Ji-Young Lee, Ph.D., FAHA, FACN

Curriculum Vitae

Department of Nutritional Sciences
University of Connecticut
211 Roy E. Jones Building
Storrs, CT 06269-4017
TEL: (860) 486-1827
FAX: (860) 486-3674
e-mail: ji-young.lee@uconn.edu

EDUCATION

Ph.D. May 2002: Major in Nutrition
University of Nebraska, Lincoln
Dissertation: "Regulation of gene expression by dietary fatty acids in cholesterol metabolism"

M.S. May 1998: Major in Nutritional Science and Dietetics
University of Nebraska, Lincoln
Thesis: "Influence of dietary cholesterol and fatty acids on the composition of plasma low-density lipoproteins"

M.S. Feb 1994: Major in Food Chemistry
Kyung Hee University, Seoul, South Korea
Thesis: "Effect of addition of dietary fibers on the quality of Julpyun"

B.S. Feb 1991: Major in Foods and Nutrition
Kyung Hee University, Seoul, South Korea

PROFESSIONAL EXPERIENCE

Department Head (January 2019 – Present)
Department of Nutritional Sciences, University of Connecticut, Storrs, CT

Professor (August 2017 – Present).
Department of Nutritional Sciences, University of Connecticut, Storrs, CT

Associate Professor (July 2010 – July 2017),
Department of Nutritional Sciences, University of Connecticut, Storrs, CT

Member (October 2014 – Present)
Institute for Systems Genomics, University of Connecticut & The Jackson Laboratory

Assistant Professor (July 2005 – June 2010),
Department of Nutrition and Health Sciences, University of Nebraska, Lincoln, NE

Courtesy Appointment as Assistant Professor (December 2009 – July 2010),
Department of Food Science and Technology, University of Nebraska, Lincoln, NE

Postdoctoral Fellow (June 2002 – June 2005),
Department of Pathology, Wake Forest University School of Medicine, Winston-Salem, NC

HONORS/AWARDS

- Taconin Biosciences Academic Grant Program Award, August 2021.
- Fellow, American College of Nutrition, July 2019.
- Volunteer Recognition Award, American Heart Association, June 2019.

- Excellence in Research Award, College of Agriculture, Health and Natural Resources, University of Connecticut, February 2019.
- International Scholar, Department of Food and Nutrition, Kyung Hee University, Seoul, South Korea, 2017.
- Fellow, American Heart Association, Arteriosclerosis, Thrombosis, and Vascular Biology Council, May 2013.
- American Society for Nutrition, KNS Award, 2011.
- Recognition of Junior Faculty for Excellence in Research, Agriculture Research Division, University of Nebraska-Lincoln, 2009.
- Luella Selover Memorial Scholarship, 2001.
- Widaman Trust Distinguished Graduate Assistant Award, 2000.
- Undergraduate Scholarship, Kyung Hee University, Seoul, South Korea, 1989.

NOTABLE PROFESSIONAL ACTIVITIES

- Grant reviewer, NIH Special Emphasis ZRG1 DKUS-B (03) M Member Conflict: In Toxicology, Pharmacology and Hepatology, December 2021.
- Grant reviewer, American Heart Association Fellowship Basic Science 6, November 2021.
- Grant reviewer, American Heart Association Fellowship Basic Science 7, February 2021.
- Grant reviewer, NIH Hepatobiliary pathophysiology (HBPP), October 2020 (ad hoc).
- Adjunct professor, Department of Food and Nutrition, Yonsei University, Seoul, South Korea, September 2019 – August 2020.
- Grant reviewer, NIH COBRA, June 2020 (ad hoc).
- Grant reviewer, NIH Hepatobiliary pathophysiology (HBPP), February 2020 (ad hoc).
- Grant reviewer, American Heart Association Career Development Award Organ Basic Sciences 2, January 2020.
- Visiting research scholar, Department of Internal Medicine, Section of Rheumatology, Allergy and Clinical Immunology, Yale School of Medicine, September 2018 – December 2018.
- International Scholar, Kyung Hee University, Seoul, South Korea 2017-2018.
- Grant reviewer, American Heart Association Lipid & Thrombosis Fellowship, September 2018.
- Grant reviewer and Acting chair, NIH ZRG1 DKUS-H(54)R, March 2018 (ad hoc).
- Grant reviewer, American Heart Association Lipid Bsc 2 Fellowship, February 2018.
- Grant reviewer, NIH Hepatobiliary pathophysiology (HBPP), June 2017 (ad hoc).
- Grant reviewer, American Heart Association Lipid Bsc 2, April 2017.
- Grant reviewer, NIH ZRG1 EMNR-V, July 2016 (ad hoc).
- Grant reviewer, American Heart Association Lipid Bsc 2, April 2016.
- Grant reviewer, NIH Integrative Nutrition and Metabolic Processes (INMP) Study Section, February 2016 (ad hoc).
- Grant reviewer, American Heart Association Lipid Bsc 2, October 2015.
- Grant reviewer, NIH Integrative Nutrition and Metabolic Processes (INMP) Study Section, October 2015 (ad hoc).
- Grant reviewer, American Heart Association Lipid Bsc 2, April 2015.
- Grant reviewer, American Heart Association Lipid Bsc 2, October 2014.
- Grant reviewer, American Heart Association Strategically Focused Research Networks (SFRN) grant, May 2014.
- Grant reviewer, American Heart Association Lipid Bsc 2, April 2014.
- Grant reviewer, NIH NCCAM Special Emphasis Panel ZAT1 SM25, March 2012.

- Reviewer Editor, Frontiers in Cardiovascular Medicine – Lipidology, February 2021-present.
- Reviewer Editor, Frontiers in Nutrition – Nutrigenomics, February 2021-present.
- Editorial board member, Journal of Nutritional Biochemistry, July 2010-present.
- Editorial board member, Journal of Human Nutrition and Food Science, July 2013-present.
- Review editor, Journal of Medicinal Food, January 2011-present.
- Editorial board member, Nutrition Research and Practice, January 2016-present.
- Editorial board member, Integrative Medicine Research, January 2016-present.
- Editorial board member, Journal of Nutrition and Intermediary Metabolism, July 2014-present.
- Editorial board member, Journal of Nutrition and Health, May 2011-present.
- Editorial board member, Endocrinology & Diabetes Research, May 2012-present.
- Editorial board member, Food and Nutrition Sciences, August 2012-March 2014.

SOCIETY MEMBERSHIPS

- Member, Association of Nutrition Departments & Programs (Since 2021)
- Premium member, American Heart Association (Since 2010)
- Member, Korean Society for Food Science and Nutrition (Since 2011)
- Member, Korean-American Scientists and Engineers Association (Since 2018)
- Member, American Association for the Advancement of Science (Since 2005)
- Regular Member, American Society for Nutrition (Since 2006)
- Early Career Member, American Heart Association, Council of Atherosclerosis, Thrombosis and Vascular Biology (2003-2010)
- Associate Member, American Society for Nutritional Science (2003-2005)
- Student Member, American Society for Nutritional Sciences (1998-2002)
- Registered Dietitian, Korean Society for Registered Dietitian (Since 1991)

PUBLICATIONS

ORCID: 0000-0002-7945-793x

Peer-Reviewed Articles

1. C. L. Miller, L. Anto, C. Garcia, M-.B. Kim, A. Jain, A. A. Provatas, **J-.Y. Lee**, F. C. Nichols, C. N. Blesso. Gut microbiome-derived glycine lipids are diet-dependent modulators of hepatic injury and atherosclerosis. *J Lipid Res* 2021; (In the 2nd round review).
2. M. G. Mostofa, M. Tran. S. Gilling, G. Lee, O. Fraher, L. Jin, H. Kang, Y-.K. Park, **J-.Y. Lee**, L. Want, D-.J. Shin. miR-200c coordinates HNF1 homeobox B and Apolipoprotein O function in alcoholic fatty liver disease. *J Biol Chem* 2021; (In review).
3. C. T. Le, H. N. Dong, S. Y. Park, Y. K. Cho, H. Baek, D-.H. Choi, W. S. Park, S. Lee, Y. Lee, **J-.Y. Lee**, E-.H. Cho. Succinate induces liver fibrosis in a mouse model and GPR91 acts as an early marker of hepatic fibrosis. *Plos One* 2021; (In review).
4. Y. Li, M-.B. Kim, Y.-K. Park, **J.-Y. Lee**. Fucoxanthin metabolites exert anti-fibrogenic and antioxidant effects in hepatic stellate cells. *J Ag Food Res* 2022; (In press). epub ahead of print on Nov 24, 2021. doi.org/10.1016/j.jafr.2021.100245
5. H. Kang, M-.B. Kim, Y-.K. Park, **J-.Y. Lee**. A mouse model of the regression of alcoholic hepatitis: Monitoring the regression of hepatic steatosis, inflammation, oxidative stress, and NAD^+ metabolism upon alcohol withdrawal. *J Nutr Biochem* 2022; 99:108852. epub ahead of print on Sept 21, 2021. doi.org/10.1016/j.jnutbio.2021.108852

6. K. C. Tan, T. X. Pham, Y. Lee, **J-.Y. Lee**, M. J. Balunas. Identification of apocarotenoids as chemical markers of anti-inflammatory activity for spirulina supplements. *J Agr Food Chem* 2021; 69:12674-12685. upub ahead of print on October 21, 2021. doi.org/10.1021/acs.jafc.1c03015
7. H. Kang, Y. Lee, M-.B. Kim, S. Hu, H. Jang, Y-.K. Park, **J-.Y. Lee**. The loss of histone deacetylase 4 in macrophages exacerbates hepatic and adipose tissue inflammation in male but not in female mice with diet-induced nonalcoholic steatohepatitis. *J Pathology* 2021; 255:319-329. epub ahead of print on July 19, 2021. doi.org/10.1002/path.5758
8. M-.B. Kim, Y. Lee, M. Bae, H. Kang, S. Hu, T. X. Pham, J-.Y. Lee, Y-.K. Park. Sugar kelp (Saccharina latissima) inhibits hepatic inflammation and fibrosis in a mouse model of diet-induced nonalcoholic steatohepatitis. *J Nutr Biochem* 2021; 97:108799. epub ahead of print on June 10, 2021. doi: 10.1016/j.jnutbio.2021.108799
9. H. Kang, Y-.K. Park. **J-.Y. Lee**. Nicotinamide riboside, an NAD^+ precursor, attenuates inflammation and oxidative stress by activating sirtuin 1 in alcohol-stimulated macrophages. *Lab Invest* 2021; 101:1225-1237. epub ahead of print on April 12, 2021. doi: 10.1038/s41374-021-00599-1
10. S-.Y. Yu, M-.B. Kim, Y-.K. Park, M. Bar, H. Kang, S. Hu, T. X. Pham, R. Carpenter, J. Lee, O-.H. Lee, **J-.Y. Lee**, Y-.C. Kim. Anthocyanin-rich aronia berry extract mitigates high-fat and high-sucrose diet-induced adipose tissue inflammation by inhibiting NF-κB activation in macrophages. *J Med Food* 2021; 24:586-594. epub ahead of print on March 22, 2021. doi: 10.1089/jmf.2020.0127
11. M-.B. Kim, H. Kang, Y. Li, Y-.K. Park, **J-.Y. Lee**. Fucoxanthin inhibits lipopolysaccharide-induced inflammation and oxidative stress by activating nuclear factor E2-related factor 2 via the phosphatidylinositol 3-kinase/AKT pathway in macrophages. *Eur J Nutr* 2021; 60(6):3315-3324. epub ahead of print on February 17, 2021. doi: 10.1007/s00394-021-02509-z
12. C. Caceres, M-.B. Kim, M. Bae, T. X. Pham, Y. Lee, S. Hu, E. O'Neill, B. Kim, Y-.K. Park, **J-.Y. Lee**. The effect of cranberry consumption on lipid metabolism and inflammation in human apolipoprotein A-I transgenic mice fed a high fat and high cholesterol diet. *Br J Nutr* 2021; 126: 183-190. epub ahead of print on October 16, 2020. doi: 10.1017/S0007114520004080
13. S. J. Baek, B. Hammock, I. K. Hwang, Q. X. Li, N. Moustaid-Moussa, Y. Park, S. Safe, N. Suh, S. S. Yi, D. C. Zeldin, Q. Zhong, J. A. Bradbury, M. L. Edin, J. P. Graves, H. Y. Jung, Y. H. Jung, M-.B. Kim, W. Kim, J. Lee, H. Li, J-.S. Moon, I. D. Yoo, Y. Yue, **J-.Y. Lee***, H. J. Han*. Natural products in the prevention of metabolic diseases: Lessons learned from the 20th Frontier Scientists Workshop. *Nutrients* 2021; 13:1881. *, Co-corresponding author. doi: 10.3390/nu13061881
14. H. Kang, Y-.K. Park. **J-.Y. Lee**. Inhibition of alcohol-induced inflammation and oxidative stress by astaxanthin is mediated by its opposite actions in the regulation of sirtuin 1 and histone deacetylase 4 in macrophages. *BBA Mol Cell Biol of Lipids* 2021; 1866:158838. epub ahead of print on October 13, 2020. (PMID: 33065288). doi: 10.1016/j.bbalip.2020.158838
15. A. C. Donepudi, Y. Lee, **J-.Y. Lee**, J. D. Schuetz, J. E. Manautou. Multidrug resistance-associated protein 4 (Mrp4) is a novel genetic factor in the pathogenesis of obesity and diabetes. *FASEB J* 2021; 35:e21304. doi: 10.1096/fj.202001299RR
16. H. Kang, Y. Lee, M. Bae, Y-.K. Park, **J-.Y. Lee**. Astaxanthin inhibits alcohol-induced inflammation and oxidative stress in macrophages in a sirtuin 1-dependent manner. *J Nutr Biochem* 2020; 85:108477. epub ahead of print on August 12, 2020. (PMID: 32801029). doi: 10.1016/j.jnutbio.2020.108477

17. M-.B. Kim, Y. Lee, M. Bae, H. Kang, T.X. Pham, S. Hu, **J-.Y. Lee**, Y-.K Park. Comprehensive characterization of metabolic, inflammatory and fibrotic changes in a mouse model of non-alcoholic steatohepatitis. *J Nutr Biochem* 2020; 85:108463. epub ahead of print on July 10, 2020. doi: 10.1016/j.jnutbio.2020.108463
18. S. Hu, M. Bae, Y-.K. Park, **J-.Y. Lee**. n-3 PUFA inhibit TGFβ1-induced pro-fibrogenic gene expression by ameliorating the repression of PPARγ in hepatic stellate cells. *J Nutr Biochem* 2020; 85;108478. epub ahead of print on June 15, 2020. doi: 10.1016/j.jnutbio.2020.108452
19. M. Bae, Y. Lee, T. X. Pham, Y-.K. Park, S. Hu, **J-.Y. Lee**. Astaxanthin inhibits the reduction of glycolysis during the activation of hepatic stellate cells. *Life Sci* 2020; 256: 117926. epub ahead of print on June 12, 2020. doi: 10.1016/j.lfs.2020.117926
20. A. C. Donepudi, G. J. Smith, O. Aladeloku, Y. Lee, S. J. Toro, M. Phof, A. L. Slitt, **J-.Y. Lee**, J. D. Schuetz, L. Wang, J. E. Manautou. Lack of multidrug-resistance associated protein 4 prolongs partial hepatectomy-induced hepatic steatosis. *Toxicol Sci* 2020; 175:301-311. epub ahead of print on March 6, 2020. doi: 10.1093/toxsci/kfaa032
21. C. L. Miller, C. Jiang, G. H. Norris, C. Carcia, S. Seibel, L. Anto, **J-.Y. Lee**, C. N. Blesso. Cow's milk polar lipids reduce atherogenic lipoprotein cholesterol, modulate gut microbiota, and attenuate atherosclerosis development in LDL-receptor knockout mice fed a Western-type diet. *J Nutr Biochem* 2020; 79: 108351. epub ahead of print on Jan 23, 2020. doi: 10.1016/j.jnutbio.2020.108351
22. M. Bae, M-.B. Kim, Y-.K. Park, **J-.Y. Lee**. Health benefits of fucoxanthin in the prevention of chronic disease. *BBA Mol Cell Biol of Lipids* 2020; 1865:158618. epub ahead of print on January 10, 2020. doi: 10.1016/j.bbalip.2020.158618
23. S. Hu, E-.H. Cho, **J-.Y. Lee**. Histone deacetylase 9: Its role in the pathogenesis of diabetes and other chronic diseases. *Diabetes Metab J* 2020; 44: 234-244. epub ahead of print on March 24, 2020. doi: 10.4093/dmj.2019.0243
24. Q. Hu, S. Hu, E. Fleming, **J-.Y. Lee**, Y. Luo. Chitosan-Caseinate-Dextran Ternary Complex Nanoparticles for Potential Oral Delivery of Astaxanthin with Significantly Improved Bioactivity. *Int J. Biol Macromole* 2020; 151: 747-756. doi: 10.1016/j.ijbiomac.2020.02.170
25. Q. Hu, **J-.Y. Lee**, Y. Luo. Nanoparticles targeting hepatic stellate cells for the treatment of liver fibrosis. *Engeneered Sci* 2019; 6:12-21. doi: 10.30919/es8d507
26. Y. Lee, C. Y. Han, M. Bae, Y-.K. Park, **J-.Y. Lee**. Egg phospholipids exert inhibitory effect on intestinal cholesterol absorption in mice. *Nutr Res Pract* 2019; 13:295-301. epub ahead of print on June 20, 2019. doi: 10.4162/nrp.2019.13.4.295
27. D. Li, C. Rodia, Z. Johnson, M. Bae, A. Muter, A. Heussinger, N. Tambini, A. Longo, H. Dong, **J-.Y. Lee**, A. B. Kohan. Intestinal basolateral lipid substrate transport (BLST) is linked to chylomicron secretion and is regulated by apoC-III. *J Lipid Res* 2019; 60:1503-1515. doi: 10.1194/jlr.M092460
28. M. Bae, Y. Lee, Y-.K. Park, D. Shin, P. Joshi, S. Hong, N. Alder, Sung I. Koo, **J-.Y. Lee**. Astaxanthin attenuates the increase in mitochondrial respiration during the activation of hepatic stellate cells. *J Nutr Biochem* 2019; 71:82-89. epub ahead of print on June 20, 2019. doi: 10.1016/j.jnutbio.2019.06.001
29. T. X. Pham, M. Bae, M-.B. Kim, Y. Lee, S. Hu, H. Kang, Y-.K. Park. **J-.Y. Lee**. Nicotinamide riboside, an NAD+ precursor, attenuates the development of liver fibrosis in a diet-induced mouse model of liver fibrosis. *BBA Molecular Basis of Disease* 2019; 1865:2451-2463. epub ahead of print on June 11, 2019. doi: 10.1016/j.bbadis.2019.06.009

30. Y. Lee, S. Hu, Y-.K. Park, **J-.Y. Lee**. Protective actions of carotenoids against non-alcoholic fatty acids disease. *Prev Nutr Food Sci* 2019; 24:103-113. doi: 10.3746/pnf.2019.24.2.103
31. M. Bae, M-.B. Kim, H. Kang, Y-.K. Park, **J-.Y. Lee**. Comparison of carotenoids for their anti-fibrogenic effects in hepatic stellate cells. *Lipids* 2019; 54:401-410. epub ahead of print on May 29, 2019. doi: 10.1002/lipd.12157
32. M-.B. Kim, M. Bae, S. Hu, H. Kang, Y-.K. Park, **J-.Y. Lee**. Fucoxanthin exerts anti-fibrogenic effects in hepatic stellate cells. *Biochem Biophy Res Comm* 2019; 513 (3): 657-662. epub ahead of print on April 11, 2019. doi: 10.1016/j.bbrc.2019.04.052
33. Y. Lee, J-**.Y. Lee**. Blackcurrant (Ribes nigrum) Extract Exerts an Anti-inflammatory Action by Modulating Macrophage Phenotypes. *Nutrients* 2019; 11(5);975. doi: 10.3390/nu11050975
34. C. M. White, **J-.Y. Lee**. The impact of turmeric or its curcumin extract on liver health: A systemic review of clinical trials. *Pharm Pract* 2019; 17(1):1350. doi: 10.18549/PharmPract.2019.1.1350
35. T. X. Pham, Y. Lee, M. Bae, S. Hu, H. Kang, M-.B. Kim, Y-.K. Park, **J-.Y. Lee**. Spirulina supplementation in a mouse model of liver fibrosis reduced the pro-inflammatory response of splenocytes. *Br J Nutr* 2019; 121:748-755. epub ahead of print on February 26, 2019. doi: 10.1017/S0007114519000126
36. Y. Lee, T. X. Pham, M. Bae, S. Hu, E. O'Neill, O. K. Chun, M. J. Han, S. I. Koo, Y-.K. Park. **J-.Y. Lee**. Blackcurrant (*Ribes nigrum*) prevents obesity-induced non-alcoholic steatohepatitis in mice. *Obesity* 2019; 27:112-120. doi: 10.1002/oby.22353
37. D. Li, C. Rodia, Z. Johnson, M. Bae, A. Muter, A. Heussinger, N. Tambini, A. Longo, H. Dong, **J-.Y. Lee**, A. B. Kohan. Intestinal basolateral lipid substrate transport (BLST) is linked to chylomicron secretion and it regulated by apoC-III. *J Lipid Res* 2019; 60:1503-1515. doi: 10.1194/jlr.M092460
38. C. L. Miller, G. H. Norris, C. Jiang, J. Kry, A. Vitols, C. Carcia, Y-.K. Park. **J-.Y. Lee**, C. N. Blesso. Long-term supplementation of black elderberry improves HDL function, but promote hyperlipidemia with no effect on atherosclerosis development in apolipoprotein E-knockout mice. *Mol Nutr Food Res* 2018; 62: 1800404. epub ahead of print on September 29, 2018. doi: 10.1002/mnfr.201800404
39. Q. Hu, M. Bae, E. Fleming, **J-.Y. Lee**, Y. Luo. Biocompatible polymeric nanoparticles with exceptional gastrointestinal stability as oral delivery vehicles for lipophilic bioactives. *Food Hydrocolloids* 2018; 89:386-395. doi: 10.1016/j.foodhyd.2018.10.057
40. T. Wang, Q. Hu, **J-.Y. Lee**, Y. Luo. Solid lipid-polymer hybrid nanoparticles by in-situ conjugation for oral delivery of astaxanthin. *J Agr Food Chem* 2018; 66:9473-9480. epub ahead of print on August 21, 2018. doi: 10.1021/acs.jafc.8b02827
41. C. Farruggia, M-.B. Kim, M. Bae, Y. Lee, T. X. Pham, Y. Yang, M. J. Han, Y-.K. Park, **J-.Y. Lee**. Astaxanthin exerts anti-inflammatory and antioxidant properties in macrophages in NRF2-dependent and independent manners. *J Nutr Biochem* 2018; 62:202-209. epub ahead of print on September 19, 2018. doi: 10.1016/j.jnutbio.2018.09.005
42. J. Wu, Y-.K. Park, M. Lin, **J-.Y. Lee**, L. Wang. Loss of PDK4 switches the hepatic NF-κB/TNF pathway from pro-survival to pro-apoptosis. *Hepatology* 2018; 68:1111-1124. epub ahead of print on March 30, 2018. doi: 10.1002/hep.29902
43. T. Wang, M. Bae, J-.Y. Lee, Y. Luo. Solid lipid-polymer hybrid nanoparticles prepared with natural biomaterials: A new platform for oral delivery of lipophilic bioactives. *Food Hydrocolloids* 2018; 84:581-592. doi: 10.1016/j.foodhyd.2018.06.041

44. T. X. Pham, M. Bae, Y. Lee, Y-.K. Park. **J-.Y. Lee**. Transcriptional and post-transcriptional repression of histone deacetylases by docosahexaenoic acid in macrophages. *J Nutr Biochem* 2018; 57:162-169. epub ahead of print on March 10, 2018. (PMID: 29734115). doi: 10.1016/j.jnutbio.2018.03.002
45. M. Bae, Y-.K. Park, **J-.Y. Lee**. Food components with antifibrotic activity and implications in prevention of liver disease. *J Nutr Biochem* 2018; 55:1-11. Epub ahead of print on November 16, 2017. (PMID: 29268106). doi: 10.1016/j.jnutbio.2017.11.003
46. B. Kim, M. Bae, Y-.K. Park, H. Ma, T. Yuan, N. Seeram, **J-.Y. Lee**. Blackcurrant anthocyanins stimulated cholesterol transport via post-transcriptional induction of LDL receptor in Caco-2 cells. *Eur J Nutr* 2018; 57:405-415. Epub ahead of print on July 17, 2017. (PMID: 28718016). doi: 10.1007/s00394-017-1506-z
47. T.X. Pham, **J-.Y. Lee**. Epigenetic regulation of adipokines. *Int J Mol Sci* 2017; 18:1740; doi:10.3390/ijms18081740.
48. T. X. Pham, Y-.K. Park, M. Bae, **J-.Y. Lee**. The potential role of an endotoxin-like mechanism for the anti-inflammatory effect of *Spirulina platensis* in macrophages: Insight into energy phenotype. *J Med Food* 2017; 20: 201-210. Epub ahead of print on January 25, 2017. (PMID: 28121488). doi: 10.1089/jmf.2016.0119
49. B. Kim, C. Farruggia, C. S. Ku, T. X. Pham, Y. Yang, M. Bae, Casey J. Wegner, N. J. Farrell, E. Harness, Y-.K. Park, Sung I. Koo, **J-.Y. Lee.** Astaxanthin inhibited inflammation and fibrosis in the liver and adipose tissue of mouse models of diet-induced obesity and nonalcoholic steatohepatitis. *J Nutr Biochem* 2017; 43:27-35. epub ahead of print on March 2, 2016. (PMID: 28193580). doi: 10.1016/j.jnutbio.2016.01.006
50. L. Xie, T. M. Vance, B. Kim, S. Lee, C. Caceres, Y. Wang, **J-.Y. Lee**, O. K. Chun, B. W. Bolling. Aronia berry polyphenol consumption reduces plasma total and low-density lipoprotein cholesterol in former smokers without lowering biomarkers of inflammation and oxidative stress: a randomized trial. *Nutr Res* 2017; 37:67-77. (PMID: 28215316). doi: 10.1016/j.nutres.2016.12.007
51. Y. Yang, M. Bae, Y-.K. Park, Y. Lee, T. X. Pham, S. Rudraiah, J. Manautou, S. I. Koo, **J-.Y. Lee**. Histone deacetylase 9 plays a role in the anti-fibrogenic effect of astaxanthin in hepatic stellate cells. *J Nutr Biochem* 2017; 40: 172-177. epub ahead of print on Nov 12, 2016. (PMID: 27915160). doi: 10.1016/j.jnutbio.2016.11.003
52. S. M. Pillai, N. H. Sereda, M. L. Hoffman, E. V. Valley, T. D. Crenshaw, Y-.K. Park, **J-.Y. Lee**, S. A. Zinn, K. E. Govoni. Effect of poor maternal nutrition during gestation on bone development and mesenchymal stem cell activity in offspring. PlosOne 2016; 11:e0168382. (PMID: 27942040)
53. B. Kim, S. Lee, Y-.K. Park, C. S. Ku, T. X. Pham, C. J. Wegner, Y. Yang, S. I. Koo, O. K. Chun, **J-.Y. Lee.** Blueberry, blackberry, and blackcurrant differentially affect plasma lipids and pro-inflammatory markers in diet-induced obesity mice. *Nutr Res Pract* 2016; 10:494-500. (PMID: 27698956).
54. T. X. Pham, Y-.K. Park, **J-.Y. Lee**. Anti-inflammatory effects of *Spirulina platensis* extract via the modulation of histone deacetylases. *Nutrients* 2016; 8:E381. Epub ahead of print on June 21, 2016. (PMID: 27338466).
55. T.X. Pham, **J-.Y. Lee**. Anti-inflammatory effect of *Spirulina platensis* in macrophages is beneficial for adipocyte differentiation and maturation by inhibiting Nuclear factor-κB pathway in 3T3-L1 adipocytes. *J Med Food* 2016; 19:535-542. epub ahead of print on May 20, 2016. (PMID: 27206252)

56. S. Patel, A. Akalkotkar, J. J. Bivona III, **J-.Y. Lee**, Y-.K. Park, M. Yu, S. Colpitts, M. Vajdy. Vitamin A or E and a catechin synergize as vaccine adjuvant to enhance immune responses in mice through induction of early interleukin-15 but not interleukin-1β responses. *Immunology* 2016; 148:352-362. epub ahead of print on May 2, 2016. (PMID: 27135790)
57. M. Surendran-Nair, A. Kollanoor-Johny, S. Ananda-Baskaran, C. Norris, **J-.Y. Lee**, K. Venkitanarayanan. Selenium reduces enterohemorrhagic Escherichia coli O157:H7 verotoxin production and globotriaosylceramide receptor expression on host cells. *Future Microbiol* 2016; 11:745-756. epub ahead of print on May 18, 2016. (PMID: 27191971)
58. L. Xie, S. Lee, T. M. Vance, Y. Wang, B. Kim, **J-.Y. Lee**, O. K. Chun, B. W. Bolling. Bioavailability of anthocyanins and colonic polyphenol metabolites following consumption of aronia berry extract. *Food Chem* 2016; 211:860-868. (PMID: 27283706)
59. Y. Yang, M. Bae, B. Kim, Y-.K. Park, S. I. Koo, **J-.Y. Lee**. Astaxanthin prevents and reverses the activation of mouse primary hepatic stellate cells. *J Nutr Biochem* 2016; 29:21-26. epub ahead of print on Nov 24, 2015. (PMID: 26895661)
60. C. E. Dugan, D. Aguilar, Y-.K. Park, **J-.Y. Lee**, M-L. Fernandez. Dietary consumption lowers systemic inflammation and liver enzymes in typically low-dairy consumers with clinical characteristics of metabolic syndrome. *J Am Coll Nutr* 2016; 35:255-261. epub ahead of print on Nov 23, 2015. (PMID: 26595359)
61. G. Karim., K. Menzies, D. Ryu, C. J. Wegner, X. Wang, E. R. Ropelle, N. Moullan, H. Zhang, A. Perino, V. Lemos, B. Kim, Y-.K. Park, P. Alessandra, T. X. Pham, Y. Yang, C. S. Ku, S. I. Koo, A. Fomitchova, C. Canto, K. Schoonjans, A. A. Sauve, **J-.Y. Lee***, J. Auwerx. Eliciting the mitochondrial unfolded protein response via NAD+ repletion prevents fatty liver disease. *Hepatology* 2016; 63:1190-1204. epub ahead of print on Sept 25, 2015. (PMID: 26404765) *** Shared corresponding authorship**. (PMID: 31195117)
62. S. Lee, B. Kim, S. D. Y, T. Vance, J.S Lee, **J-.Y. Lee, S**. I. Koo, D.O. Kim, M. H. Drissi, O. K. Chun. Relationship between oxidative stress and bone mass in obesity and effects of berry supplementation on bone remodeling in obese male mice: an exploratory study. *J Med Foods* 2015; 18:476-482. epub ahead of print on Sept 8, 2014. (PMID: 25198411)
63. C. S. Ku, B. Kim, T. X. Pham, Y. Yang, Y-.K. Park, C. L. Weller, T. Carr, **J-.Y. Lee**. Hypolipidemic effect of a blue-green alga (*Nostoc commune*) is attributed to its nonlipid fraction by decreasing intestinal cholesterol absorption in C57BL/6J mice. *J Med Food* 2015; 18:1214-1222. epub ahead of print on July 10, 2015. (PMID: 26161942)
64. C. S. Ku, B. Kim, T. X. Pham, Y. Yang, C. J. Wegner, Y-.K. Park, M. Balunas, **J-.Y. Lee**. Blue-green algae inhibit the development of atherosclerotic lesions in apolipoprotein E knockout mice. *J Med Food* 2015; 18:1299-1306. epub ahead of print on Nov 13, 2015. (PMID: 26566121)
65. M-Y. Chung, E. Mah, C. Masterjohn, S. K. Noh, H. J. Park, R. M, Clark, Y-.K. Park, **J-.Y. Lee**, R. S. Bruno. Green tea lowers hepatic COX-2 and prostaglandin E2 in rats with dietary fat-induced nonalcoholic steatohepatitis. *J Med Food* 2015; 18:648-655. epub ahead of print on Dec 2, 2014. (PMID: 25453513)
66. T. Benn, B. Kim, Y-.K. Park, Y. Yang, T. X. Pham, C.S. Ku, C. Farruggia, E. Harness J. A. Smyth, **J-.Y. Lee**. Polyphenol-rich blackcurrant extract exerts hypocholesterolemic and hypoglycemic effects in mice fed a diet containing high fat and cholesterol. *Br J Nutr* 2015: 113:1697-1703. (PMID: 25899149)
67. Y. Yang, B. Kim, Y-.K. Park, S. I. Koo, **J-.Y. Lee**. Astaxanthin prevents transforming growth factor β1-induced pro-fibrogenic gene expression by inhibiting Smad3 activation in hepatic stellate cells. *Biochimica Biophysica Acta* 2015; 1850:178-185. (PMID: 25450180)

68. Y. Yang, T. X. Pham, C. J. Wegner, B. Kim, C. S. Ku, Y-.K. Park, **J-.Y. Lee**. Astaxanthin lowered plasma triglyceride and increased hepatic antioxidant gene expression in diet-induced obesity mice. *Br J Nutr* 2014; 112:1797-1804. (PMID: 25328157)
69. T. Benn, B. Kim, Y-.K. Park, C. J. Wegner, E. Harness, T-G. Nam, D-O. Kim, J. S. Lee, **J-.Y. Lee**. Polyphenol-rich blackcurrant extract prevents inflammation in diet-induced obesity mice. *J Nutr Biochem* 2014; 25:1019-1025. (PMID: 25034502)
70. W. Sittiwong, D. K. Zinnel, R. J. Fenton, D. Marshall, C. F. Story, B. Kim, **J-.Y. Lee**, R. Powers, R. G. Barletta, P. H. Dussault. Development of cyclobutene- and cyclobutane-functionalized fatty acids with inhibitory activity against *Mycobacterium tuberculosis*. *ChemMedChem* 2014; 9:1838-1849. (PMID: 24902951)
71. C. J. Andersen, **J-.Y. Lee**, C. N. Blesso, T. P. Carr, M-L. Fernandez. Egg intake during carbohydrate restriction alters peripheral blood mononuclear cell inflammation and cholesterol homeostasis in metabolic syndrome. *Nutrients* 2014; 6:2650-2667. (PMID: 25045936)
72. Y. Yang, Y-.K. Park, B. Kim, **J-.Y. Lee**. Effects of long-term supplementation of blue-green algae on lipid metabolism in C57BL/6J mice. *J Nutr Health and Food Sci* 2014; 2:1-6. (PMID: 25614902)
73. S. Lee, B. Kim, Y. Yang, T. X. Pham, Y-.K. Park, J. Manatou, S. I. Koo, O. K. Chun, **J-.Y. Lee**. Berry anthocyanins suppress the expression and secretion of pro-inflammatory mediators in macrophages by inhibiting nuclear translocation of NF-κB independent of NRF2-mediated mechanism. *J Nutr Biochem* 2014; 25:404-411. (PMID: 24565673)
74. C. Masterjohn, Y-.K. Park, **J-.Y. Lee**, S. K. Noh, R. S. Bruno. Dietary fructose feeding increases adipose methylglyoxal accumulation in association with low expression and activity of glyoxalase-2. *Nutrients* 2013; 5:3311-3328. (PMID: 23966111)
75. Y. Yang, B. Kim, **J-.Y. Lee**. Astaxanthin: structure, metabolism, and health benefits. *J Hum Nutr Food Sci* 2013; 1:1003 (1-11).
76. C. Masterjohn, E. Mah, Y-.K. Park, R. Pei, **J-.Y. Lee**, J. E. Manatou, R. S. Bruno. Acute glutathione depletion induces hepatic methylglyoxal accumulation by impairing its detoxification to D-lactate. *Expt Biol Med* 2013; 238:360-369. (PMID: 23760001)
77. C. J. Andersen, C. N. Blesso, **J-.Y. Lee**, J. Barona, D. Shah, M. J. Thomas, M. L. Fernandez. Egg consumption during carbohydrate restriction modulates HDL lipid composition and increases the cholesterol-accepting capacity of serum in metabolic syndrome. *Lipids* 2013; 48:557-567. (PMID: 23494579)
78. B. Kim, Y-.K. Park, C. J. Wegner, B. W. Bolling, **J-.Y. Lee**. Polyphenol-rich chokeberry extract regulates the expression of genes for lipogenesis and cholesterol transport in Caco-2 cells. *J Nutr Biochem* 2013; 24:1564-1570. (PMID: 23517916)
79. B. Kim, C. S. Ku, T. X. Pham, Y-.K. Park, D. A. Martin, L. Xie, **J-.Y. Lee**, B. W. Bolling. *Aronia melanocarpa* (chokeberry) polyphenol rich extract improves antioxidant function and reduces total plasma cholesterol in apolipoprotein E knockout mice. *Nutr Res* 2013; 33:406-413. (PMID: 23684442)
80. C. S. Ku, Y. Yang, Y-.K. Park, **J-.Y. Lee**. Health Benefits of blue-green algae: Prevention of cardiovascular disease and nonalcoholic fatty liver disease. *J Med Food* 2013; 16:103-111. (PMID: 23402636)
81. C. S. Ku, T. X. Pham, Y-.K. Park, B. Kim, M. Shin, I. Kang, **J-.Y. Lee**. Edible blue-green algae reduce the production of pro-inflammatory cytokines by inhibiting NF-κB pathway in macrophages and splenocytes. *Biochimica Biophysica Acta* 2013; 1830:2981-2988. (PMID: 23357040)

82. C. J. Wegner, B. Kim, **J-.Y. Lee**. Trust your gut: Galvanizing nutritional interest in intestinal cholesterol metabolism for protection against cardiovascular diseases. *Nutrients* 2013; 5: 208-222. (PMID: 23325147)
83. T. X. Pham, **J-.Y. Lee**. Dietary regulation of histone acetylase and deacetylase for the prevention of metabolic diseases. *Nutrients* 2012; 4:1868-1886. (PMID: 23363995)
84. J. Barona, C. N. Blesso, C. J. Andersen, Y-.K. Park, **J-.Y. Lee,** M-L. Fernandez. Grape consumption increases anti-inflammatory markers and upregulates peripheral nitric oxide synthase in the absence of dyslipidemias in men with metabolic syndrome. *Nutrients* 2012; 4:1945-1957. (PMID: 23222963)
85. Y-.K. Park, T. X. Pham, **J-.Y. Lee**. Lipopolysaccharide represses the expression of ATP-binding cassette transporter G1 and scavenger receptor class B, type I in murine macrophages. *Inflamm Res* 2012; 61:465-472. (PMID: 22240665)
86. C. S. Ku, Y-.K. Park, S. L. Coleman, **J-.Y. Lee**. Unsaturated fatty acids repress expression of ATP binding cassette transporter A1 and G1 in RAW 264.7 macrophages. *J Nutr Biochem* 2012; 23: 1271-1276. (PMID: 22209005)
87. **J-.Y. Lee**, Y-.K. Park, S. I. Koo. ATP binding cassette transporter A-I and HDL metabolism: Effects of fatty acids. *J Nutr Biochem* 2012; 23:1-7. (PMID: 21684139)
88. J. E. Kim, R. M. Clark, Y-.K. Park, **J-.Y. Lee**, M. L. Fernandez. Lutein decreases oxidative stress and inflammation in liver and eyes of guinea pigs fed a hypercholesterolemic diet. *Nutr Res Pract* 2012; 6:113-119. (PMID: 22586499)
89. H. J. Park, **J-.Y. Lee**, M.Y. Chung, Y-.K. Park, A. Bower, S. I. Koo, C. Giardina, R. S. Bruno. Green tea extract suppressed NFκB activation and inflammatory responses in a diet-induced obese rats with nonalcoholic steatohepatitis. *J Nutr* 2012; 142:57-63. (PMID: 22157544)
90. J. J. Jones, Y-.K. Park, **J-.Y. Lee**, R. H. Lerman, M. L. Fernandez. A Mediterranean-style, low-glycemic-load, diet reduces the expression of HMG-CoA reductase in mononuclear cells and correlated with decreases in insulin in women with metabolic syndromes. *Nutr Res* 2011; 31:659-664. (PMID: 22024489)
91. Y. Yang, J. M. Seo, A. Nguyen, T. X. Pham, H. J. Park, Y-.K. Park, R. S. Bruno, **J-.Y. Lee**. Astaxanthin from *Haematococcus pluvialis* lowered plasma lipid concentrations and increased antioxidant defense in apolipoprotein E knockout mice. *J Nutr* 2011; 141:1611-1617. (PMID: 21734060)
92. S. L. Coleman, Y-.K. Park, **J-.Y. Lee**. Unsaturated fatty acids repress the expression of adipocyte fatty acid binding protein via the modulation of histone deacetylation in RAW 264.7 macrophages. *Eur J Nutr* 2011; 50:323-330. (PMID: 21046125)
93. J. M. Seo, **J-.Y. Lee**, G. E. Ji, J. C. You. Down-regulation of ATP-binding cassette transporter G1 expression by unmethylated CpG oligodeoxynucleotides (CpG ODNs) in RAW 264.7 macrophages. *Expt Mol Med* 2011; 43:510-516. (PMID: 21737995)
94. S. J. Ehlers, S. M. Larson, H. E. Rasmussen, Y-.K. Park, **J-.Y. Lee**. High-density lipoprotein metabolism in human apolipoprotein B transgenic/brown adipose tissue deficient mice, a model of obesity-induced hyperinsulinemia. *Appl Physiol Nutr Metab* 2011; 36:313-322. (PMID: 21574779)
95. Y. Yang, Y-.K. Park, **J-.Y. Lee**. In vitro and in vivo safety assessment of edible blue green algae, *Nostoc commune var. sphaeroides Kützing* and *Spirulina plantensis*. *Food Chem Toxicol* 2011; 49:1560-1564. (PMID: 21473896)

96. C. S. Ku, H. E. Rasmussen, Y-.K. Park, E. D. Jesch, **J-.Y. Lee**. Unsaturated fatty acids repress the expression of ATP-binding cassette transporter A1 in HepG2 and FHs 74 Int cells. *Nutr Res* 2011; 31:278-285. (PMID: 21530801)
97. H. J. Park, D. A. DiNatale, M-Y. Chung, Y-.K. Park, **J-.Y. Lee**, S. I. Koo, M. O'Connor, J. E. Manautou, R. S. Bruno. Green tea extract attenuates hepatic steatosis by decreasing adipose lipogenesis and enhancing hepatic antioxidant defenses in ob/ob mice. *J Nutr Biochem* 2011; 22:151-159. (PMID: 20655714)
98. V. L. Schlegel, R. Zbasnik, B. H. Lee, T. P. Carr, **J-.Y. Lee**, C. L. Weller, S. L. Cuppett. Characterization of potential health promoting lipids in the co-products of de-flossed milkweed. *J Food Chemistry* 2010; 126:15-20.
99. E. D. Jesch, J. M. Seo, T. P. Carr, **J-.Y. Lee**. Sitosterol reduces mRNA and protein expression levels of Niemann-Pick C1-Like 1 (NPC1L1) in FHs 74 Int cells. *Nutr Res 2009*; 29: 859-866. (PMID: 19963159)
100. J. T. Hoi, C. L. Weller, V. L. Schlegel, S. L. Cuppet, **J-.Y. Lee**, T. P. Carr. Sorghum distillers dried grain lipid extract increases cholesterol excretion and decreases plasma and liver cholesterol concentration in hamsters. *J Funct Food* 2009; 1: 381-386.
101. H. E. Rasmussen, I. Martinez, **J-.Y. Lee**, J. Walter. Alteration of the murine gastrointestinal microbiota by edible blue-green algae. *J Appl Microbiol* 2009; 107: 1108-1118. (PMID: 19486425)
102. H. E. Rasmussen, K. R. Blobaum, E. D. Jesch, C. S. Ku, Y-.K. Park, F. Lu, T. P. Carr, **J-.Y. Lee**. Hypocholesterolemic effect of *Nostoc commune var sphaeroides Kützing*, an edible blue-green alga. *Eur J Nutr* 2009; 48:387-394. (PMID: 19404563)
103. S. Shrestha, S. J. Ehlers, **J-.Y. Lee**, M-L. Fernandez, S. I. Koo. Dietary green tea extract lowers plasma and hepatic triglyceride and decreases the expression of SREBP-1c mRNA and its responsive genes in fructose-fed ovariectomized rats. *J Nutr* 2009; 139:640-645. (PMID: 19193814)
104. A. Mulya, **J-.Y. Lee**, A. K. Gebre, E. Y. Boudyguina, S-K. Chung, T. L. Smith, P. L. Colvin, X. C. Jiang, J. S. Parks. Initial Interaction of ApoA-I with ATP Binding Cassette Transporter A1 (ABCA1) Impacts in vivo metabolic fate of nascent HDL. *J Lipid Res* 2008; 49:2390-2401. (PMID: 18583707)
105. X. Zhu, **J-.Y. Lee**, J. M. Timmins, J. M. Brown, E. Y. Boudyguina, A. Mulya, A. K. Gebre, M. C. Willingham, E. M. Hiltbold, N. Mishra, N. Maeda, J. S. Parks. Increased cellular free cholesterol in macrophage-specific Abca1 knockout mice enhances pro-inflammatory response of macrophages. *J Biol Chem* 2008; 283:22930-22941. (PMID: 18552351)
106. H. E. Rasmussen, K. R. Blobaum, Y-.K. Park, S. J. Ehlers, F. Lu, **J-.Y. Lee**. Lipid extract of *Nostoc commune var. sphaeroides Kützing*, a blue-green alga, inhibits the activation of sterol regulatory element binding proteins in HepG2 cells. *J Nutr* 2008; 138:476-481. (PMID: 18287352)
107. Y-.K. Park, H. E. Rasmussen, S. J. Ehlers, K. R. Blobaum, F. Lu, V. L. Schlegal, T. P. Carr, **J-.Y. Lee**. Repression of proinflammatory gene expression by lipid extract of *Nostoc commune var sphaeroides Kützing*, a blue-green alga, via inhibition of nuclear factor-κB in RAW 264.7 macrophages. *Nutr Res* 2008; 28:83-91. (PMID: 19083393)
108. Young-Nam Kim, **J-.Y. Lee**, J. A. Driskell. Marginal folate inadequacy observed in a group of young children in Kwangju, Korea. *Nutr Res and Practice* 2007; 2:120-125. (PMID: 20535397)

109. A. Mulya, **J-.Y. Lee**, A. K. Gebre, M. Thomas, P. L. Colvin, J. S. Parks. Minimal lipidation of pre-β HDL by ABCA1 results in reduced activity to interact with ABCA1. *Arterio Thromb Vasc Biol* 2007; 27:1828-1836. (PMID: 17510466)
110. **J-.Y. Lee**, R. Badeau, A. Mulya, E. Boudyguina, A. K. Gebre, T. L. Smith, J. S. Parks. Functional lecithin:cholesterol acyltransferase (LCAT) deficiency in human apolipoprotein A-I transgenic scavenger receptor class B, type I knockout mice. *J Lipid Res* 2007; 48:1052-1061. (PMID: 17272829)
111. **J-.Y. Lee**, J. M. Timmins, A. Mulya, T. L. Smith, Y. Zhu, E. M. Rubin, P. L. Colvin, J. S. Parks. Plasma HDL in human apoA-I transgenic-Abca1 knockout mice undergo normal intravascular remodeling but are hypercatabolized by the kidney. *J Lipid Res* 2005; 46:2233-2245. (PMID: 16024913)
112. J. M. Timmins, **J-.Y. Lee**, E. Boudyguina, K. Kluckman, L. R. Brunham, A. Mulya, A. K. Gebre, J. Coutinho, P. L. Colvin, T. L. Smith, M. R. Hayden, N. Maeda, J. S. Parks. Targeted inactivation of hepatic ABCA1 causes profound hypoalphalipoproteinemia and kidney hypercatabolism of apolipoprotein A-I. *J Clin Invest* 2005; 115:1333-1342. (PMID: 15841208)
113. **J-.Y. Lee**, T. P. Carr. Dietary fatty acids regulate the expression of ABCA5 and ABCG8 in hamsters. *Nutr Res* 2005; 25:167-175.
114. **J-.Y. Lee**, J. S. Parks. ATP-binding cassette AI (ABCA1) and its role in HDL formation. *Curr Opin Lipidol* 2005; 16:19-25. (PMID: 15650559)
115. **J-.Y. Lee**, T. P. Carr. Dietary fatty acids regulate acyl-CoA:cholesterol acyltransferase and cytosolic cholesteryl ester hydrolase in hamsters. *J Nutr* 2004; 134:3239-3244. (PMID: 15570019)
116. **J-.Y. Lee**, L. Lanningham-Foster, E. Boudyguina, T. Smith, E. R. Young, P. Colvin, M. Thomas, J. S. Parks. 2004. Pre-beta high density lipoprotein has two metabolic fates in human apolipoprotein A-I transgenic mice. *J Lipid Res* 2004; 45:716-728. (PMID: 14729861)
117. **J-.Y. Lee**, N. M. Lewis, S. E. Scheideler, T. P. Carr. Consumption of omega-3 fatty acid-enriched eggs and serum lipids in humans. *J Nutraceuticals Funct Med Foods* 2003; 4:3-13.
118. R. L. Cowles, **J-.Y. Lee**, D. D. Gallaher, C. L. Stuefer-Powell, T. P. Carr. Dietary stearic acid alters gallbladder bile acid composition in hamsters fed cereal-based diets. *J Nutr* 2002; 132:3119-3122. (PMID: 12368404)
119. T. P. Carr, G. Cai, **J-.Y. Lee**, C. L. Schneider. Cholesteryl ester enrichment of plasma low-density lipoprotein in hamsters fed cereal-based diets containing cholesterol. *Proc Soc Exp Biol Med* 2000; 233:96-101. (PMID: 10632967)
120. **J-.Y. Lee**, S. J. Koo. Effect of the addition of dietary fiber on the quality of Julpyun. *J Kor Soc Food Sci* 1994; 10(3):267-276.

Book Chapters

1. Y. Lee, **J-.Y. Lee**. Protective action of polyphenols in the development of non-alcoholic fatty liver disease. In: Dietary interventions in liver disease, Ronald R. Watson and V. Preedy, ed. Academic Press, 2019; 91-99.
2. T. X. Pham, **J-.Y. Lee**. Regulation of histone acetylation by bioactive food components for the prevention of chronic diseases. In: The Role of Nutrition and Metabolism on Epigenetic Regulation, F. Domann and E. Ho, eds. Taylor & Francis Group, CRC Press., 2014, p361-388.
3. S. J. Ehlers, H. E. Rasmussen, **J-.Y. Lee**. Lipids. In: Nutrition and Exercise Concerns of Middle Age, J. Driskell, eds. CRC Press., 2009, p 53-85.

4. H. E. Rasmussen, **J-.Y. Lee**. Total Fats, Saturated Fats and Cholesterol. In: Sports Nutrition: Fats and Proteins, J. Driskell, eds. CRC Press., 2007, p 15-36.
5. **J-.Y. Lee**, S. H. Mitmesser, T. P. Carr. Cellular cholesterol metabolism. In: Molecular Nutrition, J. Zempleni and H. Daniel, eds. CABI Publishing, Oxfordshire, U.K., 2003, p 309-319.

Abstracts

1. L. Anto, C. L. Miller, C. Garcia, M-.B. Kim, A. Jain, A. Provatas, **J-.Y. Lee**, F. C. Nichols, C. N. Blesso. Microbiota-derived serine glycine lipid 654 is reduced by high fat diet and attenuates hepatic injury, dyslipidemia, and atherosclerosis in LDL-receptor knockout mice. Fredrickson Lipid Res Conference. September 2021.
2. H. Kang, Y-.K. Park, **J-.Y. Lee**. Nicotinamide riboside inhibits alcohol-induced inflammation and oxidative stress in macrophages. Submitted to the 2020 Annual Meeting of American Society for Nutrition. *Curr Dev Nutr* 2020; 4:410. (PMCID: PMC7257421).
3. H. Kang, Y-.K. Park, **J-.Y. Lee**. Astaxanthin inhibits alcohol-induced inflammation and oxidative stress by mediating the sirtuin 1 and histone deacetylase 4 axis in macrophages. Submitted to the 2020 Annual Meeting of American Society for Nutrition. *Curr Dev Nutr* 2020; 4:113. (PMCID: PMC7258907).
4. S. Hu, H. Kang, H. Jang, M. Bae, M-.B. Kim, T. X. Pham, Y-.K. Park, J. A. Smyth, **J-.Y. Lee**. The role of histone deacetylase 9 in the therapeutic effects of astaxanthin on non-alcoholic steatohepatitis. Submitted to the 2020 Annual Meeting of American Society for Nutrition. *Curr Dev Nutr* 2020; 4:1257. (PMCID: PMC7258666).
5. M-.B. Kim, H. Kang, **J-.Y. Lee**. Fucoxanthin inhibits lipopolysaccharide-induced inflammation and oxidative stress by activating nuclear factor E2-related factor 2 in macrophages. Submitted to the 2020 Annual Meeting of American Society for Nutrition. *Curr Dev Nutr* 2020; 4:116. (PMCID: PMC7258205).
6. Y. Lee, M. Bae, D. Chamberlain, T. X. Pham, H. Kang, M-.B. Kim, S. Hu, Y-.K. Park, **J-.Y. Lee**. Loss of histone deacetylase 4 in hepatocytes increases de novo lipogenesis in diet-induced obesity mice. Submitted to the 2020 Annual Meeting of American Society for Nutrition. *Curr Dev Nutr* 2020; 4:1257. (PMCID: PMC7258917).
7. M. Bae, Y. Lee, T. X. Pham, Y.-K. Park. **J.-Y. Lee**. Astaxanthin attenuates the activation of hepatic stellate cells by altering glycolysis. 2019, Int Symposium and Annual Meeting Korean Soc Food Sci and Nutr.
8. M.-B. Kim, B. Kim, **J.-Y. Lee**, Y. -K. Park. Sugar kelp (Saccharina Latissima) Prevents the development of nonalcoholic steatohepatitis with increased metabolic rates in diet-induced obesity mice. 2019, Int Symposium and Annual Meeting Korean Soc Food Sci and Nutr.
9. S. Hu, M. Bae, Y.-K. Park, **J.-Y. Lee**. Determination of the underlying mechanisms for the anti-fibrogenic effect of n-3 polyunsaturated fatty acids in hepatic stellate cells. *Curr Dev Nutr* 2019; 3:Supplement 1 (P08-105-19).
10. M.-B. Kim, Y. Lee, M. Bae, H. Kang, S. Hu, T. X. Pham, **J.-Y. Lee**, Y.-K. Park. Sugar Kelp (*Saccharina latissimi*) Inhibits Hepatic Inflammation and Fibrosis with Increased Metabolic Rates in a Mouse Model of Diet-induced Nonalcoholic Steatohepatitis. *Curr Dev Nutr* 2019; 3:Supplement 1 (OR24-08-19).
11. T. X. Pham, M. Bae, M.-B. Kim, Y. Lee, S. Hu, H. Kang, Y.-K. Park, **J.-Y. Lee**. Nicotinamide Riboside, an NAD+ Precursor, Reduces Hepatic Stellate Cell Activation and Attenuates Liver Fibrosis in a Diet-induced Mouse Model of Liver Fibrosis. *Curr Dev Nutr* 2019; 3:Supplement 1 (OR24-06-19).

12. M. Bae, **J.-Y. Lee**. Astaxanthin Attenuates the Changes in the Expression of miRNAs Involved in the Activation of Hepatic Stellate Cells. *Curr Dev Nutr* 2019; 3:Supplement 1 (P02-011-19).
13. H. Kang, Y. Lee, M. Bae, M. J. Han, Y-.K. Park, **J-.Y. Lee**. Astaxanthin inhibits alcohol-induced inflammation and oxidative stress in macrophages. *Curr Dev Nutr* 2019; 3:Supplement 1 (P02-014-19).
14. A. C. Donepudi, Y. Lee, **J-Y. Lee**, J. D. Schuetz, J. E. Manautou. Multidrug resistance protein 4 (Mrp4) regulates nutrient and energy metabolism by altering the adipose tissue physiology. Experimental Biology 2019 *FASEB J* 2019; 33:508.4.
15. B. Kim, M. Bae, Y-.K. Park, **J-.Y. Lee**. The effects of berry polyphenols on transintestinal cholesterol excretion. ICOMES 2018.
16. S. Hu, M. Bae, Y-.K. Park, **J-.Y. Lee**. The modulation of pro-fibrogenic gene expression by various fatty acids in hepatic stellate cells. *Curr Dev Nutr;* 2018 (438679).
17. M. Bae, T. X. Pham, Y-.K. Park, Y. Lee, S. Hu, D. Shin, P. Joshi, S. Hong, N. Alder, S. I. Koo, **J-.Y. Lee**. Hepatic Stellate Cells Exposed to Astaxanthin During Activation Exhibit a Distinct Metabotype from Quiescent and Activated Hepatic Stellate Cells. *Curr Dev Nutr;* 2018 (439090).
18. M. Bae, M-.B. Kim, **J-.Y. Lee**. The Effect of Astaxanthin and Lutein on the Activation of Hepatic Stellate Cells and the Underlying Mechanisms. *Curr Dev Nutr;* 2018 (439176).
19. M-.B. Kim, M. Bae, S. Hu, Y-.K. Park, **J-.Y. Lee**. Fucoxanthin Inhibits Transforming Growth Factor β1-induced Pro-fibrogenic Genes Expression by Repressing SMAD3 in Hepatic Stellate Cells. *Curr Dev Nutr;* 2018 (437519).
20. T. X. Pham, M. Bae, Y. Lee, S. Hu, N. Santangelo, M-.B. Kim, H. Kang, Y-.K. Park, **J-.Y. Lee**. Evaluation of Spirulina Platensis Supplementation for the Prevention of Liver Inflammation and Fibrosis. *Curr Dev Nutr;* 2018 (435627).
21. Y. Lee, T. X. Pham, **J-.Y. Lee**. Blackcurrant (Ribes nigrum) Exerts an Anti-inflammatory Action by Modulating Macrophage Phenotypes. *Curr Dev Nutr;* 2018 (437523).
22. G. James, F. Carvalho, Y. Lee, **J-.Y. Lee**, J. Manautou. Loss of Mrp4 function disrupts lipid homeostasis and impairs liver regeneration following partial hepatectomy. *Society of Toxicology* 2018; (accepted).
23. Y. Lee, T. X Pham, M. Bae, S. Hu, E. O'Neill, C. Han, C. Caceres, Y-.K. Park, **J-.Y. Lee**. Blackcurrant (*Ribes nigrum*) Consumption Prevents Non-alcoholic Steatohepatitis in C57BL/6J Mice with Diet-induced Obesity. *FASEB J* 2017; 31:458.4. (Oral presentation)
24. T. X. Pham, M. Bae, **J-.Y. Lee**. Nicotinamide riboside, an NAD+ Precursor, attenuates the activation of hepatic stellate cells. *FASEB J* 2017; 31:458.5. (Oral presentation)
25. M. Bae, T. X. Pham, Y-.K. Park, **J-.Y. Lee**. Astaxanthin attenuated increased mitochondrial respiration and decreased glycolysis during the activation of hepatic stellate cells. *FASEB J* 2017; 31:170.7. (Oral presentation)
26. T. X. Pham, J-.Y. Lee. The anti-inflammatory effects of *Spirulina platensis* extract is mediated, in part, through the induction of an endotoxin tolerance-like mechanism. *FASEB J* 2016; 30: 916.15.
27. T. X. Pham, J-.Y. Lee. *Spirulina platensis* organic extract increases spare respiratory capacity in RAW 264.7 macrophages to exert an anti-inflammatory effect. *FASEB J* 2016; 30: 691.11.
28. Y-.K. Park, C. Caceres, E. N. O'Neill, M. Bae, T. X. Pham, Y. Lee, B. Kim, **J-.Y. Lee**. The effect of cranberry consumption on lipid and lipoprotein metabolism in human apolipoprotein A-I transgenic mice fed a high fat and high cholesterol diet. *FASEB J* 2016; 30:1175.10.

29. M. Bae, **J-.Y. Lee**. The effect of carotenoids on transforming growth factor β1-induced fibrogenesis in LX-2 cells, a human hepatic stellate cell line. *FASEB J* 2016; 30: 913.4.
30. M. Bae, **J-.Y. Lee**. Astaxanthin attenuated the expression of fibrogenic genes induced by high glucose alone and in combination with transforming growth factor 1β in hepatic stellate cells. *FASEB J* 2016; 30: 34.3. (Oral presentation)
31. N.H. Sereda, S. M. Pillai, M. L. Hoffman, S. A. Zinn, Y-.K. Park, **J-.Y. Lee**, K. E. Govoni. Poor maternal nutrition during gestation alters mesenchymal stem cell (MSC) metabolism in offspring. *Am Soc Animal Sci JAM* 2016; (Oral presentation).
32. B. W. Bolling, L. Xie, T. M. Vance, S. G. Lee, P. Hubert, Y. Wang, B. Kim, **J-.Y. Lee**, O. K. Chun. The relationship of aronia polyphenol bioavailability and metabolism to its cholesterol-lowering activity in former smokers. Berry Health Benefits Symposium 2015. Madison, WI. Oct. 13-15, 2015.
33. B. Kim, Y-.K. Park, H. Ma, T. Yuan, N. Seeram, S. I. Koo, **J-.Y. Lee**. Anthocyanins of blackcurrant and black chokeberry induced the expression of low-density lipoprotein receptor in Caco-2 and HepG2 cells by distinct mechanisms. *FASEB J* 2015; 29: 118.7. (Oral presentation)
34. C. Farruggia, Y. Yang, B. Kim, T. X. Pham, M. Bae, Y-.K. Park, **J-.Y. Lee**. Astaxanthin plays anti-inflammatory and antioxidant effects by inhibiting NFκB nuclear translocation and NOX2 expression in macrophages. *FASEB J* 2015; 29: 603.8.
35. T. X. Pham, B. Kim, M. Bae, E. Harness, C. Caceres, C. Farruggia, Y-.K. Park. **J-.Y. Lee**. Organic extract of an edible blue-green algae *Spirulina platensis* exerts anti-inflammatory effects in C57BL/6J mice fed a high fat/high sucrose diet. *FASEB J* 2015; 29:390.3. (Oral presentation)
36. Y. Yang, M. Bae, B. Kim, S. Rudraiah, J. Manautou, Y-.K. Park, S. I. Koo, **J-.Y. Lee**. Astaxanthin Prevented and Reversed the Activation of Mouse Primary Hepatic Stellate Cells by Inhibiting the Myocyte Enhancer Factor 2-Dependent Expression of Histone Deacetylase 9. *FASEB J* 2015; 29:32.6. (Oral presentation)
37. S. G. Lee, T. M. Vance, P. Hurbert, L. Xie, B. Kim, **J-.Y. Lee**, B. W. Bolling, S. Lee, O. K. Chun. Body weight status are associated with biomarkers of inflammation and bone turnover in former smokers. *FASEB J* 2015; 29: 602.16.
38. Y. Yang, **J-.Y. Lee**. Astaxanthin, a xanthophyll carotenoid, prevented and reversed the activation of mouse primary hepatic stellate cells via the modulation of histone deacetylases. *Keystone Symposia Conference: Fibrosis: From the bench to bedside* 2014; 1052.
39. B. Kim, C. S. Ku, T. X. Pham, Y. Yang, C. Wegner, Y-.K. Park, **J-.Y. Lee**. Supplementation of astaxanthin, a xanthophyll carotenoid, improved metabolic and inflammatory abnormalities associated with obesity in diet-induced obese mice. *FASEB J* 2014; 645.8.
40. B. Kim, Y-.K. Park, S. I. Koo, **J-.Y. Lee**. Role of polyphenol-rich blackcurrant and black chokeberry extracts in the stimulation of transintestinal cholesterol excretion in vitro. *FASEB J* 2014; 1045.22.
41. Y. Yang, **J-.Y. Lee**. Astaxanthin, a xanthophyll carotenoid, inhibited and reversed the activation of mouse primary hepatic stellate cells via the modulation of histone deacetylases. *FASEB J* 2014; 39.1. (Oral presentation)
42. T. Benn, B. Kim, Y-.K. Park, C. S. Ku, Y. Yang, T. X. Pham, C. Wegner, C. Farruggia, E. Harness, **J-.Y. Lee**. Supplementation of polyphenol-rich blackcurrant extract exerted hypolipidemic and anti-inflammatory effect in diet-induced obese mice. *FASEB J* 2014; 121.7. (Oral presentation)
43. T. X. Pham, **J-.Y. Lee**. Degradation of chromatin modifiers, histone deacetylases, by *Spirulina platensis* extracts in macrophages. *FASEB J* 2014; 1045.11.

44. B. Bolling, B. McAvoy, B. Kim, Y-.K. Park, D. Martin, L. Xie, **J-.Y. Lee**. Pecan supplementation modulates plasma paraoxonase activity in apolipoprotein E knockout mice fed high-fat and high-cholesterol diets. *FASEB J* 2014; 831.9.
45. D. Aguilar, C. Dugan, Y-.K. Park, **J-.Y. Lee**, M-L Fernandez. Low-fat dairy reduces inflammatory genes and liver enzymes in adults with metabolic syndrome. *FASEB J* 2014; 40.5.
46. B. Kim, A. Perkins, Y-.K. Park, **J-.Y. Lee**. The mechanistic investigation of berry polyphenols on the regulation of transintestinal cholesterol efflux in vitro. *Korean Society of Food and Nutrition International Symposium and Annual Meeting* 2013; S11-3. (Oral presentation)
47. Y. Yang, T. X. Pham, C. Wegner, B. Kim, C. S. Ku, Y-.K. Park, **J-.Y. Lee**. Astaxanthin supplementation lowers plasma triglyceride concentrations in diet-induced obese C57BL/6J mice. *FASEB J* 2013; 27: 638.14.
48. Y. Yang, **J-.Y. Lee**. Astaxanthin inhibits TGF-β1-induced fibrogenic gene expression by inhibiting the activation of Smad3 and KLF-6 pathways in LX-2 and primary mouse hepatic stellate cells. *FASEB J* 2013; 27:32.3 (Oral presentation).
49. B. Kim, S. G. Lee, C. S. Ku, Y-.K. Park, Y. Yang, T. X Pham, C. Wegner, S. I. Koo, O. K. Chun, **J-.Y. Lee**. Comparison of hypolipidemic effects of three berries in diet-induced obese C57BL/6J mice. *FASEB J* 2013; 27:1078.12.
50. S. G. Lee, B. Kim, Y. Yang, Y-.K. Park, S. I. Koo, O. K. Chun, **J-.Y. Lee**. Berry anthocyanin fractions repress pro-inflammatory gene expression and secretion by inhibiting nuclear translocation of NF-κB in RAW 264.7 macrophages. *FASEB J* 2013; 27:348.1 (Oral presentation).
51. C. S. Ku, B. Kim, T. X Pham, C. Wegner, Y. Yang, Y-.K. Park, **J-.Y. Lee**. Anti-atherogenic effect of blue-green algae in male apolipoprotein E knockout mice fed an atherogenic diet. *FASEB J* 2013; 27:359.2 (Oral presentation).
52. B. Kim, A. Perkins, **J-.Y. Lee**. Regulation of genes involved intestinal cholesterol metabolism by polyphenol-rich black currant extract in Caco-2 cells. *FASEB J* 2013; 27:1078.8.
53. C. Wegner, B. Kim, Y. Yang, Y-.K. Park, S. I. Koo, **J-.Y. Lee**. Linking the pro-oxidant influences of epigallocatechin gallate (EGCG) to intestinal cholesterol metabolism via alterations in sirtuin 1 (SIRT1) using Caco-2 cell. *FASEB J* 2013; 27:361.8 (Oral presentation).
54. T. X. Pham, **J-.Y. Lee**. Anti-inflammatory effect of *Spirulina platensis* in macrophages is beneficial for adipocyte differentiation and maturation by inhibiting NF-κB pathway in 3T3-L1 adipocytes. *FASEB J* 2013; 27:862.14.
55. T. X. Pham, B. Kim, **J-.Y. Lee**. *Spirulina platensis* inhibits lipopolysaccharide-induced inflammation through the repression of histone deacetylases in RAW 264.7 macrophages. *FASEB J* 2013; 27:247.1 (Oral presentation).
56. C. J. Andersen, C. N. Blesso, **J-.Y. Lee**, M. L. Fernandez. Egg intake increases peripheral blood mononuclear cell expression of ATP-binding cassette transporter A1 in parallel with toll-like receptor 4 as a potential mechanism to reduce cellular inflammation in metabolic syndrome. *FASEB J* 2013; 27:846.7.
57. S. G. Lee, T. Vance, D. Y. Soung, B. Kim, **J-.Y. Lee**, S. I. Koo, M. H. Drissi, O. K. Chun. Blueberry and blackcurrant consumption increases bone mineral density and content in high fat diet-induced obese male mice. *FASEB J* 2013; 27:233.8 (Oral presentation).
58. T. X. Pham, C. S. Ku, B. Kim, **J-.Y. Lee**. Effect of anti-inflammatory properties of a blue-green alga *Spirulina plantensis* on adipocyte differentiation and maturation. *Am Chem Soc* 2013; AGFD 150.

59. **J-.Y. Lee**, Y. Yang. Obesity and nonalcoholic fatty liver disease (NAFLD): Role of astaxanthin in the prevention of NAFLD. *Kr Soc Food Sci Nutr* 2012.
60. M. L. Hoffman, M. A Rokosa, S. Neupane, S.M. Spignesi, **J-.Y. Lee**, S. A. Zinn, K. E. Govoni. The effects of intrauterine growth retardation (IUGR) due to poor maternal nutrition on adipose tissue development and metabolic status in sheep. *J Anim Sci* 2012; (In press).
61. C. S. Ku, **J-.Y. Lee**. Lipid extracts from edible blue-green algae reduce the production of pro-inflammatory cytokines by inhibiting nuclear translocation of NF-κB in RAW 264.7 macrophages. *FASEB J* 2012; 26:823.44.
62. C. S. Ku, B. Kim, T. X. Pham, Y. Yang, Y-.K. Park, C. L. Weller, T. P. Carr, **J-.Y. Lee**. Hypolipidemic effect of a blue-green alga, *Nostoc commune var. Sphaeroides Kützing*, is attributed to algal residue but not lipid extract in C57BL/6J mice. *FASEB J* 2012; 26:385.6. (Oral presentation)
63. C. S. Ku, M. J. Balunas, **J-.Y. Lee**. Effect of lipid extracts from edible blue-green algae, *Nostoc commune var. sphaeroides Kützing* and *Spirulina Platensis*, on the regulation of genes for cholesterol and lipid metabolism in HepG2 cells. *FASEB J* 2012; 26:644.12.
64. S. G. Lee, T-G. Nam, D-O. Kim, **J-.Y. Lee**, Sung I. Koo, Ock K. Chun. Anthocyanin compositions and contents influence the antioxidant capacities of berries. *FASEB J* 2012; Late breaking.
65. S. G. Lee, Y-.K. Park, **J-.Y. Lee**, S. I. Koo, O. K. Chun. Berry anthocyanin fractions inhibit LPS-induced expression of inflammatory mediators in RAW 264.7 macrophages. *FASEB J* 2012; late breaking.
66. C. Wegner, Y-.K. Park, S. I. Koo, **J-.Y. Lee**. Differential regulation of genes for intestinal cholesterol flux by epigallocatechin gallate (EGCG) and resveratrol in Caco-2 cells: Potential role of histone deacetylases and sirtuins in intestinal cholesterol metabolism. *FASEB J* 2012; 26:112.3. (Oral presentation)
67. B. Kim, C. S. Ku, T. X. Pham, Y-.K. Park, D. Martin, L. Xie, R. Taheri, J-.Y. Lee, B. Bolling. *Aronia melanocarpa* (chokeberry) polyphenol rich extract reduces plasma cholesterol and improves antioxidant function in Apolipoprotein E knockout mice. *FASEB J* 2012; 26:1026.9.
68. B. Kim, Y-.K. Park, R. Taheri, K. Kimball, A. Roto, **J-.Y. Lee**, B. Bolling. Polyphenol-rich *Aronia melanocarpa* (chokeberry) extract regulates expression of cholesterol and lipid metabolism genes in Caco-2 cells. *FASEB J* 2012; 26:251.2. (Oral presentation)
69. C. J. Andersen, C. Blesso, Y-.K. Park, J. Barona, T. X. Pham, **J-.Y. Lee**, M-L. Fernandez. Carbohydrate restriction favorably affects HDL metabolism in men and women with Metabolic Syndrome. Addition of egg yolk further increases large HDL particles. *FASEB J* 2012; 26:254.5.
70. J. Barona, **J-.Y. Lee,** Y-.K. Park, M-L. Fernandez. The Increase in Flow-Mediated Vasodilation Induced by Grape Polyphenols is Positively Correlated with Increased Expression of Inducible Nitric Oxide (iNOS). *FASEB J* 2012; 26:823.22.
71. A. Bower, H. J. Park, M-Y. Chung, **J-.Y. Lee**, R. S. Bruno. Green tea extract protects against fibrogenesis associated with non-alcoholic fatty liver disease. *FASEB J* 2012; 26:363.6.
72. Y. Yang, J-.Y. Lee. Safety assessment of edible blue green algae, *Nostoc commune var. sphaeroides Kützing* and *Spirulina plantensis*. *FASEB J* 2011; 25:601.7. (Oral presentation)
73. T. X. Pham, S. L. Coleman, Y-.K. Park, **J-.Y. Lee**. Regulation of histone deacetylases by fatty acids in RAW 264.7 macrophages. *FASEB J* 2011; 25:782.13.
74. **J-.Y. Lee**, J. M. Seo, A. Nguyen, T. Pham, Y. Yang, R. S. Bruno, Y-.K. Park. Hypolipidemic and antioxidant properties of astaxanthin-rich extract from *Haematococcus pluvialis* in apolipoprotein E knockout mice. *FASEB J* 2011; 25:224.3.

75. M-Y. Chung, S. K. Noh, C. Masterjohn, H. J. Park, R. M. Clark, Y-.K. Park, **J-.Y. Lee**, S. I. Koo, R. S. Bruno. Green tea extract (GTE) protects against hepatic inflammation by reducing cyclooxygenase-2 in a rat model of dietary fat-induced nonalcoholic steatohepatitis (NASH). *FASEB J* 2011; 25:106.2.
76. J. J. Jones, Y-.K. Park, **J-.Y. Lee**, R. H. Lerman, M. L. Fernandez. A Mediterranean-style low glycemic load diet reduces the expression of HMG-CoA reductase in mononuclear cells and correlated with decreases in insulin and LDL oxidation in women with metabolic syndrome. *FASEB J* 2011; 25:582.12.
77. J. E. Kim, **J-.Y. Lee**, M. L. Fernandez. Antioxidant and anti-inflammatory effects of lutein in aorta and liver of guinea pigs fed with a hypercholesterolemic diet. *FASEB J* 2011; 25:95.5.
78. C. S. Ku, Y-.K. Park, S. L. Coleman, J. M. Seo, **J-.Y. Lee**. Regulation of ATP Binding Cassette Transporter A1 (ABCA1) and ABCG1 by Fatty Acids in RAW 264.7 Macrophages. *FASEB J* 2010; 24:924.3.
79. S. L. Coleman, Y-.K. Park, C. S. Ku, **J-.Y. Lee**. Unsaturated Fatty Acids Repress the Expression of Adipose Fatty Acid Binding Protein (aP2) in RAW 264.7 Macrophages. *FASEB J* 2010; 24:924.6.
80. S. N. Yarbaeva, **J-.Y. Lee**, J. A. Albrecht. In vitro digestion/Caco-2 cell model for assessing transport of dietary folate across the intestinal mucosa. *FASEB J* 2010; 24:235.
81. H. J. Park, M-Y Chung, S. I. Koo, Y-.K. Park, **J-.Y. Lee**, R. S. Bruno. Green tea extract protects against nonalcoholic fatty liver disease in diet-induced obese rats by decreasing hepatic inflammatory and oxidative stress responses. IFT 2010. (Submitted).
82. H. J. Park, D. A. Dinatale, M-Y., Chung, **J-.Y. Lee**, S. I. Koo, R. S. Bruno. Green tea extract protects against nonalcoholic fatty liver disease (NAFLD) in obese mice by improving hepatic antioxidant defenses and attenuating hepatic lipid accumulation. *IFT* 2009; 061-23.
83. Y-.K. Park, **J-.Y. Lee**. Unsaturated fatty acids diminish elevated adipocyte fatty acid binding protein (aP2) expression by lipopolysaccharide in macrophages. *FASEB J* 2009; 23:724.18.
84. H. J. Park, D. A. Dinatale, M-Y., Chung, S. I. Koo, Y-.K. Park, **J-.Y. Lee**, R. S. Bruno. Green tea extract attenuates hepatic injury by reducing oxidative stress and lipid accumulation in ob/ob mice. *FASEB J* 2009; 23:563.34.
85. Y-.K. Park, H. E. Rasmussen, S. J. Ehlers, C. S. Ku, E. D. Jesch, T. P. Carr, **J-.Y. Lee**. Down-regulation of ATP-binding cassette transporter A1 (ABCA1) and ABCG1 expression by unsaturated fatty acids *in vivo* and *in vitro*. *FASEB J* 2008; 22:691.15.
86. H. E. Rasmussen, C. S. Ku, K. R. Blobaum, E. D. Jesch, Y-.K. Park, J. Walter, T. P. Carr, **J-.Y. Lee**. *Nostoc commune var sphaeroides Kutzing*, a blue-green alga, lowers plasma cholesterol levels by promoting fecal neutral sterol excretion in mice. *FASEB J* 2008; 22:315.7.
87. S. J. Ehlers, S. M. Larson, H. E. Rasmussen, Y-.K. Park, **J-.Y. Lee**. Human apolipoprotein B100 transgenic and brown adipose tissue deficient (hApoBtg/BATless) mice as a model of perturbed HDL metabolism in obesity-induced insulin resistance. *FASEB J* 2008; 22:1091.5.
88. D. M. Guderian Jr., **J-.Y. Lee**, T. P. Carr. Policosanol fails to lower HMG-CoA reductase activity in HepG2 cells. *FASEB J* 2008; 22:700.36.
89. E. D. Jesch, **J-.Y. Lee**, T. P. Carr. Dietary plant sterols regulate genes involved in cholesterol metabolism in mouse liver but not intestine. *FASEB J* 2008; 22:700.35.
90. Xuewei Zhu, **J-.Y. Lee**, Elizabeth Hiltbold, Nobuyo Maeda, J. S. Parks. Macrophage ABCA1 dampens inflammation by modulation of free cholesterol distribution in membrane lipid rafts. *Arterio Thromb Vasc Biol* 2008: 28(6):e-126.

91. **J-.Y. Lee**, Y-.K. Park, M. A. Heffley, H. E. Rasmussen, S. J. Ehlers. The expression and function of ATP-binding cassette transporter G1 (ABCG1) is down-regulated by inflammatory stimuli through the inhibition of peroxisome proliferator activated receptor gamma (PPAR gamma) pathway in macrophages. *FASEB J* 2007; 21(5):A700.
92. S. Shrestha, S. J. Ehlers, **J-.Y. Lee**, M. L. Fernandez, S. I. Koo. Dietary green tea extract (GT) lowers the plasma and hepatic triglyceride (TG) with an increase in plasma HDL-cholesterol (HDL-C) and decreases in SREBP1c mRNA and its responsive genes in fructose-fed ovariectomized (OX) rats. *FASEB J* 2007; 21(5):A342.
93. Y-.K. Park, H. E. Rasmussen, S. J. Ehlers, F. Lu, V. L. Schlegel, T. P. Carr, **J-.Y. Lee**. Expression of pro-inflammatory mediators was reduced by lipid extract of Nostoc commune, a blue-green alga, through the inhibition of nuclear factor kappa B (NF-κB) pathway in RAW 264.7 macrophages. *FASEB J* 2007; 21(5):A365.
94. H. E. Rasmussen, K. R. Blobaum, S. J. Ehlers, Y-.K. Park, F. Lu, **J-.Y. Lee**. *Nostoc commune*, a blue-green alga, reduced the expression of 3-hydroxy-3-methylglutaryl coenzyme A reductase (HMGR) by inhibiting the sterol regulatory element binding protein-2 (SREBP-2) pathway. *FASEB J* 2007; 21(5):A365.
95. D. M. Guderian, Y-.K. Park, **J-.Y. Lee**, T. P. Carr. Policosanol reduces HMG-CoA reductase mRNA in HepG2 cells. *FASEB J* 2007; 21(5):A1105.
96. E. D. Jesch, **J-.Y. Lee**, T. P. Carr. Plant sterols regulate genes involved in cholesterol metabolism in intestinal cells. *FASEB J* 2007; 21(5):A338.
97. A. Mulya, **J-.Y. Lee**, A. K. Gebre, M. J. Thomas, J. S. Parks. Lipidation of apoA-I by ABCA1 results in heterogeneous-sized pre-β particles with reduced ability to interaction with ABCA1. *Arterio Thromb Vasc Biol* 2006; 26(5):E54.
98. X. Zhu, **J-.Y. Lee**, J. Timmins, M. Brown, E. Boudyguina, A. Mulya, A. K. Gebre, N. Mishra, J. S. Parks. Targeted inactivation of ABCA1 in macrophages leads to an increased pro-inflammatory response. *Arterio Thromb Vasc Biol* 2006; 26(5):E55.
99. Y-.K. Park, H. E. Rasmussen, J. S. Weber, **J-.Y. Lee**. Polyunsaturated fatty acids reduced expression of pro-inflammatory genes in macrophages. *FASEB J* 2006; 20(4):A604.
100. H. E. Rasmussen, Y-.K. Park, **J-.Y. Lee**. Differential regulation of ATP-binding cassette transporter A1 (ABCA1) expression by fatty acids in HepG2 and RAW 264.7 macrophages. *FASEB J* 2006; 20(4):A611.
101. R. Rodriguez-Melendez, H. E. Rasmussen, **J-.Y. Lee**, T. P. Carr. NPC1L1 gene expression is down-regulated by stearic acid in CCL-241 cells. *FASEB J* 2006; 20(4):A138.
102. E. D. Jesch, D. M. Schuett, **J-.Y. Lee**, J. S. Weber, T. P. Carr. Dietary fatty acids regulate NPC1L1 gene expression in mouse intestine. *FASEB J* 2006; 20(4):A861.
103. A. Mulya, **J-.Y. Lee**, A. K. Gebre, L. R. Brunham, M. R. Hayden, J. S. Parks. Minimal lipidation of apoA-I by ABCA1 forms heterogeneous-sized pre-β HDL particles with reduced ability to interaction with ABCA1. *Kern Aspen Lipid Conference* 2005.
104. **J-.Y. Lee**, A. Mulya, J. S. Parks. Lipidation attenuates the role of apolipoprotein A-I as an acceptor in ATP-binding cassette A1 (ABCA1)-mediated efflux of cellular lipids. *FASEB J* 2005; 19(5):A982.
105. J. M. Timmins, **J-.Y. Lee**, A. Mulya, K. Kluckman, L. Brunham, M. Hayden, N. Maeda, J. S. Parks. The liver is the primary site of HDL formation. *Arterio Thromb Vasc Biol* 2004; 24 (5):E52.

106. **J-.Y. Lee**, J. M. Timmins, E. Young, T. Smith, P. Colvin, J. S. Parks. ATP-binding cassette A1 (ABCA1) is not required for maturation of small to medium-sized HDL. *FASEB J* 2004; 18(5):A861.
107. **J-.Y. Lee**, L. Lanningham-Foster, E. Boudyguina, T. Smith, E. R. Young, P. Colvin, M. Thomas, J. S. Parks. Pre-beta high density lipoprotein has two metabolic fates in human apolipoprotein A-I transgenic mice. *Arterio Thromb Vasc Biol* 2003; 23:p118.
108. **J-.Y. Lee**, B. J. Illston, T. P. Carr. Dietary fatty Acids influence on genes regulating cholesterol metabolism. *FASEB J* 2002; 16(4):A263.
109. **J-.Y. Lee**, B. J. Illston, T. P. Carr. Effect of fatty acids on the gene expression of ACAT (Acyl coA: cholesterol acyltransferase) in hamsters. *FASEB J* 2001; 15(4):A289.
110. T. P. Carr, R. M. Cornelison, **J-.Y. Lee**, S. H. Mitmesser, C. Stuefer-Powell. Dietary plant steryl esters reduce cholesterol absorption efficiency in hamsters fed a beef-based diet. *FASEB J* 2001; 15(4):A397.
111. **J-.Y. Lee**, N. M. Lewis, S. E. Scheideler, T. P. Carr. Composition of eggs enriched in omega-3 fatty acids (Omega Eggs) reduces the cholesteryl ester content of plasma LDL in humans. *FASEB J* 1999; 13(4):A230.
112. **J-.Y. Lee**, T. P. Carr. Dietary cholesterol alters low density lipoprotein cholesteryl ester composition in hamsters. *FASEB J* 1998; 12(4): A562.

GRANTS

Active

- **United States Department of Agriculture, AFRI Seed Grant 2022-67018-36236 (CONS2021-09057)**, "Gut-derived berry metabolites and inflammation", 3/01/2022-2/29/2024, $299,999. PI.
- **National Institute of Health (R01)**, 1R01AG065879-01A1 "First-in-class peptide therapeutics for mitochondrial disorders: molecular mechanism of action and optimization of design", 7/02/2020-4/30/2025, $2,501,812 (my share: one summer month salary for 3-5 years). Co-I (PI: Nathan Alder)
- **United States Department of Agriculture, Multistate Hatch W4002, CONS00992**, "Effect of nutrients on the activation of hepatic stellate cells", 10/01/2018-9/30/2022, $60,000. PI.
- **United States Department of Agriculture, AFRI Seed Grant CONS 2021-09011**, "Health benefits of sugar kelp: Its effect on gut microbiome", 3/01/2022-2/29/2024, $300,000. Co-I (PD: Young-Ki Park)
- **National Institute of Health R21 1R21AA027310-01A1**, "Role of histone deacetylase 4 in alcoholic liver disease", 9/20/2021-8/31/2023, $442,750. PI.
- **United States Department of Agriculture, Multistate Hatch W4002, CONS1056**, "Effect of bioactive food components on the prevention of intestinal fibrosis", 10/01/2021-9/30/2024, $60,000. PI.
- **United States Department of Agriculture**, **Multi-state Hatch W4002**, **CONS00916**, "W-4002, Nutrient Bioavailability-Phytonutrients and Beyond", 10/01/2018-9/30/2021, $1,000 for travel. PI.

Pending

- **United States Department of Agriculture, AFRI Grant**, "Fabrication of edible nanoparticles to fortify lipophilic nutrients and assessment for application as novel foods", 1/01/2022-12/31/2025, $650,000. Co-PD (PD: Yangchao Luo)
- **Safe Seaweed Coalition**, "In vivo safety evaluation of seaweed consumption", 3/01/2022-2/28/2023, $49,508. Co-I (PD: Young-Ki Park)

Completed

- **National Institute of Health (R01)** 1R01DK108254-01, "Nutritional transcriptomics approach for the role of astaxanthin in liver fibrosis", 9/25/2015-8/31/2021, $1,385,494. PI.
- **National Institute of Health (Supplement)** 3R01DK108254-04S1, "Nutritional transcriptomics approach for the role of astaxanthin in liver fibrosis", 9/01/2018-8/31/2021, $159,750. PI.
- **United States Department of Agriculture, AFRI Seed Grant, 2016-08864**, "Anti-fibrogenic action of astaxanthin in adipose tissue: A mechanism to inhibit obesity-associated inflammation", 4/01/2017-3/31/2021, $150,500. Co-I (PI: Young-Ki Park).
- **United States Department of Agriculture, AFRI** Grant 2015-05512 (GRANT11874093), "Protective action of blackcurrant against obesity-associated inflammation: Linking macrophage plasticity to energy metabolism", 12/01/2015-11/30/2020, $499,946. PI.
- **UConn Research Excellence Program**, "Identification of molecular mediator for sex differences in metabolism", 6/01/2019-12/31/2020, $25,000. PI.
- **United States Department of Agriculture, AFRI**, "Enhanced stability and bioavailability of astaxanthin encapsulated in multilayer-coated lipid particles", 4/15/2017-8/31/2020, $149,801. Co-PD (PD: Yangchao Luo).
- **Dairy Management Inc.**, "Milk phospholipids for the prevention of atherosclerosis", 3/01/2017-2/28/2019, $95,038. Co-I (PI: Christopher Blesso).
- **United States Department of Agriculture**, **Multi-state Hatch**, **CONS00916**, "W-3002, Nutrient Bioavailability—Phytonutrients and Beyond", 10/01/2013-9/30/2018, $1,000 for travel. PI.
- **National Institute of Health (R15)** 1R15AT00861001, "Metabolites from edible blue-green algae for obesity-induced inflammation", 12/15/2014-12/14/2018, $453,820 (my share $149,692). Co-I (PI: Marcy Balunas)
- **United States Department of Agriculture, AFRI Postdoctoral Fellowship, 2016-04624**, "A novel role of Spirulina in the regulation of macrophage phenotype for the prevention of NASH", 1/15/2017-1/14/2019, $152,000. Mentor (PI: Tho X. Pham).
- **United States Department of Agriculture, Hatch CONS00972**, "Role of bioactive components in hepatic stellate cell activation", 10/01/2016-9/30/2018, ~$70,000. PI.
- **Nutricia Research Foundation Research Grant**, "Mechanistic understanding of the effect of cranberries on HDL metabolism", 2/01/2015-1/31/2018, $64,375. PI.
- **Egg Nutrition Center**, "Pilot study for evaluating the effect of egg phospholipids on the modulation of cholesterol homeostasis", 7/01/2015-6/30/2017, $49,964. PI.
- **United States Department of Agriculture**, **Hatch CONS00872**, "Transcriptional regulation of fatty acid binding protein 4 by dietary fatty acids in macrophages", 10/01/2011-9/30/2016, $69,996. PI.
- **United States Department of Agriculture, AFRI Seed Grant, CONS2014-06619**, "Black elderberry as a novel functional food: Protection from HDL dysfunction in chronic inflammation", 2/1/2015-1/31/2017, $149,857. Co-I (PI: Christopher Blesso).
- **University of Connecticut Scholarship Facilitation Fund**, "Regulation of adipose tissue fibrosis by astaxanthin", 1/01/2016-12/31/2016, $2,000. PI.
- **University of Connecticut Research Excellence Program**, "Gene therapy for the prevention of liver fibrosis", 3/15/2015-3/14/2016, $24,875. PI.
- **United States Department of Agriculture, AFRI (2012-67018-19290)**, "Bioactivity of astaxanthin in the prevention of hepatic inflammation", 02/01/2012-01/31/2016, $459,646. PI.

- **United States Department of Agriculture, AFRI Equipment Grant**, **CONS 2013-03483**. "Use of a cell bioenergetics analyzer to determine the effect of diet and bioactive food components on energy metabolism", 12/01/2013-11/30/2015, $50,000. PI.
- **United States Department of Agriculture, AFRI Predoctoral Fellowship 2014-01870**, "Bioactivity of Spirulina platensis in the prevention of obesity-associated inflammation and insulin resistance by the modulation of histone deacetylases", 1/01/2015-12/31/2015, $39,500. Mentor (PI: Tho X. Pham).
- **National Institute of Health (R21AT005152)**, "Evaluation of athero-protective role of blue-green algae", 09/30/2009-08/31/2013, $387,365. PI.
- **State of Connecticut Department of Public Health**, "The effect of chokeberry polyphenols on biomarkers of cardiovascular disease and antioxidant defense in former smokers", 08/01/2012-5/31/2015, $417,076 (my share $87,000). Co-PI (PI: Bradley Bolling).
- **Fuji Chemical Industry Co**., "Role of astaxanthin in the prevention of hepatic stellate cell activation", 07/01/2013-07/31/2014, $22,950. PI.
- **University of Connecticut College of Agriculture and Natural Resources Equipment Competition**, "Li-Cor Odyssey CLx Infrared Imaging System", September 2012, $54,300. PI.
- **United States Department of Agriculture**, **Hatch CONS0080**, "Efficacy of chokeberry polyphenols to reduce oxidative stress and atherosclerosis in the ApoE knockout mouse", 10/01/2011-9/30/2016, $69,996. Co-I (PI: Bradley Bolling).
- **United States Department of Agriculture**, **Multi-state Hatch**, **CONS00891**, "N-3 polyunsaturated fatty acids and human health and disease", 10/01/2012-9/30/2013. PI.
- **Nutricia Research Foundation Research Grant**, "Chokeberry polyphenols promote bone health by inhibiting inflammation-induced bone resorption", 1/01/2013-12/31/2014, $63,181. Collaborator (PI: Ock Chun).
- **Connecticut Innovations,** Advanced Technology Phase I STTR**,** "A novel vaccine against vaginal transmission of Chlamydia trachomatis", 05/01/2014-11/30/2014, $40,000 direct costs (no F&A; my share $10,000). UConn Investigator (PI: Michael Vajdy at EpitoGenesis).
- **United States Department of Agriculture**, **Multi-state Hatch**, **CONS00916**, "Nutrient Bioavailability-Phytonutrients and Beyond", 10/01/2012-9/30/2013, $1,000 for travel. PI.
- **University of Connecticut Faculty Large Grant**, "Regulatory mechanism for adipocyte fatty acid binding protein expression by fatty acids in macrophages", 7/01/2011-6/30/2012, $25,000. PI.
- **National Egg Board**, "Effect of egg intake on reverse cholesterol and insulin resistance in subjects classified with metabolic syndrome ", 09/01/2010-/31/2011, $127,315. Co-I (PI: Maria-Luz Fernandez).
- **United States Department of Agriculture (NRI2007-35200-18298)**, National Research Initiative Competitive Grants Program, "Regulation of cholesterol absorption by plant sterol and stanol esters", 08/01/2007-07/31/2011, $466,915 (My share: $185,863). Co-PD (PD: Timothy Carr).
- **United States Department of Agriculture (NRI2008-35200-18699)**, National Research Initiative Competitive Grants Program, "Evaluation of the Bioactivity of Green Tea in an Animal Model of Hepatic Oxidative Stress", 01/01/2008-12/31/2010, $458,868 (Subcontract $23,921). Collaborator (PI: Richard Bruno).
- **University of Connecticut Major Research Equipment Competition**, "Preparative- and Mass Spectrometry-Based HPLC: Critical Analytical Tools To Establish A Bioactive Food Components and Health Core Laboratory", $248,358.86. Collaborator (PI: Richard Bruno).
- **United States Department of Agriculture**, **Hatch (NEB-36-065)**, "Identification and Characterization of Bioactive Compounds with Cholesterol-lowering and Anti-inflammatory

Properties from a Blue-green Alga *Nostoc commune*", 01/01/2007-12/31/2012, $61,500. (Actual award $43,050 due to PI's institutional change June 2010). PI.

- **Nebraska Gateway for Nutrigenomics**, University of Nebraska-Lincoln Vice Chancellor of Research, "Regulation of histone deacetylase 3 by fatty acids", 12/01/2009-11/30-2010, $11,480. PI.
- **Faculty Seed Grant**, University of Nebraska-Lincoln Research Council, "Modulation of cholesterol transporters in macrophages during inflammation", 01/01/2009-12/31/2009, $10,000. PI.
- **Strategic Cluster Grant**, University of Nebraska-Lincoln, Office of the Vice Chancellor for Research, "Pilot work in preparation for the R21 grant submission", 02/20/2009-12/31/2009, $12,500. Co-I (PI: Patrick Dussault).
- **National Science Foundation, SBIR Phase II (IIP-0724411)**, "An innovative photobioreactor for commercial production of Astaxanthin from genetically improved *Haematococcus pluvialis* strains", 07/01/2007-06/30/2009, $448,550 (Subcontract $21,635). Collaborator (PI: Fan Lu)
- **Institute of Agricultural and Natural Resources Equipment Grant,** University of Nebraska-Lincoln, Purchase of an infrared imaging systems for research and teaching purposes, 02/01/2008-06/01/2008, $51,950. Co-I.
- **Faculty Seed Grant**, University of Nebraska-Lincoln Research Council, "Transporter-mediated mechanism for the absorption of cholesterol and plant sterols", 01/01/2007-12/31/2007, $10,000. PI.
- **Interdisciplinary Grant**, University of Nebraska-Lincoln Research Council, "Identification of bioactive compounds with cholesterol-lowering and anti-inflammatory properties in *Nostoc commune*, a blue-green alga", 01/01/2007-12/31/2007, $20,000. PI.
- **Layman Award**, University of Nebraska Foundation, "Regulation of ATP-binding cassette transporter A1 by fatty acids", 05/01/2006-04/30/2007, $9,970. PI.