PROGRAM PLANNING COMMITTEE

Co-Chairmen

Ernst L. Wynder  
James A. Peters  
Stefano Vivona

Committee Members

Arnold L. Brown  
Gio B. Gori  
Willis A. Gortner

Arthur I. Holleb  
Mortimer B. Lipsett  
Morton K. Schwartz  
Frederick J. Stare

Sidney Weinhouse  
John H. Weisburger  
Gerald N. Wogan

PROGRAM

List of Participants .................................................. 3235
Foreword.  
Jack W. Milder .................................................. 3237

SESSION I

General Overview

James A. Peters, Chairman

Introductory Remarks.  
Ernst L. Wynder .................................................. 3238
Cancer Epidemiology in Populations of the United States—with Emphasis on Hawaii and California—and Japan.  
John E. Dunn, Jr .................................................. 3240
Willis A. Gortner .................................................. 3246
Incidence of Stomach Cancer and Its Relation to Dietary Habits and Nutrition in Japan between 1900 and 1975.  
Toshio Oiso .................................................. 3254
Dietary Patterns among Men of Japanese Ancestry in Hawaii.  
Jean H. Hankin, Abraham Nomura, and George G. Rhoads .................................................. 3259
Cancer Incidence in the United States and Puerto Rico.  
Isidro Martinez, Raquel Torres, and Zenaida Frías .................................................. 3265
Nutrition in Puerto Rico.  
Nelson A. Fernandez .................................................. 3272
Nutrition and Experimental Carcinogenesis: A Review.  
David B. Clayson .................................................. 3292
James A. Peters .................................................. 3301

Alcoholism and Nutritional Imbalance

Joseph Feldman, Chairman

Cancer of the Upper Alimentary Tract

Some Aspects of the Epidemiology of Esophageal Cancer.  
N. E. Day .................................................. 3304
Relationship of Plummer-Vinson’s Disease to Cancer of the Upper Alimentary Tract in Sweden  
Lars-Gunnar Larsson, Anita Sandström, and Per Westling .................................................. 3308
Nutrition and Tumor Immunity: Divergent Effects of Antitumor Antibody.  
David M. Bull .................................................. 3317
Possible Role of Nutrients in Neoplasia.  
Joseph J. Vitale .................................................. 3320
Effects of Dietary Constituents on the Metabolism of Chemical Carcinogens.  
Lee W. Wattenberg .................................................. 3326
Is There a Role for Mitochondrial Genes in Carcinogenesis?  
Henry D. Hoberman .................................................. 3332
Nutritional Imbalances Other Than Those Associated with Alcoholism

Alcohol and Alcohol-related Deficiencies as Carcinogens.
  Joseph J. Vitale and Leonard S. Gottlieb ........................................ 3336
Origins of Nutritional Imbalance in Cancer.
  S. D. Morrison ................................................................. 3339
Summary of the Informal Discussion of Alcoholism and Nutritional Imbalance.
  Joseph Feldman .............................................................. 3343

SESSION II
Dietary Factors and Hormone-dependent Cancers
Arthur I. Holleb, Chairman

Can Nutrition Explain the Pattern of International Epidemiology of Hormone-dependent Cancers?
  John W. Berg ............................................................... 3345
Breast Cancer Incidence and Nutritional Status with Particular Reference to Body Weight and Height.
  F. de Waard ................................................................. 3351
Formal Discussion of “Breast Cancer Incidence and Nutritional Status with Particular Reference to Body Weight and Height.”
  Brian MacMahon ......................................................... 3357
Hormones, Nutrition, and Cancer.
  Mortimer B. Lipsett ...................................................... 3359
Estrogen Receptors in Hormone-dependent Breast Cancers.
  Elwood V. Jensen .......................................................... 3362
Hormone Profiles in Hormone-dependent Cancers.
  Barnett Zumoff, Jack Fishman, H. Leon Bradlow, and Leon Hellman ........ 3365
Experimental Evidence of Dietary Factors and Hormone-dependent Cancers.
  Kenneth K. Carroll ...................................................... 3374
Dietary Fat and Growth Promotion of Rat Mammary Tumors.
  Po-Chuen Chan and Leonard A. Cohen ..................................... 3384
Summary of the Informal Discussion of Dietary Factors and Hormone-dependent Cancers.
  Arthur I. Holleb .......................................................... 3387

Dietary Factors and Cancer of the Large Bowel
  Gio B. Gori, Chairman

The Epidemiology of Large Bowel Cancer.
  Ernst L. Wynder ................................................................ 3388
Comments on the Epidemiology of Large Bowel Cancer.
  Pelayo Correa .................................................................. 3395
Metabolic Epidemiology of Dietary Factors in Large Bowel Cancer.
  Michael J. Hill .................................................................. 3398
Further Leads on Metabolic Epidemiology of Large Bowel Cancer.
  Bandaru S. Reddy, Anthony Mastromarino, and Ernst L. Wynder ........ 3403
Fecal Bacteriology of Colonic Polyp Patients and Control Patients.
  Sydney M. Finegold, Dennis J. Flora, Howard R. Attebery, and Vera L. Sutter 3407
Discussion of Current Bacteriological Investigations of the Relationships between Intestinal Flora, Diet, and Colon Cancer.
  W. E. C. Moore and L. V. Holdeman ...................................... 3418
Dietary Effects on Chemical Carcinogenesis in Animal Models for Colon and Liver Tumors.
  Adrienne E. Rogers and Paul M. Newberne ................................ 3427
Summary of the Informal Discussion of Dietary Factors and Cancer of the Large Bowel.
  Gio B. Gori .................................................................. 3432

SESSION III
Cancers of the Pancreas and Stomach and Miscellaneous Dietary Factors
  Guy R. Newell, Chairman

Pancreatic Cancer (Gallbladder)

Cancers of the Pancreas and Biliary Tract: Epidemiological Considerations.
  Joseph F. Fraumeni, Jr. .................................................... 3437

NOVEMBER

3233
Formal Discussion of “Cancers of the Pancreas and Biliary Tract: Epidemiological Considerations.”
Edward I. Goldsmith ................................................................. 3447
Formal Discussion of “Cancers of the Pancreas and Biliary Tract: Epidemiological Considerations.”
David Kritchevsky ................................................................. 3450

Stomach Cancer
Developments in the Epidemiology of Stomach Cancer over the Past Decade.
William Haenszel and Pelayo Correa ........................................... 3452
Epidemiology of Cancer of the Stomach with Special Reference to Its Recent Decrease in Japan.
Takeshi Hirayama ................................................................. 3460
Future Inquiries into the Epidemiology of Gastric Cancer.
Saxon Graham ................................................................. 3464
Dietary Factors and the Etiology of Gastric Cancer.
John H. Weisburger and Ronald Raineri .................................... 3469

Miscellaneous Dietary Factors
Potential Carcinogenicity of Food Additives and Contaminants.
Philippe Shubik ................................................................. 3475
Role of Trace Elements in Cancer.
Morton K. Schwartz ............................................................. 3481
Summary of the Informal Discussion of Cancers of the Pancreas and Stomach and Miscellaneous Dietary Factors.
Guy R. Newell ................................................................. 3488

SESSION IV
Dietary Factors and Special Epidemiological Situations
Marvin A. Schneiderman, Chairman

Dietary Factors and Esophageal Cancer in the Caspian Littoral of Iran.
H. Hormozdiari, N. E. Day, B. Aramesh, and E. Mahboubi .................. 3493
Dietary Factors and Special Epidemiological Situations of Liver Cancer in Thailand and Africa.
G. N. Wogan ................................................................. 3499
Dietary Factors and Cancer in Israel.
Baruch Modan, Vita Barell, Flora Lubin, and Michaela Modan .............. 3503
Cancer in United States Jews.
Peter Greenwald, Robert F. Korns, Philip C. Nasca, and Patricia E. Wolfgang 3507
Role of Life-style and Dietary Habits in Risk of Cancer among Seventh-Day Adventists.
Roland L. Phillips .............................................................. 3513
Incidence of Cancer in United States Blacks.
John L. Young, Jr., Susan S. Devesa, and Sidney J. Cutler .................. 3523
Relevance of Animal Studies to Human Disease.
D. Mark Hegsted ............................................................... 3537
Summary of the Informal Discussion of Dietary Factors and Special Epidemiological Situations.
Marvin A. Schneiderman .......................................................... 3540

SUMMATION

Summary of the Conference on Nutrition in the Causation of Cancer.
D. M. Hegsted ................................................................. 3541
National Cancer Institute Program on Nutrition and Cancer.
James A. Peters ............................................................... 3544
The Diet, Nutrition, and Cancer Program of the NCI National Cancer Program.
Gio B. Gori ................................................................. 3545
Ernst L. Wynder ............................................................... 3548