

注解

本書參考的研究報告、專書、文章和網路資料極多，因此只列出對讀者而言較有幫助的一部分，讓讀者能更了解本書闡述的理念與概念。有興趣更進一步探討的人也可參看這些資料。除了注解，你也可至作者網站 www.DrPerlmutter.com 查看更多的研究和更新資料。

序

1. C. Pritchard, A. Mayers, and D. Baldwin, “Changing Patterns of Neurological Mortality in the 10 Major Developed Countries—1979–2010,” *Publ. Health* 127, no. 4 (April 2013): 357–68. See also Bournemouth University, “Brain Diseases Affecting More People and Starting Earlier Than Ever Before,” *Science Daily*, May 10, 2013, accessed January 8, 2015, <http://www.sciencedaily.com/releases/2013/05/130510075502.htm>.
2. Michael D. Hurd et al., “Monetary Costs of Dementia in the United States,” *N. Engl. J. Med.* 368 (April 4, 2013): 1326–34.
3. “Statistics,” NIMH RSS, accessed January 12, 2015, <http://www.nimh.nih.gov/health/statistics/index.shtml>.
4. Ibid.
5. “Depression,” WHO, October 2012, accessed January 12, 2015, <http://www.who.int/mediacentre/factsheets/fs369/en/>.
6. Kate Torgovnick, “Why Do the Mentally Ill Die Younger?,” *Time*, December 3, 2008, accessed January 15, 2015, <http://content.time.com/time/health/article/0,8599,1863220,00.html>.
7. “Headache Disorders,” WHO, October 2012, accessed January 15, 2015, <http://www.who.int/mediacentre/factsheets/fs277/en/>.
8. “Do You Practice Headache Hygiene?,” HOPE Health Letter, July 2014, <https://www.hopehealth.com/reports/PDF/Headache-Hygiene.pdf>.
9. “Frequently Asked Questions about Multiple Sclerosis,” Multiple Sclerosis FAQs and MS Glossary, accessed January 12, 2015, <http://www.mymyaa.org/about-ms/faq/>.
10. “Multiple Sclerosis Statistics,” Statistic Brain RSS, accessed January 12,

- 2015, <http://www.statisticbrain.com/multiple-sclerosis-statistics/>.
11. “Data & Statistics,” Centers for Disease Control and Prevention, March 24, 2014, accessed January 12, 2015, <http://www.cdc.gov/ncbddd/autism/data.html>.
 12. “NIH Human Microbiome Project Defines Normal Bacterial Makeup of the Body,” U.S National Library of Medicine, accessed January 12, 2015, <http://www.nih.gov/news/health/jun2012/nhgri-13.htm>.
 13. “Human Microbiome Project DACC—Home,” HumanMicrobiomeRSS, accessed January 12, 2015, <http://hmpdacc.org/>.
 14. S. Reardon, “Gut-Brain Link Grabs Neuroscientists,” *Nature* 515 (November 13, 2014): 175–77, doi: 10.1038/515175a.
 15. 「讓食物成為你的藥，而你的藥就是你的食物。」據說這句古諺是希波克拉底所言，但他的著作沒有這句。儘管飲食與健康的關係非常密切，但希波克拉底認為食物還是不能和藥物劃上等號，這是兩種不同的概念。二〇一三年，巴黎笛卡兒大學的卡登納斯（Diana Cardenas）曾在報告中探討這句話的出處。她指出，在過去三十年中，至少有一份生化期刊刊登的文章引用此句，認為是希波克拉底所言。不管如何，這句古諺頗有道理。

第一章

1. Dan Buettner, “The Island Where People Forget to Die,” *New York Times Magazine*, October 24, 2012, <http://www.nytimes.com/2012/10/28/magazine/the-island-where-people-forget-to-die.html>.
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 (February 24, 2011): Article ID 679187, 7 pages.
3. “Link between Microbes and Obesity,” MicrobeWiki, Kenyon College, accessed January 12, 2015, https://microbewiki.kenyon.edu/index.php/Link_Between_Microbes_and_Obesity.
4. “NIH Human Microbiome Project Defines Normal Bacterial Makeup of the Body,” U.S. National Library of Medicine, accessed January 12, 2015, <http://www.nih.gov/news/health/jun2012/nhgri-13.htm>.

5. “How Bacteria in the Gut Help Fight Off Viruses,” NPR, accessed January 12, 2015, <http://www.npr.org/blogs/goatsandsoda/2014/11/14/363375355/how-bacteria-in-the-gut-help-fight-off-viruses>.
6. Adam Hadhazy, “Think Twice: How the Gut’s ‘Second Brain’ Influences Mood and Well-Being,” *Scientific American*, February 12, 2010, <http://www.scientificamerican.com/article/gut-second-brain/>.
7. Dr. Siri Carpenter, “That Gut Feeling,” *Am. Psychol. Assoc.* 43, no. 8 (September 2012): 50, <http://www.apa.org/monitor/2012/09/gut-feeling.aspx>.
8. Ibid.
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. See also University of North Carolina School of Medicine, “Gut Microbes Help the Body Extract More Calories from Food,” *ScienceDaily*, September 12, 2012, accessed January 8, 2015, <http://www.sciencedaily.com/releases/2012/09/120912125114.htm>.
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 (June 2011): 501–7, doi: 10.5114/aoms.2011.23418, Epub July 11, 2011.
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. “*Clostridium difficile* Infection,” Centers for Disease Control and Prevention, March 1, 2013, accessed January 12, 2015, http://www.cdc.gov/HAI/organisms/cdiff/Cdiff_infect.html.
13. “For Medical Professionals: Quick, Inexpensive and a 90 Percent Cure Rate,” accessed January 12, 2015, <http://www.mayoclinic.org/medical-professionals/clinical-updates/digestive-diseases/quick-inexpensive-90-percent-cure-rate>.
14. Tanya Lewis, “Go with Your Gut: How Bacteria May Affect Mental Health,” *LiveScience*, October 8, 2013, accessed January 12, 2015, <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 (May 21, 2014): 237ra65.
16. Kerry Grens, “The Maternal Microbiome,” *The Scientist*, May 21, 2014, <http://www.the-scientist.com/?articles.view/articleNo/40038/title/The-Maternal-Microbiome/>.
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. USA* 107, no. 26 (June 29, 2010): 11971–75, Epub June 21, 2010.
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, Epub February 11, 2013.
19. Canadian Medical Association Journal, “Infant Gut Microbiota Influenced by Cesarean Section and Breastfeeding Practices; May Impact Long-Term Health,” *ScienceDaily*, February 11, 2013, accessed January 8, 2015, <http://www.sciencedaily.com/releases/2013/02/130211134842.htm>.
20. Martin J. Blasser, *Missing Microbes* (New York: Henry Holt, 2014).
21. *Ibid.*, 99.
22. H. Makino et al., “Mother-to-Infant Transmission of Intestinal Bifidobacterial Strains Has an Impact on the Early Development of Vaginally Delivered Infant’s Microbiota,” *PLoS One* 11, no. 8 (November 14, 2013): e78331.
23. Sarah Glynn, “C-Section Babies 5 Times More Likely to Develop Allergies,” *Medical News Today*, February 27, 2013, accessed January 12, 2015, <http://www.medicalnewstoday.com/articles/256915.php>.
24. Shahrokh Amiri et al., “Pregnancy-Related Maternal Risk Factors of Attention-Deficit Hyperactivity Disorder: A Case-Control Study,” *ISRN Pediat.* 2012 (2012), <http://dx.doi.org/10.5402/2012/458064>.
25. E. J. Glasson, “Perinatal Factors and the Development of Autism: A Population Study,” *Arch. Gen. Psychiatry* 61, no. 6 (June 2004): 618–27.
26. E. Decker et al., “Cesarean Delivery Is Associated with Celiac Disease but Not Inflammatory Bowel Disease in Children,” *Pediatrics* 125, no. 6 (June 2010), <http://pediatrics.aappublications.org/content/early/2010/05/17/>

- peds.2009-2260.full.pdf.
27. 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): 1344–47, doi: 10.3945/ajcn.110.010033, Epub April 20, 2011.
 28. 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 (May 1994): 376–81.
 29. Karen Kaplan, “Diabetes Increases the Risk of Dementia and Alzheimer’s Disease,” *Los Angeles Times*, September 20, 2011, accessed January 12, 2015, <http://articles.latimes.com/2011/sep/20/news/la-heb-diabetes-dementia-alzheimers-20110920>.
 30. Nell Lake, “Labor, Interrupted,” *Harvard Magazine*, November–December 2012, accessed January 12, 2015, <http://harvardmagazine.com/2012/11/labor-interrupted>. See also “Births — Method of Delivery,” Centers for Disease Control and Prevention, February 25, 2014, accessed January 12, 2015, <http://www.cdc.gov/nchs/fastats/delivery.htm>.
 31. 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.
 32. L. J. Funkhouser and S. R. Bordenstein, “Mom Knows Best: The Universality of Maternal Microbial Transmission,” *PLoS Biol.* 11, no. 8 (2013), doi: 10.1371/journal.pbio.1001631, Epub August 20, 2013.
 33. Erica Sonnenburg and Justin Sonnenburg, “Starving Our Microbial Self: The Deleterious Consequences of a Diet Deficient in Microbiota-Accessible Carbohydrates,” *Cell Metab.* 20, no. 5 (November 4, 2014): 779–86.
 34. Emily Eakin, “The Excrement Experiment,” *New Yorker*, December 1, 2014.
 35. Semova et al., “Microbiota Regulate Intestinal Absorption and Metabolism of Fatty Acids.” See also K. Brown et al., “Diet-Induced Dysbiosis of the Intestinal Microbiota and the Effects on Immunity and Disease,” *Nutrients* 8, no. 4 (August 2012):1095–1119, Epub August 21, 2012.
 36. M. Fox et al., “Hygiene and the World Distribution of Alzheimer’s Disease,”

Evol. Med. Publ. Health, 2013, doi: 10.1093/emph/eot015. See also University of Cambridge, “Better Hygiene in Wealthy Nations May Increase Alzheimer’s Risk, Study Suggests,” *ScienceDaily*, accessed January 8, 2015, <http://www.sciencedaily.com/releases/2013/09/130904105347.htm>. The images on page 41 were created based on the images and data featured in the original study by Fox and colleagues.

37. “Who’s in Control: The Human Host or the Microbiome?,” *Organic Fitness*, September 27, 2014, accessed January 12, 2015, <http://organicfitness.com/whos-in-control-the-human-host-or-the-microbiome/>.

第二章

1. David Perlmutter, “Why We Can and Must Focus on Preventing Alzheimer’s,” *Daily Beast*, August 22, 2013, accessed January 12, 2015, <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,” *New York Times*, February 5, 2014, 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): 991–98, doi: 10.1001/archneurol.2011.69, Epub April 11, 2011.
6. Alzheimer’s Association, 2012 Alzheimer’s Disease Facts and Figures, http://www.alz.org/downloads/facts_figures_2012.pdf.
7. P. Crane et al., “Glucose Levels and Risk of Dementia,” *N. Engl. J. Med.* 2013, no. 369 (August 8, 2013): 540–48, doi: 10.1056/NEJMoa1215740.
8. E. H. Martinez-Lapiscina et al., “Mediterranean Diet Improves Cognition: The PREDIMED-NAVARRA Randomised Trial,” *J. Neurol. Neurosurg.*

- Psychiatry* 84, no. 12 (December 2013): 1318–25, doi: 10.1136/jnnp-2012-304792, Epub May 13, 2013. Also see E. H. Martinez-Lapiscina et al., “Virgin Olive Oil Supplementation and Long-term Cognition: The PREDIMED-NAVARRA Randomized Trial,” *J. Nutr. Health Aging* 17, no. 6 (2013): 544–52.
9. “Alzheimer’s Disease and Inflammation,” Overview Alzheimer’s Disease and Inflammation Lab: Pritam Das, accessed January 12, 2015, <http://www.mayo.edu/research/labs/alzheimers-disease-inflammation/overview>.
 10. H. Fillit et al., “Elevated Circulating Tumor Necrosis Factor Levels in Alzheimer’s Disease,” *Neurosci. Lett.* 129, no. 2 (August 19, 1991): 318–20. The image on page 48 is based on data from the following study: 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.
 11. A. J. Gearing et al., “Processing of Tumour Necrosis Factor-Alpha Precursor by Metalloproteinases,” *Nature* 370, no. 6490 (August 1994): 555–57.
 12. 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.
 13. 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, Epub February 10, 2006.
 14. 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 (November 2008): 1101–13. Published online November 2008.
 15. 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. Also see Frank Ervolino, “Could Gut Flora Be Linked to Diabetes?,” Vitamin Research Products, accessed January 12, 2015, <http://www.vrp.com/digestive-health/digestive-health/could-gut-flora-be-linked-to-diabetes>.

16. Yong Zhang and Heping Zhang, “Microbiota Associated with Type 2 Diabetes and Its Related Complications,” *Food Sci. Human Wellness* 2, nos. 3–4 (September– December 2013): 167–72, <http://www.sciencedirect.com/science/article/pii/S2213453013000451>.
17. 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.
18. G. Weinstein et al., “Serum Brain-Derived Neurotrophic Factor and the Risk for Dementia: The Framingham Heart Study,” *JAMA Neurol.* 71, no. 1 (January 2014): 55–61, doi: 10.1001/jamaneurol.2013.4781.
19. Ibid.
20. American Society for Microbiology, “Intestinal Bacteria Produce Neurotransmitter, Could Play Role in Inflammation,” *ScienceDaily*, accessed January 12, 2015, <http://www.sciencedaily.com/releases/2012/06/120617142536.htm>.
21. 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.
22. 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.
23. M. M. Welling, R. J. Nabuurs, and L. van der Weerd, “Potential Role of Antimicrobial Peptides in the Early Onset of Alzheimer’s Disease,” *Alzheimers Dement.* 11, no. 1 (January 2015): 51–7. doi: 10.1016/j.jalz.2013.12.020. Epub 2014 Mar 15.
24. 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.
25. Marielle Suzanne Kahn, “A Potential Role for LPS-Induced Inflammation in the Induction of Alzheimer’s Disease-Related Pathology and Cognitive Deficits,” Master’s thesis, Texas Christian University, Pub number: 1491006, <http://gradworks.umi.com/14/91/1491006.html>.
26. 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.
27. J. W. Lee et al., "Neuro-inflammation Induced by Lipopolysaccharide Causes Cognitive Impairment through Enhancement of Beta-Amyloid Generation," *J. Neuroinflamm.* 5 (August 29, 2008): 37, doi: 10.1186/1742-2094-5-37.
 28. 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.
 29. 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): 121–24, doi: 10.1016/j.jneuroim.2008.09.017, Epub November 14, 2008. The images on page 58 are based on data from this study.
 30. Ibid.
 31. C. B. Forsyth et al., "Increased Intestinal Permeability Correlates with Sigmoid 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, Epub 2011 December 1, 2011.
 32. "Manifestations of Low Vitamin B12 Levels," Centers for Disease Control and Prevention, June 29, 2009, accessed January 12, 2015, <http://www.cdc.gov/ncbddd/b12/manifestations.html>.
 33. H. W. Baik and R. M. Russell, "Vitamin B12 Deficiency in the Elderly," *Ann. Rev. Nutr.* 19 (1999): 357–77.
 34. 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.
 35. 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.
 36. Ibid.
 37. Janet Raloff, "A Gut Feeling about Coffee," *ScienceNews*, July 26, 2007,

- <https://www.sciencenews.org/blog/food-thought/gut-feeling-about-coffee>.
38. 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, Epub January 23, 2009.
 39. 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, Epub January 30, 2014.
 40. David Perlmutter and Alberto Villoldo, *Power of Your Brain* (New York: HayHouse, 2011).
 41. Nick Lane, *Power, Sex, and Suicide: Mitochondria and the Meaning of Life* (New York: Oxford University Press, 2006); page 207.
 42. 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, Epub September 18, 2012.
 43. S. Conradi et al., “Breast feeding Is Associated with Lower Risk for Multiple Sclerosis,” *Mult. Scler.* 19, no. 5 (April 2013): 553–58, doi: 10.1177/1352458512459683, Epub September 4, 2012.

第三章

1. Roni Caryn Rabin, “A Glut of Antidepressants,” *New York Times*, August 12, 2013, <http://well.blogs.nytimes.com/2013/08/12/a-glut-of-antidepressants/>.
2. “Astounding Increase in Antidepressant Use by Americans—Harvard Health Blog,” Harvard Health Blog RSS, October 20, 2011, accessed January 12, 2015, <http://www.health.harvard.edu/blog/astounding-increase-in-antidepressant-use-by-americans-201110203624>.
3. “Countries of the World: Gross National Product (GNP) Distribution—2005,” accessed January 12, 2015, <http://www.studentsoftheworld.info/infopays/rank/PNB2.html>.
4. Kathryn Roethel, “Antidepressants—Nation’s Top Prescription,” *SFGate*,

- November 13, 2012, accessed January 12, 2015, <http://www.sfgate.com/health/article/Antidepressants-nation-s-top-prescription-4034392.php>.
5. “REPORT: Turning Attention to ADHD,” accessed January 12, 2015, <http://lab.express-scripts.com/insights/industry-updates/report-turning-attention-to-adhd>.
 6. “Depression (Major Depressive Disorder): Selective Serotonin Reuptake Inhibitors (SSRIs),” accessed January 12, 2015, <http://www.mayoclinic.org/diseases-conditions/depression/in-depth/ssris/art-20044825>.
 7. 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, Epub May 5, 2008.
 8. 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. See also A. C. Bested 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.
 9. A. Ferrao and J. E. Kilman, “Experimental Toxic Approach to Mental Illness,” *Psychiatr. Q.* 7 (1933): 115–53.
 10. 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): 1121–28, doi: 10.1001/jamapsychiatry.2014.1332.
 11. Maria Almond, “Depression and Inflammation: Examining the Link,” *Curr. Psychiatry* 6, no. 12 (2013): 24–32.
 12. E. Painsipp et al., “Prolonged Depression-like Behavior Caused by Immune Challenge: Influence of Mouse Strain and Social Environment,” *PLoS One* 6, no. 6 (2011): e20719, doi: 10.1371/journal.pone.0020719, Epub June 6, 2011.
 13. 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.
14. N. Vogelzangs et al., “Association of Depressive Disorders, Depression Characteristics and Antidepressant Medication with Inflammation,” *Transl. Psychiatry* 2 (February 21, 2012): e79, doi: 10.1038/tp.2012.8.
 15. 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.
 16. 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): 492–98.
 17. “Diabetes: What’s the Connection between Diabetes and Depression: How Can I Cope If I Have Both?,” *Mayo Clinic*, accessed January 12, 2015, <http://www.mayoclinic.org/diseases-conditions/diabetes/expert-answers/diabetes-and-depression/faq-20057904>.
 18. 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.
 19. 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): 220–9.
 20. 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. The image on page 78 is based on data from this study.
 21. *Ibid.*
 22. Basted et al., “Intestinal Microbiota,” Part II.
 23. 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): 1090–98, doi: 10.1001/archgenpsychiatry.2009.129.

24. Basted et al., “Intestinal Microbiota,” Part II.
25. 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): 812–20, doi: 10.1001/jamapsychiatry.2013.1111.
26. 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>.
27. 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, Epub November 5, 2010.
28. 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, Epub April 30, 2011.
29. 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>.
30. 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, Epub March 6, 2013. Also see E. A. Mayer et al., “Gut Microbes and the Brain: Paradigm Shift in Neuroscience,” *J. Neurosci.* 34, no. 46 (November 12, 2014): 15490–96, doi: 10.1523/JNEUROSCI.3299-14.2014.
31. 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>.
32. 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, Epub February 4, 2013.
33. 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): 1293–99, doi: 10.1136/gutjnl-2013-305690, Epub October 23, 2013.
34. 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. Epub May 7, 2004.
 35. 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.
 36. J. Glaus et al., “Associations between Mood, Anxiety or Substance Use Disorders and Inflammatory Markers after Adjustment for Multiple Covariates in a Population- Based Study,” *J. Psychiatr. Res.* 58 (November 2014): 36–45, doi: 10.1016/j.jpsychires.2014.07.012, Epub July 22, 2014.
 37. A. E. Autry and L. M. Monteggia, “Brain-Derived Neurotrophic Factor and Neuropsychiatric Disorders,” *Pharmacol. Rev.* 64, no. 2 (April 2012): 238–58, doi: 10.1124/pr.111.005108, Epub March 8, 2012.
 38. J. Coplan et al., “Persistent Elevations of Cerebrospinal Fluid Concentrations of Corticotropin-Releasing Factor in Adult Nonhuman Primates Exposed to Early- Life Stressors: Implications for the Pathophysiology of Mood and Anxiety Disorders,” *Proc. Natl. Acad. Sci. USA* 93 (February 1996): 1619–23, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC39991/pdf/pnas01508-0266.pdf>.
 39. Bested et al., “Intestinal Microbiota,” Part II.
 40. “Anxiety Disorders,” NIMH RSS, accessed January 12, 2015, <http://www.nimh.nih.gov/health/publications/anxiety-disorders/index.shtml?rf=53414>.
 41. J. A. Bravo et al., “Ingestion of Lactobacillus Strain Regulates Emotional Behavior and Central GABA Receptor Expression in a Mouse via the Vagus Nerve,” *Proc. Natl. Acad. Sci. USA* 108, no. 38 (September 20, 2011): 16050–55, doi: 10.1073/pnas.1102999108, Epub August 29, 2011.
 42. University College Cork, “Mind-Altering Microbes: Probiotic Bacteria May Lessen Anxiety and Depression.” *ScienceDaily*, accessed January 12, 2015, <http://www.sciencedaily.com/releases/2011/08/110829164601.htm>.
 43. K. Schmidt et al., “Prebiotic Intake Reduces the Waking Cortisol Response and Alters Emotional Bias in Healthy Volunteers,” *Psychopharmacology*

- (Berl.) (December 3, 2014) [Epub ahead of print].
44. Basted et al., “Intestinal Microbiota,” Part II.
 45. Barry Sears, “ADHD: An Inflammatory Condition,” *Psychology Today*, July 20, 2011, <http://www.psychologytoday.com/blog/in-the-zone/201107/adhd-inflammatory-condition>.
 46. Alan Schwarz, “Thousands of Toddlers Are Medicated for A.D.H.D., Report Finds, Raising Worries,” *New York Times*, May 16, 2014, accessed January 12, 2015, <http://www.nytimes.com/2014/05/17/us/among-experts-scrutiny-of-attention-disorder-diagnoses-in-2-and-3-year-olds.html>.
 47. KJ Dell’Antonia, “The New Inequality for Toddlers: Less Income; More Ritalin,” *New York Times*, Motherlode, May 16, 2014, <http://parenting.blogs.nytimes.com/2014/05/16/the-new-inequality-for-toddlers-less-income-more-ritalin/>.
 48. 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): 221–28, doi: 10.1016/j.pnpbp.2012.08.012, Epub August 30, 2012.
 49. J. R. Burgess et al., “Long-Chain Polyunsaturated Fatty Acids in Children with Attention-Deficit Hyperactivity Disorder,” *Am. J. Clin. Nutr.* 71, Suppl. 1 (January 2000): 327S–30S.
 50. Ibid.
 51. 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* (October 27, 2014), doi: 10.1111/jcpp.12351 [Epub ahead of print].
 52. C. McKeown et al., “Association of Constipation and Fecal Incontinence with Attention-Deficit/Hyperactivity Disorder,” *Pediatrics* 132, no. 5 (November 2013): e1210–15, doi: 10.1542/peds.2013-1580, Epub October 21, 2013.
 53. H. Niederhofer, “Association of Attention-Deficit/Hyperactivity Disorder and Celiac Disease: A Brief Report,” *Prim. Care Companion CNS Disord.* 13, no. 3 (2011), doi: 10.4088/PCC.10br01104.

54. 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 (February 5, 2011): 494–503, doi: 10.1016/S0140-6736(10)62227-1.
55. R. A. Edden et al., “Reduced GABA Concentration in Attention-Deficit/Hyperactivity Disorder,” *Arch. Gen. Psychiatry* 69, no. 7 (July 2012): 750–53, doi: 10.1001/archgenpsychiatry.2011.2280.
56. E. Barrett et al., “ γ -Aminobutyric Acid Production by Culturable Bacteria from the Human Intestine,” *J. Appl. Microbiol.* 113, no. 2 (August 2012): 411–17, doi: 10.1111/j.1365-2672.2012.05344.x, Epub June 15, 2012.
57. 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 (March 2014): 327–35, doi: 10.1007/s11427-014-4615-4, Epub February 19, 2014.
58. 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 (March 2011): 755–64, doi: 10.1017/S0007114510004319, Epub October 26, 2010.
59. “Impulsive versus Controlled Men: Disinhibited Brains and Disinhibited Behavior,” Press Release, Elsevier, November 3, 2011, <http://www.elsevier.com/about/press-releases/research-and-journals/impulsive-versus-controlled-men-disinhibited-brains-and-disinhibited-behavior>. See also D. J. Hayes et al., “Brain γ -Aminobutyric Acid: A Neglected Role in Impulsivity,” *Eur. J. Neurosci.* 39, no. 11 (June 2014): 1921–32, doi: 10.1111/ejn.12485, Epub January 27, 2014.
60. A. Draper et al., “Increased GABA Contributes to Enhanced Control over Motor Excitability in Tourette Syndrome,” *Curr. Biol.* 24, no. 19 (October 6, 2014): 2343–47, doi: 10.1016/j.cub.2014.08.038, Epub September 25, 2014. See also A. Lerner et al., “Widespread Abnormality of the γ -Aminobutyric Acid-Ergic System in Tourette Syndrome,” *Brain* 135, pt. 6 (June 2012): 1926–36, doi: 10.1093/brain/aww104, Epub May 10, 2012.
61. K. L. Harding et al., “Outcome-Based Comparison of Ritalin versus Food-

- Supplement Treated Children with AD/HD,” *Altern. Med. Rev.* 8, no. 3 (August 2003): 319–30, <http://alternativementalhealth.com/articles/gant.pdf>.
62. P. M. Kidd, “Attention Deficit/Hyperactivity Disorder (ADHD) in Children: Rationale for Its Integrative Management,” *Altern. Med. Rev.* 5, no. 5 (October 2000): 402–28.
63. L. J. Stevens et al., “Dietary Sensitivities and ADHD Symptoms: Thirty-Five Years of Research,” *Clin. Pediatr.* (Phila.) 50, no. 4 (April 2011): 279–93, doi: 10.1177/0009922810384728, Epub December 2, 2010.

第四章

1. “Obesity,” WHO, accessed January 12, 2015, <http://www.who.int/topics/obesity/en/>.
2. “An Epidemic of Obesity: U.S. Obesity Trends,” The Nutrition Source, accessed January 12, 2015, <http://www.hsph.harvard.edu/nutritionsource/an-epidemic-of-obesity/>.
3. “Obesity and Overweight,” WHO, accessed January 12, 2015, <http://www.who.int/mediacentre/factsheets/fs311/en/>.
4. Meryl C. Vogt et al., “Neonatal Insulin Action Impairs Hypothalamic Neurocircuit Formation in Response to Maternal High-Fat Feeding” *Cell* 156, no. 3 (January, 2014): 495–509, doi: <http://dx.doi.org/10.1016/j.cell.2014.01.008>.
5. N. Ashley et al., “Maternal High-fat Diet and Obesity Compromise Fetal Hematopoiesis,” *Molecular Metabolism* 2014; DOI: 10.1016/j.molmet.2014.11.001
6. 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): 14691–96, doi: 10.1073/pnas.1005963107, Epub August 2, 2010. The images on pages 99 and 100 reflect data from this study.
7. Ibid. Also see Helen Pearson, “Fat People Harbor ‘Fat’ Microbes,” *Nature*, December 20, 2006, <http://www.nature.com/news/2006/061218/full/>

news061218-6.html.

8. M. A. O'Malley and K. Stotz, "Intervention, Integration and Translation in Obesity Research: Genetic, Developmental and Metaorganismal Approaches," *Philos. Ethics Humanit. Med.* 6 (January 2011): 2, doi: 10.1186/1747-5341-6-2.
9. 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 (January 2015): 55–64, doi: 10.3945/ajcn.114.092064, Epub November 12, 2014.
10. De Filippo et al., "Impact of Diet in Shaping Gut Microbiota." See also H. Tilg and A. Kaser, "Gut Microbiome, Obesity, and Metabolic Dysfunction," *J. Clin. Invest.* 121, no. 6 (June 2011): 2126–32, doi: 10.1172/JCI58109, Epub June 1, 2011.
11. V. K. Ridaura et al., "Gut Microbiota from Twins Discordant for Obesity Modulate Metabolism in Mice," *Science* 341, no. 6150 (September 6, 2013): 1241214, doi: 10.1126/science.1241214.
12. P. J. Turnbaugh et al., "An Obesity-Associated Gut Microbiome with Increased Capacity for Energy Harvest," *Nature* 444, no. 7122 (December 21, 2006): 1027–31.
13. J. Gerritsen et al., "Intestinal Microbiota in Human Health and Disease: The Impact of Probiotics," *Genes Nutr.* 7, no. 3 (August 2011): 209–40, doi: 10.1007/s12263-011-0229-7, Epub May 27, 2011.
14. Claudia Wallis, "How Gut Bacteria Help Make Us Fat and Thin," *Scientific American* 310, no. 6, June 1, 2014, <http://www.scientificamerican.com/article/how-gut-bacteria-help-make-us-fat-and-thin/>.
15. "Cleveland Clinic Research Shows Gut Bacteria Byproduct Impacts Heart Failure," Cleveland Clinic, accessed January 12, 2015, <http://my.clevelandclinic.org/about-cleveland-clinic/newsroom/releases-videos-newsletters/cleveland-clinic-research-shows-gut-bacteria-byproduct-impacts-heart-failure>.
16. C. N. Lumeng and A. R. Saltiel, "Inflammatory Links between Obesity and Metabolic Disease," *J. Clin. Invest.* 121, no. 6 (June 2011): 2111–17, doi:

- 10.1172/JCI57132, Epub June 1, 2011.
17. 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 (August 1, 2010): 1836–45, doi: 10.4049/jimmunol.1000021, Epub June 25, 2010.
 18. W. Jagust et al., “Central Obesity and the Aging Brain,” *Arch. Neurol.* 62, no. 10 (October 2005): 1545–48.
 19. S. DeBette et al., “Visceral Fat Is Associated with Lower Brain Volume in Healthy Middle-Aged Adults,” *Ann. Neurol.* 68, no. 2 (August 2010): 136–44, doi: 10.1002/ana.22062.
 20. R. Schmidt et al., “Early Inflammation and Dementia: A 25-Year Follow-Up of the Honolulu-Asia Aging Study,” *Ann. Neurol.* 52, no. 2 (August 2002): 168–74. See also Joseph Rogers, “High-Sensitivity C-Reactive Protein: An Early Marker of Alzheimer’s?,” *N. Engl. J. Med. Journal Watch*, October 11, 2002.
 21. National Diabetes Statistics Report, 2014, <http://www.cdc.gov/diabetes/pubs/statsreport14/national-diabetes-report-web.pdf>
 22. A.V. Hartstra et al., “Insights into the Role of the Microbiome in Obesity and Type 2 Diabetes,” *Diabetes Care* 38, no. 1 (January 2015): 159–165. For a list of publications by Dr. M. Nieuwdorp, go to: <https://www.amc.nl/web/Research/Who-is-Who-in-Research/Who-is-Who-in-Research.htm?p=1597&v=publications>. Also see 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 (February 2012): 112–20, doi: 10.1111/j.1463-1326.2011.01483.x, Epub November 22, 2011.
 23. Turnbaugh et al., “An Obesity-Associated Gut Microbiome.”
 24. V. K. Ridaura et al., “Gut Microbiota from Twins Discordant for Obesity Modulate Metabolism in Mice.”
 25. Wallis, “How Gut Bacteria Help Make Us Fat and Thin.”
 26. T. Poutahidis et al., “Microbial Reprogramming Inhibits Western Diet-Associated Obesity,” *PLoS One* 8, no. 7 (July 10, 2013), e68596, doi: 10.1371/journal.pone.0068596.

27. 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 (April 2004): 537–43.
28. A. Abbott, “Sugar Substitutes Linked to Obesity,” *Nature* 513, no. 7518 (September 18, 2014): 290, doi: 10.1038/513290a.
29. K. K. Ryan et al., “FXR Is a Molecular Target for the Effects of Vertical Sleeve Gastrectomy,” *Nature* 509, no. 7499 (May 8, 2014): 183–88, doi: 10.1038/nature13135, Epub March 26, 2014.
30. S. F. Clarke et al., “Exercise and Associated Dietary Extremes Impact on Gut Microbial Diversity,” *Gut* 63, no. 12 (December 2014): 1913–20, doi: 10.1136/gutjnl-2013-306541, Epub June 9, 2014.
31. M. C. Arrieta et al., “The Intestinal Microbiome in Early Life: Health and Disease,” *Front. Immunol.* 5 (September 5, 2014): 427, doi: 10.3389/fimmu.2014.00427, eCollection 2014.
32. “Early Antibiotic Exposure Leads to Lifelong Metabolic Disturbance in Mice,” News Release, NUY Langone Medical Center, August 14, 2014, <http://communications.med.nyu.edu/media-relations/news/early-antibiotic-exposure-leads-lifelong-metabolic-disturbances-mice>. See also L. M. Cox et al., “Altering the Intestinal Microbiota during a Critical Developmental Window Has Lasting Metabolic Consequences,” *Cell* 158, no. 4 (August 14, 2014): 705–21, doi: 10.1016/j.cell.2014.05.052.
33. Wallis, “How Gut Bacteria Help Make Us Fat and Thin.”
34. Blaser Lab Group, “Lab Overview,” accessed January 15, 2015, <http://www.med.nyu.edu/medicine/labs/blaserlab/>.

第五章

1. Melissa Pandika, “Autism’s Gut-Brain Connection,” National Geographic, November 14, 2014, <http://news.nationalgeographic.com/news/2014/11/141114-autism-gut-brain-probiotic-research-biology-medicine-bacteria/>.
2. “Autism Spectrum Disorder,” Centers for Disease Control and Prevention, January 2, 2015, accessed January 12, 2015, <http://www.cdc.gov/ncbddd/>

- autism/index.html.
3. Autism Speaks. “Largest-Ever Autism Genome Study Finds Most Siblings Have Different Autism-Risk Genes,” *ScienceDaily*, January 26, 2015, www.sciencedaily.com/releases/2015/01/150126124604.htm.
 4. Stephen W. Scherer, et al. “Whole-genome Sequencing of Quartet Families with Autism Spectrum Disorder,” *Nature Medicine*, 2015; doi: 10.1038/nm.3792
 5. The chart on page119, “Autism Spectrum Disorder—Incidence Rates,” is based on data from the CDC and National Institutes of Health. It was created by Joanne Marcinek and can be found at <http://joannemarcinek.com/autism-spectrum-disorder-incidence-rates/> (accessed January 15, 2015).
 6. F. Godiee et al., “Wakefield’s Article Linking MMR Vaccine and Autism Was Fraudulent,” *BMJ* 342 (January 5, 2011): c7452, doi: 10.1136/bmj.c7452.
 7. Melinda Wenner Moyer, “Gut Bacteria May Play a Role in Autism,” *Scientific American Mind* 25, no. 5, August 14, 2014, <http://www.scientificamerican.com/article/gut-bacteria-may-play-a-role-in-autism/>.
 8. 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 (October 2005): 987–91.
 9. Sarah Deweerdt, “New Gene Studies Suggest There Are Hundreds of Kinds of Autism,” *Wired*, November 25, 2014, <http://www.wired.com/2014/11/autism-genetics/>.
 10. “Scientists Implicate More Than 100 Genes in Causing Autism,” NPR, October 29, 2014, <http://www.npr.org/blogs/health/2014/10/29/359818102/scientists-implicate-more-than-100-genes-in-causing-autism>.
 11. P.Gorrindo et al., “Gastrointestinal Dysfunction in Autism: Parental Report, Clinical Evaluation, and Associated Factors,” *Autism Res.* 5, no. 2 (April 2012): 101–8, doi: 10.1002/aur.237.
 12. 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.0b013e3181dcc4a5.
13. E. Emanuele et al., “Low-Grade Endotoxemia in Patients with Severe Autism,” *Neurosci. Lett.* 471, no. 3 (March 8, 2010): 162–65, doi: 10.1016/j.neulet.2010.01.033, Epub January 25, 2010. The image on page 128 is based on data from this study.
 14. J. F. White, “Intestinal Pathophysiology in Autism,” *Exp. Biol. Med.* (Maywood) 228, no. 6 (June 2003): 639–49.
 15. J. G. Mulle et al., “The Gut Microbiome: A New Frontier in Autism Research,” *Curr. Psychiatry Rep.* 15, no. 2 (February 2013): 337, doi: 10.1007/s11920-012-0337-0.
 16. S. M. Finegold et al., “Gastrointestinal Microflora Studies in Late-Onset Autism,” *Clin. Infect. Dis.* 35, Suppl. 1 (September 1, 2002): S6–S16.
 17. Parracho et al., “Differences between the Gut Microflora.”
 18. R. H. Sandler et al., “Short-Term Benefit from Oral Vancomycin Treatment of Regressive-Onset Autism,” *J. Child Neurol.* 15, no. 7 (July 2000): 429–35.
 19. Sydney M. Finegold, “Studies on Bacteriology of Autism,” accessed January 29, 2015, <http://bacteriaandautism.com/>.
 20. Sandler et al., “Short-Term Benefit from Oral Vancomycin Treatment.”
 21. Finegold, “Studies on Bacteriology of Autism.”
 22. Finegold et al., “Gastrointestinal Microflora Studies in Late-Onset Autism.”
 23. Derrick MacFabe, Western Social Science, The Kilee Patchell-Evans Autism Research Group, accessed January 29, 2015, <http://www.psychology.uwo.ca/autism/>.
 24. D. F. MacFabe, “Short-Chain Fatty Acid Fermentation Products of the Gut Microbiome: Implications in Autism Spectrum Disorders,” *Microb. Ecol. Health Dis.* 23 (August 24, 2012), doi: 10.3402/mehd.v23i0.19260, eCollection 2012.
 25. S. J. James et al., “Cellular and Mitochondrial Glutathione Redox Imbalance in Lymphoblastoid Cells Derived from Children with Autism,” *FASEB J.* 23, no. 8 (August 2009): 2374–83, doi: 10.1096/fj.08-128926, Epub March 23, 2009.
 26. A. M. Aldbass et al., “Protective and Therapeutic Potency of N-Acetyl-

- Cysteine on Propionic Acid-Induced Biochemical Autistic Features in Rats,” *J. Neuroinflamm.* 10 (March 27, 2013): 42, doi: 10.1186/1742-2094-10-42.
27. A. Y. Hardan et al., “A Randomized Controlled Pilot Trial of Oral N-Acetylcysteine in Children with Autism,” *Biol. Psychiatry* 71, no. 11 (June 1, 2012): 956–61, doi:10.1016/j.biopsych.2012.01.014, Epub February 18, 2012.
 28. E. Y. Hsiao et al., “Microbiota Modulate Behavioral and Physiological Abnormalities Associated with Neurodevelopmental Disorders,” *Cell* 155, no. 7 (December 19, 2013): 1451–63, doi: 10.1016/j.cell.2013.11.024, Epub December 5, 2013. See also 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 (May 2012): 607–16, doi: 10.1016/j.bbi.2012.01.011, Epub January 30, 2012.
 29. 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 (May 2011): 41R–7R, doi: 10.1203/PDR.0b013e318212f16b.
 30. P. F. Chinnery, “Mitochondrial Disorders Overview,” in *GeneReviews* [Internet], edited by R. A. Pagon et al. (Seattle: University of Washington, 1993–2015).
 31. C. Giulivi et al., “Mitochondrial Dysfunction in Autism,” *JAMA* 304, no. 21 (December 1, 2010): 2389–96, doi: 10.1001/jama.2010.1706.
 32. University of California—Davis Health System, “Children with Autism Have Mitochondrial Dysfunction, Study Finds,” *ScienceDaily*, accessed January 12, 2015, <http://www.sciencedaily.com/releases/2010/11/101130161521.htm>.

第六章

1. K. Brown et al., “Diet-Induced Dysbiosis of the Intestinal Microbiota and the Effects on Immunity and Disease,” *Nutrients* 4, no. 8 (August 2012): 1095–119, Epub August 21, 2012.

2. J. Suez et al., “Artificial Sweeteners Induce Glucose Intolerance by Altering the Gut Microbiota,” *Nature* 514, no. 7521 (October 9, 2014): 181–86, doi: 10.1038/nature13793, Epub September 17, 2014.
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 la Mutuelle Generale de l’Education Nationale-European Prospective Investigation into Cancer and Nutrition Cohort,” *Am. J. Clin. Nutr.* 97, no. 3 (March 2013): 517–23, doi: 10.3945/ajcn.112.050997, Epub January 30, 2013. The image on page 147 is based on data from this study.
4. K. Kavanagh et al., “Dietary Fructose Induces Endotoxemia and Hepatic Injury in Calorically Controlled Primates,” *Am. J. Clin. Nutr.* 98, no. 2 (August 2013): 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 (April 2006): 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 (May 15, 2007): 6590–95.
7. J. Visser et al., “Tight Junctions, Intestinal Permeability, and Autoimmunity: Celiac Disease and Type 1 Diabetes Paradigms,” *Ann. N. Y. Acad. Sci.* 1165 (May 2009): 195–205, doi: 10.1111/j.1749-6632.2009.04037.x.
8. 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.
9. M. M. Leonard and B. Vasagar, “US Perspective on Gluten-Related Diseases,” *Clin. Exp. Gastroenterol.* 7 (January 24, 2014): 25–37, doi: 10.2147/CEG.S54567, eCollection 2014.
10. Brown et al., “Diet-Induced Dysbiosis of the Intestinal Microbiota.”
11. E. V. Marietta et al., “Low Incidence of Spontaneous Type1 Diabetes in Non-obese Diabetic Mice Raised on Gluten-Free Diets Is Associated with Changes in the Intestinal Microbiome,” *PLoS One* 8, no. 11 (November 2013): e78687, doi: 10.1371/journal.pone.0078687, eCollection 2013.

12. 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 (April 11, 2014): e94530, doi: 10.1371/journal.pone.0094530, eCollection 2014.
13. K. Vandepoele and Y. Van de Peer, “Exploring the Plant Transcriptome through Phylogenetic Profiling,” *Plant Physiol.* 137, no. 1 (January 2005): 31–42.

第七章

1. Centers for Disease Control and Prevention, “Antibiotic Resistance Threats in the United States, 2013,” accessible at <http://www.cdc.gov/drugresistance/threat-report-2013/pdf/ar-threats-2013-508.pdf> (accessed February 4, 2015).
2. “WHO’s First Global Report on Antibiotic Resistance Reveals Serious, Worldwide Threat to Public Health,” WHO, accessed January 12, 2015, <http://www.who.int/mediacentre/news/releases/2014/amr-report/en/>.
3. “Penicillin,” Alexander Fleming’s Nobel Lecture, December 11, 1945, http://www.nobelprize.org/nobel_prizes/medicine/laureates/1945/fleming-lecture.pdf.
4. “Antibiotic/Antimicrobial Resistance,” Centers for Disease Control and Prevention, accessed January 29, 2015, <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 (April 14, 2011): 37, doi: 10.1186/1471-230X-11-37.
6. The image on page 160 is adapted from James Byrne, Disease Prone blog on ScientificAmerican.com, <http://blogs.scientificamerican.com/disease-prone/files/2011/11/ABx-use-graph.png>.
7. David Kessler, “Antibiotics and Meat We Eat,” *New York Times*, March 27, 2013, Opinion Page, A27, <http://www.nytimes.com/2013/03/28/opinion/antibiotics-and-the-meat-we-eat.html>.
8. Ibid.
9. C. J. Hildreth et al., “JAMA Patient Page. Inappropriate Use of Antibiotics,” *JAMA* 302, no. 7 (August 19, 2009): 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 (February 18, 2004): 827–35. The image on page 162 is based on data from this study.
11. R. F. Schwabe and C. Jobin, “The Microbiome and Cancer,” *Nat. Rev. Cancer* 13, no. 11 (November 2013): 800–812, doi: 10.1038/nrc3610, Epub October 17, 2013.
12. U. S. Food and Drug Administration, “FDA Drug Safety Communication: Azithromycin (Zithromax or Zmax) and the Risk of Potentially Fatal Heart Rhythms,” accessed January 12, 2015, <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 (November 17, 2010): 2161–69, doi: 10.1001/jama.2010.1651.
15. E. F. Berbari et al., “Dental Procedures as Risk Factors for Prosthetic Hip or Knee Infection: A Hospital-Based Prospective Case-Control Study,” *Clin. Infect. Dis.* 50, no. 1 (January 1, 2010): 8–16, doi: 10.1086/648676.
16. 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>.
17. H. Khalili et al., “Oral Contraceptives, Reproductive Factors and Risk of Inflammatory Bowel Disease,” *Gut* 62, no. 8 (August 2013): 1153–59, doi: 10.1136/gutjnl-2012-302362, Epub May 22, 2012.
18. Kelly Brogan, “Holistic Women’s Health Psychiatry,” accessed January 29, 2015, <http://www.kellybroganmd.com>.
19. K. Andersen et al., “Do Nonsteroidal Anti-inflammatory Drugs Decrease the Risk for Alzheimer’s Disease? The Rotterdam Study,” *Neurology* 45, no. 8 (August 1995): 1441–45.
20. J. M. Natividad et al., “Host Responses to Intestinal Microbial Antigens in Gluten- Sensitive Mice,” *PLoS One* 4, no. 7 (July 31, 2009): e6472, doi:

- 10.1371/journal.pone.0006472.
21. The Environmental Working Group, “Toxic Chemicals Found in Minority Cord Blood,” News Release, December 2, 2009; accessible at <http://www.ewg.org/news/news-releases/2009/12/02/toxic-chemicals-found-minority-cord-blood> (accessed February 4, 2015).
 22. The Environmental Protection Agency: <http://www.epa.gov>.
 23. The Environmental Working Group: <http://www.ewg.org>.
 24. 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, Epub November 17, 2011.
 25. Life magazine, volume 20, no. 10a, Fall 1997.
 26. “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*, March 6, 2013, <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--ornamentals--geography---trends--f-195525101.html> (accessed February 4, 2015).
 27. S. Seneff and A. Samsel, “Glyphosate, Pathways to Modern Diseases II: Celiac Sprue and Gluten Intolerance,” *Interdiscip. Toxicol.* 6, no. 4 (December 2013): 159–84, doi: 10.2478/intox-2013-0026. The image on page 174 is extracted from published paper (Copyright © 2013 SETOX & IEPT, SASc.), which is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/2.0>).
 28. Ibid.
 29. “Where GMOs Hide in Your Food,” *Consumer Reports*, October 2014, <http://www.ConsumerReports.org/cro/gmo1014>.

第八章

1. “Ilya Mechnikov—Biographical,” Nobelprize.org, accessed January 29, 2015, http://www.nobelprize.org/nobel_prizes/medicine/laureates/1908/mechnikov-bio.html.
2. G. W. Tannock, “ASpecial Fondness for Lactobacilli,” *Appl. Environ. Microbiol.* 70, no. 6 (June 2004): 3189–94.
3. P. K. Elias et al., “Serum Cholesterol and Cognitive Performance in the Framing- ham Heart Study,” *Psychosom. Med.* 67, no. 1 (January–February 2005): 24–30.
4. 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 (September 1998): 198–203.
5. C. B. Ebbeling et al., “Effects of Dietary Composition on Energy Expenditure during Weight-Loss Maintenance,” *JAMA* 307, no. 24 (June 27, 2012): 2627–34, doi: 10.1001/jama.2012.6607.
6. S. Moco, F. P. Martin, and S. Rezzi, “MetabolomicsViewonGutMicrobiomeModulation by Polyphenol-Rich Foods,” *J. Proteome Res.* 11, no. 10 (October 5, 2012): 4781–90, doi: 10.1021/pr300581s, Epub September 6, 2012.
7. F. Cardona et al., “Benefits of Polyphenols on Gut Microbiota and Implications in Human Health,” *J. Nutr. Biochem.* 24, no. 8 (August 2013): 1415–22, doi: 10.1016/j.jnutbio.2013.05.001.
8. 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 (June 22, 2012): 61, doi: 10.1186/1752-153X-6-61.
9. 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 (September 2012): 794–801, doi: 10.1161/HYPERTENSIONAHA.112.193060, Epub August 14,

- 2012.
10. 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.
 11. "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.
 12. M. Clemente-Postigo et al., "Effect of Acute and Chronic Red Wine Consumption on Lipopolysaccharide Concentrations," *Am. J. Clin. Nutr.* 97, no. 5 (May 2013): 1053–61, doi: 10.3945/ajcn.112.051128, Epub April 10, 2013.
 13. J. Slavin, "Fiber and Prebiotics: Mechanisms and Health Benefits," *Nutrients* 5, no. 4 (April 22, 2013): 1417–35, doi: 10.3390/nu5041417.
 14. Ibid.
 15. R. J. Colman et al., "Caloric Restriction Delays Disease Onset and Mortality in Rhesus Monkeys," *Science* 325, no. 5937 (July 10, 2009): 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.

第九章

1. 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 (August 14, 2012): 4012–18, doi: 10.3748/wjg.v18.i30.4012.
2. Adlam, Katie, "Lactobacillus plantarum and Its Biological Implications," Microbe- Wiki, Kenyon College, <https://microbewiki.kenyon.edu/index>.

- php/Lactobacillus_plantarum_and_its_biological_implications.
3. “Lactobacillus acidophilus,” University of Maryland Medical Center, Medical Reference Guide, <http://umm.edu/health/medical/altmed/supplement/lactobacillus-acidophilus>.
 4. “Lactobacillus brevis,” MicrobeWiki, Kenyon College, https://microbewiki.kenyon.edu/index.php/Lactobacillus_brevis.
 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 (September 2011): 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-173010 Improved Self-Reported Digestive Comfort amongst a General Population of Adults: A Randomized, Open-Label, Controlled, Pilot Study,” *J. Dig. Dis.* 10, no. 1 (February 2009): 61–70, doi: 10.1111/j.1751-2980.2008.00366.x.
 8. G. Rizzardini et al., “Evaluation of the Immune Benefits of Two Probiotic Strains *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 (March 2012): 876–84, doi: 10.1017/S000711451100420X, Epub September 7, 2011.
 9. “*Bifidobacterium longum*,” MicrobeWiki, Kenyon College, https://microbewiki.kenyon.edu/index.php/Bifidobacterium_longum.
 10. 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 (January 2007): e124–30.
 11. 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 (January 2006): 247–53.

12. M. Kalliomaki et al., “Probiotics in Primary Prevention of Atopic Disease: A Randomised Placebo-Controlled Trial,” *Lancet* 375, no. 9262 (April 7, 2001): 1076–69.
13. 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 (October 2013): 1679–86, doi: 10.3945/jn.113.180794, Epub August 21, 2013.

結語

1. David Agus, *The End of Illness* (New York: Free Press, 2009).
2. I. Youngster et al., “Oral, Capsulized, Frozen Fecal Microbiota Transplantation for Relapsing *Clostridium difficile* Infection,” *JAMA* 312, no. 17 (November 5, 2014): 1772–78, doi: 10.1001/jama.2014.13875.
3. Emily Hollister, “Fresh Infusions: The Science behind Fecal Transplants,” Baylor College of Medicine, http://www.asmbanches.org/brcano/meetings/2014SprPpts/4.3Hollister_NCASM_2014.pdf.
4. Elsvan Nood et al., “Fecal Microbiota Transplantation,” *Curr. Opin. Gastroenterol.* 30, no. 1 (2014): 34–39.
5. “What Is FMT?,” The Fecal Transplant Foundation, <http://thefecaltransplantfoundation.org/what-is-fecal-transplant/>.
6. T. J. Borody et al., “Fecal Microbiota Transplantation: Indications, Methods, Evidence, and Future Directions,” *Curr. Gastroenterol. Rep.* 15, no. 8 (August 2013): 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 (January 2014): 97–105, doi: 10.1097/MOG.000000000000027.
8. T. J. Borody et al., Case Studies #941, 942, *Am. J. Gastroenterol.* 106, Suppl. 2 (October 2011): S352.
9. Kerry Brewster, “Doctor Tom Borody Claims Faecal Transplants Curing Incurable Diseases like Crohn’s,” ABC News Australia, March 2014, <http://www.abc.net.au/news/2014-03-18/sydney-doctor-claims-poo-transplants-curing-diseases/5329836>.

10. “For Medical Professionals: Quick, Inexpensive and a 90 Percent Cure Rate,” accessed January 13, 2015, <http://www.mayoclinic.org/medical-professionals/clinical-updates/digestive-diseases/quick-inexpensive-90-percent-cure-rate>.
11. 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/>
12. 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 (December 1, 2010): 60ra88, doi: 10.1126/scitranslmed.3001500.
13. R. W. Summers et al., “*Trichuris suis* Therapy for Active Ulcerative Colitis: A Randomized Controlled Trial,” *Gastroenterology* 128, no. 4 (April 2005): 825–32.
14. 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/>.
15. S. Reardon, “Gut-Brain Link Grabs Neuroscientists,” *Nature* 515 (November 13, 2014): 175–77, doi: 10.1038/515175a.