

vol. n.
60/4

Cited in Index Medicus / Medline
NLM ID 921440 (Pub-Med)

December
2019

Supplemento 3

Atti

Le giornate della ricerca scientifica
e delle esperienze professionali dei giovani

Società Italiana di Igiene, Medicina Preventiva e Sanità Pubblica (SIIP)

Roma 20-21 dicembre 2019

JOURNAL
OF PREVENTIVE
Medicine
AND Hygiene

the ORIGINAL DOCUMENT OF HIPPOCRATES' OATH



The Journal has been Accredited,
on occasion of the 17th December
2004 Meeting of the Executive
and Scientific SIIP Councils, by the
Italian Society of Hygiene, Preventive
Medicine and Public Health

PACINI
EDITORE
MEDICINA

JOURNAL OF PREVENTIVE MEDICINE AND HYGIENE

<http://www.jpmmh.org>

Editor

Pietro Crovari, *Department of Health Sciences, University of Genoa, Italy*

Co-Editors

Roberto Gasparini, *Department of Health Sciences and Interuniversity Research Centre on Influenza and other infections, University of Genoa, Italy*

Giancarlo Icardi, *Department of Health Sciences and Interuniversity Research Centre on Influenza and other infections, University of Genoa, Italy*

International Editorial Board

Gabriella Agazzotti, *Department of Diagnostic, Clinical and Public Health Medicine, University of Modena and Reggio Emilia, Modena, Italy*

Daniela Amicizia, *Department of Health Sciences, University of Genoa, Italy*

Roy Anderson, *FRS FMedSci, London Centre for Neglected Tropical Disease Research, Department of Infectious Disease Epidemiology, School of Public Health Faculty of Medicine, United Kingdom*

Italo Francesco Angelillo, *Department of Experimental Medicine, Second University of Naples, Italy*

Filippo Ansaldi, *Department of Health Sciences, University of Genoa, Italy*

Paolo Bonanni, *Department of Health Sciences, University of Florence, Italy*

Rosa Cristina Coppola, *Department of Public Health, University of Cagliari, Italy*

Maria Luisa Cristina, *Department of Health Sciences, University of Genoa, Italy*

Francesco D'Agostini, *Department of Health Sciences, University of Genoa, Italy*

Silvio De Flora, *Department of Health Sciences, University of Genoa, Italy*

Àngela Dominguez, *Department de Salut Pública Facultat de Medicina, University of Barcelona, Spain*

Paolo Durando, *Department of Health Sciences, Postgraduate School in Occupational Medicine, University of Genoa and Occupational Medicine Unit, IRCCS AOU San Martino IST, Genoa, Italy*

Giovanni Gabutti, *Department of Medical Sciences, University of Ferrara, Italy*

Alberto Izzotti, *Department of Health Sciences, University of Genoa, Italy*

Silvia Majori, *Dep. Diagnostics and Public Health, University of Verona. Section of Hygiene and Preventive, Environmental and Occupational Medicine*

Nicola Nante, *Department of Molecular and Developmental Medicine, University of Siena, Italy*

Paolo Orlando, *Department of Health Sciences, University of Genoa, Italy*

Donatella Panatto, *Department of Health Sciences and Interuniversity Research Centre on Influenza and Other Infections, University of Genoa, Italy*

Vana Papaevangelou, *Pediatric Infectious Diseases Third Department of Pediatrics General University Hospital Attikon, Athens, Greece*

Gabriele Pelissero, *Department of Preventive, Occupational and Community Medicine, University of Pavia, Italy*

Mario Ramirez, *Instituto de Microbiologia Faculdade de Medicina, University of Lisboa, Portugal*

Rino Rappuoli, *GlaxoSmithKline, Siena Italy*

Laura Sticchi, *Department of Health Sciences, University of Genoa, Italy*

Fiona Timmins, *School of Nursing and Midwifery, Trinity College, Dublin, Ireland*

Pierre Van Damme, *Faculty of Medicine and Health Sciences Centre for the Evaluation of Vaccination Vaccine & Infectious Disease Institute, University of Antwerp, Belgium*

Alessandro Remo Zanetti, *Department of Biomedical Sciences for Health, University of Milan, Italy*

Editorial Staff

Daniela Amicizia, *Department of Health Sciences and Interuniversity Research Centre on Influenza and Other Infections, University of Genoa, Italy*

Piero Luigi Lai, *Department of Health Sciences and Interuniversity Research Centre on Influenza and Other Infections, University of Genoa, Italy*

Donatella Panatto, *Department of Health Sciences and Interuniversity Research Centre on Influenza and Other Infections, University of Genoa, Italy*

Section Editors

e-Health: Alexander Domnich

Environmental Hygiene: Maria Luisa Cristina

Health Care Management: Giancarlo Icardi

Health Promotion: Donatella Panatto, Giacomo Lazzeri

Health Technology Assessment: Roberto Gasparini

History of Medicine and Ethics: Mariano Martini

Hospital Hygiene: Maria Luisa Cristina

Infectious Diseases: Daniela Amicizia, Cecilia Trucchi

Molecular Epidemiology: Sebastiano La Maestra

Non Communicable Diseases: Alberto Izzotti

Nosocomial Infections: Filippo Ansaldi

Nursing: Loredana Sasso, Annamaria Bagnasco

Occupational Medicine and Hygiene: Paolo Durando, Guglielmo Dini

Pharmacoeconomics: Donatella Panatto

Prevention by Antivirals and Antibiotics: Claudio Viscoli

Public Health Laboratory Methods: Laura Sticchi

The International Board is under revision.

© Copyright by Pacini Editore Srl, Pisa, Italy

Managing Editor: Patrizia Alma Pacini

Publisher: Pacini Editore Srl, Via Gherardesca 1, 56121 Pisa, Italy

Published online February 2020

Authorization Tribunal of Genoa, Italy n. 507 - 10/6/1960
Journal registered at "Registro pubblico degli Operatori della Comunicazione" (Pacini Editore srl registration n. 6269 - 29/8/2001).

- ⁵ Lo screening mammografico: dati di attività dal 2011 al 2017. Rapporto dell'Osservatorio Nazionale Screening 2018. <https://www.osservatorionazionalecreening.it/content/lo-screening-mammografico>
- ⁶ European guidelines on breast cancer screening and diagnosis. *European Commission Initiative on Breast Cancer (ECIBC)*. <https://ecibc.jrc.ec.europa.eu/recommendations/>

Green tea consumption and risk of cancer: a systematic review and meta-analysis of observational studies

FILIPPINI TOMMASO¹, MALAVOLTI MARCELLA¹, VINCETI MARCO^{1,2}

¹ Research Center in Environmental, Nutritional and Genetic Epidemiology (CREAGEN), Department of Biomedical, Metabolic and Neural Sciences, University of Modena and Reggio Emilia, Modena;

² Department of Epidemiology, Boston University School of Public Health, Boston

INTRODUCTION

Tea is one of the most highly consumed drink in the world after water. Between 2007 and 2016, world tea production grew by an average annual rate of 4.4%. Global tea consumption was 5.53 million tonnes in 2016 with an annual growth rate of 4.5 percent between 2007 and 2016 ¹. Brewed tea is obtained from the infusion of leaves and buds of *Camellia sinensis*. The most commonly consumed type of tea varies cross-culturally, but green and black tea are the main ones. It has been described that *Camellia sinensis* contains polyphenols, particularly green tea that contain a high amount of catechins, powerful antioxidants. Laboratory studies have suggested that these compounds may inhibit cancer cell proliferation and ² and some experimental and nonexperimental epidemiologic studies have suggested that green tea may have cancer-preventative effects ^{3,4}. We aimed to assess associations between green tea consumption and the risk of cancer incidence and mortality.

MATERIALS AND METHODS

We searched eligible studies up to January 2019 online databases as well as from reference lists of previous reviews and included studies. We included all observational epidemiological studies (both cohort and case-control studies), that investigated the association of green tea consumption with cancer risk. Two or more authors independently applied the study criteria, extracted data and assessed methodological quality of studies. We also performed a meta-analysis using a random effects model comparing the highest category of green tea intake with the lowest, and using the most adjusted multivariable model. We summarized the results according to cancer type diagnosis

RESULTS

In this review update, we included 131 studies, including 46 cohort and 85 case-control studies with over 1,100,000 participants., we found a lower overall cancer incidence. Regarding overall cancer mortality we found no difference in risk. For most of the site-specific cancers we observed a decreased sRR. However, after stratifying the analysis according to study design, we found strongly conflicting results for some cancer sites: esophageal, prostate and urinary tract cancer showed an increased sRR in cohort studies and a decreased/null sRR in case-control studies.

CONCLUSIONS

Overall, findings from observational epidemiological studies yielded inconsistent and even contrasting results for the effect of

green tea consumption on cancer risk. In addition, since observational studies generally suffered from the inherent limitation of this study design, potential unmeasured confounding and exposure misclassification, well conducted and adequately powered experimental studies are clearly needed to elucidate the possible beneficial effects of green tea consumption on cancer risk in humans.

REFERENCES

- ¹ FAO 2018: The FAO Intergovernmental Group on Tea. *Emerging trends in tea consumption: informing a generic promotion process*. In: *Twenty-third Session of the Intergovernmental Group on Tea*. Hangzhou, China, 17-20 May 2018. <http://www.fao.org/ccp/tea23/en/>
- ² Romano B, Pagano E, Montanaro V, et al. *Novel insights into the pharmacology of flavonoids*. *Phytotherapy Res* 2013;27:1588-96.
- ³ Yang CS, Zhang J. *Studies on the prevention of cancer and cardiometabolic diseases by tea: issues on mechanisms, effective doses, and toxicities*. *J Agric Food Chem*. 2019;67:5446-56.
- ⁴ Zhang YF, Xu Q, Lu J, et al. *Tea consumption and the incidence of cancer: a systematic review and meta-analysis of prospective observational studies*. *Eur J Cancer Preven* 2015;24:353-62.

Risk of early onset dementia (EOD) in relation to fruit and vegetable consumption: a case-control study

FILIPPINI TOMMASO¹, GARUTI CATERINA¹, ADANI GIORGIA¹, VINCETI GIULIA^{2,3}, GALLI CHIARA^{3,4}, ZAMBONI GIOVANNA^{2,3}, TONDELLI MANUELA^{2,3}, COSTA MANUELA⁵, MALAVOLTI MARCELLA¹, VINCETI MARCO^{1,2}, CHIARI ANNALISA^{2,3}

¹ Environmental, Genetic and Nutritional Epidemiology Research Center (CREAGEN), Department of Biomedical, Metabolic and Neural Sciences, University of Modena and Reggio Emilia, Modena;

² Center for Neurosciences and Neurotechnology, Department of Biomedical, Metabolic, and Neural Sciences, University of Modena and Reggio Emilia; ³ Neurology Unit of AOU Modena Hospital, Modena;

⁴ Department of Neuroscience, Psychology, Pharmacology and Child Health (NEUROFARBA), University of Florence, Florence; ⁵ Neurology Unit of Carpi Hospital, Modena Local Health Authority, Carpi

INTRODUCTION

Early onset dementia (EOD) is a condition characterized by the onset of severe cognitive impairment before 65 year ¹. There is a general agreement that clinical presentation and consequences on daily life are different than late-onset dementia, due to the occurrence when subjects are still involved within occupational activities as well as familiar responsibilities ². Previous studies have raised the possibility that the risk factors may also differ between the two forms, including the role of environmental and life-style determinants such as diet ³. There is some epidemiologic evidence of an association between dietary habits and protective relations to cognitive decline and incident dementia ^{4,5}. The aim of this study is to evaluate, for the first time to our knowledge, the association between diet and EOD risk.