

April, 2007

## **CURRICULUM VITAE**

**Tony Hayek, M.D.**

**ID No.** 55751267  
**DATE of BIRTH:** March 15, 1959  
**PLACE of BIRTH:** Haifa, Israel  
**ADDRESS:**

WORK	HOME
Dept. Internal Medicine E	Lohame Hageaot 32
Rambam Medical Center	Haifa 35027 Israel
Haifa 31096 Israel	Tel: 972 4 853 6758
Tel: 972 4 854 2059	
Fax: 972 4 854 2359	

### **ACADEMIC DEGREES**

1983 Hadassah Hebrew University, Jerusalem, M.D.

### **ACADEMIC APPOINTMENTS**

1999 until present Head, Dept. Internal Medicine E, Rambam Medical Center  
1999 - 2001 Acting Dept. Head, Emergency Room, Rambam Medical Center  
1997 - 1999 Acting Head, Dept. Internal Medicine E, Rambam Medical Center  
1994 - 1997 Deputy Head, Dept. Internal Medicine E, Rambam Medical Center  
1994 - 2000 Senior Lecturer, Technion-Israel Institute of Technology,  
Faculty of Medicine, Haifa  
2001 Associate professor, Technion-Israel Institute of Technology,  
Faculty of Medicine, Haifa

### **PROFESSIONAL EXPERIENCE**

2004 Sabbatical – Steve Humphries, University College London, Center  
for cardiovascular genetics.  
1990 Charles H. Revson Fellow in Biomedical Research,  
The Rockefeller University, New York, New York  
1989-1992 Postdoctoral Associate, The Rockefeller University,  
Laboratory of Biochemical Genetics and Metabolism,  
New York, New York  
1985-1989 Rambam Medical Center, Haifa, Residency in Internal Medicine

1984

Rambam Medical Center, Haifa, Internship

### **RESEARCH INTERESTS**

Effect of drugs and nutrients on the progression as well as the regression of atherosclerosis in the unique apo E deficient mouse.

### **TEACHING EXPERIENCE**

Medical students in clerkship, 4<sup>th</sup> and 6<sup>th</sup> years.

Frontal lectures to Touro College students.

### **MEMBERSHIP IN PROFESSIONAL SOCIETIES**

Israel Atherosclerosis Society

European Atherosclerosis Society

A member of the residency inspection committee of the scientific council - 2004

### **AWARDS**

1. International Forum on Angiotensin II Receptor Antagonism. 1999. Losartan attenuates atherosclerosis in apo E deficient mice without blood pressure reduction. Monte-Carlo, Monaco. \$1500.
2. Losartan Science Awards. 1998. The effect of losartan on the susceptibility of plasma LDL to lipid peroxidation and on the progression of atherosclerosis in the apo E deficient mice. American Society of Hypertension meeting, New York, NY, USA. \$3,500.
3. Israel Atherosclerosis Society Award. 1998. The effect of fosinopril and losartan on the susceptibility of LDL to oxidation and on the progression of atherosclerosis in the apo E deficient mice. The Israel Medical Association Society for Research, Prevention and Treatment of Atherosclerosis 2,000 NIS.
4. The 60<sup>th</sup> Anniversary celebration of Rambam Medical Center. 1998. The effect of high and low dose fosinopril and losartan on LDL oxidation and on the progression of atherosclerosis in apo E deficient mice. Award on oral presentation on the 60<sup>th</sup> celebration conference in Rambam Medical Center.
5. Experimental Biology Losartan Travel Awards. 1997. The effect of the ACE inhibitor, fosinopril, and the angiotensin receptor antagonist, losartan, on the susceptibility of plasma and LDL to lipid peroxidation in the apo E deficient mice. Pharmacology 97 meeting, San Diego, CA, USA. \$1,500 Merck & Co Inc.

## **STUDENTS**

### **M.D. THESIS**

1. Eyal Keidar. Comparison of the effect of the angiotensin converting enzyme inhibitor, fosinopril, and of the angiotensin receptor antagonist, losartan, on the susceptibility of plasma low density lipoprotein to lipid peroxidation. 1998.
2. Mati Waterman. The effect of Aspirin (75mg/day) on LDL susceptibility to oxidative modification in healthy volunteers. 1999.

### **BASIC SCIENCE PROJECTS OF RESIDENTS**

1. Sakhnini Emad, MD: Losartan inhibits uptake of oxidized LDL in human monocyte-derived macrophages from patients with familial hypercholesterolemia, 1999.
2. Raz Ayelet, MD: The effect of the ACE inhibitor ramipril on lipoprotein peroxidation and on regression of atherosclerosis in apo E deficient mice. 1999-2000.

## **RESEARCH GRANTS**

- |           |   |
|-----------|---|
| 1993      | Grant-in-Aid for a multicenter study on the effect of Cerivastatin in patients with hypercholesterolemia. Bayer Company, \$80,000   |
| 1995      | Grant-in-Aid for the study of the effect of Fosinopril and Losartan on LDL lipid peroxidation in apo E deficient mice. Bristol-Meyers Squibb, \$25,000.   |
| 1995      | Grant-in-Aid for study of the effect of garlic on atherosclerosis in apo E deficient mice. \$25,000.  |
| 1995      | Technion Faculty of Medicine grant. The effect of antioxidants and ACE inhibitors on lipoprotein peroxidation and atherosclerosis: studies in apo E deficient mice. 4,000 NIS.                              |
| 1996      | Ministry of Health grant. The effect of ACE inhibitors and dietary antioxidants on LDL lipid peroxidation in apo E deficient mice. \$15,000.  |
| 1998      | Grant-In-Aid for a multicenter study comparing the effects of Atorvastatin vs Simvastatin in patients with hypercholesterolemia. Merck Company. \$40,000.   |
| 1998      | Ministry of Health-Technion Faculty of Medicine-Rambam Medical Center grant. Incorporation of polyphenolic flavonoids into macrophages: potential role in the inhibition of foam cell formation. 15,000 NIS |
| 1998-1999 | Grant-In-Aid for a multicenter study comparing the effects of Omapatrilat vs Losartan on left ventricular hypertrophy in patients with mild to moderate hypertension. Bristol-Meyers Squibb, \$100,000.     |
| 1999      | Grant-In-Aid for the study of the effect of high and low dose Losartan on attenuation of atherosclerosis in apo E deficient mice, Merck Company, \$30,000.  |

## PUBLICATIONS

**Tony Hayek, M.D.**

1. **Thesis: Hayek T**, Popovtzer M, Wald H. 24,25(OH)<sub>2</sub>D<sub>3</sub> enhances the calcemic effect of 1,25-(OH)<sub>2</sub>D<sub>3</sub>. Library of Hadassah Medical School, Jerusalem. 1983.
2. Wald H, **Hayek T**, Popovtzer MM. 24,25(OH)<sub>2</sub>D<sub>3</sub> enhances the calcemic effect of 1,25-(OH)<sub>2</sub>D<sub>3</sub> Proc. Soc Exp Biol Med 180:219-223, 1985.
3. **Hayek T**, Fuhrman B, Levy Y, Aviram M, Brook JG. Intralipid infusion in patients with familial hypercholesterolemia: Effect of serum and plasma lipoproteins on platelet aggregation and on macrophage cholesterol metabolism. *Atherosclerosis* 81:61-69, 1990.
4. Smith JD, Plump AS, **Hayek T**, Walsh A, Breslow JL. High levels of human apolipoprotein E gene expression in kidney of transgenic mice. *J Biol Chem* 265:14709-14712, 1990.
5. **Hayek T**, Chajek-Shaul T, Walsh A, Azrolan N, Breslow JL. Probucol decreases apo A-I transport rate and increases HDL cholesteryl ester fractional catabolic rate in control and human apo A-I transgenic mice. *Arterioscler Thromb* 11:1295-1302, 1991.
6. Chajek-Shaul T, **Hayek T**, Walsh A, Breslow JL. Expression of the human apolipoprotein A-I gene in transgenic mice alters high density lipoprotein (HDL) particle size distribution and diminishes selective uptake of HDL cholesteryl esters. *Proc Natl Acad Sci USA* 88:6731-6735, 1991.
7. Agellon LB, Walsh A, **Hayek T**, Moulin P, Jiang XC, Shelanski SA, Breslow JL, Tall AR. Reduced high density lipoprotein cholesterol in human cholesteryl ester transfer protein transgenic mice. *J Biol Chem* 266:10796-10801, 1991.
8. **Hayek T**, Chajek-Shaul T, Walsh A, Azrolan N, Breslow JL. Mice bearing the apolipoprotein A-I transgene. In: Scarpelli DG, Migaki G and Pletcher JM, eds. *Transgenic Animal Models in Biochemical Research*, Baltimore, Maryland. p.63, 1991.
9. **Hayek T**, Chajek-Shaul T, Walsh A, Agellon LB, Moulin P, Tall AR, Breslow JL. An interaction between the human cholesteryl ester transfer protein (CETP) and apolipoprotein A-I genes in transgenic mice results in a profound CETP-mediated depression of HDL cholesterol levels. *J Clin Invest* 90:505-510, 1992.
10. Agellon LB, Jiang XC, **Hayek T**, Moulin P, Walsh A, Breslow JL, Tall AR. The impact of human cholesteryl ester transfer protein action on lipoprotein metabolism of transgenic mice. In: Gotto AM and Paoletti R, eds. *Atherosclerosis Reviews. Proceedings of the High Density Lipoprotein Meeting*, Bellagio, Italy. 1992.

11. Aalto-Setälä K, Fisher EA, Chen X, Ckajek-Shaul T, **Hayek T**, Zechner R, Walsh A, Ramakrishnan R, Ginsberg HN, Breslow JL. Mechanism of hypercholesterolemia in human apo CIII transgenic mice: Diminished VLDL fractional catabolic rate associated with increased apo CIII and reduced apo E on the particles. *J Clin Invest* 90:1889-1900, 1992.
12. Plump AS, Smith JD, **Hayek T**, Aalto-Setälä K, Walsh A, Verstuyft JG, Rubin EM, Breslow JL. Severe hypercholesterolemia and atherosclerosis in apolipoprotein E-deficient mice created by homologous recombination in ES cells. *Cell* 71:343-353, 1992.
13. **Hayek T**, Ito Y, Azrolan N, Verdery RB, Aalto-Setälä K, Walsh A, Breslow JL. Dietary fat increases HDL levels both by increasing the TR and decreasing the FCR of HDL CE and apo A-I: Presentation of a new animal model and mechanistic studies in human apo A-I transgenic and control mice. *J Clin Invest* 91:1665-1671, 1993.
14. **Hayek T**, Azrolan N, Verdery RB, Walsh A, Chajek-Shaul T, Agellon LB, Tall AR, Breslow JL. Hypertriglyceridemia and cholesteryl ester transfer protein (CETP) expression interact to dramatically alter HDL levels, particle sizes and metabolism: Studies in transgenic mice. *J Clin Invest* 92:1143-1152, 1993.
15. **Hayek T**, Oiknine J, Brook JG, Aviram M. Increased plasma and lipoprotein lipid peroxidation in apo E-deficient mice. *Bioch Biophys Res Comm* 201:1567-1574, 1994.
16. **Hayek T**, Oiknine J, Brook JG, Aviram M. Role of apolipoprotein in HDL, but not in macrophages in cellular cholesterol efflux: studies in apo E knockout transgenic mice. *Bioch Biophys Res Comm*. 205:1072-1078, 1994.
17. Shachter NS, **Hayek T**, Leff T, Smith JD, Rosenberg D, Walsh A, Ramakrishnan R, Goldberg IJ, Ginsberg HN, Breslow JL. Overexpression of apo C II causes hypertriglyceridemia in transgenic mice. *J. Clin Invest* 93:1683-90, 1994.
18. **Hayek T**, Oiknine J, Dankner G, Brook JG, Aviram M. HDL apolipoprotein A-I attenuates oxidative modification of low density lipoprotein: Studies in transgenic mice. *Eur J Clin Chem Clin Biochem* 33:721-725, 1995.
19. Aviram M, Maor I, Keidar S, **Hayek T**, Oiknine J, Bar-El Y, Adler Z, Kertzman V, Milo S. *Biochem Biophys Res Comm* 216:501-513, 1995.
20. Huang L, Voyiuziakis E, Markenson D, Sokol K, **Hayek T**, Breslow JL. Apo B gene knockout in mice results in embryonic lethality in homozygotes and neural tube defects, male infertility and reduced HDL cholesterol ester and apo A-I transport rates in heterozygotes. *J Clin Invest* 96:2152-2161, 1995.
21. **Hayek T**, Masucci-Magoules L, Jiang X, Walsh A, Rubin Ed, Breslow JL, Tall AR. 1995. Decreased early atherosclerotic lesions in hypertriglyceridemic mice expressing CETP transgene. *J Clin Invest* 96:2071-2074
22. Coleman R, Mazor L, Shenzer P, Aviram M, Keidar S, **Hayek T**. Pathogenesis of atherosclerosis. *Rev Acta Histochemica* 98:372, 1996.

23. **Hayek T**, Rosenblat M, Aviram M. Increased platelet activation in the atherosclerotic apolipoprotein E-deficient transgenic mice: role of plasma lipoproteins and platelet composition. *Eur J Lab Med.* 4:79-84, 1996
24. Keidar S, Attias J, Smith J, Breslow JL, **Hayek T**. The angiotensin II receptor antagonist, losartan, inhibits LDL lipid peroxidation and atherosclerosis in apo E deficient mice. *Bioch Biophys Res Comm.* 236:622-625, 1997.
25. Aviram M, **Hayek T**, Furman B. Red wine consumption inhibits LDL oxidation and aggregation in humans and in atherosclerotic mice. *Bio Factors* 6:415-419, 1997.
26. Fuhrman B, Ben-Yaish L, Attias J, **Hayek T**, Aviram M. Tomato lycopene and  $\beta$ -carotene inhibit LDL oxidation and this effect depends on the lipoprotein vitamin E content. *Nutr Metab Cardiovasc Dis* 7:433-443, 1997.
27. Maor I, **Hayek T**, Coleman R, Aviram M. Plasma LDL oxidation leads to its aggregation in the atherosclerotic apo E deficient mice. *Arterioscler Thromb* 17:2995-3005, 1997.
28. Weinstock P, Bisgaier C, **Hayek T**, Aalto-Setälä K, Sehayek E, Wu L, Sheiffel P, Markel M, Essenburg A, Breslow JL. Decreased HDL-C levels but normal lipid absorption, growth and feeding behavior in apo A-IV knockout mice. *J Lipid Res* 38:1782-1794, 1997.
29. Levak-Frank S, Weinstock P, **Hayek T**, Verdery R, Hofmann W, Ramakrishnan R, Sattler W, Breslow JL, Zechner R. Induced mutant mice expressing lipoprotein lipase exclusively in muscle have subnormal triglycerides, yet reduced HDL-C levels in plasma. *J Biol Chem* 272:17182-17190, 1997.
30. Tall A, Sharp D, Zhong S, **Hayek T**, Masucci-Magoulas L, Rubin EM, Breslow JG. Cholesteryl ester transfer protein and atherogenesis. *Ann NY Acad Sci* 811:178-182, 1997.
31. Fuhrman B, Buch S, Vaya J, Belinky PA, Coleman R, **Hayek T**, Aviram M. Licorice extract and its major polyphenol glabridin protect LDL against lipid peroxidation: In vitro and ex vivo studies in humans and in atherosclerotic apo E deficient mice. *Am J Clin Nutr* 66:267-275, 1997.
32. **Hayek T**, Fuhrman B, Vaya J, Rosenblat M, Belinky P, Coleman R, Elis A, Aviram M. Reduced Progression of atherosclerosis in the apo E deficient mice following consumption of red wine, or its polyphenols, Quercetin or Catechin, is associated with reduced susceptibility of LDL to oxidation and to aggregation. *Arterioscler Thromb Vasc Biol* 17:2744-2752, 1997.
33. Aviram M, Hussein O, Rosenblat M, Sclzinger S, **Hayek T**, Keidar S. Interactions of platelets and lipoproteins in hypercholesterolemia: Antiatherogenic effects of HMG-COA reductase inhibitor therapy. *J Cardiovasc Pharmacol* 31:39-45, 1998.

34. Zaiou M, Azrolan N, **Hayek T**, Wang H, Wu L, Cizman B, Madaio M, Milbrandt J, Marsh J, Breslow J, Fisher Ed. The full induction of human apo A-I gene expression by the experimental nephrotic syndrome in transgenic mice depends on cis-acting elements in the proximal 256 base-pair promoter region and the transacting factor early growth response factor  
1. *J Clin Invest* 101:1669-1707, 1998.
35. **Hayek T**, Attias J, Smith J, Breslow JL, Keidar S. Antiatherosclerotic and antioxidative effects of captopril in apo E deficient mice. *J Cardiovasc Pharm.* 31:540-544, 1998.
36. Rosenblat M, Belinky P, Vaya J, Levy R, **Hayek T**, Coleman R, Merehav S, Aviram M. Macrophage enrichment with the isofluvan glabridin inhibits NADPH oxidase- induced cell-mediated oxidation of LDL. *J Biol Chem* 274:13790-13799, 1999.
37. **Hayek T**, Attias J, Coleman R, Brodsky S, Smith J, Breslow J, Keidar S. The angiotensin converting enzyme inhibitor, fosinopril, and the angiotensin II receptor antagonist, losartan, inhibit LDL oxidation and attenuate atherosclerosis independent of lowering blood pressure in apolipoprotein E deficient mice. *Cardiovasc Res* 44:579-587, 1999.
38. Maor I, Kaplan M, **Hayek T**, Vaya J, Hofman A, Aviram M. Oxidized monocyte-derived macrophages in aortic atherosclerotic lesion from apo E deficient mice and from human carotid artery contain lipid peroxide and oxysterols. *Biochem Biophys Res Comm* 269:775-780, 2000.
39. Maor I, **Hayek T**, Hirsh M, Iancu I, Aviram M. Macrophage-released proteoglycans enhance LDL aggregation: studies in aorta from apo E-deficient mice. *Atherosclerosis* 150:91-101, 2000.
40. Fuhrman B, Rosenblatt M, **Hayek T**, Coleman R, Aviram M. Ginger extract consumption reduces plasma cholesterol, inhibits LDL oxidation and attenuates development of atherosclerosis in atherosclerotic apo E deficient mice. *J Nutr* 130:1124-1131, 2000.
41. Keidar S, Attias J, Coleman R, Wirth K, Scholkens B, **Hayek T**. Attenuation of atherosclerosis in apo E deficient mice by ramipril is dissociated from its antihypertensive effects and from potentiation of bradykinin. *J Cardiovasc Pharmacol* 35:64-72, 2000.
42. **Hayek T**, Aviram M, Heinrich R, Sakhnini E, Keidar S. Losartan inhibits cellular uptake of oxidized LDL in monocyte-macrophages from hypercholesterolemic patients. *Biochem Biophys Res Comm*, 273:417-470, 2000.
43. Keidar S, Heinrich R, Kaplan M, **Hayek T**, Aviram M. Angiotensin II administration to Atherosclerotic mice increases macrophage uptake of oxidized LDL. A possible role for Interleukin-6. *Arterioscler Thromb Vasc Biol.* 21:1464-1469,2001.
44. Kaplan M, **Hayek T**, Raz A, Coleman R, Dornfeld L, Vaya J, Aviram M. Pomegranate juice supplementation to atherosclerotic mice reduces macrophage lipid peroxidation, cellular cholesterol accumulation and development of atherosclerosis. *J Nutr.* 131:2082-2089, 2001.

45. Vaya J, Aviram M, Mahmood S, **Hayek T**, Grenadir E, Hoffman A, Milo S. Selective Distribution of oxysterols in atherosclerotic lesions and human plasma lipoproteins. *Free Radic Res.* 34:485-97,2001
46. Aviram M, Dornfeld L, Kaplan M, Coleman R, Gaitini D, Nitecki S, Hofman A, Rosenbatal M, Volkova N, Presser D, Attias J, **Hayek T**, Fuhrman B. Pomegranate juice flavonoids inhibit low-density lipoprotein oxidation and cardiovascular diseases: studies in atherosclerotic mice and in humans. *Drugs Exp Clin Res* 28:49-62,2002.
47. Rosenblat M, Grunfeld O, **Hayek T**, Aviram M. Serum paraoxonase activity and extent of lipid peroxidation are not affected by increased levels of human apolipoprotein A-I: studies in transgenic mice. *Clin Chem Lab Med* 40:9-14,2002.
48. Fuhrman B, Volkova N, Kaplan M, Attias J, **Hayek T**, Aviram M. Antiatherosclerotic effects of licorice extract supplementation on hypercholesterolemic patients: increased resistance of LDL to atherogenic modifications, reduced plasma lipid levels, and decreased systolic blood pressure. *Nutrition* 18:268-73, 2002.
49. **Hayek T**, Kaplan M, Raz A, Keidar S, Coleman R, Aviram M. Ramipril administration to atherosclerotic mice reduce oxidized low-density lipoprotein uptake by their macrophages and blocks the progression of atherosclerosis. *Atherosclerosis* 161:65-74, 2002.
50. Fuhrman B, Koren L, Volkova N, Keidar S, **Hayek T**, Aviram M. Atrovastatin therapy in hypercholesterolemic patients suppresses cellular uptake of oxidized-LDL by differentiating monocytes. *Atherosclerosis* 164:179-85,2002.
51. Coleman R, **Hayek T**, Keidar S, Aviram M. Atherosclerosis: The Apolipoprotein E-deficient mouse model revisited. *Microscopy and Microanalysis, Volume 8, Supplement 2:944-945, 2002*
52. Shamir R, Shehadeh N, Rosenblat M, Eshach-Adiv O, Coleman R, Kaplan M, Hamoud S, Lischinsky S, **Hayek T**. Oral insulin supplementation attenuates atherosclerosis progression in apolipoprotein E-deficient mice. *Arterioscler Thromb Vasc Biol* 23:104-10,2003
53. Keidar S, **Hayek T**, Kaplan M, Pavlotzky E, Hamoud S, Coleman R, Aviram M. Effect of Eplerenone, a selective aldosterone blocker, on blood pressure, serum and macrophage oxidative stress, and atherosclerosis in apolipoprotein E-deficient mice. *Cardiovasc pharmacol* 41:955-963,2003
54. **Hayek T**, Hamoud S, Keidar S, Pavlotzky E, Coleman R, Aviram M, Kaplan M. Omapatrilat decreased macrophage oxidative status and atherosclerosis progression in atherosclerotic apolipoprotein E-deficient Mice. *Cardiovasc Pharmacol* 43:140-147, 2004
55. **Hayek T**, Pavlotzky E, Hamoud S, Coleman R, Keidar S, Aviram M, Kaplan M. Tissue Angiotensin- Converting-Enzyme (ACE) deficiency leads to a reduction in oxidative stress and in atherosclerosis. Studies in ACE-Knockout mice type 2. *Arterioscler Thromb Vasc Biol* 23:2090-2096, 2003
56. Rosenblat M, **Hayek T**, Hussein K, Aviram M. Decreased macrophage Paraoxonase 2 expression in patients with hypercholesterolemia is the result of their increased

cellular cholesterol content: Effect of Atorvastatin therapy. *Arterioscler Thromb Vasc Biol* 24:175-180, 2004.

57. Keidar S, Kaplan M, Pavlotzky E, Coleman R, **Hayek T**, Hamoud S, Aviram M. Aldosterone administration to mice stimulates macrophage NADPH oxidase and increases atherosclerosis development. A possible role for Angiotensin-Converting Enzyme and the receptors for Angiotensin II and Aldosterone. *Circulation*, 109:2213-2220, 2004.
58. **Hayek T**, Hussein K, Aviram M, Coleman R, Keidar S, Pavlotzky E, Kaplan M. Macrophage-derived foam cell formation in streptozotocin-induced diabetic mice: Stimulatory effect of Glucose. *Atherosclerosis*, 2005 nov; 183:25-33.
59. **Hayek T**, Stephens J.W, Hubbart C.S, Acharya J, Caslake M.J, Hawe E, Miller G.J, Hurel S.J, Humphries S. A common variant in the glutathione S transferase gene is associated with elevated markers of inflammation and lipid peroxidation in subjects with diabetes mellitus. *Atherosclerosis*. 184:404-412, 2006.
60. Luigi Fabrizio Rodella, Francesca Bonomini, Rita Rezzani, Sandra Tengattini, **Tony Hayek**, Michael Aviram, Shlomo Keidar, Raymond Coleman, Rossella Bianchi. Atherosclerosis and the protective role played by different proteins in apolipoprotein E-deficient mice. In press, 2006.
61. Coleman R, **Hayek T**, Keidar S, Aviram M. A mouse model for human atherosclerosis: Long - term histopathological study of lesion development in the aortic arch of apolipoprotein E – deficient (E<sup>o</sup>) mice. *Acta histochemica*, 108: 415-424, 2006.

#### **CASE REPORTS**

1. Nagler A, Brenner B, **Hayek T**, Brook JG. Subdural hemorrhage in a 32-year old man with chronic idiopathic thrombocytopenic purpura. *Acta Hemat* 75:186-187, 1986.
2. Benderly A, Shehadeh N, Griff Z, **Hayek T**, Erde P, Etzioni A. Bacterial meningitis in infants two to six weeks old. *Helv Pediat Acta* 41:311-315, 1986.
3. Finkelstein R, **Hayek T**, Brook JG. Q-fever endocarditis. *Harefuah* 113:108-109, 1987.
4. Klein L, **Hayek T**, Finkelstein R. Non-tropical pyomyositis in an elderly patient. *Harefuah* 116:145-146, 1988.
5. **Hayek T**, Kleinhaus U, Hashmonai M, Keidar S. Preoperative diagnosis of Mirizzi syndrome. *Am J Med Sci* 296:74-75., 1988.
6. Nagler A, **Hayek T**, Brenner B, Eidelman S. Recurrent spontaneous bacterial peritonitis in a patient with polycythemia vera. *Am J Hematol* 29:54-55, 1988.
7. **Hayek T**, Markel A, Goldfed M, Ben-Arie Y, Brook JG. Chronic active hepatitis presenting as retroperitoneal lymphadenopathy. *Postgrad Med J* 70:380-382, 1994.
8. **Hayek T**, Markel A, Karban A, Finkelstein R. Left sided group A streptococcal endocarditis in an intravenous drug abuser with mitral valve prolapse. *Harefuah* 126:251-252, 1994.
9. Levy Y, **Hayek T**, Finkelstein R. Sarcoidosis mimicking toxoplasmosis with severe hypercalcemia and normal 1,25-dihydroxy vitamin D. *J Int Med* 240:165-167, 1996.

10. Dagash M, **Hayek T**, Gallimidi Z, Yassin K, Brook G. Transient radiologic and colonoscopic features of inflammatory bowel disease in a patient with severe salmonella gastroenteritis. *Am J Gastroentrol* 92(2):349-351, 1997.
11. Avivi I, Valfsons S, Finkelstein R, **Hayek T**, Brook JG. Pulmonary infiltrates and skin lesions. *Postgrad Med J* 73:245-246, 1997.
12. **Hayek T**, Engel A, Eyal A, Brook JG. Abdominal retroperitoneal lymphadenopathy in an elderly man. *Postgrad Med J* 73:591-592, 1997.
13. Hamood S, **Hayek T**, Munichor M, Michaelson M, Best LA, Bentur L. Fat Embolism in a boy with minor non-fracture trauma. *Pediat Pulmon J* 27:221-223, 1999.
14. Soudack M, Shechter A, Malkin L, **Hayek T**, Gaitini D. Inflammatory pseudotumor of the liver: sonographic and computed tomographic features with complete regression. *J Ultrasound Med* 19:501-4, 2000.
15. Hamoud S, Nitesky S, Engel A, Goldsher D, **Hayek T**. A case report of hyoplasia of the inferior vena cava with azygous continuation presenting as recurrent leg deep vein thrombosis. *Am J Med Sci* 319:414-6,2000.
16. Raz A, Bergman R, Eilam O, Yungerman T, **Hayek T**. Olanzapine Induced Hypersensitivity Syndrome. *Am J Med Sci.* 321:156-8, 2001.
17. Dagash M, Nakhoul F, Daoud D, **Hayek T**. The spectrum of “cerebral hyponatremia”—cerebral salt wasting syndrome in a patient with pituitary adenoma. *Isr Med Assoc J* 2:865-7, 2000.
18. Weinberger T, **Hayek T**, Keidar S. Acute gastroenteritis caused by enterohemorrhagic E coli O157:H7. *Harefuah* 15;134(10):767-9, 831,1998.
19. Guttman-Yassky E, **Hayek T**, Muchnik L, Bergman R. Acute Rhabdomyolysis Myoglobinuria associated with isotretinoin treatment. *Intern J of Derm.* 42:499-500,2003
20. Zalts R, Hamoud S, Bar-Shalom R, Eilam O, Rozin A, **Hayek T**. Aortitis: Presenting as fever of unknown origin – FDG PET for diagnosis and follow up. Annual European Congress of Rheumatology EULAR, Vienna, Austria, 2005.
21. Hussein K, **Hayek T**, Yassin K, Fischer D, Vlodaysky E, Kra-Oz Z, Hamoud S. Acute CMV infection associated with the onset of inflammatory Bowel Disease. A case report & review of the literature. 2005.
22. Zalts R, Hamoud S, Bar-Shalom R, Eilam O, Rozin A, **Hayek T**. Panaortitis: Diagnosis via fluorodeoxyglucose positron emission tomography. *Am J Med Sci.* 2005 Nov; 330(5):247-9.
23. Hussein K, **Hayek T**, Yassin K, Fischer D, Vlodaysky E, Kra-Oz Z, Hamoud S. Acute cytomegalovirus infection associated with the onset of inflammatory bowel disease. *Am J Med Sci.* Jan; 331(1):40-3.

## CONFERENCES

### INVITED TALKS

1. **Hayek T.** Heterologous HDL in transgenic mice. American Heart Association 67th Scientific Sessions, Anaheim, California, USA. 1991.
2. **Hayek T.** Studies of HDL metabolism in transgenic mice. European Lipoprotein Club, Tutzing, Germany, September 1992.
3. **Hayek T.** HDL metabolism in transgenic mice. Glaxo-Group Research Cellular and Molecular Sciences Division, London, England, September 1992.
4. **Hayek T.** Transgenic mice – lipoproteins and atherosclerosis. Session Chairman. American Heart Association, 68<sup>th</sup> Scientific Sessions. Anaheim, CA, USA. November 1995.
5. **Hayek T.** The effect of the ACE inhibitor, ramipril, on blood pressure, lipoprotein peroxidation and atherosclerosis 20 יר, 04 in apo E deficient mice. Hoechst Marion Roussel – Cardiovascular Research. Frankfurt, Germany. October 1998.

### ABSTRACTS

1. **Hayek T,** Fuhrman B, Levy Y, Aviram M, Brook JG. Intralipid infusion in patients with familial hypercholesterolemia: Effect of serum and plasma lipoproteins on platelet aggregation and on macrophage cholesterol metabolism. 8th International Symposium on Atherosclerosis. Rome, Italy, 1988.
2. Ben-Arieh Y, **Hayek T,** Gaiteni D. Multiple myeloma presenting as bilateral high adrenal plasma cell tumors. Israeli Pathologist Association Conference. Tel-Aviv, Israel, 1988.
3. **Hayek T,** Chajek-Shaul T, Walsh A, Azrolan N, Breslow JL. Probucol reduces HDL-C levels by decreasing apo A-I transport rate in human A-I transgenic mouse model. *Circulation* 82:929, 1990.
4. Chajek-Shaul T, **Hayek T,** Walsh A, Breslow JL. Reduced fractional catabolic rate of HDL cholesteryl ester in human A-I transgenic mice. *Circulation* 82:2115, 1990.
5. Agellon LB, Walsh A, Hesler CB, Shelanski SA, **Hayek T,** Gillette TG, Breslow JL, Tall TG. Expression of human cholesteryl ester protein transfer (CETP) in transgenic mice. *Circulation* 82:1714, 1990.
6. **Hayek T,** Chajek-Shaul T, Walsh A, Agellon LB, Moulin P, Tall AR, Breslow JL. Interaction of human apo A-I and CETP genes in transgenic mice results in a profound decrease in HDL cholesterol. *Circulation* 84:68, 1991.
7. **Hayek T,** Chajek-Shaul T, Azrolan N, Walsh A, Breslow JL. Hypertriglyceridemia in human apo CIII transgenic mice causes reduced HDL-C and apo A-I levels. European Atherosclerosis Society. Nice, France, 1992.
8. Azrolan N, **Hayek T,** Ito Y, Verdery RB, Chajek-Shaul T, Walsh A, Breslow JL. A high fat diet increases hepatic production of human apo A-I in transgenic mice. *Circulation* 86:1104, 1992.

9. Aalto-Setälä K, Fisher EA, Chen X, Chajek-Shaul T, **Hayek T**, Zechner R, Walsh A, Ramakrishnan R, Ginsberg HN, Breslow JL. Mechanism of hypertriglyceridemia in human apo CIII transgenic mice. *Circulation* 86:1106, 1992.
10. **Hayek T**, Azrolan N, Walsh A, Chajek-Shaul T, Verdery RB, Agellon LB, Tall AR, Breslow JL. CETP plays an important role in the inverse relationship between plasma triglycerides and HDL cholesterol levels. *Circulation* 86:1682, 1992.
11. Plump AS, Smith JD, **Hayek T**, Aalto-Setälä K, Walsh A, Breslow JL. Apolipoprotein E-deficient mice created by homologous recombination in embryonic stem cells. *Circulation* 86:1873, 1992.
12. Shachter N, **Hayek T**, Leff T, Smith J, Rosenberg D, Walsh A, Goldberg I, Ramakrishnan R, Ginsberg H, Breslow J 1993. Overexpression of apolipoprotein C II Cause hypertriglyceridemia in transgenic mice. *Circulation* 88:270, 1993.
13. Odaka H, Azrolan N, **Hayek T**, Aalto-Setälä K, Breslow J. Increased human apo A-I synthesis in hepatocytes of transgenic mice fed a high fat diet. *Circulation* 88:422, 1993.
14. Plump A, **Hayek T**, Walsh A, Breslow J. Diminished HDL - CE flux in apo A-I deficient mice. *Circulation* 88:422, 1993.
15. Tall A, Jiang X, Quinet E, Oliveira H, Agellon L, **Hayek T**, Walsh A, Breslow J. Plasma CETP in lipoprotein metabolism. 62nd European Atherosclerosis Society. Jerusalem, Israel, 1993.
16. **Hayek T**, Oiknine J, Breslow J, Aviram M, Brook JG. Plasma and lipoprotein oxidation in apo E deficient mice with severe hypercholesterolemia and atherosclerosis. Xth International Symposium on Atherosclerosis. Montreal, Canada, 1994
17. **Hayek T**, Keidar S, Mei Y, Oiknine J, Breslow J. Effect of Angiotensin converting enzyme inhibitors on LDL lipid peroxidation and atherosclerosis in apo E deficient mice. *Circulation* 92:2998, 1995.
18. **Hayek T**, Rubbin E, Walsh A, Breslow J, Alan T. Decreased aortic atherosclerotic lesions in hypertriglyceridemic mice expressing CETP. *Circulation* 92:359, 1995.
19. **Hayek T**, Rosenblat M, Aviram M. Increased platelet activation in atherosclerotic, apo E deficient transgenic mice - Role of plasma lipoprotein and platelet composition. *Circulation* 92:106, 1995.
20. Weng Wei, **Hayek T**, Breslow JL. Dramatic reduction of HDL in apo A-II deficient mice created by homologous recombination in ES cells. *Circulation* 92:105, 1995.
21. **Hayek T**, Attias J, Coleman R, Breslow J, Keidar S. The effect of the ACE inhibitor fosinopril and the angiotensin receptor antagonist losartan on the susceptibility of plasma LDL to lipid peroxidation and on the progression of atherosclerosis in the apo E deficient mice. XI<sup>th</sup> International Symposium on Atherosclerosis. Paris, France, 1997.

22. **Hayek T**, Attias J, Coleman R, Keidar S. Losartan attenuates atherosclerosis in apo E deficient mice without blood pressure reduction. International Forum on Angiotensin II Receptor Antagonism. Monte Carlo, Monaco, 1999.
23. **Hayek T**, Raz A, Coleman R, Heinrich R, Kaplan M. Ramipril induces regression of the atherosclerotic lesions in apo E deficient mice. XIIth International Symposium on Atherosclerosis. Stockholm, Sweden, 2000.
24. Coleman R, **Hayek T**, Keidar S, Aviram M. Atherosclerosis: The apolipoprotein E-deficient mouse model revisited. Microscopy Society of America 8(suppl 2),2002.

## CLINICAL RESEARCH

1. 2000-2003 Co-Investigator, Rambam Medical Center, Pharmanet. A Multicenter Study Comparing Blood Pressure Control by Enalapril with and without Lercanidipine. \$40,000
2. 1999 – 2003 Co-Investigator, Rambam Medical Center, Bristol-Myres-Squibb. A Multicenter Study Comparing the Effect of Omapatrilat vs Enalapril on the Morbidity and Mortality of Patients with Severe Congestive Heart Failure. \$300,000
3. 2003 – 2004 Co-Investigator, Rambam Medical Center, Sanofi-Synthelabo. A multicenter Survey on Clopidogrel in Non Myocardial Infarct Acute Coronary syndromes. \$55,000
4. 2004 – Co-Investigator, Rambam Medical Center, Novartis (Icon). A Multicenter Study Comparing the Effect of Amlodipine vs Combination of Amlodipine with Valsartan in treating moderate severity Diastolic Blood Pressure. \$50,000
5. 2004 – Co-Investigator, Rambam Medical Center, BMS (PPD). A Multicenter Study Comparing the Effect of Irbesartan with or without Disothiazide in treating severe Distolic Hypertention. \$60,000
6. Co-Investigator, Rambam Medical Center, Novartis. A Multicenter Study comparing the effect of HCTZ combination with HCTZ alone, Irbesartan and

HCTZ combination, or Amlodipine and HCTZ combination. \$80,000

7. 2005-2006 Co-Investigator, Rambam Medical Center, Novartis

A Multicenter Study Randomized Double Blind, Placebo Controlled trial Comparing the Efficacy and Safety of the Combination of Aliskeren with HCTZ compared with Irbesartan or Amlodipine with HCTZ or HCTZ alone in Hypertensive Patients with BMI  $\geq 30$  kg/m<sup>2</sup> not Adequately Responsive to HCTZ 25 mg. (Including ICH-GCP training in investigator meeting).