaemic subjects. *N Z Med J* 1992;105(943):398-400.
141. Swain JF, Rouse IL, Curley CB, Sacks FM. Comparison of the effects of oat bran and low-fiber wheat on serum lipoprotein levels and blood pressure. *N Engl J Med* 1990;322(3):147-52.
142. Törrönen R, Kansanen L, Uusitupa M, Hänninen O, Myllymäki O, Härkönen H, Mälkki Y. Effects of an oat bran concentrate on serum lipids in free-living men with mild to moderate hypercholesterolemia. *Eur J Clin Nutr* 1992;46(9):621-7.
143. Turnbull WH, Leeds AR. The effect of rolled oats and a reduced/modified fat diet on apolipoprotein AI and B. *J Clin Nutr Gastroenterol* 1989;1:15-9.
144. Uusitupa MI, Ruuskanen E, Mäkinen E, Laitinen J, Toskala E, Kervinen K, Kesäniemi YA. A controlled study on the effect of beta-glucan-rich oat bran on serum lipids in hypercholesterolemic subjects: relation to apolipoprotein E phenotype. *J Am Coll Nutr* 1992;11(6):651-9.
145. Van Horn L, Moag-Stahlberg A, Liu KA, Ballew C, Ruth K, Hughes R, Stamler J. Effects on serum lipids of adding instant oats to usual American diets. *Am J Public Health* 1991;81(2):183-8.
146. Van Horn L, Emidy LA, Liu KA, Liao YL, Ballew C, King J, Stamler J. Serum lipid response to a fat-modified, oatmeal-enhanced diet. *Prev Med* 1988;17(3):377-86.
147. Whyte JL, McArthur R, Topping D, Nestel P. Oat bran lowers plasma cholesterol levels in mildly hypercholesterolemic men. *J Am Diet Assoc* 1992;92(4):446-9.
148. Zhang JX, Hallmans G, Andersson H, Bosaeus I, Aman P, Tidehag P, Stenling R, Lundin E, Dahlgren S. Effect of oat bran on plasma cholesterol and bile acid excretion in nine subjects with ileostomies. *Am J Clin Nutr* 1992;56(1):99-105.
149. Anderson JW, Zettwoch N, Feldman T, Tietyen-Clark J, Oeltgen P, Bishop CW. Cholesterol-lowering effects of psyllium hydrophilic mucilloid for hypercholesterolemic men. *Arch Intern Med* 1988;148(2):292-6.
150. Anderson JW, Floore TL, Geil PB, O'Neal DS, Balm TK. Hypocholesterolemic effects of different bulk-forming hydrophilic fibers as adjuncts to dietary therapy in mild to moderate hypercholesterolemia. *Arch Intern Med* 1991;151(8):1597-602.
151. Anderson JW, Riddell-Mason S, Gustafson NJ, Smith SF, Mackey M. Cholesterol-lowering effects of psyllium-enriched cereal as an adjunct to a prudent diet in the treatment of mild to moderate hypercholesterolemia. *Am J Clin Nutr* 1992;56(1):93-8.
152. Bell LP, Hectorne K, Reynolds H, Balm TK, Hunninghake DB. Cholesterol-lowering effects of psyllium hydrophilic mucilloid. Adjunct therapy to a prudent diet for patients with mild to moderate hypercholesterolemia. *JAMA* 1989;261(23):3419-23.
153. Everson GT, Daggy BP, McKinley C, Story JA. Effects of psyllium hydrophilic mucilloid on LDL-cholesterol and bile acid synthesis in hypercholesterolemic men. *J Lipid Res* 1992;33(8):1183-92.
154. Levin EG, Miller VT, Muesing RA, Stoy DB, Balm TK, LaRosa JC. Comparison of psyllium hydrophilic mucilloid and cellulose as adjuncts to a prudent diet in the treatment of mild to moderate hypercholesterolemia. *Arch Intern Med* 1990;150(9):1822-7.
155. Maciejko JJ, Brazg R, Shah A, Patil S, Rubenfire M. Psyllium for the reduction of cholestyramine-associated gastrointestinal symptoms in the treatment of primary hypercholesterolemia. *Arch Fam Med* 1994;3(11):955-60.
156. Neal GW, Balm TK. Synergistic effects of psyllium in the dietary treatment of hypercholesterolemia. *South Med J*

- 1990;83(10):1131-7.
157. Roberts DC, Truswell AS, Bencke A, Dewar HM, Farmakalidis E. The cholesterol-lowering effect of a breakfast cereal containing psyllium fibre. *Med J Aust* 1994;161(11-12):660-4.
158. Spence JD, Huff MW, Heidenheim P, Viswanatha A, Munoz C, Lindsay R, Wolfe B, Mills D. Combination therapy with colestipol and psyllium mucilloid in patients with hyperlipidemia. *Ann Intern Med* 1995;123(7):493-9.
159. Sprecher DL, Harris BV, Goldberg AC, Anderson EC, Bayuk LM, Russell BS, Crone DS, Quinn C, Bateman J, Kuzmak BR, Allgood LD. Efficacy of psyllium in reducing serum cholesterol levels in hypercholesterolemic patients on high- or low-fat diets. *Ann Intern Med* 1993;119:545-54.
160. Stoy DB, LaRosa JC, Brewer BK, Mackey M, Meusing RA. Cholesterol-lowering effects of ready-to-eat cereal containing psyllium. *J Am Diet Assoc* 1993;93(8):910-2.
161. Summerbell CD, Manley P, Barnes D, Leeds A. The effects of psyllium on blood lipids in hypercholesterolaemic subjects. *J Hum Nutr Diet* 1994;7:147-51.
162. Wolever TM, Jenkins DJ, Mueller S, Patten R, Relle LK, Boctor D, Ransom TP, Chao ES, McMillan K, Fulgoni V 3rd. Psyllium reduces blood lipids in men and women with hyperlipidemia. *Am J Med Sci* 1994;307(4):269-73.
163. Wolever TM, Jenkins DJ, Mueller S, Boctor DL, Ransom TP, Patten R, Chao ES, McMillan K, Fulgoni V 3rd. Method of administration influences the serum cholesterol-lowering effect of psyllium. *Am J Clin Nutr* 1994;59(5):1055-9.
164. Cerdá JJ, Robbins FL, Burgin CW, Baumgartner TG, Rice RW. The effects of grapefruit pectin on patients at risk for coronary heart disease without altering diet or lifestyle. *Clin Cardiol* 1988;11(9):589-94.
165. Hillman LC, Peters SG, Fisher CA, Pomare EW. The effects of the fiber components pectin, cellulose and lignin on serum cholesterol levels. *Am J Clin Nutr* 1985;42(2):207-13.
166. Mahalko JR, Sandstead HH, Johnson LK, Inman LF, Milne DB, Warner RC, Haunz EA. Effect of consuming fiber from corn bran, soy hulls, or apple powder on glucose tolerance and plasma lipids in type II diabetes. *Am J Clin Nutr* 1984;39(1):25-34.
167. Singh RB, Rastogi SS, Singh R, Ghosh S, Niaz MA. Effects of guava intake on serum total and high-density lipoprotein cholesterol levels and on systemic blood pressure. *Am J Cardiol* 1992;70(15):1287-91.
168. Stasse-Wolthuis M, Albers HF, van Jeveren JG, Wil de Jong J, Hautvast JG, Hermus RJ, Katan MB, Brydon WG, Eastwood MA. Influence of dietary fiber from vegetables and fruits, bran or citrus pectin on serum lipids, fecal lipids, and colonic function. *Am J Clin Nutr* 1980;33(8):1745-56.
169. Tinker LF, Schneeman BO, Davis PA, Gallaher DD, Waggoner CR. Consumption of prunes as a source of dietary fiber in men with mild hypercholesterolemia. *Am J Clin Nutr* 1991;53(5):1259-65.
170. Aro A, Uusitupa M, Voutilainen E, Hersio K, Korhonen T, Siitonen O. Improved diabetic control and hypcholesterolaemic effect induced by long-term dietary supplementation with guar gum in type 2 (insulin-independent) diabetes. *Diabetologia* 1981;21(1):29-33.
171. Aro A, Uusitupa M, Voutilainen E, Korhonen T. Effects of guar gum in male subjects with hypercholesterolemia. *Am J Clin Nutr* 1984;39(6):911-6.
172. Chuang LM, Jou TS, Yang WS, Wu HP, Huang SH, Tai TY, Lin BJ. Therapeutic effect of guar gum in patients with non-insulin-dependent diabetes mellitus. *J Formos Med Assoc* 1992;91(1):15-9.
173. Fuessl HS, Williams G, Adrian TE, Bloom SR. Guar sprinkled on food: effect on glycaemic control, plasma lipids and gut hormones in non-insulin dependent diabetic patients. *Diabet Med* 1987;4(5):463-8.
174. Holman RR, Steemson J, Darling P, Turner RC. No glycemic benefit from guar administration in NIDDM. *Diabetes Care* 1987;10(1):68-71.
175. Khan AR, Khan GY, Mitchel A, Qadeer MA.

- Effect of guar gum on blood lipids. Am J Clin Nutr 1981;34(11):2446-9.
176. Lalor BC, Bhatnagar D, Winocour PH, Ishola M, Arrol S, Brading M, Durrington PN. Placebo-controlled trial of the effects of guar gum and metformin on fasting blood glucose and serum lipids in obese, type 2 diabetic patients. Diabet Med 1990;7(3):242-5.
177. Landin K, Holm G, Tengborn L, Smith U. Guar gum improves insulin sensitivity, blood lipids, blood pressure, and fibrinolysis in healthy men. Am J Clin Nutr 1992;56(6):1061-5.
178. McIvor ME, Cummings CC, Van Duyn MA, Leo TA, Margolis S, Behall KM, Michnowski JE, Mendeloff AI. Long-term effects of guar gum on blood lipids. Atherosclerosis 1986;60(1):7-13.
179. Niemi MK, Keinänen-Kiukaanniemi SM, Salmela PI. Long-term effects of guar gum and microcrystalline cellulose on glycaemic control and serum lipids in type 2 diabetes. Eur J Clin Pharmacol 1988;34(4):427-9.
180. Requejo F, Utenthal LO, Bloom SR. Effects of alpha-glucosidase inhibition and viscous fibre on diabetic control and postprandial gut hormone responses. Diabet Med 1990;7(6):515-20.
181. Superko HR, Haskell WL, Sawrey-Kubicek L, Farquhar JW. Effects of solid and liquid guar gum on plasma cholesterol and triglyceride concentrations in moderate hypercholesterolemia. Am J Cardiol 1988;62(1):51-5.
182. Tuomilehto J, Silvasti M, Manninen V, Uusitupa M, Aro A. Guar gum and gemfibrozil--an effective combination in the treatment of hypercholesterolemia. Atherosclerosis 1989;76(1):71-7.
183. Turner PR, Tuomilehto J, Happonen P, La Ville AE, Shaikh M, Lewis B. Metabolic studies on the hypolipidaemic effect of guar gum. Atherosclerosis 1990;81(2):145-50.
184. Uusitupa M, Tuomilehto J, Karttunen P, Wolf E. Long term effects of guar gum on metabolic control, serum cholesterol and blood pressure levels in type 2 (non-insulin-dependent) diabetic patients with high blood pressure. Ann Clin Res 1984;16 Suppl 43:126-31.
185. Uusitupa M, Siitonен O, Savolainen K, Silvasti M, Penttilä I, Parviainen M. Metabolic and nutritional effects of long-term use of guar gum in the treatment of noninsulin-dependent diabetes of poor metabolic control. Am J Clin Nutr 1989;49(2):345-51.
186. Vaaler S, Hanssen KF, Dahl-Jørgensen K, Frølich W, Aaseth J, Odegaard B, Aagenaes O. Diabetic control is improved by guar gum and wheat bran supplementation. Diabet Med 1986;3(3):230-3.
187. Vuorinen-Markkola H, Sinisalo M, Koivisto VA. Guar gum in insulin-dependent diabetes: effects on glycemic control and serum lipoproteins. Am J Clin Nutr 1992;56(6):1056-60.
- 肥満（表6）**
188. Ludwig DS, Pereira MA, Kroenke CH, Hilner JE, Van Horn L, Slattery ML, Jacobs DR Jr. Dietary fiber, weight gain, and cardiovascular disease risk factors in young adults. JAMA 1999;282:1539-46.
189. Liu S, Willett WC, Manson JE, Hu FB, Rosner B, Colditz G. Relation between changes in intakes of dietary fiber and grain products and changes in weight and development of obesity among middle-aged women. Am J Clin Nutr 2003;78:920-7.
190. Koh-Banerjee P, Franz M, Sampson L, Liu S, Jacobs DR Jr, Spiegelman D, Willett W, Rimm E. Changes in whole-grain, bran, and cereal fiber consumption in relation to 8-y weight gain among men. Am J Clin Nutr 2004;80:1237-45.
191. Iqbal SI, Helge JW, Heitmann BL. Do energy density and dietary fiber influence subsequent 5-year weight changes in adult men and women? Obesity (Silver Spring) 2006;14:106-14.
- 便秘（表7）**
192. Murakami K, Sasaki S, Okubo H, Takahashi Y, Hosoi Y, Itabashi M, the Freshmen in Dietetic Courses Study II Group. Association between dietary fiber, water and magnesium

- intake and functional constipation among young Japanese women. *Eur J Clin Nutr* 2007;61:616-22.
193. Everhart JE, Go VL, Johannes RS, Fitzsimmons SC, Roth HP, White LR. A longitudinal survey of self-reported bowel habits in the United States. *Dig Dis Sci* 1989;34:1153-62.
194. Towers AL, Burgio KL, Locher JL, Merkel IS, Safaeian M, Wald A. Constipation in the elderly: influence of dietary, psychological, and physiological factors. *J Am Geriatr Soc* 1994;42:701-6.
195. Campbell AJ, Busby WJ, Horwath CC. Factors associated with constipation in a community based sample of people aged 70 years and over. *J Epidemiol Community Health* 1993;47:23-6.
196. Murakami K, Okubo H, Sasaki S. Dietary intake in relation to self-reported constipation among Japanese women aged 18-20 years. *Eur J Clin Nutr* 2006;60:650-7.
197. Whitehead WE, Drinkwater D, Cheskin LJ, Heller BR, Schuster MM. Constipation in the elderly living at home. Definition, prevalence, and relationship to lifestyle and health status. *J Am Geriatr Soc* 1989;37:423-9.
198. Dukas L, Willett WC, Giovannucci EL. Association between physical activity, fiber intake, and other lifestyle variables and constipation in a study of women. *Am J Gastroenterol* 2003;98:1790-6.
199. Sanjoaquin MA, Appleby PN, Spencer EA, Key TJ. Nutrition and lifestyle in relation to bowel movement frequency: a cross-sectional study of 20630 men and women in EPIC-Oxford. *Public Health Nutr* 2004;7:77-83.

表1 食物摂取量と2型糖尿病発症との関連を検討した前向きコホート研究

論文/ 研究名/ 国	性別/ (人種)	ベースライン/ の年齢(歳)/ 追跡期間 (年)	症例数/ 総対象者数	症例評価法/ 食事評価法	カテゴリ数/ エネルギー調整/ 最低および最高 摂取群の摂取量	調整因子	最低摂取群に対する 最高摂取群の相 対危険(95%信頼 区間)	傾向性 のP値	関連
総食物摂取 Golditz et al. (1992) NHS 米国	F a	34-59 6	252 73393	自己申告 (妥当性確認済み) 6項目FFQ	5 あり(残差法) 不明	年齢、肥満度、飲酒、糖尿病の家族歴、過去の体重変化、調査時 1.08 (0.78-1.48)	0.75 (0.50-1.13)	0.60	
Colditz et al. (1992) NHS 米国	F b	34-59 6	450 10967	自己申告 (妥当性確認済み) 6項目FFQ	5 あり(残差法) 不明	年齢、肥満度、飲酒、糖尿病の家族歴、過去の体重変化、調査時 1.08 (0.78-1.48)	0.97		
Salmeron et al. (1997) HPFS 米国	M	40-75 6	523 42759	自己申告 (妥当性確認済み) 131項目FFQ (妥当性確認済み)	5 あり(残差法) 13.4g/日 29.7g/日	年齢、肥満度、飲酒、喫煙、身体活動、糖尿病の家族歴 0.98 (0.73-1.33)	0.70		
Salmeron et al. (1997) NHS 米国	F	40-65 6	915 65173	自己申告 (妥当性確認済み) 134項目FFQ (妥当性確認済み)	5 あり(残差法) 11.8g/日 24.1g/日	年齢、肥満度、飲酒、喫煙、身体活動、糖尿病の家族歴 0.78 (0.62-0.98)	0.02	-	
Meyer et al. (2000) IWHS 米国	F	55-69 6	1141 35988	自己申告 (妥当性確認済み) 127項目FFQ (妥当性確認済み)	5 あり(残差法) 13.3g/日 26.5g/日	年齢、エネルギー摂取量、肥満度、ウエスト・ヒップ比、教育歴、喫 煙、飲酒、身体活動 0.78 (0.64-0.96)	0.005	-	
Stevens et al. (2002) ARIC S 米国	M/F c 9	45-64 9	971 9529	血糖値測定もしく は自己申告 66項目FFQ (妥当性確認済み)	0 あり(残差法)	年齢、肥満度、性別、センター、教育歴、喫煙、身体活動 1.00 (0.99-1.01)d	0.92d		
Stevens et al. (2002) ARIC S 米国	M/F e 9	45-64 9	476 2722	血糖値測定もしく は自己申告 66項目FFQ (妥当性確認済み)	0 あり(残差法)	年齢、肥満度、性別、センター、教育歴、喫煙、身体活動 1.00 (0.98-1.02)d	0.85d		
Montonen et al. (2003) FMCHES フィンランド	M/F 10	40-69 10	156 4316	社会保険施設によ る薬物治療の糖尿病 病の記録 DHI	4 <19.2g/日 >33.3g/日	年齢、性別、地域、喫煙、肥満度、エネルギー摂取量、果物・ベ リー摂取量、野菜摂取量 0.51 (0.26-1.00)	0.04	-	
Hodge et al. (2004) MCCS 豪州	M/F 4	40-69 4	365 31641	自己申告 121項目FFQ (妥当性確認済み)	0 なし	年齢、性別、出身地、身体活動、糖尿病の家族歴、飲酒、教育歴、 過去5年間の体重変化、エネルギー摂取量、肥満度、ウエスト・ヒッ 比 1.02 (0.81-1.30)f	0.85f		

表1 つづき

Schulze et al. (2004) NHSII 米国	F 24-44 8	741 91249	自己申告 (妥当性確認済み) 133項目FFQ (妥当性確認済み)	5 あり(残差法) 12.5g/日 24.9g/日	年齢、肥満度、エネルギー摂取量、飲酒、身体活動、糖尿病の家族歴、高血圧歴、高コレステロール歴、既経後ホルモンの使用、経口避妊薬の使用、グライセミック・ロード、マグネシウム摂取量、カーフェイン摂取量	1.00 (0.75-1.34) 0.80
Barclay et al. (2007) 不明 豪州	M/F >48 10	138 1833	血糖値測定もししくは自己申告 145項目FFQ (妥当性確認済み)	0 なし	年齢、性別、糖尿病の家族歴、喫煙、トリグリセリド、HDLコレステロール、身体活動	0.90 (0.79-1.02)g 0.11g
Schulze et al. (2007) EPIC(ポツダム) ドイツ	M/F 35-65 7	844 25067	自己申告 (医師の確認あり) 148項目FFQ (妥当性確認済み)	5 あり(残差法) 15.8g/日 27.9g/日	年齢、性別、教育歴、スポーツ、サイクリング、仕事活動量、喫煙、飲酒、エネルギー摂取量、肥満度、腹囲、多価不飽和脂肪酸摂取量と飽和脂肪酸摂取量の比、一価不飽和脂肪酸摂取量と飽和脂肪酸摂取量の比、炭水化物摂取量、マグネシウム摂取量	0.86 (0.65-1.14) 0.19
水溶性食物繊維 Meyer et al. (2000) IWHIS 米国	F 55-69 6	1141 35988	自己申告 (妥当性確認済み) 127項目FFQ (妥当性確認済み)	5 あり(残差法) 4.2g/日 8.0g/日	年齢、エネルギー摂取量、肥満度、ウエスト・ヒップ比、教育歴、喫煙、飲酒、身体活動	0.89 (0.73-1.08) 0.23
Montonen et al. (2003) FMCHES フィンランド	M/F 40-69 10	156 4316	社会保健施設による薬物治療の糖尿病の記録 DHI	4 なし <4.5g/日 >7.4g/日	年齢、性別、地域、喫煙、肥満度、エネルギー摂取量、果物・ベリー摂取量、野菜摂取量	0.57 (0.29-1.12) 0.21
Schulze et al. (2007) EPIC(ポツダム) ドイツ	M/F 35-65 7	844 25067	自己申告 (医師の確認あり) 148項目FFQ (妥当性確認済み)	5 あり(残差法) 5.3g/日 9.6g/日	年齢、性別、教育歴、スポーツ、サイクリング、仕事活動量、喫煙、飲酒、エネルギー摂取量、肥満度、腹囲、多価不飽和脂肪酸摂取量と飽和脂肪酸摂取量の比、一価不飽和脂肪酸摂取量と飽和脂肪酸摂取量の比、炭水化物摂取量、マグネシウム摂取量、不溶性	0.83 (0.57-1.22) 0.45
不溶性食物繊維 Meyer et al. (2000) IWHIS 米国	F 55-69 6	1141 35988	自己申告 (妥当性確認済み) 127項目FFQ (妥当性確認済み)	5 あり(残差法) 9.9g/日 19.8g/日	年齢、エネルギー摂取量、肥満度、ウエスト・ヒップ比、教育歴、喫煙、飲酒、身体活動	0.75 (0.61-0.91) 0.001 -
Montonen et al. (2003) FMCHES フィンランド	M/F 40-69 10	156 4316	社会保健施設による薬物治療の糖尿病の記録 DHI	4 なし <8.7g/日 >16.6g/日	年齢、性別、地域、喫煙、肥満度、エネルギー摂取量、果物・ベリー摂取量、野菜摂取量	0.47 (0.25-0.91) 0.03 -
Schulze et al. (2007) EPIC(ポツダム) ドイツ	M/F 35-65 7	844 25067	自己申告 (医師の確認あり) 148項目FFQ (妥当性確認済み)	5 あり(残差法) 10.3g/日 18.4g/日	年齢、性別、教育歴、スポーツ、サイクリング、仕事活動量、喫煙、飲酒、エネルギー摂取量、肥満度、腹囲、多価不飽和脂肪酸摂取量と飽和脂肪酸摂取量の比、一価不飽和脂肪酸摂取量と飽和脂肪酸摂取量の比、炭水化物摂取量、マグネシウム摂取量、水溶性	0.93 (0.62-1.40) 0.62

表1 つづき

Colditz et al. (1992) NHS 米国	F a 6	34-59	252 73393	自己申告 (妥当性確認済み) 61項目FFQ	5 あり(残差法) 不明	年齢、肥満度、飲酒、糖尿病の家族歴、過去の体重変化、調査時 期、果物由来食物繊維摂取量、野菜由来食物繊維摂取量	0.98 (0.62-1.55) 不明
Salmeron et al. (1997) NHS 米国	M 6	40-75	523 42759	自己申告 (妥当性確認済み) 131項目FFQ (妥当性確認済み)	5 あり(残差法) 2.5g/日 10.2g/日	年齢、肥満度、飲酒、喫煙、身体活動、糖尿病の家族歴	0.70 (0.51-0.96) 0.007 -
Hu et al. (2001) NHS 米国	F 6	34-59	915 65173	自己申告 (妥当性確認済み) 134項目FFQ (妥当性確認済み)	5 あり(残差法) 2.0g/日 7.5g/日	年齢、肥満度、飲酒、喫煙、身体活動、糖尿病の家族歴	0.72 (0.58-0.90) 0.001 -
Meyer et al. (2000) IWHHS 米国	F 6	55-69	1141 35998	自己申告 (妥当性確認済み) 127項目FFQ (妥当性確認済み)	5 あり(残差法) 2.7g/日 9.4g/日	年齢、エネルギー摂取量、肥満度、ウエスト・ヒップ比、教育歴、喫 煙、飲酒、身体活動	0.64 (0.53-0.79) 0.0001 -
Stevens et al. (2002) ARIC S 米国	M/F e 9	45-64	971 9529	血糖値測定もししく は自己申告 66項目FFQ (妥当性確認済み)	5 あり(残差法) 不明 不明	多価不飽和脂肪酸摂取量と飽和脂肪酸摂取量の比、トランス脂肪 酸摂取量、グライセミック・ロード、年齢、調査時期、糖尿病の家族 歴、閉経状態、閉経後ホルモン治療の有無、喫煙、肥満度、身体 活動、飲酒	0.59 (0.52-0.68)h <0.001 -
Montonen et al. (2003) FMCHES フィンランド	M/F 10	40-69	476 2722	血糖値測定もししく は自己申告 66項目FFQ (妥当性確認済み)	5 あり(残差法) 5.2g/日h 9.4g/日h	年齢、肥満度、性別、センター、教育歴、喫煙、身体活動	0.75 (0.60-0.92) 不明
Hodge et al. (2004) MCCS 豪州	M/F 4	40-69	156 4316	社会保健施設によ る薬物治療の糖尿 病の記録 DHI	4 なし 9.2g/日h 30.5g/日h	年齢、性別、地域、喫煙、肥満度、エネルギー摂取量、果物・ベ リー摂取量、野菜摂取量	0.39 (0.20-0.77) 0.01 -
Schulze et al. (2004) NHSII 米国	F 8	24-44	365 31641	自己申告 (医師の確認あり) 121項目FFQ (妥当性確認済み)	5 なし 4.8g/日h 18.4g/日h	年齢、肥満度、エネルギー摂取量、飲酒、身体活動、糖尿病の家 族歴、高血圧歴、高コレステロール歴、閉経後ホルモンの使用、經 口避妊薬の使用、グライセミック・ロード、マグネシウム摂取量、カ フェイン摂取量、果物由来食物繊維摂取量、野菜由来食物繊維	1.08 (0.73-1.59)h 不明

表1 つづき

Barclay et al. (2007) 不明 豪州	M/F 10	>48 1833	138 は自己申告 145項目FFQ (妥当性確認済み)	血糖値測定もししく は自己申告 0 なし	年齢、性別、糖尿病の家族歴、喫煙、トリグリセリド、HDLコレステロール、身体活動	0.96 (0.78-1.20)d 0.74d
Krishnan et al. (2007) BWHS 米国	F 8	21-69 40078	1938 (妥当性確認済み) 68項目FFQ (妥当性確認済み)	自己申告 あり(残差法) 1.7g/日 7.6g/日	年齢、肥満度、エネルギー摂取量、糖尿病の家族歴、身体活動、喫煙、 グライセミック・インデックス、たんぱく質摂取量、脂質摂取量	0.82 (0.70-0.96) 0.01 -
Schulze et al. (2007) EPIC(ポツダム) ドイツ	M/F 7	35-65 25067	844 (医師の確認あり) 148項目FFQ (妥当性確認済み)	自己申告 あり(残差法) 6.6g/日 16.6g/日	年齢、性別、教育歴、スポーツ、サイクリング、仕事活動量、喫煙、 飲酒、エネルギー摂取量、肥満度、腹囲、多価不飽和脂肪酸摂取量 と飽和脂肪酸摂取量の比、一価不飽和脂肪酸摂取量と飽和脂肪 酸摂取量の比、炭水化物摂取量、マグネシウム摂取量、果物由 来食物纖維摂取量、野菜由来食物纖維摂取量	0.72 (0.55-0.93) 0.02 -
果物由来食物纖維 Golditz et al. (1992) NHS 米国	F a 6	34-59 73393	252 (妥当性確認済み) 61項目FFQ (妥当性確認済み)	自己申告 あり(残差法) 不明 不明	年齢、肥満度、飲酒、糖尿病の家族歴、過去の体重変化、調査時 期、穀物由来食物纖維摂取量、野菜由来食物纖維摂取量	0.95 (0.60-1.50) 不明
Salmeron et al. (1997) HPFS 米国	M 6	40-75 42759	523 (妥当性確認済み) 131項目FFQ (妥当性確認済み)	自己申告 あり(残差法) 1.2g/日 8.3g/日	年齢、肥満度、飲酒、喫煙、身体活動、糖尿病の家族歴	1.01 (0.76-1.36) 0.68
Salmeron et al. (1997) NHS 米国	F 6	40-65 65173	915 (妥当性確認済み) 134項目FFQ (妥当性確認済み)	自己申告 あり(残差法) 1.4g/日 7.6g/日	年齢、肥満度、飲酒、喫煙、身体活動、糖尿病の家族歴	0.87 (0.70-1.08) 0.39
Meyer et al. (2000) WHS 米国	F 6	55-69 35988	1141 (妥当性確認済み) 127項目FFQ (妥当性確認済み)	自己申告 あり(残差法) 1.7g/日 8.7g/日	年齢、エネルギー摂取量、肥満度、ウエスト・ヒップ比、教育歴、喫 煙、飲酒、身体活動	1.17 (0.96-1.42) 0.08
Stevens et al. (2002) ARIC S 米国	M/F c 9	45-64 9	971 9529	血糖値測定もししく は自己申告 66項目FFQ (妥当性確認済み)	年齢、エネルギー摂取量、肥満度、性別、セントラル、教育歴、喫煙、身体活動	1.00 (0.81-1.24)h 不明
Stevens et al. (2002) ARIC S 米国	M/F e 9	45-64 9	476 2722	血糖値測定もししく は自己申告 66項目FFQ (妥当性確認済み)	年齢、肥満度、性別、セントラル、教育歴、喫煙、身体活動	0.93 (0.69-1.26)h 不明
Montonen et al. (2003) FMCHES フィンランド	M/F 10	40-69 4316	156 社会保健施設によ る薬物治療の糖尿 病の記録 DIH	4 なし 0.5g/日h 4.6g/日h	年齢、性別、地域、喫煙、肥満度、性別、セントラル、教育歴、エノルギー摂取量、果物・ベ リー摂取量、野菜摂取量	0.92 (0.40-2.13) 0.87

表1 つづき

Hodge et al. (2004) MCCSS 豪州	M/F 40-69 4	365 31641	自己申告 (医師の確認あり) 121項目FFQ (妥当性確認済み)	5 なし 2.1g/日h 14.5g/日h	年齢、性別、出身地、身体活動、糖尿病の家族歴、飲酒、教育歴、過去5年間の体重変化、エネルギー摂取量、肥満度、ウエスト・ヒップ比	0.85 (0.59-1.21)h	不明
Schulze et al. (2004) NHSI 米国	F 24-44 8	741 91249	自己申告 (妥当性確認済み) 133項目FFQ (妥当性確認済み)	5 あり(残差法) 1.1g/日 6.2g/日	年齢、肥満度、エネルギー摂取量、飲酒、身体活動、糖尿病の家族歴、高血圧歴、高コレステロール歴、既往後ホルモンの使用、経口避妊薬の使用、グライセミック・ロード、マグネシウム摂取量、カーフェイン摂取量、穀物由来食物繊維摂取量、野菜由来食物繊維摂取量	0.79 (0.60-1.02)	0.04
Barclay et al. (2007) 不明 豪州	M/F 40-69 10	138 1833	血端値測定もししくは自己申告 145項目FFQ (妥当性確認済み)	0 なし 0	年齢、性別、糖尿病の家族歴、喫煙、トリグリセリド、HDLコレステロール、身体活動	0.94 (0.78-1.15)d	0.57d
Schulze et al. (2007) EPIC(ポツダム) ドイツ	M/F 35-65 7	844 25087	自己申告 (医師の確認あり) 148項目FFQ (妥当性確認済み)	5 あり(残差法) 0.2g/日 4.7g/日	年齢、性別、教育歴、スポーツ、サイクリング、仕事活動量、喫煙、飲酒、エネルギー摂取量、肥満度、腹囲、多価不飽和脂肪酸摂取量と飽和脂肪酸摂取量の比、一価不飽和脂肪酸摂取量と飽和脂肪酸摂取量とマグネシウム摂取量、穀物由来食物繊維摂取量、野菜由来食物繊維摂取量	0.89 (0.70-1.13)	0.22
Colditz et al. (1992) NHS 米国	F a 34-59 6	252 73393	自己申告 (妥当性確認済み) 61項目FFQ (妥当性確認済み)	5 あり(残差法) 不明 不明	年齢、肥満度、飲酒、糖尿病の家族歴、過去の体重変化、調査時期、穀物由来食物繊維摂取量	1.06 (0.67-1.66)	不明
Salmeron et al. (1997) HPFS 米国	M 40-75 6	523 42759	自己申告 (妥当性確認済み) 131項目FFQ (妥当性確認済み)	5 あり(残差法) 3.5g/日 11.3g/日	年齢、肥満度、飲酒、喫煙、身体活動、糖尿病の家族歴	1.12 (0.84-1.49)	0.65
Salmeron et al. (1997) NHS 米国	F 40-65 6	915 65173	自己申告 (妥当性確認済み) 134項目FFQ (妥当性確認済み)	5 あり(残差法) 3.4g/日 9.6g/日	年齢、肥満度、飲酒、喫煙、身体活動、糖尿病の家族歴	1.17 (0.93-1.46)	0.54
Meyer et al. (2000) IWH/S 米国	F 55-69 6	1141 35988	自己申告 (妥当性確認済み) 112項目FFQ (妥当性確認済み)	5 あり(残差法) 4.7g/日 11.7g/日	年齢、エネルギー摂取量、肥満度、ウエスト・ヒップ比、教育歴、喫煙、飲酒、身体活動	0.77	
Montonen et al. (2003) FMCHES フィンランド	M/F 40-69 10	156 4316	社会保健施設による薬物治療の糖尿病の記録 DHI	4 なし 2.9g/日 8.2g/日h	年齢、性別、地域、喫煙、肥満度、エネルギー摂取量、野菜摂取量	1.19 (0.46-3.04)	0.86

表1 つづき

Hodge et al. (2004) MCCS 豪州	M/F 4	40-69 365 (医師の確認あり) (妥当性確認済み)	自己申告 5 なし 2.0g/日h 8.8g/日h	年齢、性別、出身地、身体活動、糖尿病の家族歴、飲酒、教育歴、 過去5年間の体重変化、エネルギー摂取量、肥満度、ウエスト・ヒップ比	0.81 (0.57-1.46)h 不明
Schulze et al. (2004) NHSS 米国	F 8	24-44 741 (妥当性確認済み)	自己申告 5 あり(残差法) 3.4g/日	年齢、肥満度、エネルギー摂取量、飲酒、身体活動、糖尿病の家族歴、 高血圧歴、高コレステロール歴、開経後ホルモンの使用、経口避妊薬の使用、グライセミック・ロード、マグネシウム摂取量、カーフェイン摂取量、穀物由来食物纖維摂取量、果物由来食物纖維摂取量	1.12 (0.87-1.46) 0.19
Barclay et al. (2007) 不明 豪州	M/F 10	>48 138 (妥当性確認済み)	血糖値測定もししく は自己申告 0 なし 145項目FFQ	年齢、性別、糖尿病の家族歴、喫煙、トリグリセリド、HDLコレステロール、身体活動	0.76 (0.57-0.99)g 0.048g -
Schulze et al. (2007) EPIC(ボンダム) ドイツ	M/F 7	35-65 844 (妥当性確認済み)	自己申告 5 あり(残差法) 0.7g/日 3.4g/日	年齢、性別、教育歴、スポーツ、サイクリング、仕事活動量、喫煙、 飲酒、エネルギー摂取量、肥満度、腰圍、多価不飽和脂肪酸摂取量と飽和脂 肪酸摂取量の比、一価不飽和脂肪酸摂取量と飽和脂 肪酸摂取量の比、炭水化合物摂取量、マグネシウム摂取量、穀物由 来食物纖維摂取量、果物由来食物纖維摂取量	0.93 (0.74-1.17) 0.66
Meyer et al. (2000) WHS 米国	F 6	55-69 1141 (妥当性確認済み)	自己申告 5 あり(残差法) 0.1g/日 1.7g/日	年齢、エネルギー摂取量、肥満度、ウエスト・ヒップ比、教育歴、喫 煙、飲酒、身体活動	1.10 (0.91-1.33) 0.17
Stevens et al. (2002) ARIC S 米国	M/F c 9	45-64 971 (妥当性確認済み)	血糖値測定もししく は自己申告 0 66項目FFQ	年齢、肥満度、性別、センター、教育歴、喫煙、身体活動	1.01 (0.96-1.06)d 0.77d
Stevens et al. (2002) ARIC S 米国	M/F c 9	45-64 476 (妥当性確認済み)	血糖値測定もししく は自己申告 0 66項目FFQ	年齢、肥満度、性別、センター、教育歴、喫煙、身体活動	0.96 (0.88-1.05)d 0.37d
Hodge et al. (2004) MCCS 豪州	M/F 4	40-69 365 (医師の確認あり) (妥当性確認済み)	自己申告 0 なし 121項目FFQ	年齢、性別、出身地、身体活動、糖尿病の家族歴、飲酒、教育歴、 過去5年間の体重変化、エネルギー摂取量、肥満度、ウエスト・ヒップ比	0.67d 0.65d
Hodge et al. (2004) MCCS 豪州	M/F 4	40-69 365 (医師の確認あり) (妥当性確認済み)	自己申告 0 なし 121項目FFQ	年齢、性別、出身地、身体活動、糖尿病の家族歴、飲酒、教育歴、 過去5年間の体重変化、エネルギー摂取量、肥満度、ウエスト・ヒップ比	1.03 (0.91-1.16)d 0.65d

いも由来食物纖維  
Hodge et al. (2004)  
MCCS  
豪州

ARIC S, Atherosclerosis Risk in Communities Study  
WHS, Black Women's Health Study  
DHL: 食事歴面接

表1 つづき

EPIC, European Prospective Investigation into Cancer and Nutrition

F: 女性

FFQ: 食物摂取頻度質問票

FMCHES, Finnish Mobile Clinic Health Examination Survey

HPFS, Health Professionals Follow-up Study

IWHS, Iowa Women's Health Study

M: 男性

MCCS, Melbourne Collaborative Cohort Study

NHS, Nurses' Health Study

NHSII, Nurses' Health Study II

-: 有意な負の関連

a: 肥満度29未満

b: 肥満度29以上

c: 白人

d: 摂取量1g/日増加あたりの相対危険

e: 黒人

f: 摂取量20g/日増加あたりの相対危険

g: 摂取量5g/日増加あたりの相対危険

h: Schulze et al. (2007)より引用

表2 食物纖維摂取量と循環器疾患、脳卒中、および心筋梗塞との関連を検討した前瞻性コホート研究

著者(年)	対象者 人数	性別	年齢	追跡 年数	結果要数	群の 相対危険(95%信頼区間)		傾向性 のP値	関連
						最低摂取群	最高摂取群に対する最高摂取群の 相対危険(95%信頼区間)		
<b>循環器疾患(研究数=3)</b>									
総食物纖維									
Bazzano (2003)	USA 9776	M/W M/W	25~74	19	発症	4	0.89 (0.80-0.99)	0.01	-
Mozaffarian (2003)	USA 3588	M/W W	≥65 ≥45	8.6 6	発症	5	0.84 (0.66-1.07)	0.23	
Liu (2002)	USA 39876	W	25~74	19	死亡	5	0.79 (0.58-1.09)	0.17	
Bazzano (2003)	USA 9776	M/W M/W	25~74	19	死亡	4	0.93 (0.77-1.12)	0.20	
Bazzano (2003)	USA 9776	M/W W	25~74	19	発症	4	0.90 (0.82-0.99)	0.01	-
Liu (2002)	USA 39876	W	≥45	6	死亡	5	0.90 (0.68-1.21)	0.50	
Bazzano (2003)	USA 9776	M/W W	25~74	19	死亡	4	0.88 (0.75-1.04)	0.03	-
Liu (2002)	USA 39876	W	≥45	6	死亡	5	0.78 (0.57-1.06)	0.09	-
Mozaffarian (2003)	USA 3588	M/W W	≥65	8.6	発症	5	0.79 (0.62-0.99)	0.02	-
Liu (2002)	USA 39876	W	≥45	6	死亡	5	1.11 (0.84-1.46)	0.38	
不溶性食物纖維									
穀物由来食物纖維									
Mozaffarian (2003)	USA 3588	M/W W	≥65	8.6	発症	5	1.08 (0.86-1.36)	0.95	
Liu (2002)	USA 39876	W	≥45	6	死亡	5	0.96 (0.72-1.28)	0.78	
野菜由来食物纖維									
Mozaffarian (2003)	USA 3588	M/W W	≥65	8.6	発症	5	0.99 (0.78-1.25)	0.98	
Liu (2002)	USA 39876	W	≥45	6	死亡	5	0.82 (0.61-1.09)	0.09	
果物由来食物纖維									
脳卒中(研究数=3)									
総食物纖維									
Ascherio (1998)	USA 43738	M	40~75	8	発症	5	0.86 (0.55-1.32)	0.37	
Oh (2005)	USA 78779	W	30~55	18	発症	5	0.83 (0.66-1.04)	0.07	
Bazzano (2003)	USA 9776	M/W W	25~74	19	発症	4	0.95 (0.78-1.16)	0.44	
Oh (2005)	USA 78779	W	30~55	18	発症(脳梗塞)	5	0.78 (0.56-1.09)	0.09	
Oh (2005)	USA 78779	W	30~55	18	発症(脳出血)	5	0.84 (0.54-1.30)	0.34	
Bazzano (2003)	USA 9776	M/W W	25~74	19	死亡	4	0.99 (0.64-1.53)	0.99	
Bazzano (2003)	USA 9776	M/W W	25~74	19	発症	4	0.88 (0.73-1.06)	0.14	
Bazzano (2003)	USA 9776	M/W W	25~74	19	死亡	4	0.93 (0.63-1.37)	0.55	
Oh (2005)	USA 78779	W	30~55	18	発症	5	0.66 (0.52-0.83)	0.001	-
Oh (2005)	USA 78779	W	30~55	18	発症(脳梗塞)	5	0.80 (0.57-1.12)	0.23	
Oh (2005)	USA 78779	W	30~55	18	発症(脳出血)	5	0.51 (0.33-0.78)	0.01	-
Oh (2005)	USA 78779	W	30~55	18	発症	5	0.92 (0.74-1.14)	0.14	
Oh (2005)	USA 78779	W	30~55	18	発症	5	1.01 (0.74-1.38)	0.48	
Oh (2005)	USA 78779	W	30~55	18	発症(脳梗塞)	5	0.76 (0.51-1.13)	0.18	
Oh (2005)	USA 78779	W	30~55	18	発症(脳出血)	5	0.87 (0.70-1.09)	0.28	
野菜由来食物纖維									
穀物由来食物纖維									
野菜由来食物纖維									
Oh (2005)	USA 78779	W	30~55	18	発症	5	0.87 (0.63-1.21)	0.22	
Oh (2005)	USA 78779	W	30~55	18	発症(脳梗塞)	5	0.86 (0.57-1.29)	0.64	
果物由来食物纖維									
心筋梗塞(研究数=14)									
総食物纖維									
Humble (1993)	USA 1801	M	35~60	9.6	発症	0	-8.10 (-15.50-0.10) e	NA	
Pietinen (1996)	FIN 21930	M	50~69	6.1	発症	5	0.87 (0.73-1.04)	0.08	
Rimm (1996)	USA 43757	M	40~75	6	発症	5	0.64 (0.47-0.87)	0.004	-
Todd (1999)	UK 5754	M	40~59	6~9	発症	4	0.64 (0.45-0.90)	NA	
Todd (1999)	UK 5875	W	40~59	6~9	発症	4	0.56 (0.29-1.08)	NA	
Wolk (1999)	USA 68782	W	37~64	10	発症	5	0.77 (0.57-1.04)	0.07	
Bazzano (2003)	USA 9776	M/W W	25~74	19	発症	4	0.88 (0.74-1.04)	0.05	
Pereira (2004)	POOL 33644	M/W	35~99	6~10	発症	0	0.86 (0.78-0.96) f	0.005	-
Kromhout (1984)	NED 857	M	40~59	10	死亡	0	NA	>0.05	
Kushi (1985)	USA 1001	M	30~69	20	死亡	3	0.57	<0.05	-
Pietinen (1996)	FIN 21930	M	50~69	6.1	死亡	5	0.73 (0.56-0.95) g	0.004	-
Kromhout (1996)	7C 12763	M	40~59	25	死亡	0	-0.07 (-0.20~0.05) g	>0.05	
Liu (2002)	USA 39876	W	≥45	6	死亡	5	0.68 (0.39-1.22)	0.13	
Khaw (1987)	USA 859	M/W	50~79	12	死亡	0	0.74 (0.58-0.94) h	0.01	-
Mann (1997)	UK 10802	M/W	16~79	13.3	死亡	3	2.25 (0.92-5.53)	>0.05	
Bazzano (2003)	USA 9776	M/W	25~74	19	死亡	4	0.85 (0.65-1.10)	0.15	

表2 つづき

Ferreira (2004)

POOL

&lt;0.001