

◎脚注

以下は本文で述べた見解や概念について、もっと知りたいという際に役立つと思われる書籍および学術論文、記事やウェブサイトの一覧である。決してすべてを網羅するものではないが、新しい見方や「腸の力」をつくるためのライフスタイルを始める一助になる。

ここにあげた出典の多くは、本文で簡単に紹介したり詳細を説明したりした研究に関するものだ。これらの資料がいつもの調査や探究への扉を開いてくれるだろう。

本文で触れた内容で、この一覧にあげられていないものがある場合は、ウェブサイト www.DrPerlmutter.com を訪ねていただきたい。さらなる研究論文や最新の参考文献をご覧いただける。

プロローグ

1. C. Pritchard, A. Mayers, D. Baldwin, "Changing Patterns of Neurological Mortality in the 10 Major Developed Countries--1979-2010," *Public Health* 127, no. 4 (2013年4月): 357-68. :Bournemouth University. "Brain Diseases Affecting More People and Starting Earlier than Ever Before." *ScienceDaily* も参照。 www.sciencedaily.com/releases/2013/05/130510075502.htm (2015年1月8日にアクセス)。
2. Michael D. Hurd, et al., "Monetary Costs of Dementia in the United States," *The New England Journal of Medicine* 368 (2013年4月4日): 1326-1334.
3. "Statistics." NIMH RSS (2015年1月12日にアクセス)。 <http://www.nimh.nih.gov/health/statistics/index.shtml>.
4. 同上。
5. "Depression." 世界保健機関 (2015年1月12日にアクセス)。 <http://www.who.int/mediacentre/factsheets/fs369/en/>.
6. Kate Torgovnick, "Why Do the Mentally Ill Die Younger?" *Time* December 3, 2008. <http://content.time.com/time/health/article/0,8599,1863220,00.html> (2015年1月15日にアクセス)。
7. "Headache Disorders." 世界保健機関 (2015年1月15日にアクセス)。 <http://www.who.int/mediacentre/factsheets/fs277/en/>
8. "Frequently Asked Questions about Multiple Sclerosis." *Multiple Sclerosis FAQs and MS Glossary* (2015年1月12日にアクセス)。 <http://www.mymsaa.org/about-multiple-sclerosis/faq/>.
9. "Data & Statistics." アメリカ疾病管理予防センター、2014年3月24日 (2015年1月12日にアクセス)。 <http://www.cdc.gov/ncbddd/autism/data.html>.

10. "Human Microbiome Project DACC - Home." Human Microbiome RSS (2015年1月12日にアクセス)。 <http://hmpdacc.org/>.
11. S. Reardon, "Gut-brain Link Grabs Neuroscientists," *Nature* 515, 175-177 (2014年11月13日) : 175-177. doi: 10.1038/515175a. <http://www.nature.com/news/gut-brain-link-grabs-neuroscientists-1.16316?WT>
12. この言葉は長くヒポクラテスのものとされてきたが、実際にはヒポクラテスの著述の中には見られない。食事内容と健康の関係はこれまで何世紀にもわたってよく知られ、学術論文にも記されてきたが、きっとヒポクラテスも「食物の概念は医療の概念と混同すべきでない」という意見だろう。2013年にパリ第5大学のディアナ・カルデナスがこの言葉について論文を書いた。それによると、過去30年間でこの引用の誤りが一度以上、生体医学誌に登場する。いずれにせよ、現在にも通じる格言であるのは確かで、誰の言葉であるかにかかわらず真実である。

1章

1. Dan Buettner, "The Island Where People Forget to Die," *The New York Times Magazine*, October 24, 2012. ウェブサイト http://www.nytimes.com/2012/10/28/magazine/the-island-where-people-forget-to-die.html?pagewanted=all&_r=0 を参照。
2. D.B. Panagiotakos, et al., "Sociodemographic and Lifestyle Statistics of Oldest Old People (>80 Years) Living in Ikaria Island: The Ikaria Study," *Cardiol Res Pract* 2011 (Feb 24, 2011): 679187
3. "Link Between Microbes and Obesity." – MicrobeWiki (2015年1月12日にアクセス)。 https://microbewiki.kenyon.edu/index.php/Link_Between_Microbes_and_Obesity.
4. "NIH Human Microbiome Project Defines Normal Bacterial Makeup of the Body." アメリカ国立医学図書館 (2015年1月12日にアクセス)。 <http://www.nih.gov/news/health/jun2012/nhgri-13.htm>.
5. "How Bacteria In The Gut Help Fight Off Viruses." NPR. (2015年1月12日にアクセス)。 <http://www.npr.org/blogs/goatsandsoda/2014/11/14/363375355/how-bacteria-in-the-gut-help-fight-off-viruses?sc=tw>.
6. Adam Hadhazy, "Think Twice: How the Gut's 'Second Brain' Influences Mood and Well-Being," *Scientific American*, February 12, 2010. ウェブサイト <http://www.scientificamerican.com/article/gut-second-brain/> を参照。
7. Dr. Siri Carpenter, "That Gut Feeling," アメリカ心理学会誌の特集記事、2012年9月、43巻8号50頁。
8. 同上。ウェブサイト <http://www.apa.org/monitor/2012/09/gut-feeling.aspx> にて閲覧可

能。

9. Ivana Semova, et al., "Microbiota Regulate Intestinal Absorption and Metabolism of Fatty Acids in the Zebrafish," *Cell Host & Microbe* 12, no. 3 (2012): 277. University of North Carolina School of Medicine. "Gut Microbes Help the Body Extract More Calories from Food," *ScienceDaily*. も参照。 www.sciencedaily.com/releases/2012/09/120912125114.htm (2015年1月8日にアクセス)。
10. N. Abdallah Ismail, "Frequency of Firmicutes and Bacteroidetes in Gut Microbiota in Obese and Normal Weight Egyptian Children and Adults," *Arch Med Sci* 7, no. 3 (2011年6月): 501-7. doi: 10.5114/aoms.2011.23418. 電子出版 2011年7月11日。
11. H. Kumar, et al., "Gut Microbiota as an Epigenetic Regulator: Pilot Study Based on Whole-genome Methylation Analysis." *mBio* 5, no. 6 (2014):e02113-14. doi:10.1128/mBio.02113-14.
12. アメリカ疾病管理予防センター、2013年3月1日 (2015年1月12日にアクセス)。 http://www.cdc.gov/HAI/organisms/cdiff/Cdiff_infect.html.
13. "For Medical Professionals." Quick, Inexpensive and a 90 Percent Cure Rate (2015年1月12日にアクセス)。 <http://www.mayoclinic.org/medical-professionals/clinic-al-updates/digestive-diseases/quick-inexpensive-90-percent-cure-rate>.
14. Tanya Lewis. "Go with Your Gut: How Bacteria May Affect Mental Health." *LiveScience*. 2013年10月8日 (2015年1月12日にアクセス)。 <http://www.livescience.com/40255-how-bacteria-affect-mental-health.html>.
15. K. Aagaard, et al., "The Placenta Harbors a Unique Microbiome," *Sci Transl Med* 237, no. 6 (2014年5月21日): 237ra65.
16. Kerry Grens, "The Maternal Microbiome," *The Scientist*, May 21, 2014. ウェブサイト <http://www.the-scientist.com/?articles.view/articleNo/40038/title/The-Maternal-Microbiome/>. を参照。
17. M.G. Dominguez-Bello, et al., "Delivery Mode Shapes the Acquisition and Structure of the Initial Microbiota Across Multiple Body Habitats in Newborns," *Proc Natl Acad Sci U S A* 107, no. 26 (2010年6月29日): 11971-5. 電子出版 2010年6月21日。
18. M.B. Azad, et al., "Gut Microbiota of Healthy Canadian Infants: Profiles by Mode of Delivery and Infant Diet at 4 Months," *CMAJ* 185, no. 5 (March 19, 2013): 385-94. 電子出版 2013年2月11日。
19. *Canadian Medical Association Journal*. "Infant Gut Microbiota Influenced by Cesarean Section and Breastfeeding Practices; May Impact Long-term Health." *ScienceDaily*. www.sciencedaily.com/releases/2013/02/130211134842.htm (2015年1月8日)

にアクセス)。

20. Martin J. Blaser, *Missing Microbes* (New York: Henry Holt, 2014). 『失われてゆく、我々の内なる細菌』(マーティン・J・ブレイザー著、みすず書房、2015年)、99頁。
21. Sarah Glynn, “C-Section Babies 5 Times More Likely To Develop Allergies,” February 27, 2013. *Medical News Today* (2015年1月12日にアクセス)。 <http://www.medicalnewstoday.com/articles/256915.php>.
22. Amiri, Shahrokh et al. “Pregnancy-Related Maternal Risk Factors of Attention-Deficit Hyperactivity Disorder: A Case-Control Study.” *ISRN Pediatrics* 2012 (2012): 458064. PMC. Web. 12 Jan. 2015.
23. E.J. Glasson, “Perinatal Factors and the Development of Autism: A Population Study,” *Arch Gen Psychiatry* 61, no. 6 (2004年6月) : 618-27.
24. E. Decker, et al., “Cesarean Delivery Is Associated with Celiac Disease but Not Inflammatory Bowel Disease in Children,” *Pediatrics* 125, no. 6, 2010年6月。 <http://pediatrics.aappublications.org/content/early/2010/05/17/peds.2009-2260.full.pdf>
25. H.A. Goldani, et al., “Cesarean Delivery Is Associated with an Increased Risk of Obesity in Adulthood in a Brazilian Birth Cohort Study,” *Am J Clin Nutr* 93, no. 6 (June 2011): 1344-7. doi: 10.3945/ajcn.110.010033. 電子出版 2011年4月20日。
26. C.C. Patterson, et al., “A Case-Control Investigation of Perinatal Risk Factors for Childhood IDDM in Northern Ireland and Scotland,” *Diabetes Care* 17, no. 5 (1994年5月) : 376-381.
27. Kaplan, Karen. "Diabetes Increases the Risk of Dementia and Alzheimer's Disease." *Los Angeles Times*. September 20, 2011. (2015年1月12日にアクセス)。 <http://articles.latimes.com/2011/sep/20/news/la-heb-diabetes-dementia-alzheimers-20110920>.
28. "Labor, Interrupted." *The Rise in the Use of C-sections in Recent Decades* (2015年1月12日にアクセス)。 <http://harvardmagazine.com/2012/11/labor-interrupted>. "Births Method of Delivery." も参照。アメリカ疾病管理予防センター、2014年2月25日。(2015年1月12日にアクセス)。 <http://www.cdc.gov/nchs/fastats/delivery.htm>.
29. W.P. Witt, et al., “Determinants of Cesarean Delivery in the US: A Lifecourse Approach,” *Matern Child Health J* 1, no. 19 (January, 2015): 84-93.
30. Erica Sonnenburg and Justin Sonnenburg, “Starving our Microbial Self: The Deleterious Consequences of a Diet Deficient in Microbiota-Accessible Carbohydrates,” *Cell Metabolism* 20, Issue 5, p779–786, 4 November 2014.
31. Emily Eakin, “The Excrement Experiment,” *The New Yorker*, December 1, 2014.
32. M. Fox, et al., “Hygiene and the World Distribution of Alzheimer’s Disease,”

Evolution, Medicine, and Public Health, 2013; doi: 10.1093/emph/eot015. University of Cambridge. "Better Hygiene in Wealthy Nations May Increase Alzheimer's Risk, Study Suggests." ScienceDaily も参照。www.sciencedaily.com/releases/2013/09/130904105347.htm (2015年1月8日にアクセス)。本文 57 ページ、61 ページのグラフはフォックスと共同研究者らの当初の研究で得られた図ならびにデータにもとづき作成。

33. "Who's in Control: The Human Host or the Microbiome?" Organic Fitness. September 27, 2014 (2015年1月12日にアクセス)。http://organicfitness.com/whos-in-control-the-human-host-or-the-microbiome/.

34. Ivana Semova, et al., "Microbiota Regulate Intestinal Absorption and Metabolism of Fatty Acids in the Zebrafish," Cell Host & Microbe 12, no. 3 (2012): 277 doi: 10.1016/j.chom.2012.08.003. K. Brown, et al., "Diet-induced Dysbiosis of the Intestinal Microbiota and the Effects on Immunity and Disease," Nutrients 8, no. 4 (August, 2012): 1095-119. 電子出版 2012 年 8 月 21 日 も参照。

2章

1. David Perlmutter, "Why We Can and Must Focus on Preventing Alzheimer's." The Daily Beast. 2013年8月22日 (2015年1月12日にアクセス)。http://www.thedailybeast.com/articles/2013/08/22/why-we-can-and-must-focus-on-preventing-alzheimer-s.html.

2. Gina Kolata, "An Unusual Partnership to Tackle Stubborn Diseases," The New York Times, February 5, 2014, page A14.

3. R.S. Doody, et al., "Phase 3 Trials of Solanezumab for Mild-to-moderate Alzheimer's Disease," N Engl J Med 370, no. 4 (January 23, 2014): 311-21. doi: 10.1056/NEJMoA1312889.

4. S. Salloway, et al., "Two Phase 3 Trials of Bapineuzumab in Mild-to-moderate Alzheimer's Disease," N Engl J Med 370, no. 4 (January 23, 2014): 322-33. doi: 10.1056/NEJMoA1304839.

5. L.S. Schneider, et al., "Lack of Evidence for the Efficacy of Memantine in Mild Alzheimer Disease," Arch Neurol 68, no. 8 (August 2011): 991-8. doi: 10.1001/archneurol.2011.69. 電子出版 2011 年 4 月 11 日。

6. P. Crane, et al., "Glucose Levels and Risk of Dementia," N Engl J Med 2013; 369:540-548 August 8, 2013 DOI: 10.1056/NEJMoA1215740.

7. E.H. Martinez-Lapiscina, et al., "Mediterranean Diet Improves Cognition: The PREDIMED-NAVARRA Randomised Trial," J Neurol Neurosurg Psychiatry 84, no. 1

- 2 (December 2013): 1318-25. doi: 10.1136/jnnp-2012-304792. 電子出版 2013 年 5 月 13 日。
8. "Alzheimer's Disease and Inflammation." Overview Alzheimer's Disease and Inflammation Lab: Pritam Das (2015 年 1 月 12 日にアクセス)。 <http://www.mayo.edu/research/labs/alzheimers-disease-inflammation/overview>.
9. H. Fillit, et al., "Elevated Circulating Tumor Necrosis Factor Levels in Alzheimer's Disease," *Neurosci Lett* 129, no. 2 (August 19, 1991): 318-20. 本文 71 ページのグラフは、次の研究で得られたデータにもとづく。H. Bruunsgaard, "The Clinical Impact of Systemic Low-level Inflammation in Elderly Populations. With Special Reference to Cardiovascular Disease, Dementia and Mortality," *Dan Med Bull* 53, no. 3 (August 2006): 285-309.
10. A.J. Gearing, et al., "Processing of Tumour Necrosis Factor-alpha Precursor by Metalloproteinases," *Nature* 370, no. 6490 (August 1994): 555-7.
11. B.B. Aggarwal, S.C. Gupta, and J.H. Kim, "Historical Perspectives on Tumor Necrosis Factor and Its Superfamily: 25 Years Later, a Golden Journey," *Blood* 119, no. 3 (January 19, 2012): 651-65.
12. M. Sastre, et al., "Contribution of Inflammatory Processes to Alzheimer's Disease: Molecular Mechanisms," *Int J Dev Neurosci* 24, no. 2-3 (April-May 2006): 167-76. 電子出版 2006 年 2 月 10 日。
13. Suzanne M. de la Monte and Jack R. Wands, "Alzheimer's Disease Is Type 3 Diabetes—Evidence Reviewed," *J Diabetes Sci Technol* 2, no. 6 (Nov 2008): 1101–1113. 2008 年 11 月にインターネットで発表。
14. J. Qin et al., "A Metagenome-wide Association Study of Gut Microbiota in Type 2 Diabetes," *Nature* 490, no. 7418 (October 4, 2012): 55-60. Doi: 10.1038/nature11450. Epub September 26, 2012. また、"Could Gut Flora Be Linked to Diabetes?" *Could Gut Flora Be Linked to Diabetes?* (2015 年 1 月 12 日にアクセス) <http://www.vrp.com/digestive-health/digestive-health/could-gut-flora-be-linked-to-diabetes>. も参照。
15. Yong Zhang and Heping Zhang, "Microbiota Associated with Type 2 Diabetes and Its Related Complications," *Food Science and Human Wellness* 2, Issues 3–4, September–December 2013, Pages 167–172. <http://www.sciencedirect.com/science/article/pii/S2213453013000451>
16. J.M. Hill, et al., "The Gastrointestinal Tract Microbiome and Potential Link to Alzheimer's Disease," *Front Neurol* 5 (April 4, 2014): 43. doi: 10.3389/fneur.2014.00043. eCollection 2014.
17. G. Weinstein, et al., "Serum Brain-derived Neurotrophic Factor and the Risk for Dementia: the Framingham Heart Study," *JAMA Neurol* 71, no. 1 (January 20

- 14): 55-61. doi: 10.1001/jamaneurol.2013.4781.
18. 同上。
19. American Society for Microbiology. "Intestinal Bacteria Produce Neurotransmitter, Could Play Role in Inflammation." ScienceDaily. www.sciencedaily.com/releases/2012/06/120617142536.htm (2015年1月12日にアクセス)。
20. J.R. Turner, "Intestinal Mucosal Barrier Function in Health and Disease," *Nat Rev Immunol* 9, no. 11 (November 2009): 799-809. doi: 10.1038/nri2653.
21. A. Fasano, "Zonulin and Its Regulation of Intestinal Barrier Function: The Biological Door to Inflammation, Autoimmunity, and Cancer," *Physiol Rev* 91, no. 1 (January 2011): 151-75. doi: 10.1152/physrev.00003.2008.
22. M.M. Welling, et al., "Potential Role of Antimicrobial Peptides in the Early Onset of Alzheimer's Disease," *Alzheimers Dement* (March 15, 2014) pii: S1552-5260(14)00011-9. doi: 10.1016/j.jalz.2013.12.020. (印刷物に先立ち電子出版)
23. J.R. Jackson, et al., "Neurologic and Psychiatric Manifestations of Celiac Disease and Gluten Sensitivity," *Psychiatr Q* 83, no. 1 (March 2012): 91-102. doi: 10.1007/s11126-011-9186-y.
24. Marielle Suzanne Kahn, "A Potential Role for LPS-induced Inflammation in the Induction of Alzheimer's Disease-related Pathology and Cognitive Deficits," Thesis, Texas Christian University, Pub number: 1491006. <http://gradworks.umi.com/14/91/1491006.html>
25. M. Kahn, et al., "A Potential Role for LPS-Induced Inflammation in the Induction of Alzheimer's Disease-Related Pathology and Cognitive Deficits, Texas Christian University," http://www.srs.tcu.edu/previous_posters/Interdisciplinary/2011/122-Kahn-Chumley.pdf
26. J.W. Lee, et al., "Neuro-inflammation Induced by Lipopolysaccharide Causes Cognitive Impairment through Enhancement of Beta-amyloid Generation," *J Neuroinflammation* 5 (August 29, 2008): 37. doi: 10.1186/1742-2094-5-37.
27. Z. Guan and J. Fang, "Peripheral Immune Activation by Lipopolysaccharide Decreases Neurotrophins in the Cortex and Hippocampus in Rats," *Brain Behav Immun* 20, no. 1 (January 2006): 64-71.
28. R. Zhang, et al., "Circulating Endotoxin and Systemic Immune Activation in Sporadic Amyotrophic Lateral Sclerosis (sALS)," *J Neuroimmunol* 206, no. 1-2 (January 3, 2009): 121-4. doi: 10.1016/j.jneuroim.2008.09.017. 電子出版 2008年11月14日。本文83ページのグラフは、この研究で得られたデータにもとづく。
29. 同上。本文85ページのグラフは、同じ研究で得られたデータにもとづく。
30. C.B. Forsyth, et al., "Increased Intestinal Permeability Correlates with Sigmoid

- d Mucosa Alpha-synuclein Staining and Endotoxin Exposure Markers in Early Parkinson's Disease," PLoS One 6, no. 12 (2011): e28032. doi: 10.1371/journal.pone.0028032. 電子出版 2011年12月1日。
31. "Manifestations of Low Vitamin B12 Levels." アメリカ疾病管理予防センター、2009年6月29日。(2015年1月12日にアクセス)。 <http://www.cdc.gov/ncbddd/b12/manifestations.html>.
32. H.W. Baik and R.M. Russell, "Vitamin B12 Deficiency in the Elderly," *Annu Rev Nutr* 19 (1999): 357-77.
33. P.M. Kris-Etherton, et al., "Polyunsaturated Fatty Acids in the Food Chain in the United States," *Am J Clin Nutr* 71, Suppl 1 (January 2000): 179S-88S.
34. M.H. Eskelinen, et al., "Midlife Coffee and Tea Drinking and the Risk of Late-life Dementia: A Population-based CAIDE Study," *J Alzheimers Dis* 16, no. 1 (2009): 85-91. doi: 10.3233/JAD-2009-0920.
35. 同上。
36. Janet Raloff, "A Gut Feeling about Coffee," *ScienceNews*, July 26, 2007. <https://www.sciencenews.org/blog/food-thought/gut-feeling-about-coffee>
37. M. Jaquet, et al., "Impact of Coffee Consumption on the Gut Microbiota: A Human Volunteer Study," *J Food Microbiol* 130, no. 2 (March 31, 2009): 117-21. doi: 10.1016/j.ijfoodmicro.2009.01.011. 電子出版 2009年1月23日。
38. T.E. Cowan et al., "Chronic Coffee Consumption in the Diet-induced Obese Rat: Impact on Gut Microbiota and Serum Metabolomics," *J Nutr Biochem* 25, no. 4 (April 2014): 489-95. doi: 10.1016/j.jnutbio.2013.12.009. 電子出版 2014年1月30日。
39. David Perlmutter and Alberto Villoldo, *Power of Your Brain* (New York: Hay House, 2011)
40. Nick Lane, *Power, Sex, and Suicide: Mitochondria and the Meaning of Life* (New York: Oxford University Press, 2006) 『ミトコンドリアが進化を決めた』(ニック・レーン著、みすず書房、2007年)
41. C. O'Gorman, et al., "Environmental Risk Factors for Multiple Sclerosis: A Review with a Focus on Molecular Mechanisms," *Int J Mol Sci* 13, no. 9 (2012): 11718-52. doi: 10.3390/ijms130911718. 電子出版 2012年9月18日。
42. S. Conradi, et al., "Breastfeeding Is Associated with Lower Risk for Multiple Sclerosis," *Mult Scler* 19, no. 5 (April 2013): 553-8. doi: 10.1177/1352458512459683. 電子出版 2012年9月4日。

3章

1. Roni Caryn Rabin, "A Glut of Antidepressants," the New York Times, August 12, 2013. http://well.blogs.nytimes.com/2013/08/12/a-glut-of-antidepressants/?_r=0
2. "GNP - Gross National Product @ Countries of the World." GNP - Gross National Product @ Countries of the World (2015年1月12日にアクセス)。 <http://www.studentsoftheworld.info/infopays/rank/PNB2.html>.
3. Kathryn Roethel, "Antidepressants - Nation's Top Prescription." SFGate. November 13, 2012 (2015年1月12日にアクセス)。 <http://www.sfgate.com/health/article/Antidepressants-nation-s-top-prescription-4034392.php>.
4. "REPORT: Turning Attention to ADHD." REPORT: Turning Attention to ADHD (2015年1月12日にアクセス)。 <http://lab.express-scripts.com/insights/industry-updates/report-turning-attention-to-adhd>.
5. "Depression (major Depressive Disorder)." Selective Serotonin Reuptake Inhibitors (SSRIs) (2015年1月12日にアクセス)。 <http://www.mayoclinic.org/diseases-conditions/depression/in-depth/ssris/art-20044825>.
6. L. Desbonnet, et al., "The Probiotic *Bifidobacteria infantis*: An Assessment of Potential Antidepressant Properties in the Rat," *J Psychiatr Res* 43, no. 2 (December 2008): 164-74. doi: 10.1016/j.jpsychires.2008.03.009. 電子出版 2008年5月5日。
7. A.C. Bsted, et al., "Intestinal Microbiota, Probiotics and Mental Health: From Metchnikoff to Modern Advances: Part II - Contemporary Contextual Research," *Gut Pathog* 5, no. 1 (March 2013): 3. doi: 10.1186/1757-4749-5-3. A.C. Bsted, et al., "Intestinal Microbiota, Probiotics and Mental Health: From Metchnikoff to Modern Advances: Part III - Convergence Toward Clinical Trials," *Gut Pathog* 5, no. 1 (March 16, 2013): 4. doi: 10.1186/1757-4749-5-4 も参照。
8. A. Ferrao, and J.E. Kilman, "Experimental Toxic Approach to Mental Illness," *Psychiatr Q* 7 (1933): 115-153.
9. G.M. Khandaker, et al., "Association of Serum Interleukin 6 and C-reactive Protein in Childhood with Depression and Psychosis in Young Adult Life: A Population-based Longitudinal Study," *JAMA Psychiatry* 71, no. 10 (October 2014): 1121-8. doi: 10.1001/jamapsychiatry.2014.1332.
10. Maria Almond, "Depression and Inflammation: Examining the Link," *Current Psychiatry* 6, no. 12 (2013): 24-32.
11. E. Painsipp, et al., "Prolonged Depression-like Behavior Caused by Immune C

- challenge: Influence of Mouse Strain and Social Environment,” PLoS One 6, no. 6 (2011): e20719. doi: 10.1371/journal.pone.0020719. 電子出版 2011 年 6 月 6 日。
12. M. Udina, et al., “Interferon-induced Depression in Chronic Hepatitis C: A Systematic Review and Meta-analysis,” J Clin Psychiatry 73, no. 8 (August 2012): 1128-38. doi: 10.4088/JCP.12r07694.
 13. N. Vogelzangs, et al., “Association of Depressive Disorders, Depression Characteristics and Antidepressant Medication with Inflammation,” Transl Psychiatry 2 (Feb 21, 2012): e79. doi: 10.1038/tp.2012.8.
 14. E. Lopez-Garcia, et al., “Major Dietary Patterns Are Related to Plasma Concentrations of Markers of Inflammation and Endothelial Dysfunction,” Am J Clin Nutr 80, no. 4 (October 2004): 1029-35.
 15. S. Liu, et al., “Relation Between a Diet with a High Glycemic Load and Plasma Concentrations of High-sensitivity C-reactive Protein in Middle-aged Women,” Am J Clin Nutr 75, no. 3 (March 2002): 492-8.
 16. "Diabetes." And Depression: Coping with the Two Conditions (2015 年 1 月 12 日にアクセス)。 <http://www.mayoclinic.org/diseases-conditions/diabetes/expert-answers/diabetes-and-depression/faq-20057904>.
 17. A. Pan, et al., “Bidirectional Association between Depression and Type 2 Diabetes Mellitus in Women,” Arch Intern Med 170, no. 21 (November 22, 2010): 1884-91. doi: 10.1001/archinternmed.2010.356.
 18. F.S. Luppino, et al., “Overweight, Obesity, and Depression: A Systematic Review and Meta-analysis of Longitudinal Studies,” JAMA Psychiatry 67, no. 3 (March 2010).
 19. M. Maes, et al., “The Gut-brain Barrier in Major Depression: Intestinal Mucosal Dysfunction with an Increased Translocation of LPS from Gram Negative Enterobacteria (Leaky Gut) Plays a Role in the Inflammatory Pathophysiology of Depression,” Neuro Endocrinol Lett 29, no. 1 (February 2008): 117-24. 本文 117 ページのグラフは、この研究で得られたデータにもとづく。
 20. 同上。
 21. A.C. Bested, et al., “Intestinal Microbiota, Probiotics and Mental Health: From Metchnikoff to Modern Advances: Part II - Contemporary Contextual Research,” Gut Pathog 5, no. 1 (March 2013): 3. doi: 10.1186/1757-4749-5-3.
 22. A. Sanchez-Villegas, et al., “Association of the Mediterranean Dietary Pattern with the Incidence of Depression: The Seguimiento Universidad de Navarra/University of Navarra Follow-up (SUN) Cohort,” Arch Gen Psychiatry 66, no. 10 (October 2009): 1090-8. doi: 10.1001/archgenpsychiatry.2009.129.

23. A.C. Basted, et al., "Intestinal Microbiota, Probiotics and Mental Health: From Metchnikoff to Modern Advances: Part II - Contemporary Contextual Research," *Gut Pathog* 5, no. 1 (March 2013): 3. doi: 10.1186/1757-4749-5-3.
24. M.E. Benros, et al., "Autoimmune Diseases and Severe Infections as Risk Factors for Mood Disorders: A Nationwide Study," *JAMA Psychiatry* 70, no. 8 (August 2013): 81220. doi: 10.1001/jamapsychiatry.2013.1111.
25. Sonia Shoukat and Thomas W. Hale, "Breastfeeding in Infancy May Reduce the Risk of Major Depression in Adulthood," Texas Tech University Health Sciences Center, September 18, 2012. <http://www.infantrisk.com/content/breastfeeding-infancy-may-reduce-risk-major-depression-adulthood-1>.
26. K.M. Neufeld, et al., "Reduced Anxiety-like Behavior and Central Neurochemical Change in Germ-free Mice," *Neurogastroenterol Motil* 23, no. 3 (March 2011): 255-64, e119. doi: 10.1111/j.1365-2982.2010.01620.x. 電子出版 2010年11月5日。
27. P. Bercik et al., "The Intestinal Microbiota Affect Central Levels of Brain-derived Neurotrophic Factor and Behavior in Mice," *Gastroenterology* 141, no. 2 (August 2011): 599-609, 609.e1-3. doi: 10.1053/j.gastro.2011.04.052. 電子出版 2011年4月30日。
28. Carrie Arnold, "Gut Feelings: The Future of Psychiatry May Be Inside Your Stomach," *The Verge*, August 21, 2013. <http://www.theverge.com/2013/8/21/4595712/gut-feelings-the-future-of-psychiatry-may-be-inside-your-stomach>
29. K. Tillisch, et al., "Consumption of Fermented Milk Product with Probiotic Modulates Brain Activity," *Gastroenterology* 144, no. 7 (June 2013): 1394-401, 1401.e1-4. doi: 10.1053/j.gastro.2013.02.043. 電子出版 2013年3月6日。E.A. Mayer, et al., "Gut Microbes and the Brain: Paradigm Shift in Neuroscience," *J Neurosci* 34, no. 46 (November 12, 2014): 15490-6. doi: 10.1523/JNEUROSCI.3299-14.2014 も参照。
30. Rachel Champeau, "Changing Gut Bacteria through Diet Affects Brain Function, UCLA Study Shows," *UCLA Newsroom*, May 28, 2013. <http://newsroom.ucla.edu/releases/changing-gut-bacteria-through-245617>
31. J.A. Foster and K.A. McVey, "Gut-brain Axis: How the Microbiome Influences Anxiety and Depression," *Trends Neurosci* 36, no. 5 (May 2013): 305-12. doi: 10.1016/j.tins.2013.01.005. 電子出版 2013年2月4日。
32. T. Vanuytsel, et al., "Psychological Stress and Corticotropin-releasing Hormone Increase Intestinal Permeability in Humans by a Mast Cell-dependent Mechanism," *Gut* 63, no. 8 (August 2014): 1293-9. doi: 10.1136/gutjnl-2013-305690. 電子出版 2013年10月23日。
33. N. Sudo, et al., "Postnatal Microbial Colonization Programs the Hypothalamic-

- pituitary-adrenal System for Stress Response in Mice,” *J Physiol* 558, Pt 1 (July 2004): 263-75. 電子出版 2004年5月7日。
34. Barry Sears, “ADHD: An Inflammatory Condition,” *Psychology Today*, July 20, 2011. <http://www.psychologytoday.com/blog/in-the-zone/201107/adhd-inflammatory-condition>
35. Alan Schwarz, “Thousands of Toddlers Are Medicated for A.D.H.D., Report Finds, Raising Worries,” *The New York Times*. May 16, 2014. (2015年1月12日にアクセス)。http://www.nytimes.com/2014/05/17/us/among-experts-scrutiny-of-attention-disorder-diagnoses-in-2-and-3-year-olds.html?_r=0.
36. KJ Dell-Antonia, “The New Inequality for Toddlers: Less Income; More Ritalin,” *The New York Times*, Motherlode, 2014年5月16日。 <http://parenting.blogs.nytimes.com/2014/05/16/the-new-inequality-for-toddlers-less-income-more-ritalin/>
37. T. Lempo, et al., “Altered Gene Expression in the Prefrontal Cortex of Young Rats Induced by the ADHD Drug Atomoxetine,” *Prog Neuropsychopharmacol Biol Psychiatry* 40 (January 10, 2013): 221-8. doi: 10.1016/j.pnpbp.2012.08.012. 電子出版 2012年8月30日。
38. J.R. Burgess, et al., “Long-chain Polyunsaturated Fatty Acids in Children with Attention-deficit Hyperactivity Disorder,” *Am J Clin Nutr* 71, 1 Suppl (2001月): 327S-30S.
39. 同上。
40. E.A. Curran, et al., “Research Review: Birth by Caesarean Section and Development of Autism Spectrum Disorder and Attention-deficit/hyperactivity Disorder: A Systematic Review and Meta-analysis,” *J Child Psychol Psychiatry* (2014年10月27日) ; doi: 10.1111/jcpp.12351. (印刷物に先立ち電子出版)
41. C. McKeown, et al., “Association of Constipation and Fecal Incontinence with Attention deficit/hyperactivity Disorder,” *Pediatrics* 132, no. 5 (November 2013): e1210-5. doi: 10.1542/peds.2013-1580. 電子出版 2013年10月21日。
42. H. Niederhofer, “Association of Attention-deficit/hyperactivity Disorder and Celiac Disease: A Brief Report,” *Prim Care Companion CNS Disord* 13, no. 3 (2011). pii: PCC.10br01104. doi: 10.4088/PCC.10br01104
43. L.M. Pelsser, et al., “Effects of a Restricted Elimination Diet on the Behaviour of Children with Attention-deficit Hyperactivity Disorder (INCA study): A Randomised Controlled Trial,” *Lancet* 377, no. 9764 (2011年2月5日) : 494-503. doi: 10.1016/S0140-6736(10)62227-1.
44. R.A. Edden, et al., “Reduced GABA Concentration in Attention-deficit/hyperactivity Disorder,” *Arch Gen Psychiatry* 69, no. 7 (2012年7月) : 750-3. doi: 10.1001/a

rchgenpsychiatry.2011.2280.

45. E. Barrett, et al., "γ-Aminobutyric Acid Production by Culturable Bacteria from the Human Intestine," *J Appl Microbiol* 113, no. 2 (August 2012): 411-7. doi: 10.1111/j.1365-2672.2012.05344.x. 電子出版 2012年6月15日。
46. J. Luo, et al., "Ingestion of Lactobacillus Strain Reduces Anxiety and Improves Cognitive Function in the Hyperammonemia Rat," *Sci China Life Sci* 57, no. 3 (2014年3月): 32735. doi: 10.1007/s11427-014-4615-4. 電子出版 2014年2月19日。
47. M. Messaoudi, et al., "Assessment of Psychotropic-like Properties of a Probiotic Formulation (*Lactobacillus helveticus* R0052 and *Bifidobacterium longum* R0175) in Rats and Human Subjects," *Br J Nutr* 105, no. 5 (2011年3月): 755-64. doi: 10.1017/S0007114510004319. 電子出版 2010年10月26日。
48. J.M. Kreuger and J.A. Majde, "Microbial Products and Cytokines in Sleep and Fever Regulation," *Crit Rev Immunol* 14, no 3-4 (1994): 355-79.

4章

1. "Obesity." 世界保健機関 (2015年1月12日にアクセス)。 <http://www.who.int/topics/obesity/en/>.
2. "An Epidemic of Obesity: U.S. Obesity Trends." The Nutrition Source. (2015年1月12日にアクセス)。 <http://www.hsph.harvard.edu/nutritionsource/an-epidemic-of-obesity/>.
3. "Obesity and Overweight." 世界保健機関 (2015年1月12日にアクセス)。 <http://www.who.int/mediacentre/factsheets/fs311/en/>.
4. F. De Vadder, et al., "Microbiota-generated Metabolites Promote Metabolic Benefits via Gut-brain Neural Circuits," *Cell* 156, no. 1-2 (2014年1月16日): 84-96. doi: 10.1016/j.cell.2013.12.016. 電子出版 2014年1月9日。
5. C. De Filippo, et al., "Impact of Diet in Shaping Gut Microbiota Revealed by a Comparative Study in Children from Europe and Rural Africa," *Proc Natl Acad Sci USA* 107, no. 33 (August 17, 2010): 14691-6. doi: 10.1073/pnas.1005963107. 電子出版 2010年8月2日。本文147ページと149ページのグラフは、この研究で得られたデータにもとづく。
6. 同上。Helen Pearson, "Fat People Harbor 'Fat' Microbes," *Nature*, 2006年12月20日。 <http://www.nature.com/news/2006/061218/full/news061218-6.html> も参照。
7. M.A. O'Malley and K. Stotz, "Intervention, Integration and Translation in Obesity Research: Genetic, Developmental and Metaorganismal Approaches," *Philos Et*

- hics Humanit Med 6 (2011年1月) :2. doi: 10.1186/1747-5341-6-2.
8. H.D. Holscher, et al., "Fiber Supplementation Influences Phylogenetic Structure and Functional Capacity of the Human Intestinal Microbiome: Follow-up of a Randomized Controlled Trial," *Am J Clin Nutr* 101, no. 1 (2015年1月) : 55-64. doi: 10.3945/ajcn.114.092064. 電子出版 2014年11月12日。
 9. C. De Filippo, et al., "Impact of Diet in Shaping Gut Microbiota Revealed by a Comparative Study in Children from Europe and Rural Africa," *Proc Natl Acad Sci USA* 107, no. 33 (2010年8月17日): 14691-6. H. Tilg and A. Kaser, "Gut Microbiome, Obesity, and Metabolic Dysfunction," *J Clin Invest* 121, no. 6(2011年6月): 2126-32. doi: 10.1172/JCI58109. も参照。電子出版 2011年6月1日。
 10. P.J. Turnbaugh, et al., "An Obesity-associated Gut Microbiome with Increased Capacity for Energy Harvest," *Nature* 444, no. 7122 (2006年12月21日) : 1027-31.
 11. J. Gerritsen et al., "Intestinal Microbiota in Human Health and Disease: The Impact of Probiotics," *Genes Nutr* 7, no. 3 (2011年8月) : 209-40. doi: 10.1007/s12263-011-0229-7. 電子出版 2011年5月27日。
 12. Claudia Wallis, "How Gut Bacteria Help Make Us Fat and Thin," *Scientific American* 310, Issue June 1, 2014. <http://www.scientificamerican.com/article/how-gut-bacteria-help-make-us-fat-and-thin/>
 13. "Cleveland Clinic Research Shows Gut Bacteria Byproduct Impacts Heart Failure." Cleveland Clinic (2015年1月12日にアクセス)。 <http://my.clevelandclinic.org/about-cleveland-clinic/newsroom/releases-videos-newsletters/cleveland-clinic-research-shows-gut-bacteria-byproduct-impacts-heart-failure>.
 14. C.N. Lumeng and A.R. Saltiel, "Inflammatory Links between Obesity and Metabolic Disease," *J Clin Invest* 121, no. 6 (2011年6月) : 2111-7. doi: 10.1172/JCI57132. 電子出版 2011年6月1日。
 15. H. Yang, et al., "Obesity Increases the Production of Proinflammatory Mediators from Adipose Tissue T Cells and Compromises TCR Repertoire Diversity: Implications for Systemic Inflammation and Insulin Resistance," *J Immunol* 185, no. 3 (2010年8月1日) : 1836-45. doi: 10.4049/jimmunol.1000021. 電子出版 2010年6月25日。
 16. W. Jagust, et al., "Central Obesity and the Aging Brain," *Arch Neurol* 62, no. 10 (2005年10月) : 1545-8.
 17. S. DeBette, et al., "Visceral Fat Is Associated with Lower Brain Volume in Healthy Middle-aged Adults," *Ann Neurol* 68, no. 2 (2010年8月) : 136-44. doi: 10.1002/ana.22062.

18. R. Schmidt, et al., “Early Inflammation and Dementia: A 25-Year Follow-Up of the Honolulu-Asia Aging Study,” *Ann Neurol* 52, no. 2 (2002年8月) : 168-74.
- Joseph Rogers, “High-Sensitivity C-Reactive Protein: an Early Marker of Alzheimer’s?” *NEJM Journal Watch*, October 11, 2002 も参照。
19. National Diabetes Statistics Report, 2014. <http://www.cdc.gov/diabetes/pubs/statreport14/national-diabetes-report-web.pdf>
20. 同上。
21. A. V. Hartstra et al., “Insights into the Role of the Microbiome in Obesity and Type 2 Diabetes Care 38, no. 1 (January 2015): 159-165. ニュードルプ博士の著作リストは、<http://www.amc.nl/web/Research/Who-is-Who-in-Research/Who-is-Who-in-Research.htm?p=1597&v=publications>.を参照。 ”R.S. Kootte, et al., “The Therapeutic Potential of Manipulating Gut Microbiota in Obesity and Type 2 Diabetes Mellitus,” *Diabetes Obes Metab* 14, no. 2 (2012年2月) : 112-20. doi: 10.1111/j.1463-1326.2011.01483.x. 電子出版 2011年11月22日。
22. P.J. Turnbaugh, et al., “An Obesity-associated Gut Microbiome with Increased Capacity for Energy Harvest,” *Nature* 444, no. 7122 (2006年12月21日) : 1027-31.
23. V.K. Ridaura, et al., “Gut Microbiota from Twins Discordant for Obesity Modulate Metabolism in Mice,” *Science* 341, no. 6150 (2013年9月6日) : 1241214. doi: 10.1126/science.1241214.
24. Claudia Wallis, “How Gut Bacteria Help Make Us Fat and Thin,” *Scientific American* 310, Issue 6, 2014年6月1日。 <http://www.scientificamerican.com/article/how-gut-bacteria-help-make-us-fat-and-thin/>
25. T. Poutahidis, et al., “Microbial Reprogramming Inhibits Western Diet-Associated Obesity,” *PLoS One* 8, no. 7 (2013年7月10日) : e68596. doi: 10.1371/journal.pone.0068596. Print 2013.
26. G.A. Bray, et al., “Consumption of High-Fructose Corn Syrup in Beverages May Play a Role in the Epidemic of Obesity,” *Am J Clin Nutr* 79, no. 4, (2004年4月) : 537-43.
27. A. Abbott, “Sugar Substitutes Linked to Obesity,” *Nature* 513, no. 7518 (2014年9月18日) : 290. doi: 10.1038/513290a.
28. S.F. Clarke, et al., “Exercise and Associated Dietary Extremes Impact on Gut Microbial Diversity,” *Gut* 63, no. 12 (2014年12月) : 1913-20. doi: 10.1136/gutjnl-2013-306541. 電子出版 2014年6月9日。
29. M.C. Arrieta, et al., “The Intestinal Microbiome in Early Life: Health and Disease,” *Front Immunol* 5 (2014年9月5日) : 427. doi: 10.3389/fimmu.2014.00427.

eCollection 2014.

30. “Early Antibiotic Exposure Leads to Lifelong Metabolic Disturbance in Mice,” News Release, NUY Langone Medical Center, 2014年8月14日。 <http://communications.med.nyu.edu/media-relations/news/early-antibiotic-exposure-leads-lifelong-metabolic-disturbances-mice>. L.M. Cox, et al., “Altering the Intestinal Microbiota During a Critical Developmental Window Has Lasting Metabolic Consequences,” *Cell* 158, no. 4 (2014年8月14日) : 705-21. doi: 10.1016/j.cell.2014.05.052. も参照。
31. Claudia Wallis, “How Gut Bacteria Help Make Us Fat and Thin,” *Scientific American* 310, Issue 6, 2014年6月1日。 <http://www.scientificamerican.com/article/how-gut-bacteria-help-make-us-fat-and-thin/>
32. Blaser Lab Group: <http://www.med.nyu.edu/medicine/labs/blaserlab/>

5章

1. Melissa Pandika, *Autism’s Gut-Brain Connection*, ナショナルジオグラフィック (2014年11月14日ウェブ版)。 <http://news.nationalgeographic.com/news/2014/11/141114-autism-gut-brain-probiotic-research-biology-medicine-bacteria/>
2. “Autism Spectrum Disorder.” アメリカ疾病管理予防センター、2015年1月2日。(2015年1月12日にアクセス)。 <http://www.cdc.gov/ncbddd/autism/index.html>.
3. 本文179ページのグラフはアメリカ疾病管理予防センターならびにアメリカ国立衛生研究所のデータにもとづく。ジョアンヌ・マーシネックが作成したもので、ウェブサイト <http://joannemarcinek.com/autism-spectrum-disorder-incidence-rates/> にて閲覧可能。(2015年1月15日にアクセス)。
4. F. Godiee, et al., “Wakefield's Article Linking MMR Vaccine and Autism Was Fraudulent,” *BMJ* 342 (2011年1月5日) : c7452. doi: 10.1136/bmj.c7452.
5. Melinda Wenner Moyer, “Gut Bacteria May Play a Role in Autism,” *Scientific American Mind* Volume 25, Issue 5, 2014年8月14日。 <http://www.scientificamerican.com/article/gut-bacteria-may-play-a-role-in-autism/>
6. H.M. Parracho, et al., “Differences between the Gut Microflora of Children with Autistic Spectrum Disorders and that of Healthy Children,” *J Med Microbiol* 54, Pt 10 (2005年10月) : 987-91.
7. Sarah Deweerdt, “New Gene Studies Suggests There Are Hundreds of Kinds of Autism,” *Wired* November 25, 2014. <http://www.wired.com/2014/11/autism-genetics/>
8. “Scientists Implicate More Than 100 Genes In Causing Autism,” NPR, 2014年10月29日。 <http://www.npr.org/blogs/health/2014/10/29/359818102/scientists-implicate->

more-than-100-genes-in-causing-autism

9. P. Gorrindo, et al., "Gastrointestinal Dysfunction in Autism: Parental Report, Clinical Evaluation, and Associated Factors," *Autism Res* 5, no. 2 (2012年4月): 101-8. doi: 10.1002/aur.237.
10. L. de Magistris, et al., "Alterations of the Intestinal Barrier in Patients with Autism Spectrum Disorders and in Their First-degree Relatives," *J Pediatr Gastroenterol Nutr* 51, no. 4 (October 2010): 418-24. doi: 10.1097/MPG.0b013e3181dccc4a5.
11. E. Emanuele, et al., "Low-grade Endotoxemia in Patients with Severe Autism," *Neurosci Lett* 471, no. 3 (March 8, 2010): 162-5. doi: 10.1016/j.neulet.2010.01.033. 電子出版 2010年1月25日。本文191ページのグラフは、この研究で得られたデータにもとづく。
12. J.F. White, "Intestinal Pathophysiology in Autism," *Exp Biol Med (Maywood)* 228, no. 6 (2003年6月): 639-49.
13. J.G. Mulle, et al., "The Gut Microbiome: A New Frontier in Autism Research," *Curr Psychiatry Rep* 15, no. 2 (2013年2月): 337. doi: 10.1007/s11920-012-0337-0.
14. S.M. Finegold, et al., "Gastrointestinal Microflora Studies in Late-onset Autism," *Clin Infect Dis* 35, Suppl 1 (2002年9月1日): S6-S16.
15. H.M. Parracho, et al., "Differences between the Gut Microflora of Children with Autistic Spectrum Disorders and that of Healthy Children," *J Med Microbiol* 54, Pt 10 (2005年10月): 987-91.
16. R.H. Sandler, et al., "Short-term Benefit from Oral Vancomycin Treatment of Regressive-onset Autism," *J Child Neurol* 15, no. 7 (2000年7月): 429-35.
17. Dr. Sydney M. Finegold's website: <http://bacteriaandautism.com/>
18. R.H. Sandler, et al., "Short-term Benefit from Oral Vancomycin Treatment of Regressive-onset Autism," *J Child Neurol* 15, no. 7 (2000年7月): 429-35.
19. Dr. Sydney M. Finegold's website: <http://bacteriaandautism.com/>
20. S.M. Finegold, et al., "Gastrointestinal Microflora Studies in Late-onset Autism," *Clin Infect Dis* 35, Suppl 1 (2002年9月1日): S6-S16.
21. Dr. Derrick MacFabe: <http://www.psychology.uwo.ca/autism/>
22. D.F. MacFabe, "Short-chain Fatty Acid Fermentation Products of the Gut Microbiome: Implications in Autism Spectrum Disorders," *Microb Ecol Health Dis* 23 (2012年8月24日) doi: 10.3402/mehd.v23i0.19260. eCollection 2012.
23. S.J. James, et al., "Cellular and Mitochondrial Glutathione Redox Imbalance in Lymphoblastoid Cells Derived from Children with Autism," *FASEB J* 23, no. 8

- (2009年8月) : 2374-83. doi: 10.1096/fj.08-128926. 電子出版 2009年3月23日。
24. A.M. Aldbass, et al., "Protective and Therapeutic Potency of N-acetyl-cysteine on Propionic Acid-induced Biochemical Autistic Features in Rats," *J Neuroinflammation* 10 (2013年3月27日) : 42. doi: 10.1186/1742-2094-10-42.
25. A.Y. Hardan, et al., "A Randomized Controlled Pilot Trial of Oral N-acetylcysteine in Children with Autism," *Biol Psychiatry* 71, no 11 (2012年6月1日) : 956-61. doi: 10.1016/j.biopsych.2012.01.014. 電子出版 2012年2月18日。
26. E.Y. Hsiao, et al., "Microbiota Modulate Behavioral and Physiological Abnormalities Associated with Neurodevelopmental Disorders," *Cell* 155, no. 7 (2013年12月19日) : 1451-63. doi: 10.1016/j.cell.2013.11.024. 電子出版 2013年12月5日。http://
- E.Y. Hsiao, et al., "Maternal Immune Activation Yields Offspring Displaying Mouse Versions of the Three Core Symptoms of Autism," *Brain Behav Immun* 26, no. 4 (2012年5月) : 607-16. doi: 10.1016/j.bbi.2012.01.011. も参照。電子出版 2012年1月30日。
27. R.E. Frye and D.A. Rossignol, "Mitochondrial Dysfunction Can Connect the Diverse Medical Symptoms Associated with Autism Spectrum Disorders," *Pediatr Res* 69, no. 5 Pt 2 (2011年5月) : 41R-7R. doi: 10.1203/PDR.0b013e318212f16b.
28. P.F. Chinnery, "Mitochondrial Disorders Overview," *GeneReviews* [Internet] R.A. Pagon, et al., editors. Seattle (WA): University of Washington, Seattle; 1993-2015.
29. C. Giulivi, et al., "Mitochondrial Dysfunction in Autism," *JAMA* 304, no. 21 (2010年12月1日) : 2389-96. doi: 10.1001/jama.2010.1706.
30. University of California - Davis Health System. "Children with Autism Have Mitochondrial Dysfunction, Study Finds." *ScienceDaily*. www.sciencedaily.com/releases/2010/11/101130161521.htm (2015年1月12日にアクセス)。

6章

1. K. Brown, et al., "Diet-induced Dysbiosis of the Intestinal Microbiota and the Effects on Immunity and Disease," *Nutrients* 4, no 8 (2012年8月) : 1095-119. 電子出版 2012年8月21日。
2. J. Suez, et al., "Artificial Sweeteners Induce Glucose Intolerance by Altering the Gut Microbiota," *Nature* 514, no. 7521 (2014年10月9日) : 181-6. doi: 10.1038/nature13793. 電子出版 2014年9月17日。
3. G. Fagherazzi, et al., "Consumption of Artificially and Sugar-sweetened Beverages and Incident Type 2 Diabetes in the Etude Epidemiologique aupres des femmes de Dijon-Cotillon," *Diabetes Care* 37, no. 12 (2014年12月) : 2011-2018. doi: 10.2337/131007. 電子出版 2014年11月11日。

- s de la Mutuelle Generale de l'Education Nationale-European Prospective Investigation into Cancer and Nutrition Cohort,” *Am J Clin Nutr* 97, no. 3 (2013年3月): 517-23. doi: 10.3945/ajcn.112.050997. 電子出版 2013年1月30日。本文223ページのグラフは、この研究で得られたデータにもとづく。
4. K. Kavanagh, et al., “Dietary Fructose Induces Endotoxemia and Hepatic Injury in Calorically Controlled Primates,” *Am J Clin Nutr* 98, no. 2 (2013年8月): 349-57. doi: 10.3945/ajcn.112.057331.
 5. S. Drago, et al., “Gliadin, Zonulin and Gut Permeability: Effects on Celiac and Non-celiac Intestinal Mucosa and Intestinal Cell Lines,” *Scand J Gastroenterol* 41, no. 4 (2006年4月): 408-19.
 6. A. Alaedini, et al., “Immune Cross-reactivity in Celiac Disease: Anti-gliadin Antibodies Bind to Neuronal Synapsin I,” *J Immunol* 178, no. 10 (2007年5月15日): 6590-5.
 7. 同上。
 8. J. Visser, et al., “Tight Junctions, Intestinal Permeability, and Autoimmunity: Celiac Disease and Type 1 Diabetes Paradigms,” *Ann N Y Acad Sci* 1165 (2009年5月): 195-205. doi: 10.1111/j.1749-6632.2009.04037.x.
 9. A. Fasano, “Zonulin and its Regulation of Intestinal Barrier Function: The Biological Door to Inflammation, Autoimmunity, and Cancer,” *Physiol Rev* 91, no. 1 (2011年1月): 151-75. doi: 10.1152/physrev.00003.2008.
 10. E.V. Marietta, et al., “Low Incidence of Spontaneous Type 1 Diabetes in Non-obese Diabetic Mice Raised on Gluten-free Diets Is Associated with Changes in the Intestinal Microbiome,” *PLoS One* 8, no. 11 (2013年11月): e78687. doi: 10.1371/journal.pone.0078687. eCollection 2013.
 11. D.P. Funda, et al., “Prevention or Early Cure of Type 1 Diabetes by Intranasal Administration of Gliadin in NOD Mice,” *PLoS One* 9, no. 4 (2014年4月11日): e94530. doi: 10.1371/journal.pone.0094530. eCollection 2014.
 12. K. Vandepoele and Y. Van de Peer, “Exploring the Plant Transcriptome through Phylogenetic Profiling,” *Plant Physiol.* 2005 Jan;137(1):31-42.

7章

1. アメリカ疾病管理予防センター: www.cdc.gov
2. "WHO's First Global Report on Antibiotic Resistance Reveals Serious, Worldwide Threat to Public Health." 世界保健機関 (2015年1月12日にアクセス)。 <http://www.who.int/mediacentre/news/releases/2014/1411215/>

- who.int/mediacentre/news/releases/2014/amr-report/en/.
3. “Penicillin,” Alexander Fleming のノーベル賞受賞講演、1945 年 12 月 11 日。 http://www.nobelprize.org/nobel_prizes/medicine/laureates/1945/fleming-lecture.pdf
 4. アメリカ疾病管理予防センター: <http://www.cdc.gov/drugresistance/>
 5. F. Francois, et al., “The Effect of H. Pylori Eradication on Meal-associated Changes in Plasma Ghrelin and Leptin,” *BMC Gastroenterol* 11 (2011 年 4 月 14 日) : 37. doi: 10.1186/1471-230X-11-37.
 6. 本文 245 ページのグラフは、ScientificAmerican.com 上のジェームズ・バーンのブログ “Disease Prone” から掲載。 <http://blogs.scientificamerican.com/disease-prone/files/2011/11/ABx-use-graph.png>
 7. David Kessler, “Antibiotics and Meat We Eat,” *The New York Times*, The Opinion Page, A27, March 27, 2013. <http://www.nytimes.com/2013/03/28/opinion/antibiotics-and-the-meat-we-eat.html>
 8. 同上。
 9. C.J. Hildreth, et al., “JAMA Patient Page. Inappropriate Use of Antibiotics,” *JAMA* 302, no. 7 (2009 年 8 月 19 日) : 816. doi: 10.1001/jama.302.7.816.
 10. C.M. Velicer, et al., “Antibiotic Use in Relation to the Risk of Breast Cancer,” *JAMA* 291, no. 7 (2004 年 2 月 18 日) : 827-35. 本文 249 ページのグラフは、この研究で得られたデータにもとづく。
 11. R.F. Schwabe and C. Jobin, “The Microbiome and Cancer,” *Nat Rev Cancer* 13, no. 11 (2013 年 11 月) : 800-12. doi: 10.1038/nrc3610. 電子出版 2013 年 10 月 17 日。
 12. “FDA Drug Safety Communication: Azithromycin (Zithromax or Zmax) and the Risk of Potentially Fatal Heart Rhythms.” アメリカ食品医薬品局 Drug Safety Communication: Azithromycin (Zithromax or Zmax) and the Risk of Potentially Fatal Heart Rhythms (2015 年 1 月 12 日にアクセス)。 <http://www.fda.gov/Drugs/DrugSafety/ucm341822.htm>.
 13. Michael O’Riordan, “Cardiac Risks with Antibiotics Azithromycin, Levofloxacin Supported by VA Data,” *Medscape*, March 10, 2014. <http://www.medscape.com/viewarticle/821697>
 14. T.R. Coker, et al., “Diagnosis, Microbial Epidemiology, and Antibiotic Treatment of Acute Otitis Media in Children: A Systematic Review,” *JAMA* 304, no. 19 (2010 年 11 月 17 日) : 2161-9. doi: 10.1001/jama.2010.1651.
 15. Kathleen Doheny, “Birth Control Pills, HRT Tied to Digestive Ills,” *HealthDay*, May 21, 2012. <http://consumer.healthday.com/women-s-health-information-34/birth-control-news-62/birth-control-pills-hrt-tied-to-digestive-ills-664939.html>
 16. H. Khalili, et al., “Oral Contraceptives, Reproductive Factors and Risk of Infla

mmatory Bowel Disease,” *Gut* 62, no. 8 (2013年8月) : 1153-9. doi: 10.1136/gutjnl-2012-302362. 電子出版 2012年5月22日。

17. Dr. Kelly Brogan: <http://www.keallybroganmd.com>

18. K. Andersen, et al., “Do Nonsteroidal Anti-inflammatory Drugs Decrease the Risk for Alzheimer's Disease? The Rotterdam Study,” *Neurology* 45, no. 8 (1995年8月) : 1441-5.

19. J.M. Natividad, et al., “Host Responses to Intestinal Microbial Antigens in Gluten-sensitive Mice,” *PLoS One* 4, no. 7 (2009年7月31日) : e6472. doi: 10.1371/journal.pone.0006472.

20. “Global Water Soluble Fertilizers Market, By Types (Nitrogenous, Phosphatic, Potassic, Micronutrients), Applications (Fertigation, Foliar Application), Crop Types (Field, Horticultural, Turf & Ornamentals) & Geography - Trends & Forecasts to 2017,” PR Newswire, 2013年3月6日。 <http://www.prnewswire.com/news-releases/global-water-soluble-fertilizers-market-by-types-nitrogenous-phosphatic-potassic-micronutrients-applications-fertigation-foliar-application-crop-types-field-horticultural-turf-or-ornamentals-geography-trends-f-195525101.html>

21. S. Seneff and A. Samsel, “Glyphosate, Pathways to Modern Diseases II: Celiac Sprue and Gluten Intolerance,” *Interdiscip Toxicol* 6, no. 4 (2013年12月) : 159-84. doi: 10.2478/intox-2013-0026. インターネットで発表: www.intertox.sav.sk & www.versita.com/it. 本文 261 ページのグラフは、クリエイティブ・コモンズ・ライセンス (<http://creativecommons.org/licenses/by/2.0>) の条件にもとづくオープンアクセスの論文 (© 2013 SETOX & IEPT, SASc.) からの抜粋。

22. 同上。

23. エンバイロンメンタル・ワーキンググループ: <http://www.ewg.org>

24. 米国環境保護庁: <http://www.epa.gov>

25. エンバイロンメンタル・ワーキンググループ: <http://www.ewg.org>

26. H.S. Lee, et al., “Associations Among Organochlorine Pesticides, Methanobacteriales, and Obesity in Korean Women,” *PLoS One* 6, no. 11 (2011): e27773. doi: 10.1371/journal.pone.0027773. 電子出版 2011年11月17日。

27. <http://www.historyofwaterfilters.com/use-of-chlorine.html>

8章

1. ノーベル賞公式ウェブサイト http://www.nobelprize.org/nobel_prizes/medicine/laureates/1908/mechnikov-bio.html

2. G.W. Tannock, "A Special Fondness for Lactobacilli," *Appl Environ Microbiol* 70, no. 6 (2004年6月) : 3189-94.
3. J. Slavin, "Fiber and Prebiotics: Mechanisms and Health Benefits," *Nutrients* 5, no. 4 (2013年4月22日) : 1417-35. doi: 10.3390/nu5041417.
4. 同上。
5. P.K. Elias, et al., "Serum Cholesterol and Cognitive Performance in the Framingham Heart Study," *Psychosom Med* 67, no. 1 (2005年1-2月) : 24-30.
6. M. Mulder, et al., "Reduced Levels of Cholesterol, Phospholipids, and Fatty Acids in Cerebrospinal Fluid of Alzheimer Disease Patients Are Not Related to Apolipoprotein E4," *Alzheimer Dis Assoc Disord* 12, no. 3 (1998年9月) : 198-203.
7. C.B. Ebbeling, et al., "Effects of Dietary Composition on Energy Expenditure During Weight-loss Maintenance," *JAMA* 307, no. 24 (2012年6月27日) : 2627-34. doi: 10.1001/jama.2012.6607.
8. S. Moco, F.P. Martin, and S. Rezzi, "Metabolomics View on Gut Microbiome Modulation by Polyphenol-rich Foods," *J Proteome Res* 11, no. 10 (2012年10月5日) : 4781-90. doi: 10.1021/pr300581s. 電子出版 2012年9月6日。
9. F. Cardona, et al., "Benefits of Polyphenols on Gut Microbiota and Implications in Human Health," *J Nutr Biochem* 24, no. 8 (2013年8月) : 1415-22. doi: 10.1016/j.jnutbio.2013.05.001.
10. D.C. Vodnar and C. Socaciu, "Green Tea Increases the Survival Yield of Bifidobacteria in Simulated Gastrointestinal Environment and During Refrigerated Conditions," *Chem Cent J* 6, no. 1 (2012年6月22日) : 61. doi: 10.1186/1752-153X-6-61.
11. G. Desideri, et al., "Benefits in Cognitive Function, Blood Pressure, and Insulin Resistance through Cocoa Flavanol Consumption in Elderly Subjects with Mild Cognitive Impairment: The Cocoa, Cognition, and Aging (CoCoA) Study," *Hypertension* 60, no. 3 (2012年9月) : 794-801. doi: 10.1161/HYPERTENSIONAHA.112.193060. 電子出版 2012年8月14日。
12. S.T. Francis, et al., "The Effect of Flavanol-Rich Cocoa on the fMRI Response to a Cognitive Task in Healthy Young People," *J Cardiovasc Pharmacol* 47, Suppl 2 (2006): S215-20.
13. "Drinking Cocoa Boosts Cognition and Blood Flow in the Brain," *Tufts University Health & Nutrition Letter*, November 2013. http://www.nutritionletter.tufts.edu/issues/9_11/current-articles/Drinking-Cocoa-Boosts-Cognition-and-Blood-Flow-in-the-Brain_1270-1.html
14. M. Clemente-Postigo, et al., "Effect of Acute and Chronic Red Wine Consumpt

- ion on Lipopolysaccharide Concentrations,” *Am J Clin Nutr* 97, no. 5(2013年5月): 1053-61. doi: 10.3945/ajcn.112.051128. 電子出版 2013年4月10日。
15. R.J. Colman, et al., “Caloric Restriction Delays Disease Onset and Mortality in Rhesus Monkeys,” *Science* 325, no. 5937 (2009年7月10日): 201-4. doi: 10.1126/science.1173635.
16. Jessica Firger, “Calorie-restricted Diet May Help Keep the Mind Sharp,” *CBS News*, November 18, 2014. <http://www.cbsnews.com/news/calorie-restricted-diet-may-slow-aging-cognitive-mental-decline/>
17. C. Zhang, et al., “Structural Modulation of Gut Microbiota in Life-long Calorie-restricted Mice,” *Nat Commun* 4 (2013): 2163. doi: 10.1038/ncomms3163.

9章

1. P. Ducrotte, P. Sawant, and V. Jayanthi, “Clinical Trial: *Lactobacillus plantarum* 299v (DSM 9843) Improves Symptoms of Irritable Bowel Syndrome,” *World J Gastroenterol* 18, no. 30 (2012年8月14日): 4012-8. doi: 10.3748/wjg.v18.i30.4012.
2. “*Lactobacillus plantarum* and Its Biological Implications,” ケニオン大学の MicrobeWiki のウェブサイト: https://microbewiki.kenyon.edu/index.php/Lactobacillus_plantarum_and_its_biological_implications より。
3. “*Lactobacillus acidophilus*,” University of Maryland Medical Center, Medical Reference Guide online: <http://umm.edu/health/medical/altmed/supplement/lactobacillus-acidophilus>
4. “*Lactobacillus brevis*,” ケニオン大学の MicrobeWiki のウェブサイト: https://microbewiki.kenyon.edu/index.php/Lactobacillus_brevis より。
5. E. O’Sullivan, et al., “BDNF Expression in the Hippocampus of Maternally Separated Rats: Does *Bifidobacterium breve* 6330 Alter BDNF Levels?” *Benef Microbes* 2, no. 3 (2011年9月): 199-207. doi: 10.3920/BM2011.0015.
6. “*Bifidobacteria*,” Medline Plus: <http://www.nlm.nih.gov/medlineplus/druginfo/natural/891.html>
7. D. Guyonnet, et al., “Fermented Milk Containing *Bifidobacterium lactis* DN-173 010 Improved Self-reported Digestive Comfort Amongst a General Population of Adults. A Randomized, Open-label, Controlled, Pilot Study,” *J Dig Dis* 10, no. 1 (2009年2月): 61-70. doi: 10.1111/j.1751-2980.2008.00366.x.
8. G. Rizzardini, et al., “Evaluation of the Immune Benefits of Two Probiotic Stra

- ins *Bifidobacterium animalis* ssp. *lactis*, BB-12® and *Lactobacillus paracasei* ssp. *paracasei*, *L. casei* 431® in an Influenza Vaccination Model: A Randomised, Double-blind, Placebo-controlled Study,” *Br J Nutr* 107, no. 6 (2012年3月): 876-84. doi: 10.1017/S000711451100420X. 電子出版 2011年9月7日。
9. “*Bifidobacterium longum*,” ケニオン大学の MicrobeWiki のウェブサイト: https://microbewiki.kenyon.edu/index.php/Bifidobacterium_longum より。
10. J.H. Ooi, et al., “Vitamin D Regulates the Gut Microbiome and Protects Mice from Dextran Sodium Sulfate-induced Colitis,” *J Nutr* 143, no. 10 (2013年10月): 1679-86. doi: 10.3945/jn.113.180794. 電子出版 2013年8月21日。
11. F. Savino, et al., “*Lactobacillus reuteri* (American Type Culture Collection Strain 55730) versus Simethicone in the Treatment of Infantile Colic: A Prospective Randomized Study,” *Pediatrics* 119, no. 1 (2007年1月): e124-30.
12. H. Szymanski, et al., “Treatment of Acute Infectious Diarrhoea in Infants and Children with a Mixture of Three *Lactobacillus rhamnosus* Strains—A Randomized, Double-blind, Placebo-controlled Trial,” *Aliment Pharmacol Ther* 23, no. 2 (2006年1月): 247-53.
13. M. Kalliomaki, et al., “Probiotics in Primary Prevention of Atopic Disease: A Randomised Placebo-controlled Trial,” *Lancet* 375, no. 9262 (2001年4月7日): 1076-9.

エピソード

1. David Agus, *The End of Illness* (New York: Free Press, 2009) 『ジエンド・オブ・イルネス: 病気にならない生き方』(デイビッド・B・エイガス著、日経BP社、2013年)
2. I. Youngster, et al., “Oral, Capsulized, Frozen Fecal Microbiota Transplantation for Relapsing *Clostridium difficile* Infection,” *JAMA* 312, no. 17 (2014年11月5日): 1772-8. doi: 10.1001/jama.2014.13875.
3. Emily Hollister, “Fresh Infusions: The Science Behind Fecal Transplants,” Baylor College of Medicine; プレゼンテーション原稿がウェブサイト http://www.asmbanches.org/brcano/meetings/2014SprPpts/4.3Hollister_NCASM_2014.pdf で入手できる。
4. Els van Nood, et al., “Fecal Microbiota Transplantation,” *Curr Opin Gastroenterol* 30, no. 1 (2014): 34-39.
5. The Fecal Transplant Foundation: <http://thefecaltransplantfoundation.org/what-is-fecal-transplant/>
6. T.J. Borody, et al., “Fecal Microbiota Transplantation: Indications, Methods, Evi

- dence, and Future Directions,” *Curr Gastroenterol Rep* 15, no. 8 (2013年8月) : 337. doi: 10.1007/s11894-013-0337-1.
7. T.J. Borody, et al., “Therapeutic Faecal Microbiota Transplantation: Current Status and Future Developments,” *Curr Opin Gastroenterol* 30, no. 1 (2014年1月) : 97-105. doi: 10.1097/MOG.000000000000027.
8. Borody, et al., case studies #941, 942, *American Journal of Gastroenterology*, vol. 106, Supplement 2, October 2011.
9. "For Medical Professionals." Quick, Inexpensive and a 90 Percent Cure Rate (2015年1月13日にアクセス)。 <http://www.mayoclinic.org/medical-professionals/clinical-updates/digestive-diseases/quick-inexpensive-90-percent-cure-rate>.
10. Ferris Jabr, “For the Good of the Gut: Can Parasitic Worms Treat Autoimmune Diseases?” *Scientific American*, December 1, 2010. <http://www.scientificamerican.com/article/helminthic-therapy-mucus/>
11. M.J. Broadhurst, et al., “IL-22+ CD4+ T Cells Are Associated with Therapeutic *Trichuris Trichiura* Infection in an Ulcerative Colitis Patient,” *Sci Transl Med* 2, no. 60 (2010年12月1日) : 60ra88. doi: 10.1126/scitranslmed.3001500.
12. Katherine Harmon Courage, “Parasitic Worm Eggs Ease Intestinal Ills by Changing Gut Microbiota,” *Scientific American Blogs*, November 15, 2012. <http://blogs.scientificamerican.com/observations/2012/11/15/parasitic-worm-eggs-ease-intestinal-ills-by-changing-gut-microbiota/>
13. S. Reardon, “Gut-brain Link Grabs Neuroscientists,” *Nature* 515, 175-177 (2014年11月13日) : 175-177. doi: 10.1038/515175a. <http://www.nature.com/news/gut-brain-link-grabs-neuroscientists-1.16316?WT>