

La Manipolazione Nutrizionale: Nuove Frontiere nell' Alimentazione del Paziente Oncologico

Dott. Armando D'Orta

Biologo Nutrizionista

Spec. in Scienze dell' Alimentazione

Membro A.R.T.O.I. Sez. Campania

Nutrition Intervention in Cancer.

Heber D¹, Li Z².

 Author information

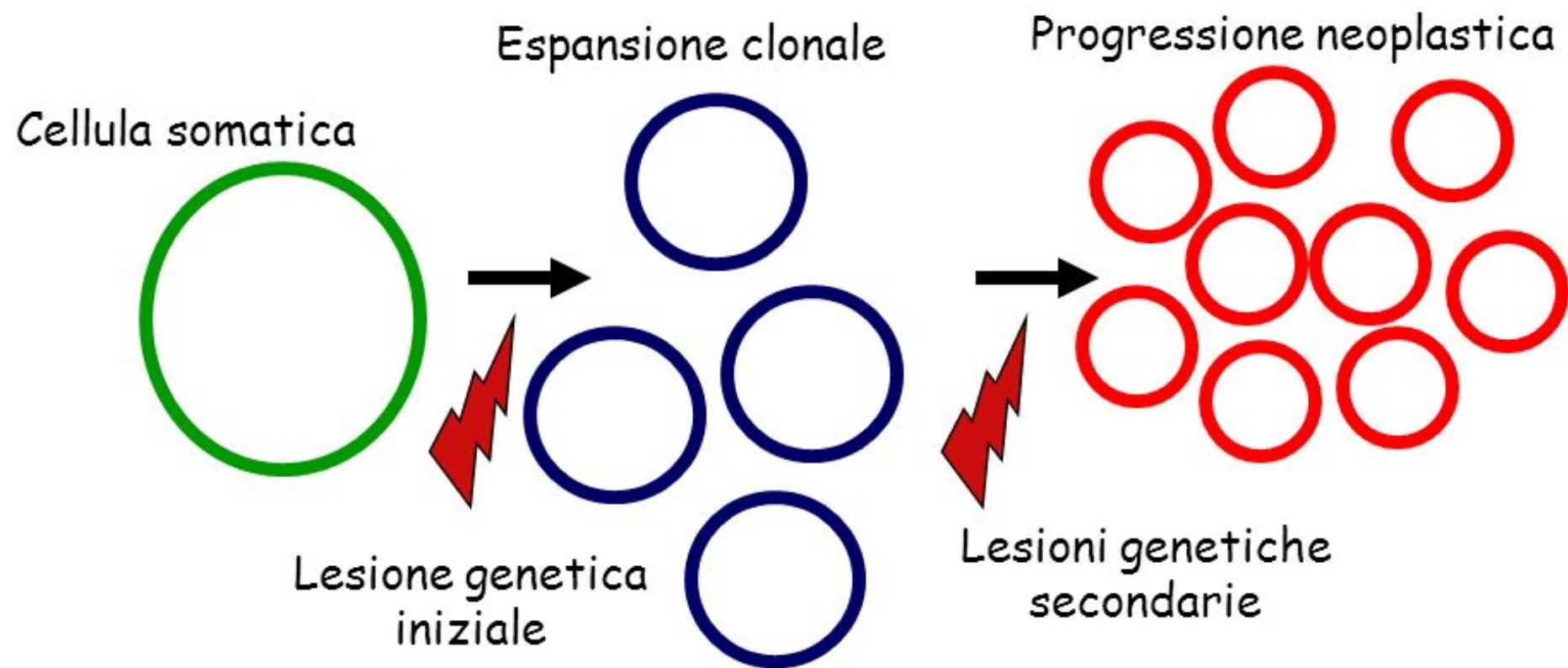
Abstract

Nutrition intervention supports the patient with malnutrition secondary to cancer and its treatment and has been used in the primary and secondary prevention of common forms of cancer. During the emotional stress of dealing with cancer at any stage, patients derive increased quality of life and a sense of control over their lives as the result of receiving supportive advice on diet and lifestyle. Therefore, the use of nutrition intervention in cancer patients is justified in the absence of absolute proof of efficacy as long as it is done safely and with the consent of the cancer patient.

Copyright © 2016 Elsevier Inc. All rights reserved.

KEYWORDS: Cancer; Cancer prevention; Cancer treatment; Malnutrition; Nutrition

CANCEROGENESI



Vegetarianism and breast, colorectal and prostate cancer risk: an overview and meta-analysis of cohort studies.

[Godos J](#)¹, [Bella F](#)¹, [Sciacca S](#)¹, [Galvano F](#)², [Grosso G](#)³.

Author information

Abstract

BACKGROUND: Vegetarian diets may be associated with certain benefits toward human health, although current evidence is scarce and contrasting. In the present study, a systematic review and meta-analysis of prospective cohort studies was performed with respect to the association between vegetarian diets and breast, colorectal and prostate cancer risk.

METHODS: Studies were systematically searched in Pubmed and EMBASE electronic databases. Eligible studies had a prospective design and compared vegetarian, semi- and pesco-vegetarian diets with a non-vegetarian diet. Random-effects models were applied to calculate relative risks (RRs) of cancer between diets. Statistical heterogeneity and publication bias were explored.

RESULTS: A total of nine studies were included in the meta-analysis. Studies were conducted on six cohorts accounting for 686 629 individuals, and 3441, 4062 and 1935 cases of breast, colorectal and prostate cancer, respectively. None of the analyses showed a significant association of vegetarian diet and a lower risk of either breast, colorectal, and prostate cancer compared to a non-vegetarian diet. By contrast, a lower risk of colorectal cancer was associated with a semi-vegetarian diet (RR = 0.86, 95% confidence interval = 0.79-0.94; $I^2 = 0\%$, $P_{\text{heterogeneity}} = 0.82$) and a pesco-vegetarian diet (RR = 0.67, 95% confidence interval = 0.53, 0.83; $I^2 = 0\%$, $P_{\text{heterogeneity}} = 0.46$) compared to a non-vegetarian diet. The subgroup analysis by cancer localisation showed no differences in summary risk estimates between colon and rectal cancer.

CONCLUSIONS: A summary of the existing evidence from cohort studies on vegetarian diets showed that complete exclusion of any source of protein from the diet is not associated with further benefits for human health.

© 2016 The British Dietetic Association Ltd.

KEYWORDS: breast cancer; colorectal cancer; epidemiology; meta-analysis; prostate cancer; vegetarian diet; vegetarianism

La dieta nel cancro **NON** ha nome. Non è:

- Mediterranea.
- Vegetariana.
- Vegana.
- Crudista
- Paleo

Prevenzione
Secondaria e
Terziaria

American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention

Reducing the Risk of Cancer With Healthy Food Choices and Physical Activity

Lawrence H. Kushi, ScD¹; Colleen Doyle, MS, RD²; Marji McCullough, ScD, RD³; Cheryl L. Rock, PhD, RD⁴; Wendy Demark-Wahnefried, PhD, RD⁵; Elisa V. Bandera, MD, PhD⁶; Susan Gapstur, PhD, MPH⁷; Alpa V. Patel, PhD⁸; Kimberly Andrews⁹; Ted Gansler, MD, MBA, MPH¹⁰ and The American Cancer Society 2010 Nutrition and Physical Activity Guidelines Advisory Committee

Abstract

The American Cancer Society (ACS) publishes Nutrition and Physical Activity Guidelines to serve as a foundation for its communication, policy, and community strategies and, ultimately, to affect dietary and physical activity patterns among Americans. These Guidelines, published approximately every 5 years, are developed by a national panel of experts in cancer research, prevention, epidemiology, public health, and policy, and they reflect the most current scientific evidence related to dietary and activity patterns and cancer risk. The ACS Guidelines focus on recommendations for individual choices regarding diet and physical activity patterns, but those choices occur within a community context that either facilitates or creates barriers to healthy behaviors. Therefore, this committee presents recommendations for community action to accompany the 4 recommendations for individual choices to reduce cancer risk. These recommendations for community action recognize that a supportive social and physical environment is indispensable if individuals at all levels of society are to have genuine opportunities to choose healthy behaviors. The ACS Guidelines are consistent with guidelines from the American Heart Association and the American Diabetes Association for the prevention of coronary heart disease and diabetes, as well as for general health promotion, as defined by the 2010 *Dietary Guidelines for Americans* and the 2008 *Physical Activity Guidelines for Americans*.

Guevara-Aguirre J, Balasubramanian P, Guevara-Aguirre M, Wei M, Madia F, Cheng CW, Hwang D, Martin-Montalvo A, Saavedra J, Ingles S, de Cabo R, Cohen P, Longo VD

Growth hormone receptor deficiency is associated with a major reduction in pro-aging signaling, cancer, and diabetes in humans.

Sci Transl Med. 2011 Feb 16;3(70):70ra13



Dr. Jaime Guevara-Aguirre, with members of an Ecuadorian family with Laron syndrome

The scientists have monitored for 22 years Ecuadorian individuals who carry mutations in the growth hormone receptor (GHR) gene (Laron syndrome) that lead to severe GHR and IGF-1 (insulin-like growth factor-1) deficiencies.

They have combined this information with surveys to identify the cause and age of death for individuals in this community who died before this period.

They have found that those with Laron syndrome almost completely avoided cancer and diabetes

Is there a role for IGF-1 in the development of second primary cancers?

Shanmugalingam T¹, Bosco C², Ridley AJ³, Van Hemelrijck M².

Author information

Abstract

Cancer survival rates are increasing, and as a result, more cancer survivors are exposed to the risk of developing a second primary cancer (SPC). It has been hypothesized that one of the underlying mechanisms for this risk could be mediated by variations in insulin-like growth factor-1 (IGF-1). This review summarizes the current epidemiological evidence to identify whether IGF-1 plays a role in the development of SPCs. IGF-1 is known to promote cancer development by inhibiting apoptosis and stimulating cell proliferation. Epidemiological studies have reported a positive association between circulating IGF-1 levels and various primary cancers, such as breast, colorectal, and prostate cancer. The role of IGF-1 in increasing SPC risk has been explored less. Nonetheless, several experimental studies have observed a deregulation of the IGF-1 pathway, which may explain the association between IGF-1 and SPCs. Thus, measuring serum IGF-1 may serve as a useful marker in assessing the risk of SPCs, and therefore, more translational experimental and epidemiological studies are needed to further disentangle the role of IGF-1 in the development of specific SPCs.

© 2016 The Authors. Cancer Medicine published by John Wiley & Sons Ltd.

KEYWORDS: Breast cancer; IGF-1; colorectal cancer; lung cancer; prostate cancer; second primary cancer

Is **DIET** relevant in cancer therapy ?

Clin Nutr. 2015 Jan 23. pii: S0261-5614(15)00035-7. doi: 10.1016/j.clnu.2015.01.013. [Epub ahead of print]

Toward a cancer-specific diet.

Bozzetti F¹, Zupec-Kania B².

 **Author information**

Linee guida Alimentazione di Base

- Normoproteica con prevalenza di proteine vegetali
- Cibi densi, con poco volume, per un apporto nutrizionale prevalentemente plastico
- Assenza di distrattori immunologici
- Alto indice FITONUTRIENTE
- Bassi livelli di fattori di crescita
(Non c'entra "l' ingestione di fattori di crescita")

Latte e derivati

[Am J Public Health. 1997 Jun;87\(6\):992-7.](#)

Milk, dietary calcium, and bone fractures in women: a 12-year prospective study.

[Feskanich D](#), [Willett WC](#), [Stampfer MJ](#), [Colditz GA](#).

Channing Laboratory, Boston, Mass. 02115, USA.

Abstract

OBJECTIVES: This study examined whether higher intakes of milk and other calcium-rich foods during adult years can reduce the risk of osteoporotic fractures.

METHODS: This was a 12-year prospective study among 77761 women, aged 34 through 59 years in 1980, who had never used calcium supplements. Dietary intake was assessed with a food-frequency questionnaire in 1980, 1984, and 1986. Fractures of the proximal femur (n = 133) and distal radius (n = 1046) from low or moderate trauma were self-reported on biennial questionnaires.

RESULTS: We found no evidence that higher intakes of milk or calcium from food sources reduce fracture incidence. Women who drank two or more glasses of milk per day had relative risks of 1.45 for hip fracture (95% confidence interval [CI] = 0.87, 2.43) and 1.05 for forearm fracture (95% CI = 0.88, 1.25) when compared with women consuming one glass or less per week. Likewise, higher intakes of total dietary calcium or calcium from dairy foods were not associated with decreased risk of hip or forearm fracture.

CONCLUSIONS: These data do not support the hypothesis that higher consumption of milk or other food sources of calcium by adult women protects against hip or forearm fractures.

PMID: 9224182 [PubMed - indexed for MEDLINE] PMCID: PMC1380936 [Free PMC Article](#)

[J Bone Miner Res. 2011 Apr;26\(4\):833-9. doi: 10.1002/jbmr.279.](#)

Milk intake and risk of hip fracture in men and women: A meta-analysis of prospective cohort studies.

[Bischoff-Ferrari HA](#), [Dawson-Hughes B](#), [Baron JA](#), [Kanis JA](#), [Orav EJ](#), [Staehelin HB](#), [Kiel DP](#), [Burckhardt P](#), [Henschkowski J](#), [Spiegelman D](#), [Li R](#), [Wong JB](#), [Feskanich D](#), [Willett WC](#).

Centre on Aging and Mobility, University of Zurich, Zurich, Switzerland; Department of Rheumatology and Institute for Physical Medicine and Rehabilitation, University Hospital Zurich, Zurich, Switzerland. Heike.Bischoff@usz.ch.

Abstract

Milk contains calcium, phosphorus, and protein and is fortified with vitamin D in the United States. All these ingredients may improve bone health. However, the potential benefit of milk on hip fracture prevention is not well established. The objective of this study was to assess the association of milk intake with risk of hip fracture based on a meta-analysis of cohort studies in middle-aged or older men and women. Data sources for this study were English and non-English publications via Medline (Ovid, PubMed) and EMBASE search up to June 2010, experts in the field, and reference lists. The idea was to compare prospective cohort studies on the same scale so that we could calculate the relative risk (RR) of hip fracture per glass of milk intake daily (approximately 300 mg calcium per glass of milk). Pooled analyses were based on random effects models. The data were extracted by two independent observers. The results show that in women (6 studies, 195,102 women, 3574 hip fractures), there was no overall association between total milk intake and hip fracture risk (pooled RR per glass of milk per day = 0.99; 95% confidence interval [CI] 0.96-1.02; Q-test p = .37). In men (3 studies, 75,149 men, 195 hip fractures), the pooled RR per daily glass of milk was 0.91 (95% CI 0.81-1.01). Our conclusion is that in our meta-analysis of cohort studies, there was no overall association between milk intake and hip fracture risk in women but that more data are needed in men. © 2011 American Society for Bone and Mineral Research.

Copyright © 2011 American Society for Bone and Mineral Research.

Latte e derivati: la patologia oncologica

[Display Settings](#): ☒ Abstract

[Lancet](#). 1989 Jul 8;2(8654):66-71.

Galactose consumption and metabolism in relation to the risk of ovarian cancer.

[Cramer DW](#), [Harlow BL](#), [Willett WC](#), [Welch WR](#), [Bell DA](#), [Scully RE](#), [Ng WG](#), [Knapp RC](#).

Brigham and Women's Hospital, Obstetrics and Gynecology Epidemiology Center, Boston, Massachusetts 02115.

Comment in:

[Med Hypotheses](#). 1997 Jun;48(6):453-61.

Dairy products and breast cancer: the IGF-I, estrogen, and bGH hypothesis.

[Outwater JL](#), [Nicholson A](#), [Barnard N](#).

A. B. Princeton University 1996, Physicians Committee For Responsible Medicine, Washington, DC 20016, USA.

Abstract

Research on the role of dietary factors in breast cancer causation has focused predominantly on fat intake. While some studies have examined associations between breast cancer rates and consumption of whole milk, there has been less attention given to dairy products in general. Dairy products contain both hormones and growth factors, in addition to fat and various chemical contaminants, that have been implicated in the proliferation of human breast cancer cells. This literature review evaluates the epidemiological and mechanistic evidence linking dairy consumption with breast cancer risk.

[Science](#). 1998 Jan 23;279(5350):563-6.

Plasma insulin-like growth factor-I and prostate cancer risk: a prospective study.

[Chan JM](#), [Stampfer MJ](#), [Giovannucci E](#), [Gann PH](#), [Ma J](#), [Wilkinson P](#), [Hennekens CH](#), [Pollak M](#).

Department of Epidemiology, Harvard School of Public Health, 677 Huntington Avenue, Boston, MA 02115, USA. jmchan@hsph.harvard.edu

Comment in:

[Science](#). 1998 Jan 23;279(5350):475.

[Science](#). 1998 Oct 9;282(5387):199.

Abstract

Insulin-like growth factor-I (IGF-I) is a mitogen for prostate epithelial cells. To investigate associations between plasma IGF levels and prostate cancer risk, a nested case-control study within the Physicians' Health Study was conducted on prospectively collected plasma from 152 cases and 152 controls. A strong positive association was observed between IGF-I levels and prostate cancer risk. Men in the highest quartile of IGF-I levels had a relative risk of 4.3 (95 percent confidence interval 1.8 to 10.6) compared with men in the lowest quartile. This association was independent of baseline prostate-specific antigen levels. Identification of plasma IGF-I as a predictor of prostate cancer risk may have implications for risk reduction and treatment.

Milk intake and risk of mortality and fractures in women and men: cohort studies

BMJ 2014 ; 349 doi: <http://dx.doi.org/10.1136/bmj.g6015> (Published 28 October 2014)

Cite this as: *BMJ* 2014;349:g6015

[Article](#)

[Related content](#)

[Metrics](#)

[Responses](#)

[Peer review](#)

Karl Michaëlsson, professor¹, Alicja Wolk, professor², Sophie Langenskiöld, senior lecturer³, Samar Basu, professor³, Eva Warensjö Lemming, researcher^{1 4}, Håkan Melhus, professor⁵, Liisa Byberg, associate professor¹

[Author affiliations](#) ▼

Correspondence to: K Michaëlsson karl.michaelsson@surgsci.uu.se

Accepted 22 September 2014

Abstract

Objective To examine whether high milk consumption is associated with mortality and fractures in women and men.

Design Cohort studies.

Setting Three counties in central Sweden.

Participants Two large Swedish cohorts, one with 61 433 women (39-74 years at baseline 1987-90) and one with 45 339 men (45-79 years at baseline 1997), were administered food frequency questionnaires. The women responded to a second food frequency questionnaire in 1997.

OGM, non-OGM

Soía sí, soía NO

