Non solo cura: il ruolo dell' ospedale nell'ambito della prevenzione

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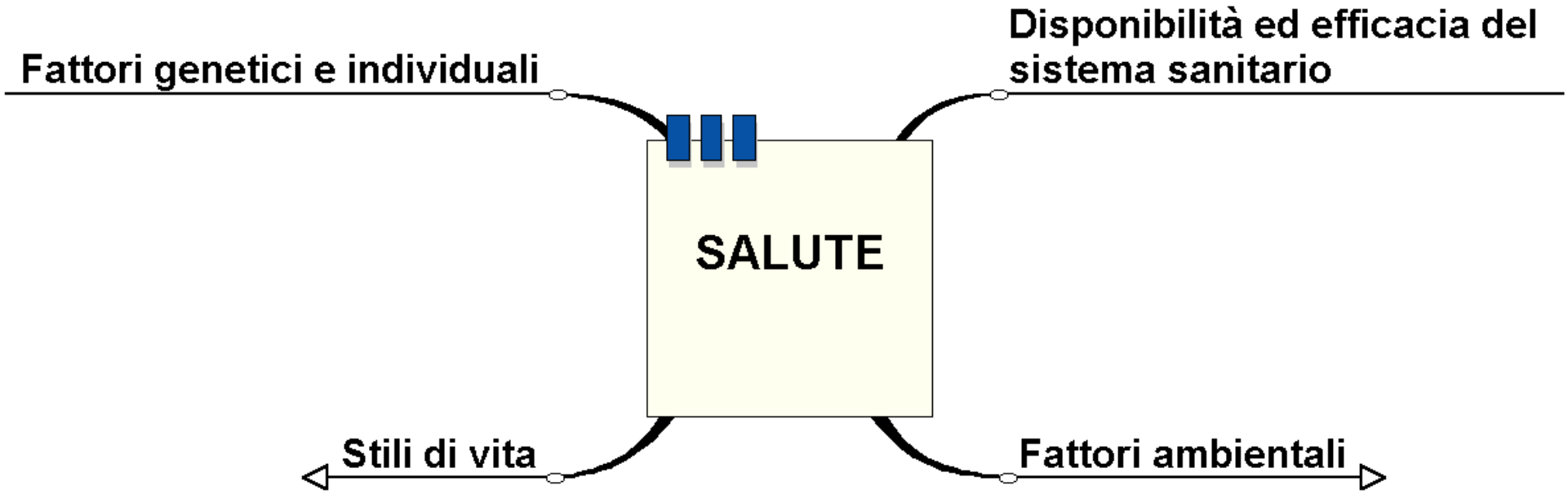
NUOVO CODICE DEONTOLOGICO
Doveri e competenze del medico

- Art. 5 PROMOZIONE DELLA SALUTE, AMBIENTE E SALUTE GLOBALE

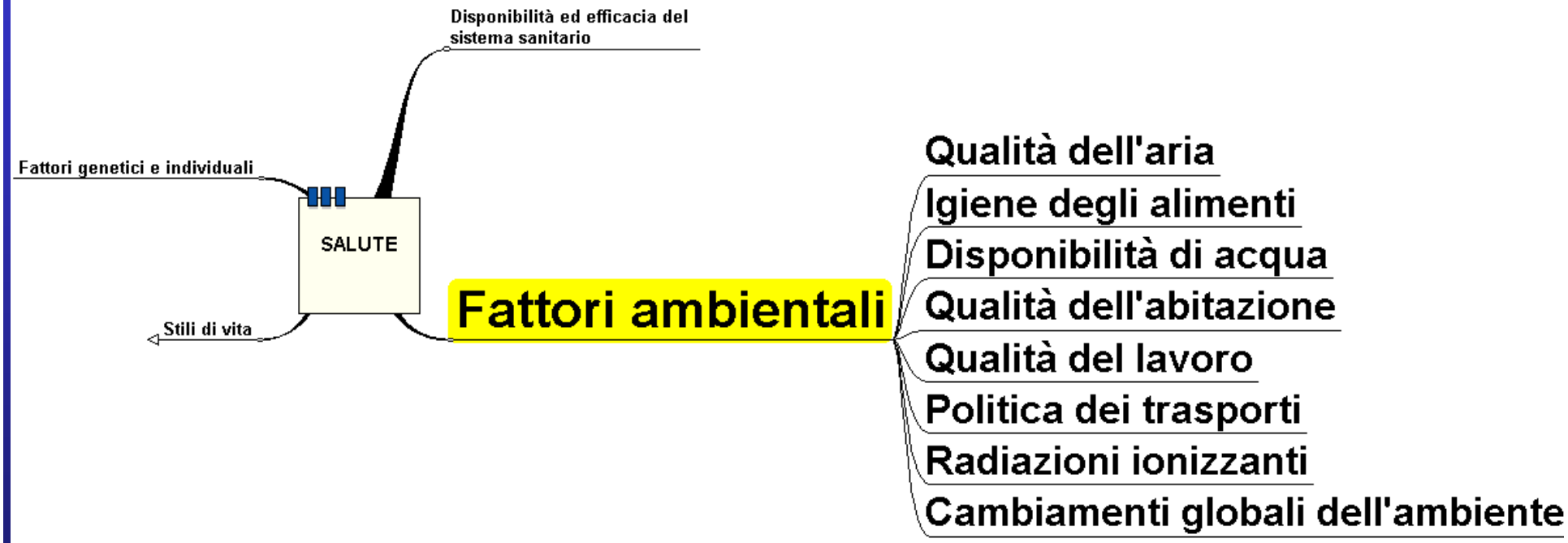
Il medico, nel considerare l'ambiente di vita e di lavoro e i livelli di istruzione e di equità sociale quali determinanti fondamentali della salute individuale e collettiva, collabora all'attuazione di idonee politiche educative, di prevenzione e di contrasto alle diseguaglianze alla salute e promuove l'adozione di stili di vita salubri, informando sui principali fattori di rischio. …

Il medico si adopera… per una pertinente comunicazione sul'esposizione e vulnerabilità a fattori di rischio ambientali e favorisce un uso appropriato delle risorse naturali per un ecosistema equilibrato e vivibile anche dalla future generazioni.

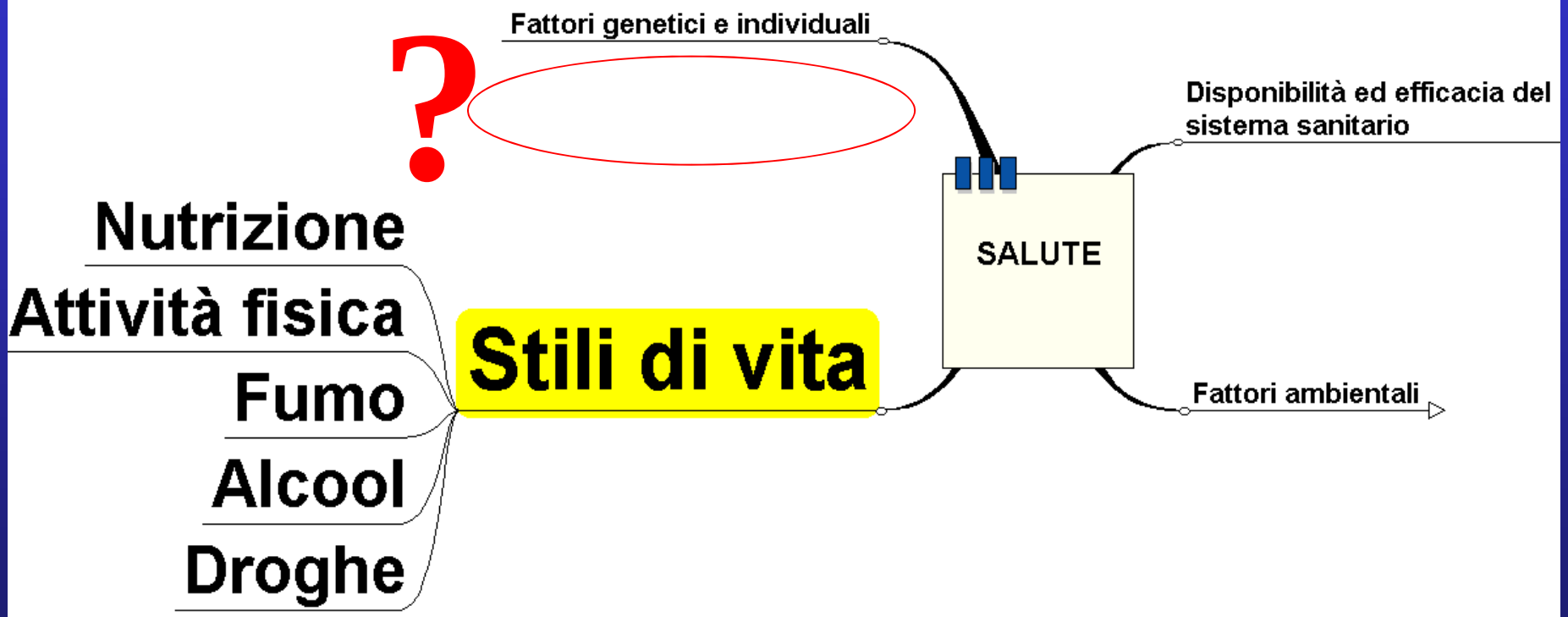
PREVENZIONE PRIMARIA

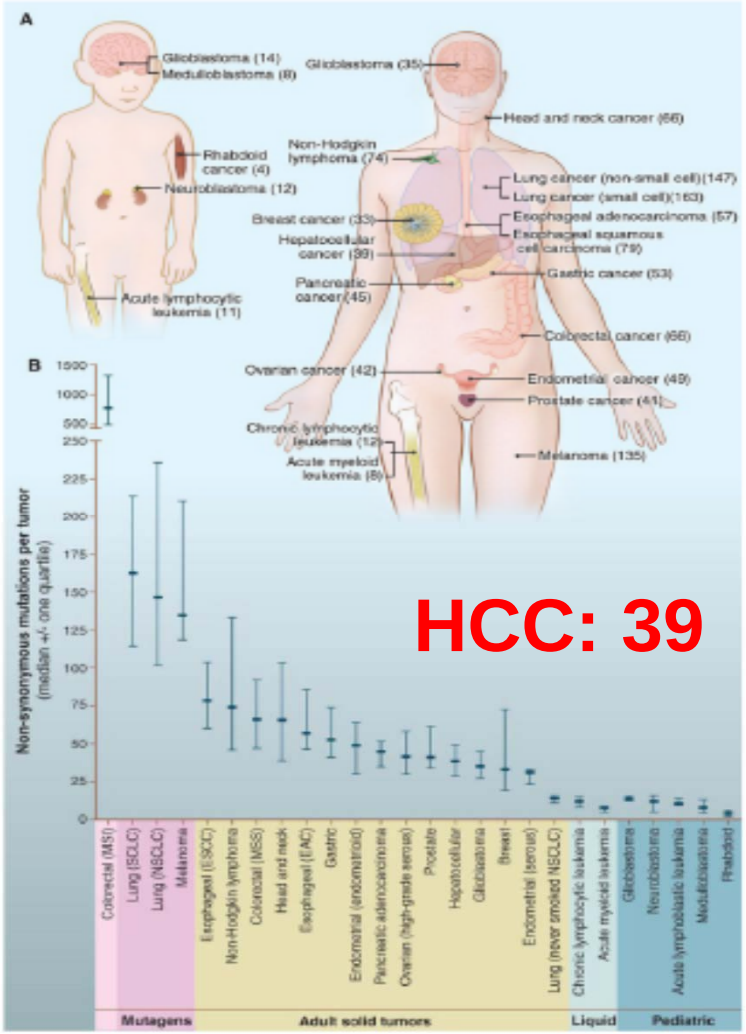


PREVENZIONE PRIMARIA



Prevenzione Primaria





CANCER GENOME LANDSCAPES, www.sciencemag.org/special/carcergenomics, 2013

Applying the Precautionary Principle to Nutrition and Cancer

Joseph F. Gonzales, R.D., Neal D. Barnard, M.D., David J.A. Jenkins, M.D., Ph.D., Amy J. Lanou, Ph.D., Brenda Davis, R.D., Gordon Saxe, M.D., Ph.D., Susan Levin, M.S., R.D.

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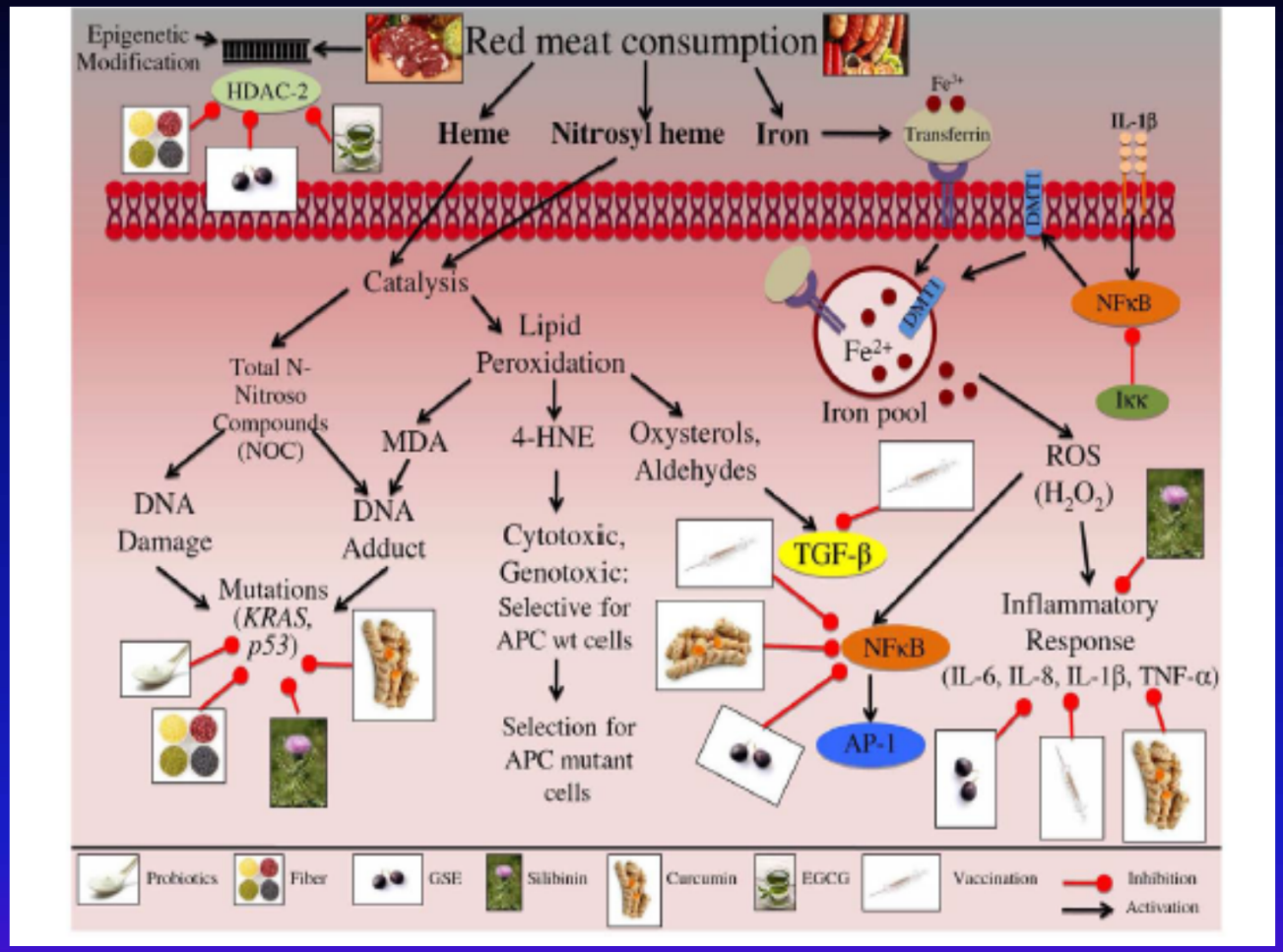
Key words: cancer, risk, diet, meat, milk, dairy, soy, alcohol

Primary Objective: Research has identified certain foods and dietary patterns that are associated with reduced cancer risk and improved survival after cancer diagnosis. This research has formed the basis for dietary guidance issued by cancer organizations. Unfortunately, gaps within nutrition research have made it difficult to make recommendations in some areas. This review specifies suggested dietary guidance in which evidence of a dietary influence on cancer risk is substantial, even if not conclusive. Evidence summaries within the review are based on the 2007 report of the World Cancer Research Fund/American Institute for Cancer Research. This review also describes advantages and disadvantages of following the suggested dietary guidance and includes putative mechanisms involved in cancer progression.

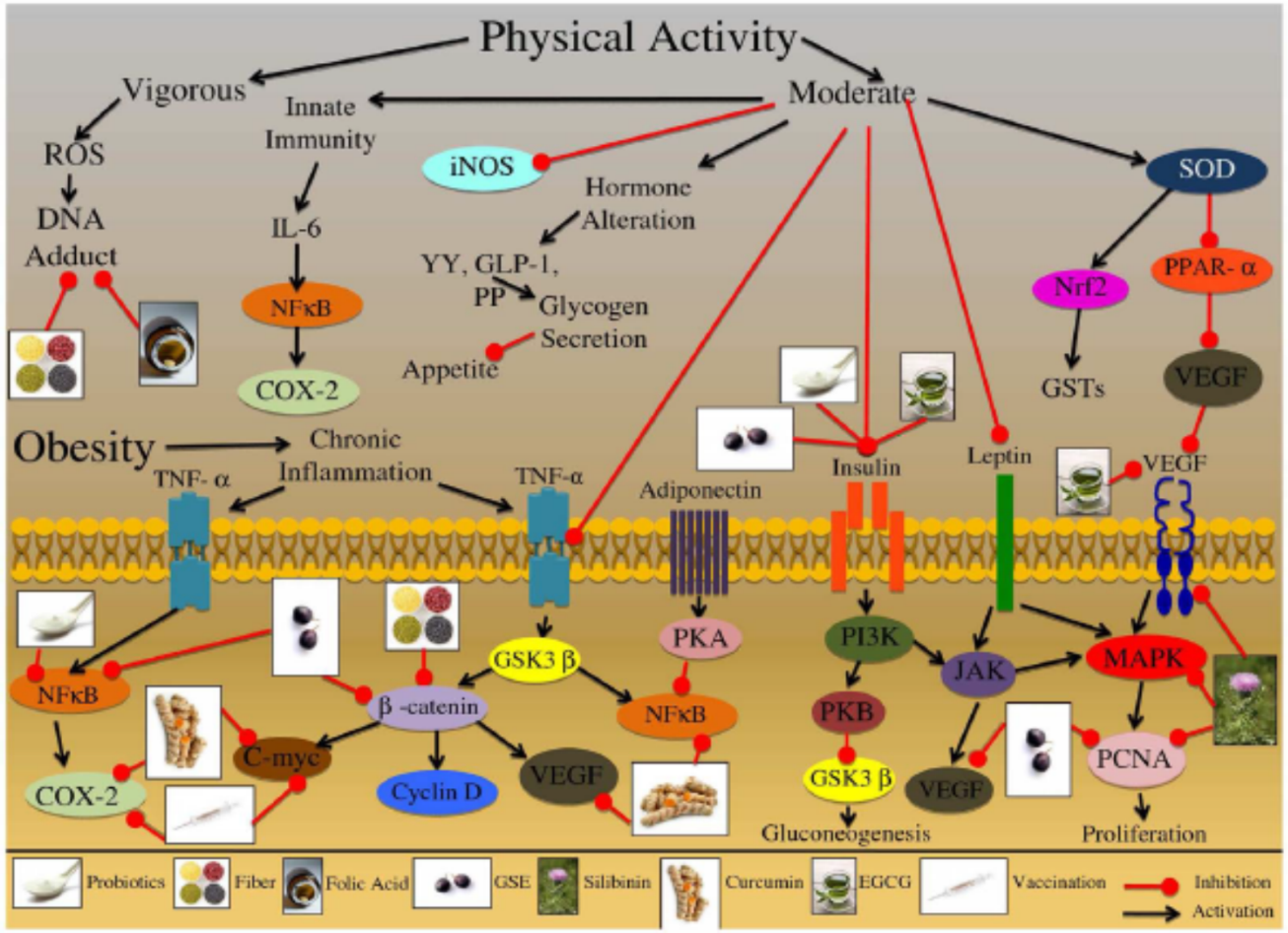
Main Outcomes and Results: Suggested dietary guidance where evidence is sufficiently compelling include (1) limiting or avoiding dairy products to reduce the risk of prostate cancer; (2) limiting or avoiding alcohol to reduce the risk of cancers of the mouth, pharynx, larynx, esophagus, colon, rectum, and breast; (3) avoiding red and processed meat to reduce the risk of cancers of the colon and rectum; (4) avoiding grilled, fried, and broiled meats to reduce the risk of cancers of the colon, rectum, breast, prostate, kidney, and pancreas; (5) consumption of soy products during adolescence to reduce the risk of breast cancer in adulthood and to reduce the risk of recurrence and mortality for women previously treated for breast cancer; and (6) emphasizing fruits and vegetables to reduce risk of several common forms of cancer.

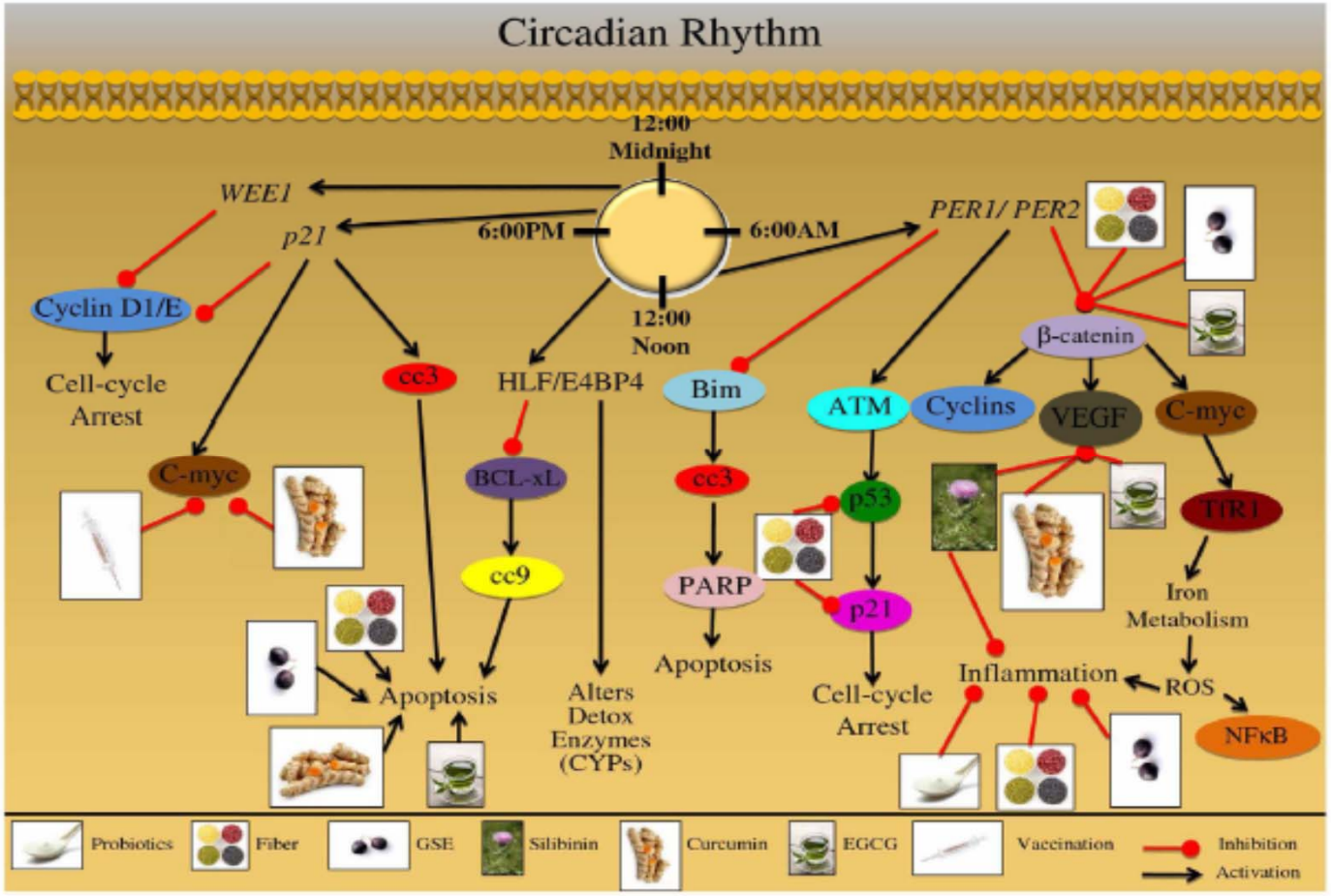
Conclusion: By adopting the precautionary principle for nutrition research, this review aims to serve as a useful tool for practitioners and patients.

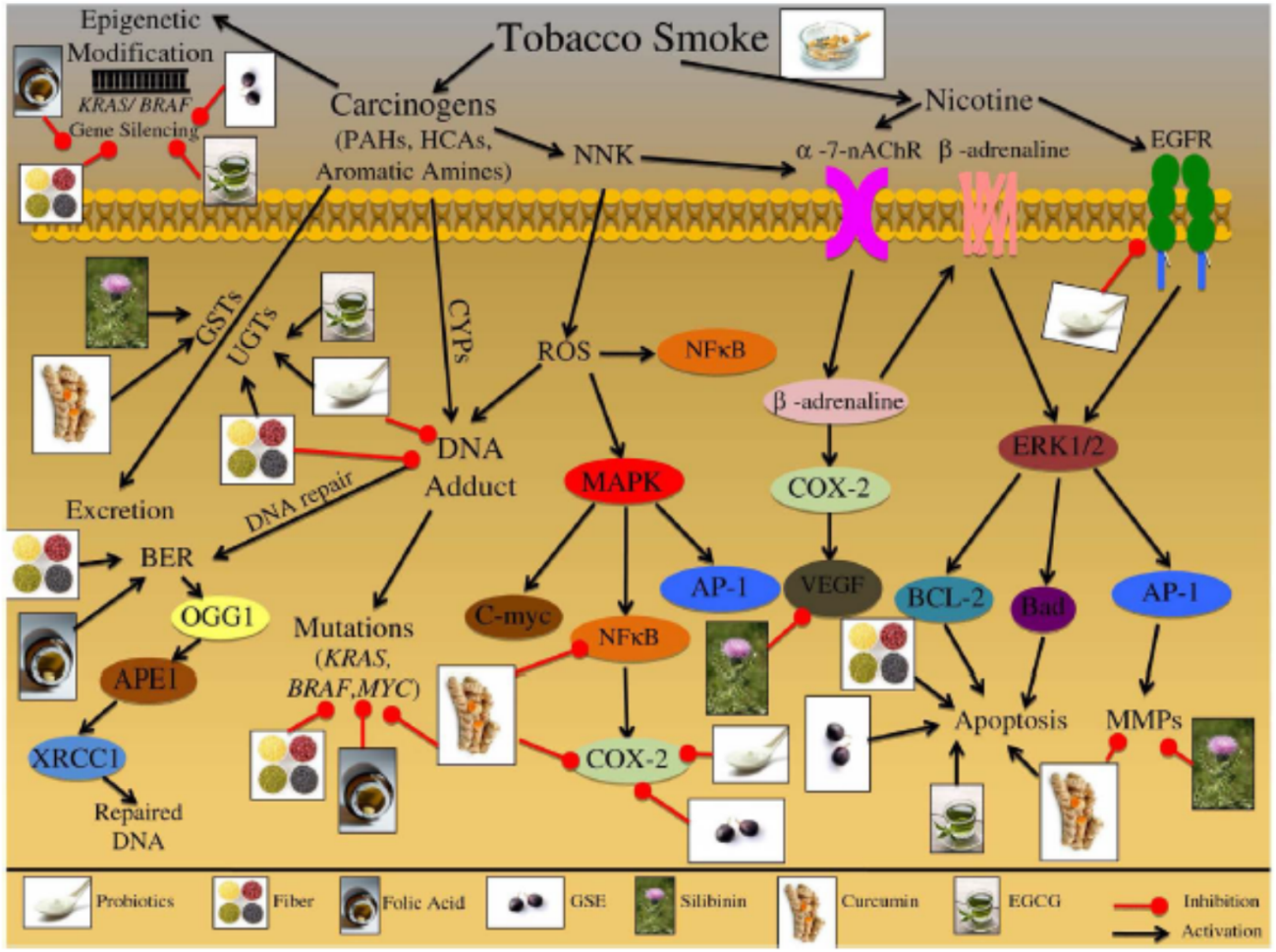
Gonzales et al, Journal of the American College of Nutrition 2014; 33: 239-246



Derry et al, Frontiers in Oncology 2013


Physical Activity
Vigorous
Moderate
Innate Immunity
ROS
DNA Adduct
IL-6
NFκB
COX-2
iNOS
Hormone Alteration
YY, GLP-1, PP
Glycogen Secretion
Appetite
SOD
Nrf2
GSTs
PPAR- α
VEGF
Obesity
Chronic Inflammation
TNF- α
TNF-α
Adiponectin
Insulin
Leptin
VEGF
NFκB
COX-2
C-myc
β -catenin
GSK3 β
Cyclin D
VEGF
PKA
NFκB
PI3K
PKB
GSK3 β
Gluconeogenesis
JAK
VEGF
MAPK
PCNA
Proliferation
Probiotics
Fiber
Folic Acid
GSE
Silibinin
Curcumin
EGCG
Vaccination
Inhibition
Activation


Circadian Rhythm
12:00
Midnight
6:00PM
6:00AM
12:00
Noon
WEE1
p21
PER1/ PER2
Cyclin D1/E
Cell-cycle
Arrest
cc3
HLF/E4BP4
Bim
ATM
Cyclins
VEGF
C-myc
β-catenin
C-myc
BCL-xL
cc3
p53
TfR1
cc9
PARP
p21
Iron
Metabolism
Apoptosis
Apoptosis
Alters
Detox
Enzymes
(CYPs)
Cell-cycle
Arrest
Inflammation
ROS
NFκB
Probiotics
Fiber
GSE
Silibinin
Curcumin
EGCG
Vaccination
Inhibition
Activation


Tobacco Smoke
Epigenetic Modification
KRAS/ BRAF
Gene Silencing
Carcinogens
(PAHs, HCAs, Aromatic Amines)
NNK
Nicotine
α -7-nAChR
β -adrenaline
EGFR
GSTs
UGTs
CYPs
ROS
NFκB
β -adrenaline
DNA Adduct
DNA repair
MAPK
COX-2
ERK1/2
Excretion
BER
OGG1
APE1
XRCC1
Repaired DNA
Mutations
(KRAS, BRAF,MYC)
C-myc
NFκB
AP-1
VEGF
BCL-2
Bad
AP-1
COX-2
Apoptosis
MMPs
Probiotics
Fiber
Folic Acid
GSE
Silibinin
Curcumin
EGCG
Inhibition
Activation

CIGARETTE SMOKING

- Cardiovascular diseases*, cancers, lung diseases, chronic renal disorders

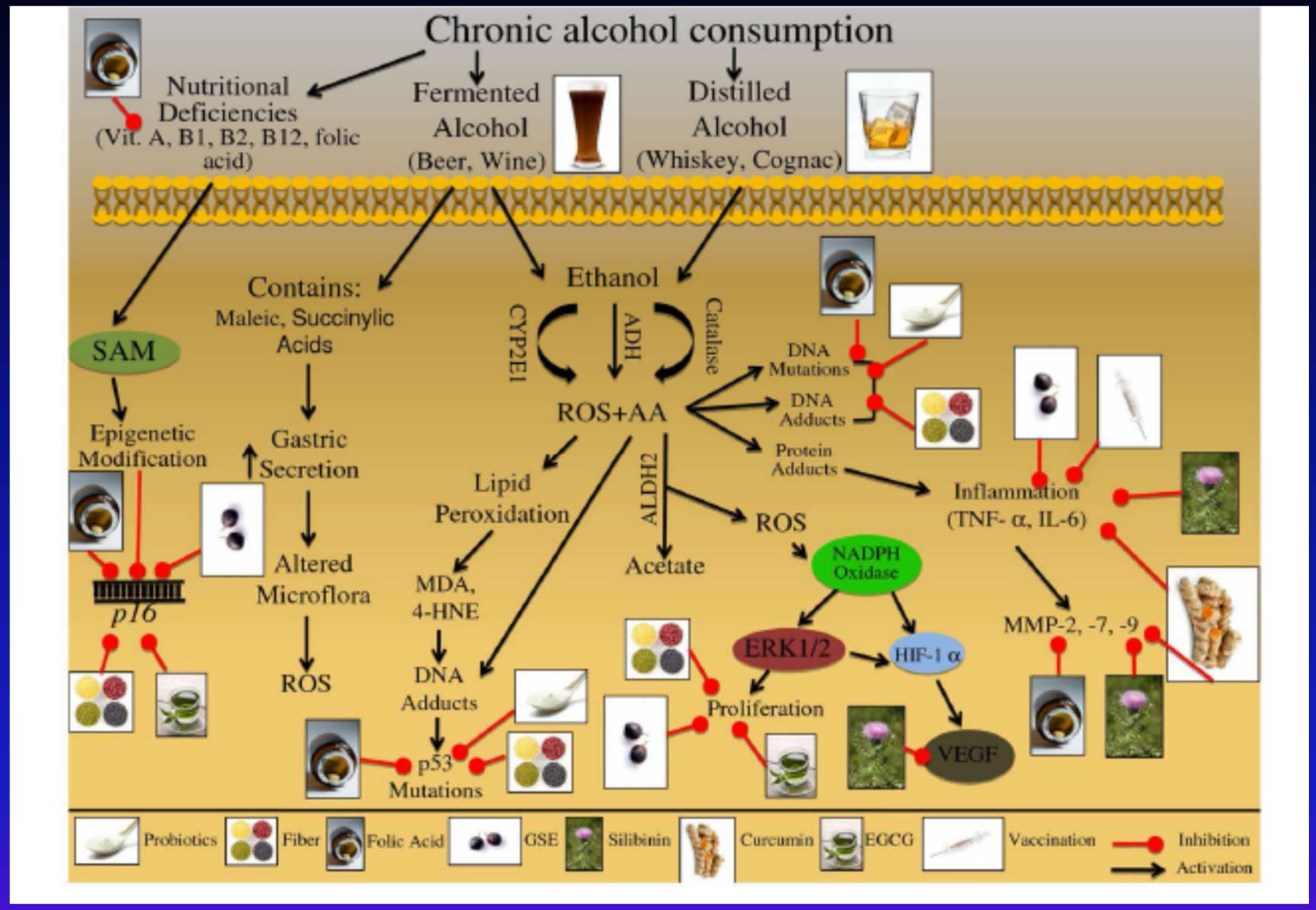
- Lung cancer: 90% of small cell lung cancer; 70% of non-small cell lung cancer

- Gastrointestinal disorders: «abdominal discomfort», ulcers, IBD, cancers

- 5000 ingredients
- 150 carcinogenic activities
- Alkaloids, phenolic compounds, volatile aldehydes, polycyclic aromatic hydrocarbons, tobacco-specific nitrosamines, heavy metals

** Oxidative stress → lipid peroxidation → low density lipoprotein (LDL) oxidation →*

→ Atherosclerosis

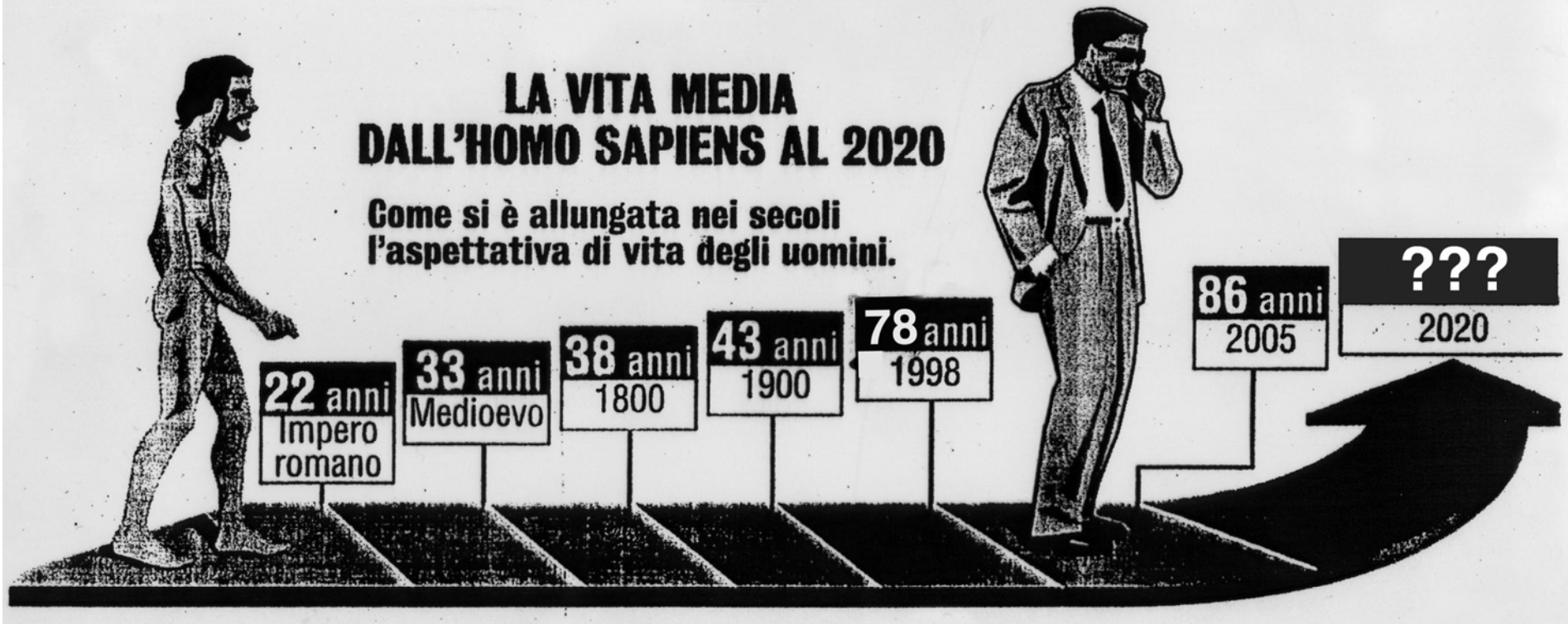


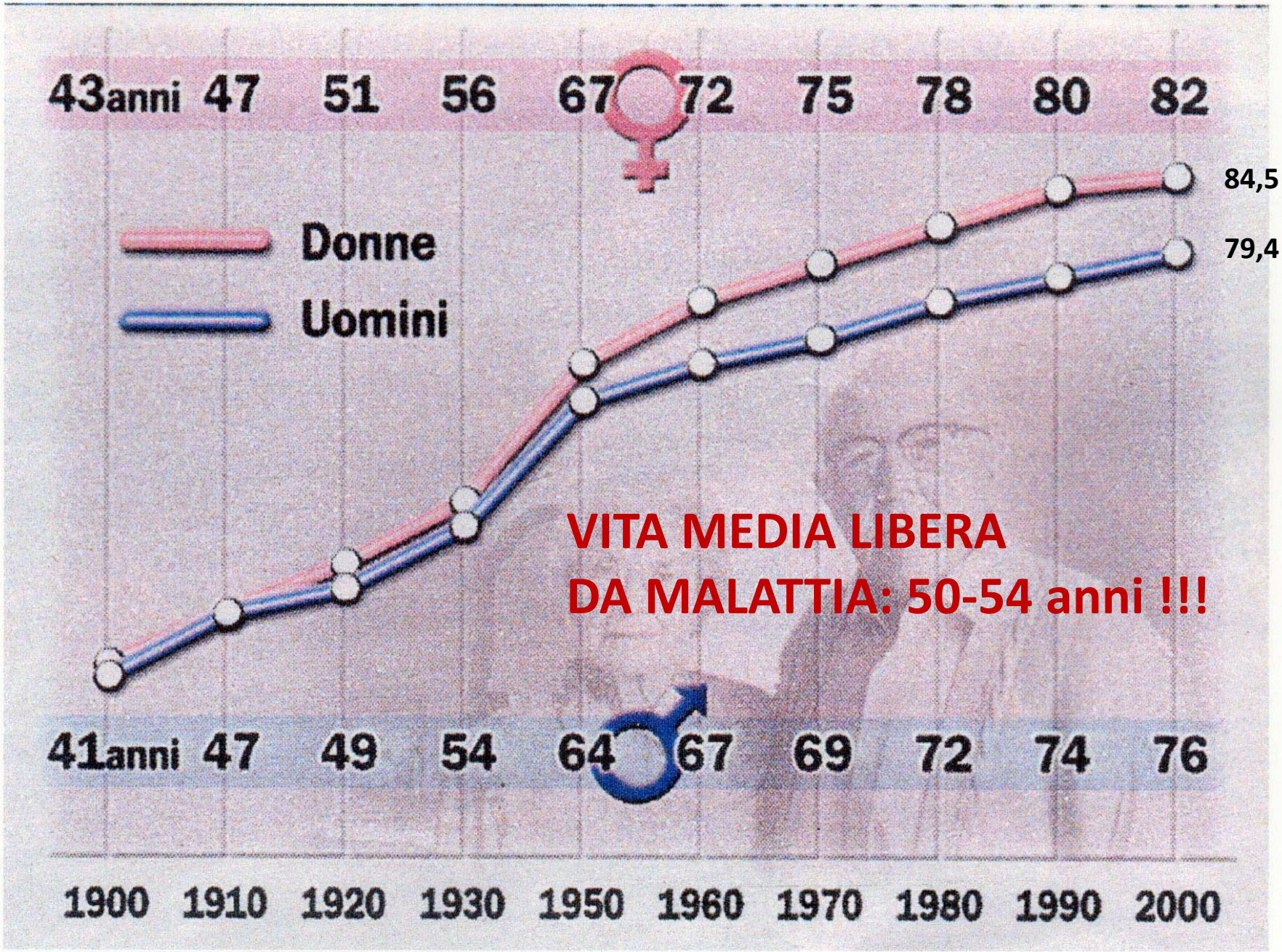
Decreased vitamin A levels result in decreased expression of the AP-1 gene, which is involved in cell cycle regulation and inflammation (TNF, NFkB……) (*Gianni Testino, Maedica 2011)*

Derry et al, Frontiers in Oncology 2013

Bersagli e obiettivi della prevenzione

Livello	Bersaglio	Obiettivo
Primario →	Soggetti sani →	Impedire che si ammalino
Secondario →	Soggetti malati senza sintomi →	Diagnosi precoce, screening
Terziario →	Malati →	Impedire le complicanze e gli aggravamenti


LA VITA MEDIA
DALL'HOMO SAPIENS AL 2020
Come si è allungata nei secoli
l'aspettativa di vita degli uomini.
22 anni
Impero romano
33 anni
Medioevo
38 anni
1800
43 anni
1900
78 anni
1998
86 anni
2005
???
2020


43anni 47 51 56 67 72 75 78 80 82
84,5
79,4
Donne
Uomini
VITA MEDIA LIBERA
DA MALATTIA: 50-54 anni !!!
41anni 47 49 54 64 67 69 72 74 76
1900 1910 1920 1930 1950 1960 1970 1980 1990 2000

LIFESTYLE RISK FACTORS AND RESIDUAL LIFE EXPECTANCY AT AGE 40: A GERMAN COHORT STUDY

RESIDUAL LIFE EXPECTANCY (RLE)

The combined loss of RLE for smoking, obesity, alcohol drinking,

red meat consumption versus never smoking, optimal BMI, no/light alcohol drinking

and low processed/ read meat consumption was 17 years for men and 13.9 for women

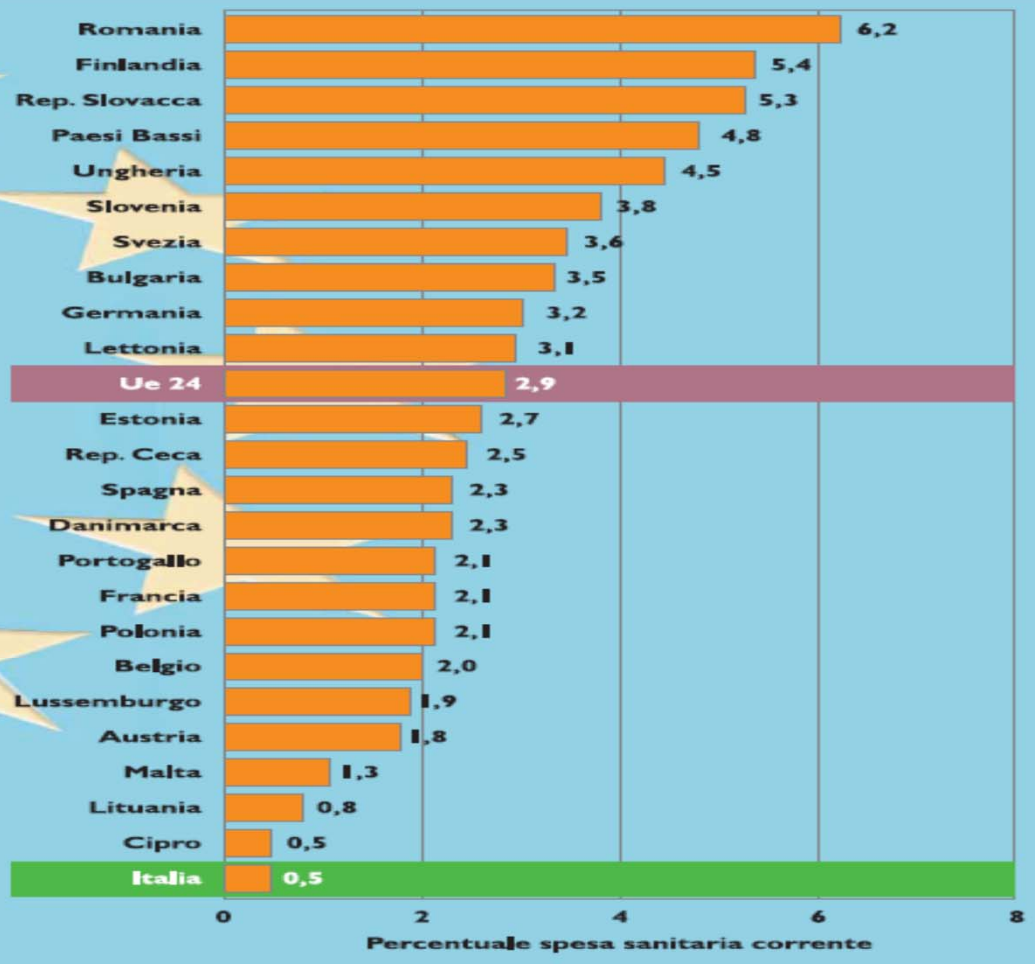
Li K et al, BMC Medicine 2014

…… cancer deaths can be reduced by more than 75% in the coming decades, but than this reduction will only come about if greater efforts are made towards early detection and prevention

Vogelstein et al, Cancer Genomics 2014

Colditz GA, American Society of Clinical Oncology 2014

La spesa sanitaria destinata alla prevenzione (% sul totale)



Fonte: Ocse; Eurostat; Oms

La figura mostra la quota della spesa sanitaria assegnata alla prevenzione.
In media, gli Stati membri dell'Ue hanno stanziato meno del 3% della loro spesa per la salute alle attività di prevenzione come ad esempio i programmi di vaccinazione e le campagne su abuso di alcool e fumo.
L'Italia con lo 0,5% della spesa sanitaria totale destinata a politiche per la salute collettiva e a campagne di prevenzione, si trova all'ultimo posto tra i partner comunitari. Precedono l'Italia, nella parte bassa della classifica, Malta, Lituania e Cipro.
Chi investe di più in prevenzione e campagne per la promozione di stili di vita corretti sono invece Romania (6,2%), Finlandia (5,4%), Repubblica slovacca (5,3%), Paesi Bassi (4,8%).

The use of expensive technologies instead of simple, sound and effective lifestyle interventions: a perpetual delusion

Silvia Carlos,[1,2] Jokin de Irala,[1,2,3] Matt Hanley,[1] Miguel Ángel Martínez-González[1,3]

Journal of Epidemiology Community Health, 2014; 68: 897-904

OSPEDALI PROMOTORI DI SALUTE

Health Promoting Hospital

Il movimento degli Ospedali per la promozione della salute rappresenta il tentativo promosso dall'Organizzazione Mondiale di Sanita' di introdurre nell'area dell'assistenza ospedaliera i principi e i metodi della promozione della salute, intesa come *processo che mette in grado le persone e le comunita' di avere un maggior controllo sulla propria salute e migliorarla*

Carta di Ottawa, WHO, 1986

MANIFESTO HPH Alcol

- Diritto del cittadino ad una assistenza competente sulle PPAC (Diagnosi, terapia e continuità terapeutica)
- Promozione di stili di vita sani (HPH Ospedali che promuovono la Salute)
- Salute e Sicurezza negli ambienti di lavoro
- Commercializzazione e distribuzione di bevande alcoliche in ospedale

PIANO NAZIONALE ALCOL E SALUTE

- Riduzione del danno prodotto dall'alcol sui luoghi di lavoro, in particolare nei luoghi di lavoro a rischio per la salute e la sicurezza di terzi ……

- Promuovere e supportare programmi socio-sanitari che rafforzino la mobilitazione della comunita', lo sviluppo e l'azione di una leadership nella prevenzione dei problemi alcol-correlati

V. Patussi, APD 2007

LEADERSHIP OSPEDALIERA

- I professionisti della salute ospedalieri possono esercitare una profonda influenza sull'atteggiamento dei pazienti e dei loro familiari, in quanto maggiormente sensibili alle indicazioni sanitarie

- Influenza le scelte e le decisioni politiche dei livelli superiori dell' organizzazione della societa'

V. Patussi, 2007

An International Consensus for Medical Leadership on Alcohol

. . . . . Medical professionalism includes the responsability to speak out, to lead, and to voice advocacy. It is every clinician's responsability to address alcohol harm, both on a daily basis with individual patients and in the wider context of health harms and inequalities at the population level.

The voice of doctors is valued and trusted within societies, and therefore we call on all doctors to show effective leadership by holding ministries of health accountable for their lack of action in the face of such robust evidence.

We ask governments to act urgently and to champion evidence-based initiatives for the implementation of effective alcohol strategies at all levels to improve the health of populations worldwide.

Coltard C et al, Lancet 2011; vol 378: 1215

AREE DI AZIONE (I)

- **PROMUOVERE LA SALUTE DEL PAZIENTE (identificazione precoce, informazioni, distribuzione materiale informativo ….)**

- **PROMUOVERE LA SALUTE DEL PERSONALE OSPEDALIERO**

- **AZIONI DI COMUNITA' (Medici di famiglia, Scuola, Municipi ……)**

FORMAZIONE OPERATORI SANITARI

- Individuare in ambito ospedaliero i problemi alcol-correlati nelle persone ricoverate (degenza ordinaria/ day hospital) o che accedono in ospedale con modalita' day-service attraverso una stretta collaborazione tra tutti gli operatori sanitari, indipendentemente dalla patologia di ingresso

- Fornire agli operatori sanitari strumenti per l'individuazione dei problemi alcol correlati, materiale informativo di supporto e riferimenti e recapiti per poter gestire l'invio presso le strutture di alcologia

ALCOHOL SCREENING SCORES AND RISK OF HOSPITALIZATION

		Any GI condition of interest			Liver disease		Upper GI bleeds		Pancreatitis	
	Patients	Events	Unadjusted HR (95% CI)	Adjusted HR (95% CI)	Events	Adjusted HR (95% CI)	Events	Adjusted HR (95% CI)	Events	Adjusted HR (95% CI)
All screened patients (n = 30,606)										
CAGE score										
0	16,375	319	Referent	Referent	24	Referent	222	Referent	77	Referent
1	4,601	81	0.9 (0.7, 1.2)	0.9 (0.7, 1.2)	9	1.1 (0.5, 2.5)	56	0.9 (0.7, 1.3)	19	0.8 (0.5, 1.3)
2	3,282	97	1.5 (1.2, 1.9)	1.6 (1.2, 2.0)	19	3.6 (2.0, 6.6)	67	1.7 (1.3, 2.2)	16	0.9 (0.5, 1.5)
3	3,110	93	1.5 (1.2, 1.9)	1.5 (1.2, 1.9)	30	5.5 (3.2, 9.6)	48	1.3 (0.9, 1.7)	21	1.1 (0.7, 1.9)
4	3,238	115	1.8 (1.5, 2.3)	1.7 (1.4, 2.2)	37	6.1 (3.5, 10.3)	59	1.5 (1.1, 2.0)	34	1.6 (1.04, 2.4)
AUDIT-C score										
0	13,159	325	1.4 (1.2, 1.7)	1.2 (1.02, 1.5)	43	1.5 (0.9, 2.6)	215	1.2 (0.9, 1.4)	78	1.5 (1.0, 2.1)
1–3	9,993	178	Referent	Referent	20	Referent	126	Referent	37	Referent
4–5	3,794	76	1.1 (0.9, 1.5)	1.1 (0.8, 1.4)	13	1.7 (0.8, 3.4)	44	0.9 (0.6, 1.3)	22	1.5 (0.9, 2.6)
6–7	1,707	43	1.4 (1.04, 2.0)	1.4 (1.01, 2.0)	7	1.8 (0.8, 4.4)	29	1.5 (1.0, 2.2)	8	1.1 (0.5, 2.3)
8–9	1,026	35	1.9 (1.3, 2.8)	2.0 (1.4, 2.8)	11	4.5 (2.1, 9.6)	19	1.7 (1.1, 2.8)	11	2.3 (1.2, 4.6)
10–12	927	48	2.9 (2.1, 3.9)	2.7 (1.9, 3.8)	25	9.3 (5.0, 17.2)	19	1.8 (1.1, 3.0)	11	2.1 (1.04, 4.2)
Drinkers only (n = 17,127)										
CAGE score										
0	8,481	125	Referent	Referent	7	Referent	87	Referent	31	Referent
1	3,284	50	1.0 (0.7, 1.4)	1.0 (0.7, 1.4)	3	0.7 (0.1, 3.3)	36	1.1 (0.7, 1.6)	12	0.9 (0.5, 1.7)
2	2,277	65	2.0 (1.5, 2.7)	2.0 (1.4, 2.7)	16	7.4 (3.0, 18.2)	46	2.2 (1.5, 3.2)	7	0.7 (0.3, 1.6)
3	1,779	52	2.0 (1.5, 2.8)	1.9 (1.4, 2.7)	19	10.0 (4.1-24.3)	25	1.5 (1.0, 2.4)	14	1.6 (0.8, 3.0)
4	1,306	59	3.2 (2.4, 4.4)	2.8 (2.0, 3.9)	24	15.4 (6.4-37.2)	26	2.2 (1.4, 3.5)	19	2.5 (1.4, 4.7)
AUDIT-C score										
1–3	9,736	155	Referent	Referent	16	Referent	111	Referent	32	Referent
4–5	3,669	70	1.2 (0.9, 1.6)	1.2 (0. 9, 1.6)	10	1.6 (0.7, 3.6)	42	1.0 (0.7, 1.4)	21	1.7 (1.0, 3.0)
6–7	1,673	43	1.6 (1.1, 2.2)	1.6 (1.1, 2.2)	7	2.2 (0.9, 5.3)	29	1.6 (1.1, 2.4)	8	1.2 (0.5, 2.6)
8–9	996	35	2.2 (1.5, 3.2)	2.1 (1.5, 3.1)	11	5.4 (2.5, 11.9)	19	1.9 (1.1, 3.1)	11	2.6 (1.3, 5.3)
10–12	927	48	3.2 (2.3, 4.4)	2.8 (2.0, 4.0)	25	10.6 (5.4, 20.7)	19	1.9 (1.1, 3.2)	11	2.2 (1.1, 4.6)

31311 patients
median of 3.75 years

Au DH, 2007

Table 4. Association of Alcohol Screening Scores (CAGE or AUDIT-C) with the Risk of Any GI Hospitalization*, Stratified by Age

	<50 years old			50–64 years old			>65 years old		
	Patients (*N* = 4,128)	Events (*N* = 86)	Adjusted HR (95% CI)	Patients (*N* = 6,268)	Events (*N* = 109)	Adjusted HR (95% CI)	Patients (*N* = 6,706)	Events (*N* = 155)	Adjusted HR (95% CI)
CAGE score									
0	1,562	10	Referent	2,849	39	Referent	3,932	76	Referent
1	790	11	2.0 (0.8–4.8)	1,233	13	0.8 (0.4–1.5)	1,206	25	1.0 (0.7–1.5)
2	642	13	2.6 (1.1–6.4)	866	20	1.8 (1.0–3.2)	704	32	2.0 (1.3–3.0)
3	555	22	5.3 (2.4–11.6)	719	17	1.7 (0.9–3.0)	448	13	1.3 (0.7–2.2)
4	493	30	6.0 (2.7–12.9)	492	20	3.3 (1.9–5.6)	261	9	1.4 (0.7–2.8)
AUDIT-C score									
1–3	2,097	14	Referent	3,394	44	Referent	4,077	97	Referent
4–5	758	16	3.3 (1.6–7.1)	1,240	19	1.1 (0.6–2.0)	1,594	34	0.9 (0.6–1.4)
6–7	474	14	4.2 (1.9–9.2)	713	17	1.7 (0.9–3.1)	484	12	1.1 (0.6–1.9)
8–9	324	20	7.2 (3.3–15.4)	441	8	2.1 (1.1–4.1)	230	7	1.2 (0.6–2.4)
10–12	389	22	6.5 (3.2–13.4)	371	21	3.8 (2.2–6.5)	166	5	1.2 (0.5–2.7)

AUDIT-C, Alcohol Use Disorders Identification Test—Consumption questions; GI, gastrointestinal.

Au DH et al, 2007

Risk of GI Hospitalization

	< 40	40 – 50	51 – 64	> 65
CAGE score				
0	Referent	Referent	Referent	Referent
1	2.1 (0.9-5)	2.0 (0,8-4.8)	0.8 (0.4-1.5)	1.0 (0.7-1.5)
2	2.8 (1.3-6.6)	2.6 (1.1-6.4)	1.8 (1.0-3.2)	2.0 (1.3-3.0)
3	6 (2.8-11.8)	5.3 (2.4-11.6)	1.7 (0.9-3.0)	1.3 (0.7-2.2)
4	6.2 (2.9-13-1)	6.0 (2.7-12.9)	3.3 (1.9-5.6)	1.4 (0.7-2.8)
AUDIT-score				
1-3	Referent	Referent	Referent	Referent
4-5	3.5 (1.8-7.2)	3.3 (1.6-7.1)	1.1 (0.6-2.0)	0.9 (0.6-1.4)
6-7	4.4 (2-9.8)	4.2 (1.9-9.2)	1.7 (0.9-3.1)	1.1 (0.6-1.9)
8-9	7.3 (3.5 -16)	7.2 (3.3-15.4)	2.1 (1.1-4.1)	1.2 (0.6- 2.4)
10-12	6.6 (3.2- 13.6)	6.5 (3.2-13.4)	3.8 (2.2-6.5)	1.2 (0.5-2.7)

AUDIT – C Alcohol Use Disordes Identification Test - Comsumption; GI,gastrointestinal.

31311 patients
median of 3.75 years

Au DH, Alcohol Clin Exp Res 2007

BEVITORI A RISCHIO TRATTAMENTO IN REGIME OSPEDALIERO DIURNO IN RETE CON IL TERRITORIO

Riduzione ad un anno del 25% dei ricoveri per patologie complesse *

Riduzione a tre anni del 65% dei ricoveri per patologie complesse *

*Sanguinasmento gastroenterico , cirrosi scompensata , pancreatite cronica sintomatica

Au D.H. Clinical and Experimental Research,2007

ALCOL E LAVORO

UN OCCASIONE PER ESSERE INFORMATI E

PENSARE ALLA NOSTRA SALUTE !!!

ALCOL, OSPEDALE, LAVORO

AUMENTARE NEI VARI SETTORI DELL'OSPEDALE:

Informazione

Formazione

Sensibilita'

Responsabilita'

DEGLI OPERATORI SULL'IMPORTANZA DEGLI STILI DI VITA PERSONALI

COME DETERMINANTI DI SALUTE

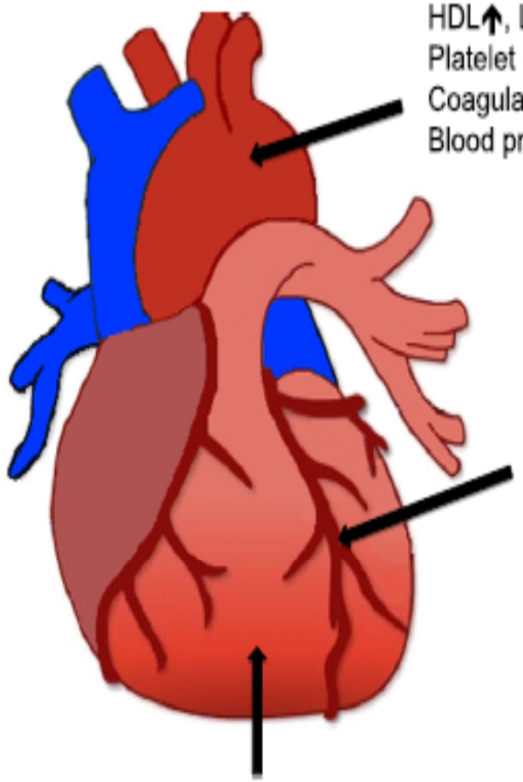
G/L	EFFETTI DELL' ALCOL A LIVELLI CRESCENTI DI ALCOLEMIA
0,2	iniziale tendenza ad operare in modo più rischioso: riflessi leggermente rallentati.
0,4	rallentano le capacità di vigilanza ed elaborazione mentale – le percezioni, i movimenti o le manovre vengono eseguiti bruscamente con difficoltà di coordinazione. Mancata percezione di tali alterazioni.
0,5	si riduce la visione laterale – e' ritardata la percezione degli ostacoli, della segnaletica, degli stimoli sonori, luminosi e uditivi e della conseguente capacità di reazione. Mancata percezione di tali alterazioni.
0,6	i movimenti e gli ostacoli vengono percepiti con notevole ritardo e la facoltà visiva laterale è fortemente compromessa
0,7	i tempi di reazione sono fortemente compromessi – l'esecuzione dei normali comportamenti alla guida è priva di coordinamento, confusa e conduce sempre a gravi conseguenze
0,9	si riduce la capacità di adattamento all'oscurità – e' sensibilmente compromessa la valutazione degli ingombri stradali, delle traiettorie dei veicoli e delle percezioni visive simultanee (per esempio di due veicoli se ne vede solo uno)
1	il livello della capacità visiva e di attenzione ed i tempi di reazione diventano assolutamente inadeguati – si manifesta chiaramente lo stato di ebbrezza caratterizzata da euforia e disturbi motori che rendono precario l'equilibrio
> 1	lo stato di euforia viene sostituito da uno stato di confusione mentale e di totale perdita della lucidità accompagnata da forte sonnolenza

CONSUMO DI BEVANDE ALCOLICHE IN SOGGETTI SANI

3 - 5 gr/die	Rischio minimo
Donna < 10 gr/die **Uomo < 20 gr/die**	Basso rischio
Donna 11-40 gr/die **Uomo 21-60 gr/die** **> 65 anni e fra i 16-18 anni >12/die**	Consumo Rischioso
Donna > 40 gr/die **Uomo > 60 gr/die** **Binge Drinking**	**Consumo Dannoso**

Scafato E et al, Istituto Superiore Sanita' 2010
Testino G et al, Eur Rev Med Pharmacol Sci 2012
Testino G et al, BMJ Com 2013, in press

The Spectrum of Cardioprotective Effects Induced by Antecedent Ethanol Ingestion



Blood:
HDL↑, LDL↓
Platelet reactivity↓
Coagulation↓
Blood pressure↓

Coronary vessels:
Vasodilation↑
Coronary flow↑
Inflammation↓
Atherosclerosis↓
Diabetic vasculopathy↓

Cardiomyocytes:
Protective signaling against I/R-induced tissue damage↑

Krenz and Korthuis; Journal of Molecular and Cellular Cardiology, 2012

IARC; Lancet Oncology, November 2009

	Tumour sites for which there is sufficient evidence	Tumour sites for which there is limited evidence	Tumour sites for which there is evidence suggesting lack of carcinogenicity
Tobacco smoking	Oral cavity, oropharynx, nasopharynx, and hypopharynx, oesophagus (adenocarcinoma and squamous-cell carcinoma), stomach, colorectum,* liver, pancreas, nasal cavity and paranasal sinuses, larynx, lung, uterine cervix, ovary (mucinous)*, urinary bladder, kidney (body and pelvis), ureter, bone marrow (myeloid leukaemia)	Female breast*	Endometrium (postmenopausal*), thyroid*
Parental smoking (cancer in the offspring)	Hepatoblastoma*	Childhood leukaemia (in particular acute lymphocytic leukaemia)*	
Second-hand smoke	Lung	Larynx,* pharynx*	
Smokeless tobacco	Oral cavity, oesophagus,* pancreas		
Areca nut			
Betel quid with added tobacco	Oral cavity, pharynx, oesophagus		
Betel quid without added tobacco	Oral cavity, oesophagus*	Liver*	
Alcohol consumption	Oral cavity, pharynx, larynx, oesophagus, liver, colorectum, female breast	Pancreas*	Kidney, non-Hodgkin lymphoma
Acetaldehyde associated with alcohol consumption	Oesophagus,* head and neck*		
Chinese-style salted fish	Nasopharynx	Stomach*	
Indoor emissions from household combustion of coal	Lung		

*New sites.

Table: Evidence for carcinogenicity in humans of Group 1 agents assessed

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EUROPEAN CODE AGAINST CANCER

12 ways to reduce your cancer risk

1. Do not smoke. Do not use any form of tobacco.
2. Make your home smoke free. Support smoke-free policies in your workplace.
3. Take action to be a healthy body weight.
4. Be physically active in everyday life. Limit the time you spend sitting.
5. Have a healthy diet:
   - Eat plenty of whole grains, pulses, vegetables and fruits.
   - Limit high-calorie foods (foods high in sugar or fat) and avoid sugary drinks.
   - Avoid processed meat, limit red meat and foods high in salt.
6. If you drink alcohol of any type, limit your intake. Not drinking alcohol is better for cancer prevention.
7. Avoid too much sun, especially for children. Use sun protection. Do not use sunbeds.
8. In the workplace, protect yourself against cancer-causing substances by following health and safety instructions.
9. Find out if you are exposed to radiation from naturally high radon levels in your home. Take action to reduce high radon levels.
10. For women:
    - Breastfeeding reduces the mother's cancer risk. If you can, breastfeed your baby.
    - Hormone replacement therapy (HRT) increases the risk of certain cancers. Limit use of HRT.
11. Ensure your children take part in vaccination programmes for:
    - Hepatitis B (for newborns)
    - Human papillomavirus (HPV) (for girls).
12. Take part in organized cancer screening programmes for:
    - Bowel cancer (men and women)
    - Breast cancer (women)
    - Cervical cancer (women).

The European Code Against Cancer focuses on actions that individual citizens can take to help prevent cancer. Successful cancer prevention requires these individual actions to be supported by governmental policies and actions.

Find out more about the European Code Against Cancer at: http://cancer-code-europe.iarc.fr

International Agency for Research on Cancer

World Health Organization

These recommendations are the result of a project coordinated by the International Agency for Research on Cancer and co-financed by the European Commission

ATION 6

DRINKS

ic drinks[1]

TH GOAL

ulation drinking
ended limits to be
every 10 years[1 2]

MMENDATION

are consumed,
e than two drinks a day
a day for women[1 2 3]

hat there is a likely protective effect

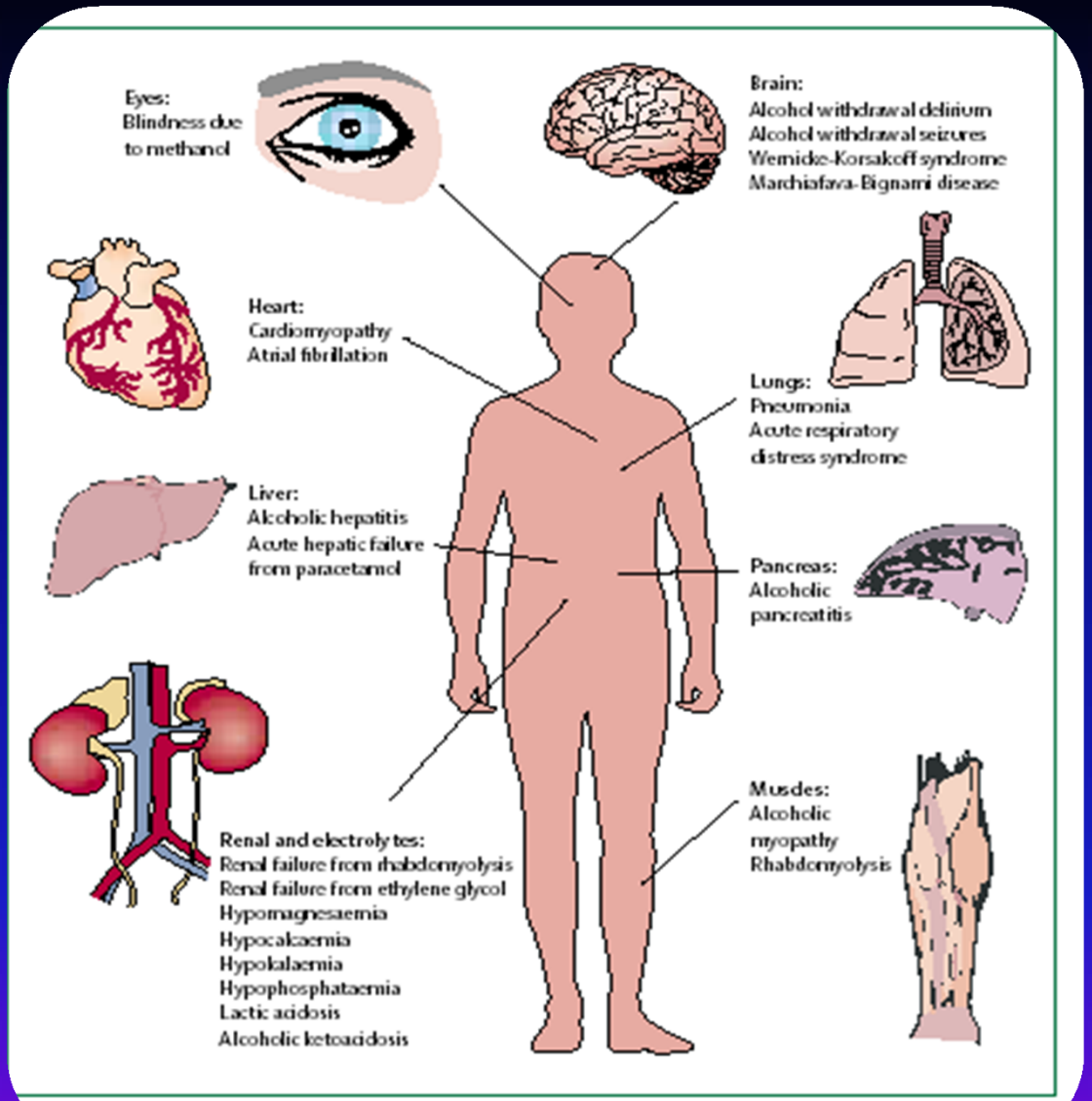
ume alcoholic drinks
ethanol

AREE DI AZIONE (II)

- PROMUOVERE LA SALUTE DEL PAZIENTE (identificazione precoce, informazioni, distribuzione materiale informativo ….)
- PROMUOVERE LA SALUTE DEL PERSONALE OSPEDALIERO
- **AZIONI DI COMUNITA' (Medici di famiglia, Scuola, Municipi ……)**

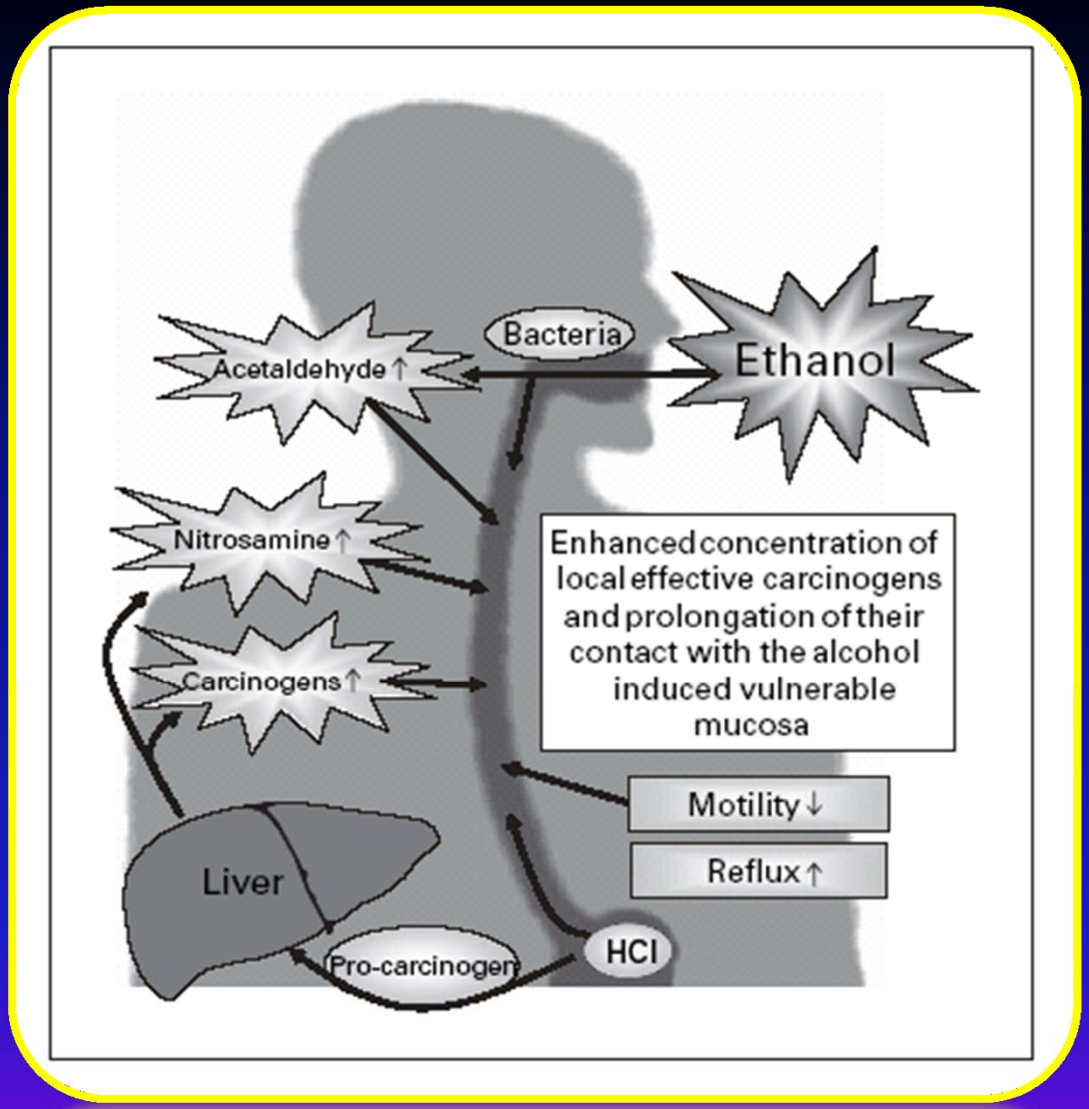
-- implementare i nodi della rete collaborando con i servizi territoriali (integrazione ospedale-territorio/ dipartimenti inter aziendali): PREVENZIONE SECONDARIA

-- promozione del paziente esperto/ integrazione con le associazioni di autotutela e promozione della salute



re 1: Disorders that can occur in critically ill patients as a result of alcohol abuse or dependence

Moss M. and Burnham E. L., The Lancet 2006



Franke et al, Dig Dis 2005

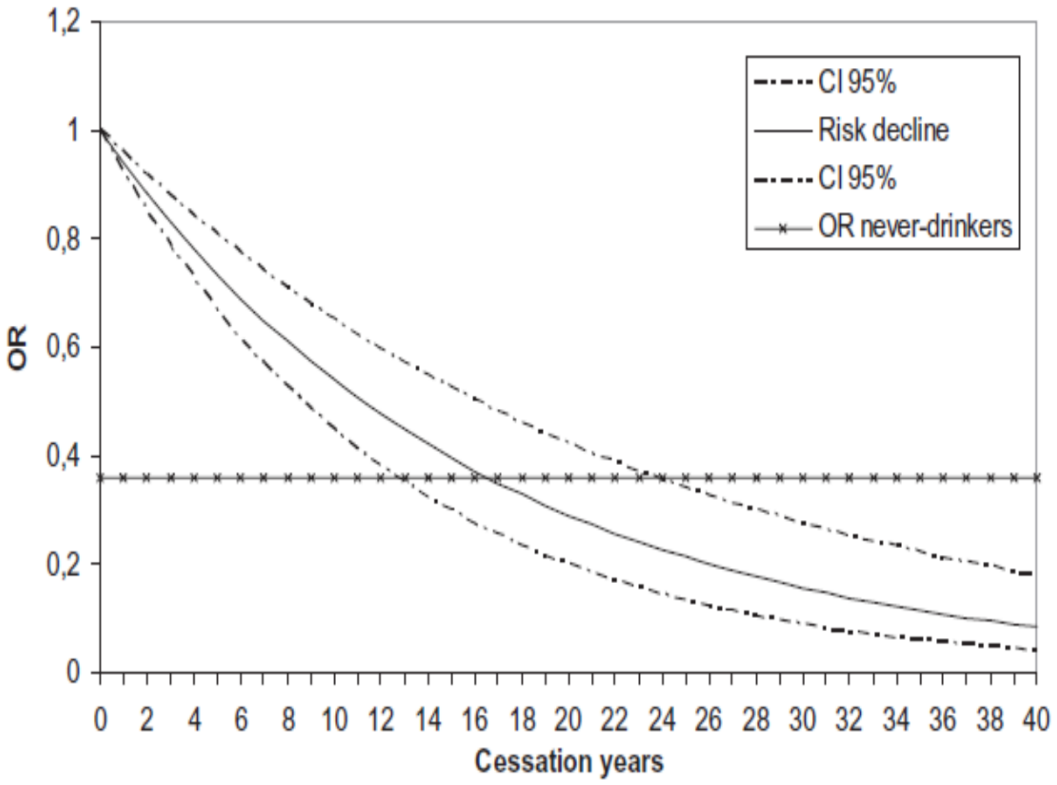
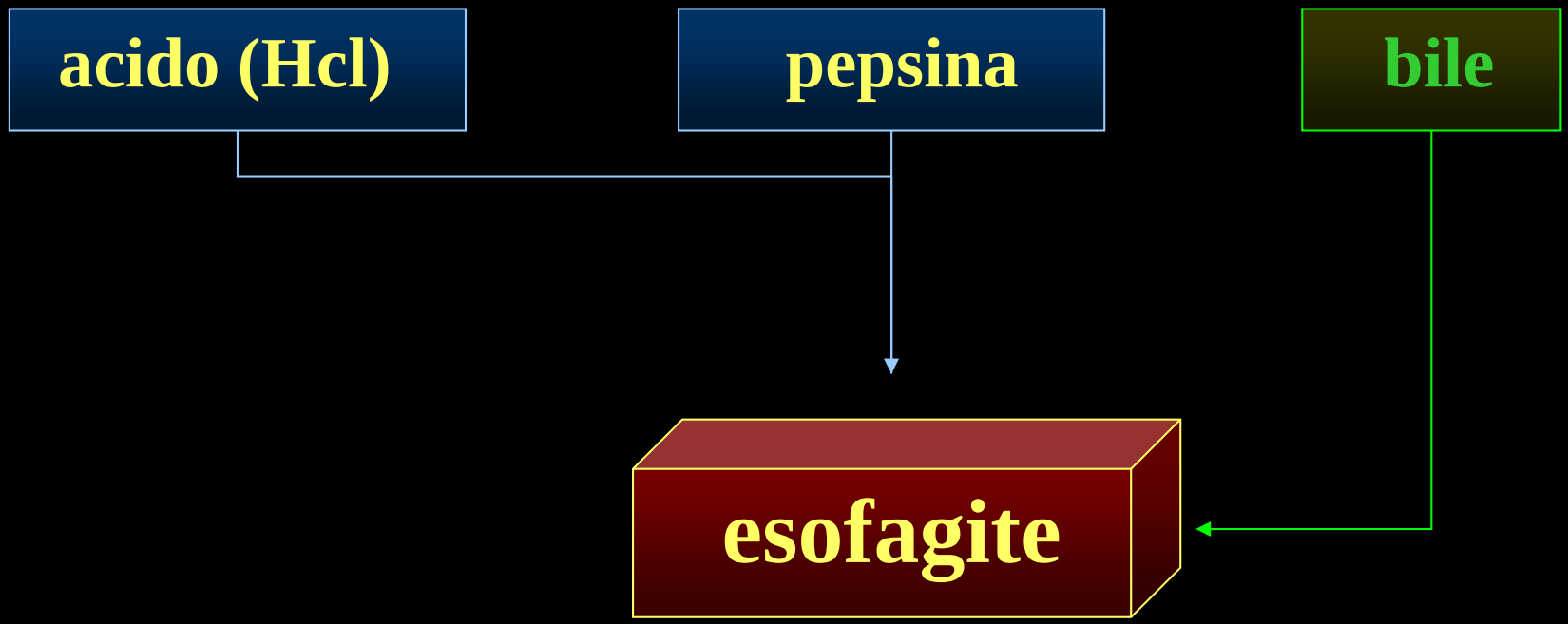
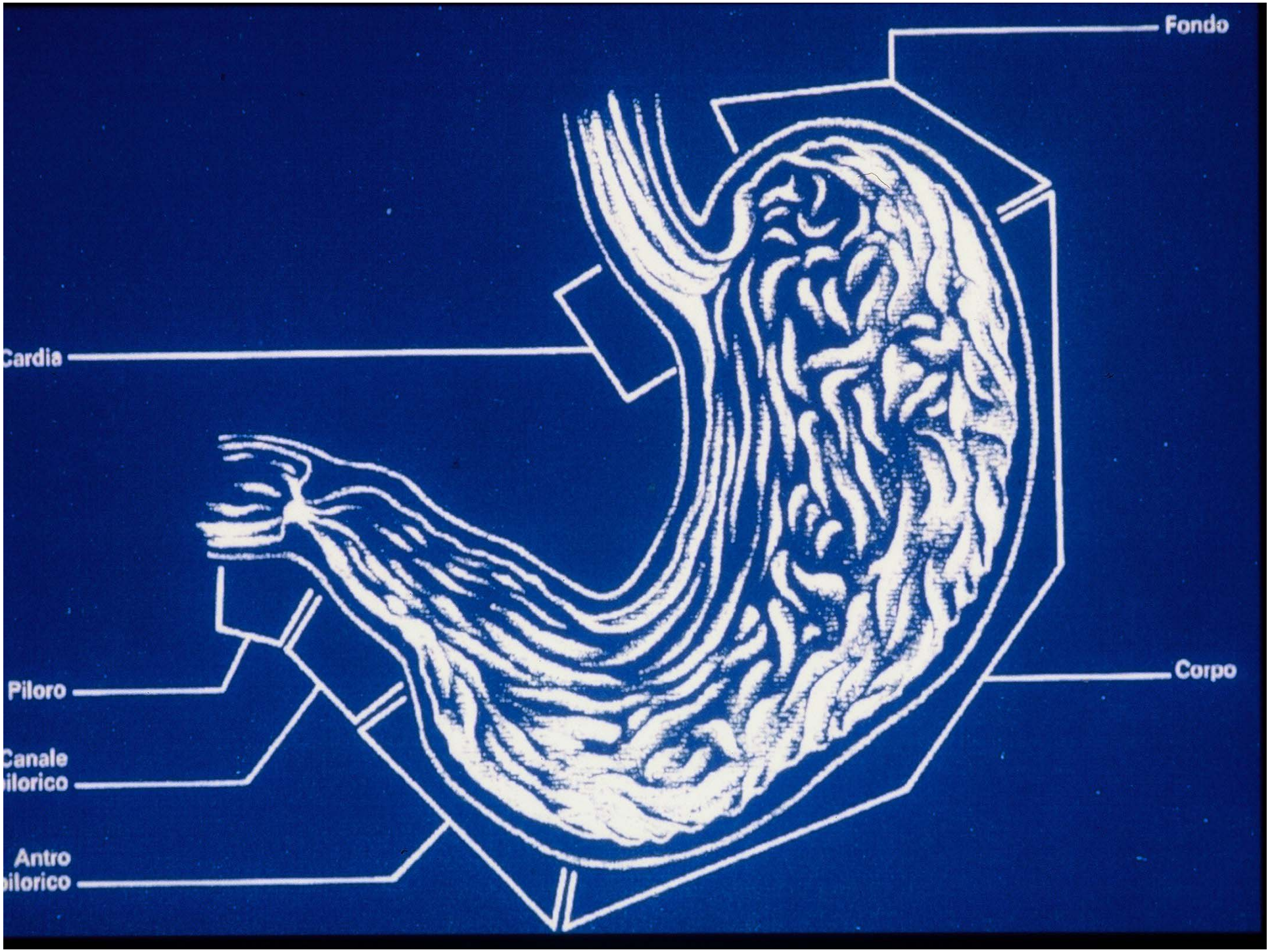
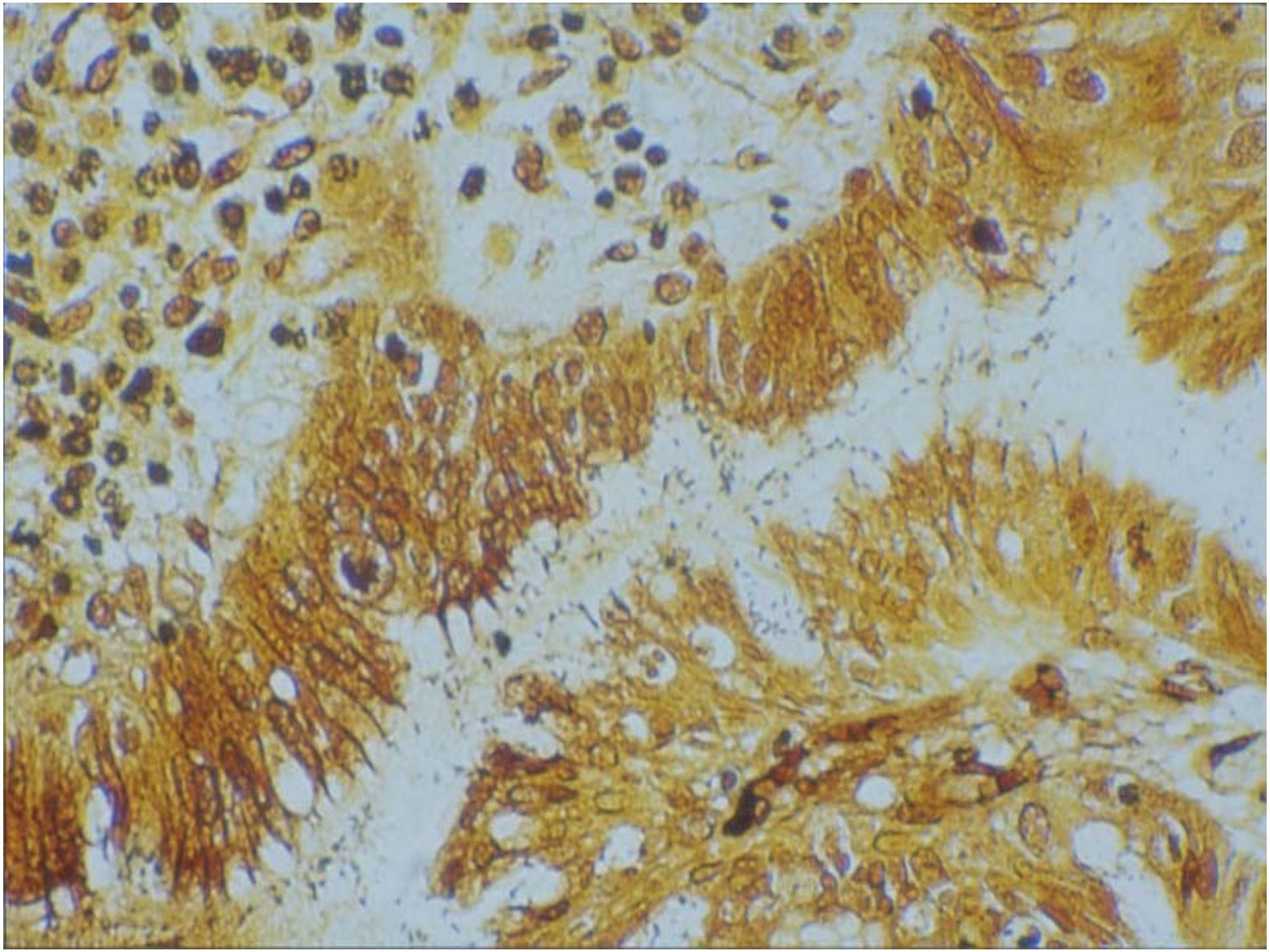


Figure 3 Estimated temporal characteristics of decline in risk of oesophageal cancer after drinking cessation; OR: odds ratio; CI: confidence interval

Jarl and Gerdtham, Addiction 2011


acido (Hcl)
pepsina
bile
esofagite

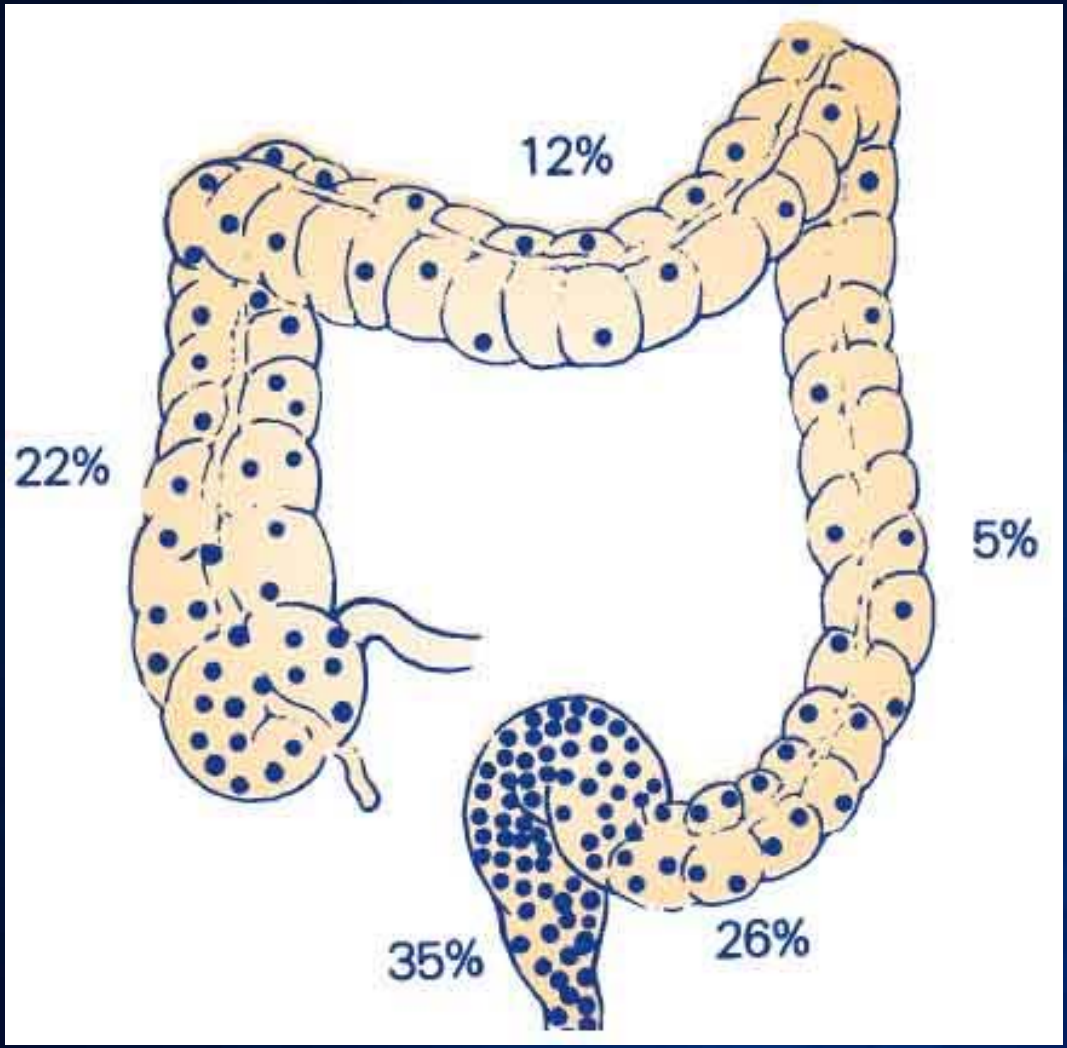

Fondo
Cardia
Corpo
Piloro
Canale
ilorico
Antro
ilorico



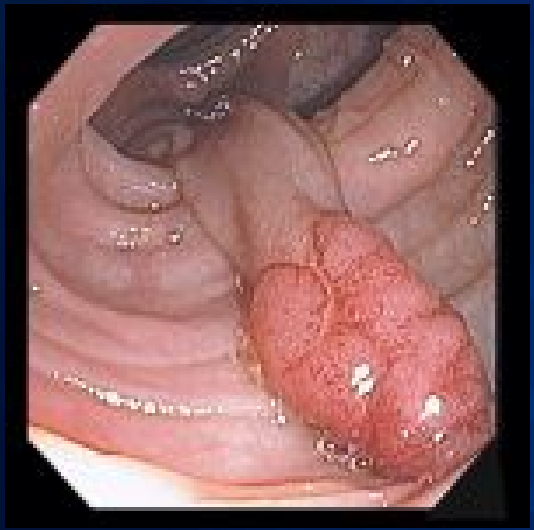
MUCOSECTOMIA ENDOSCOPICA

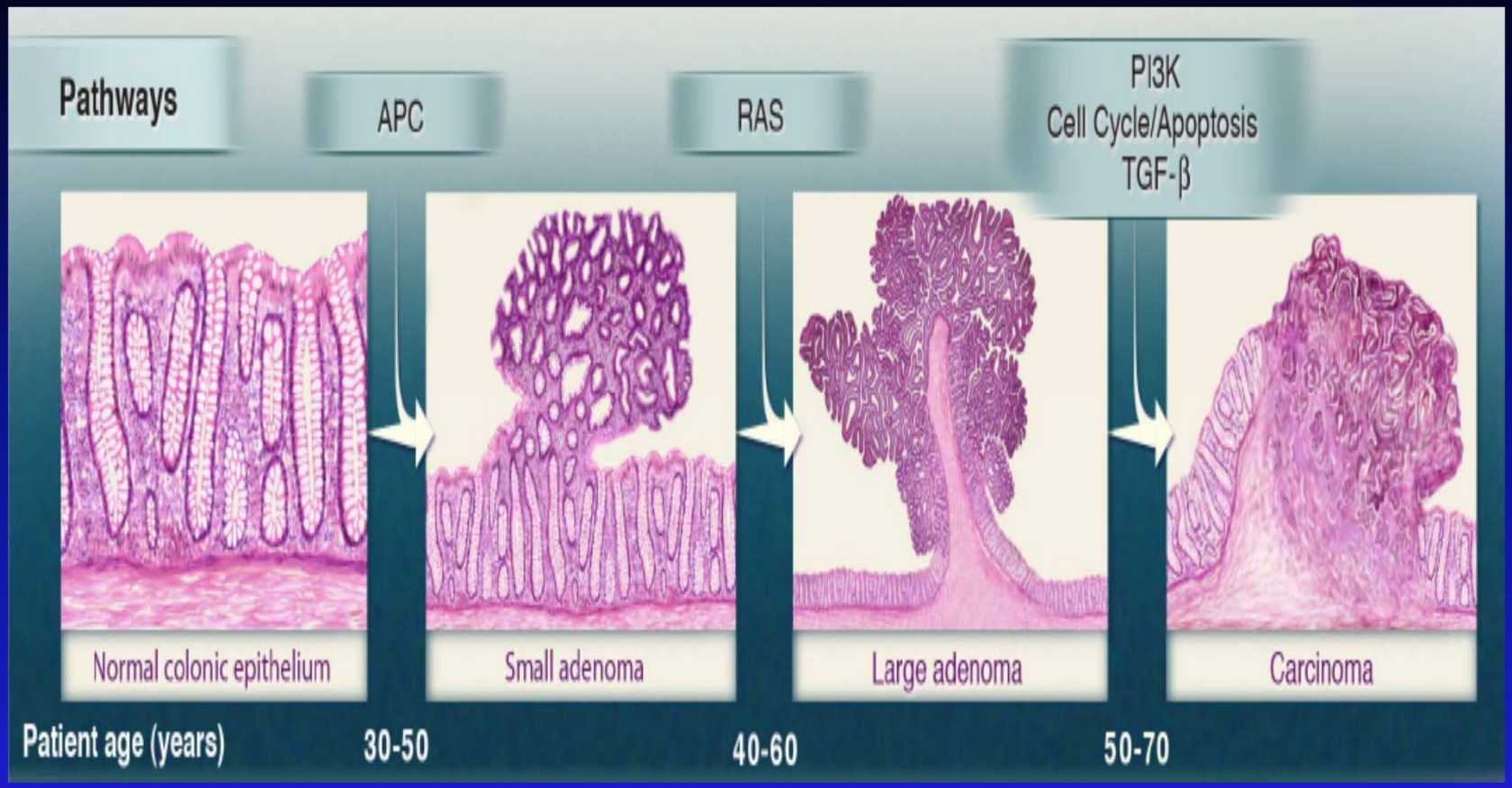
PDTA, IRCCS San Martino-IST, Genova

Localizzazione del cancro colorettale



Polipi adenomatosi





Social Consumption

Testino, 2011

Volgelstein et al, Science 2013

Prospective Study of Adolescent Alcohol Consumption and Risk of Benign Breast Disease in Young Women

Drinking Frequency	OR
Never to less than weekly	1.00 (referent)
1-2 U/ wk	1.72
3-5 U/ wk	3.34
6-7 U/ wk	5.94

Berkey CS et al, Pediatrics 2010

Printz C, Cancer 2010

Table 3. Risk of Biopsy-Confirmed BBD in Young Females With Family History of BC, Family History of Maternal BBD Family History

	BC in Affected Family Member			BDD in Mother
	Mother or Aunt	Grandmother	Any Family Member (Mother, Aunt, Grandmother)	
GUTS girls, No.	477	749	1157	1264
GUTS BBD cases, No.	10	10	19	18
Risk factor, OR (*P*)				
Adolescent alcohol, daily drink	3.80 (.02)	2.29 (.04)	2.28 (.01)	1.96 (.02)
PHV, in./y	1.82 (.05)	0.71 (.51)	1.21 (.49)	1.31 (.44)
Menarche age, y	1.21 (.47)	1.08 (.77)	1.05 (.78)	1.00 (.99)
Young adult height, in.	0.95 (.67)	0.93 (.54)	0.96 (.64)	1.07 (.44)
Childhood BMI, kg/m^2	1.00 (.97)	0.83 (.16)	0.93 (.37)	0.99 (.90)
BMI change, kg/m^2	1.03 (.72)	1.06 (.59)	1.04 (.58)	1.05 (.44)
Young adult BMI, kg/m^2	1.02 (.81)	0.94 (.51)	0.99 (.80)	1.02 (.63)
Adolescent waist circumference, in.	0.92 (.51)	0.90 (.37)	0.91 (.27)	1.08 (.30)

6888

18-27 years

< 7 drinks/wk

Berkey CS et al, Cancer 2012

AMERICAN SOCIETY OF CLINICAL ONCOLOGY
CLINICAL PRACTICE GUIDELINES
JULY 2013

PREVENTION BREAST CANCER

- Chemoprevention
- Surgery
- Lifestyle Changes

CHEMOPREVENTION

- Tamoxifen (35 years older)
- Raloxifene (post-menopausal women)
- Aromatase inhibitors
- -- MAP.3 and IBIS-II studies: incidence of ER-positive Invasive Breast Cancer
- was decreased by the Ais exemestane and anastrozole

SURGERY

- Salpingo-oophorectomy
- Bilateraly risk reduction mastectomy

LIFESTYLE CHANGES

……the role of chemopreventive agents in patients with hereditary predisposition to breast cancer is not well established

Advani and Moreno-Aspita, Breast Cancer: Targets and Therapy 2014

….women who do not drink should not start, and those who do drink should do so in moderation, which is generally recognized to be about a drink per day (LOW RISK).

Alcohol intake is one of the few modifiable breast cancer risk factors yet identified

Singletary and Gapstur, JAMA 2001
Testino G, Maedica 2011
Dumalaon-Canaria et al, Cancer Causes Control 2014
Zakhari and Hoek, Adv Exp Med Biol 2015

Overweight - obesity

Breast Cancer: Targets and Therapy

Dovepress
open access to scientific and medical research

Open Access Full Text Article

REVIEW

Current strategies for the prevention of breast cancer

This article was published in the following Dove Press journal:
Breast Cancer: Targets and Therapy
2 May 2014
Number of times this article has been viewed

Pooja Advani
Alvaro Moreno-Aspitia

Department of Hematology and Oncology, Mayo Clinic, Jacksonville, FL, USA

Video abstract

Abstract: Due to the high incidence of breast cancer in the United States, optimal strategies for its prevention are imperative. This entails identification of women who are at an increased risk for breast cancer and an integrative approach that includes effective screening methods as well as nutritional, pharmacologic, and surgical management. Several breast cancer risk-assessment tools, such as the Gail and Claus models, can help clinicians determine the quantitative risk of breast cancer. The role of selective estrogen receptor modulators, such as tamoxifen and raloxifene, for the prevention of breast cancer has been well established. Several other agents, such as aromatase inhibitors, are currently being investigated. The potential adverse effects of these chemopreventive agents, which include an impact on the quality of life, must be discussed with the patient before deciding on this approach. Additionally, breast cancer risk factors have been identified over the years; some of them are modifiable, but others are not. Although there is no conclusive evidence to suggest the protective role of specific dietary components, alcohol consumption and obesity are associated with an increased breast cancer risk; thus lifestyle changes can lead to a lower risk of developing breast cancer. Surgical approaches, including bilateral risk-reduction mastectomy and salpingo-oophorectomy, are usually limited to women with a hereditary predisposition to development of breast cancer. The objective of this review is to summarize the various approaches directed at reducing the incidence of breast cancer.

Keywords: chemoprevention, tamoxifen, raloxifene, prophylactic surgery

2014

Obesita' Centrale

↑ Trigliceridi

↓ HDL Colesterolo

↑ Pressione Arteriosa

↑ Glicemia Basale

Sindrome metabolica

Insieme di fattori di rischio di origine metabolica, tra loro correlati, che inducono lo sviluppo di una malattia cardiovascolare aterosclerotica

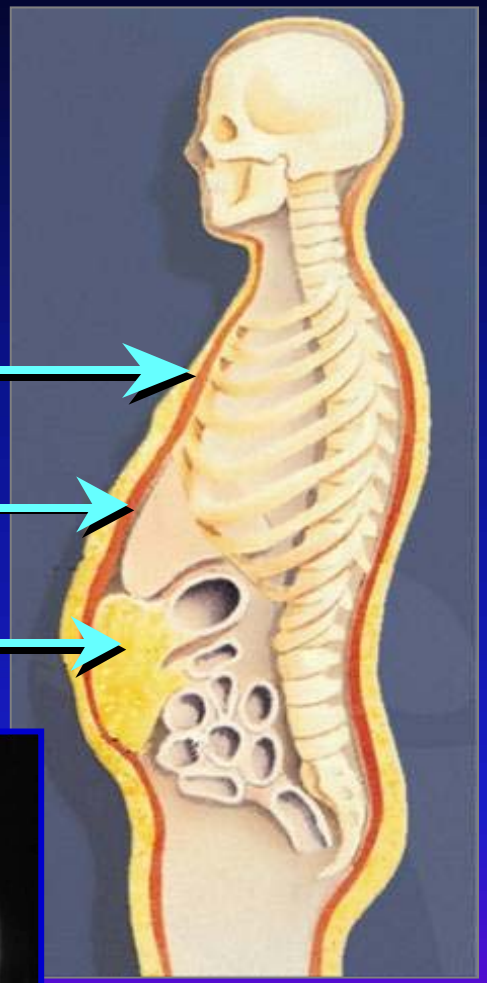
Patogenesi: Insulinoresistenza

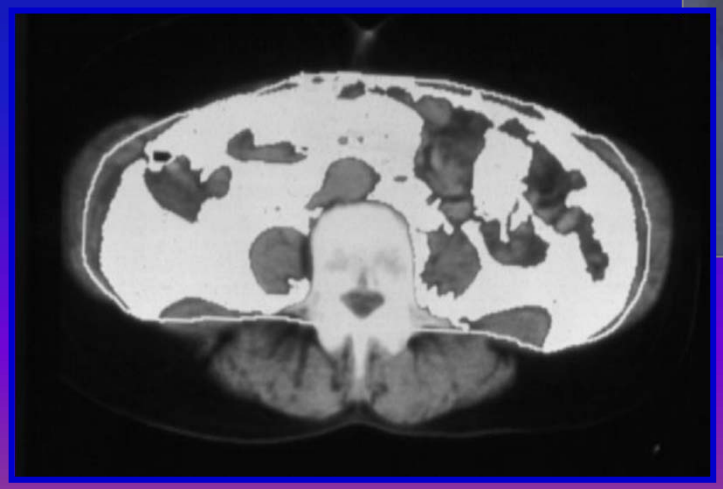
Adiposità addominale di tipo viscerale

Adiposità sottocutanea

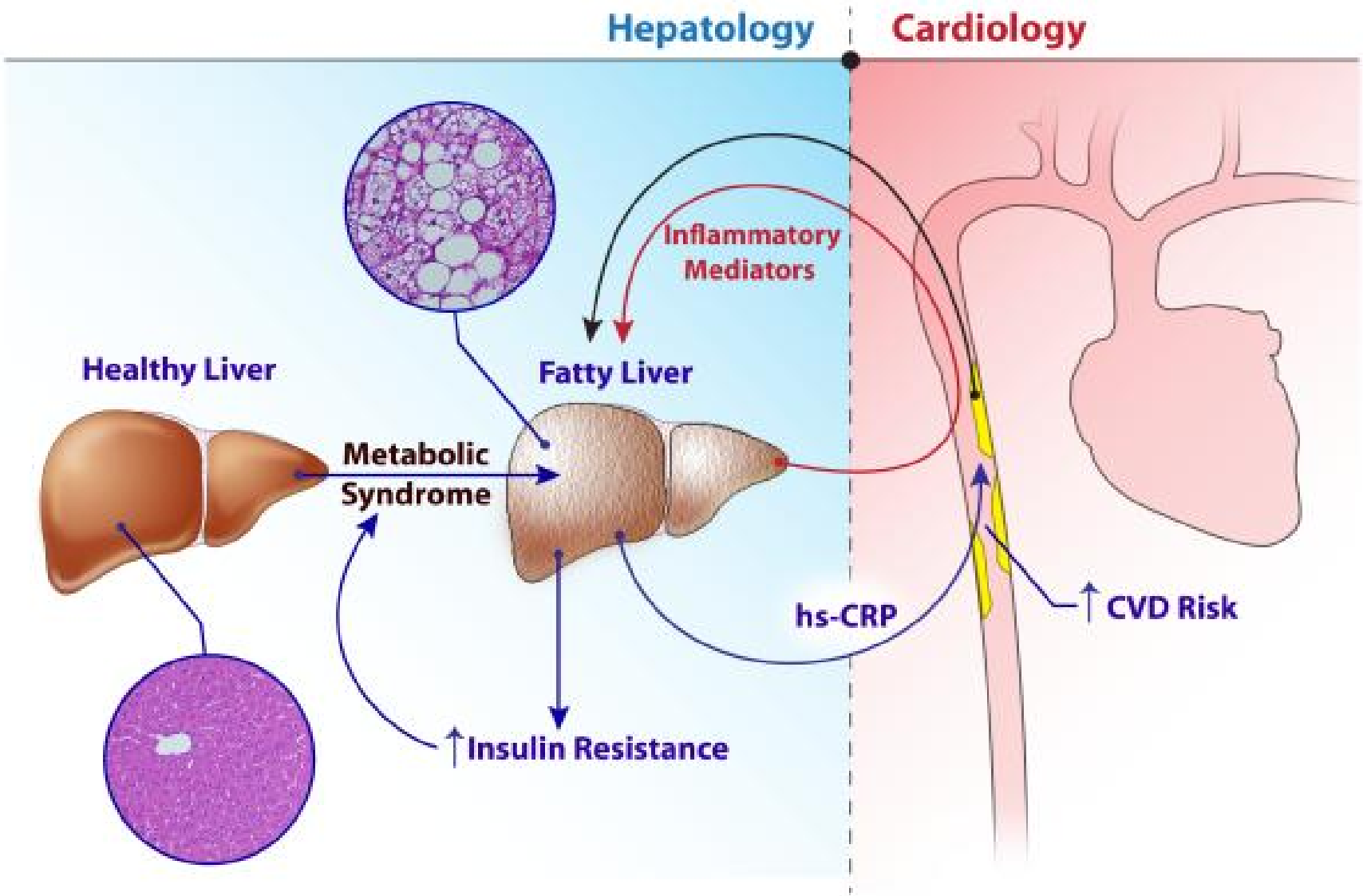
Strato muscolare addominale

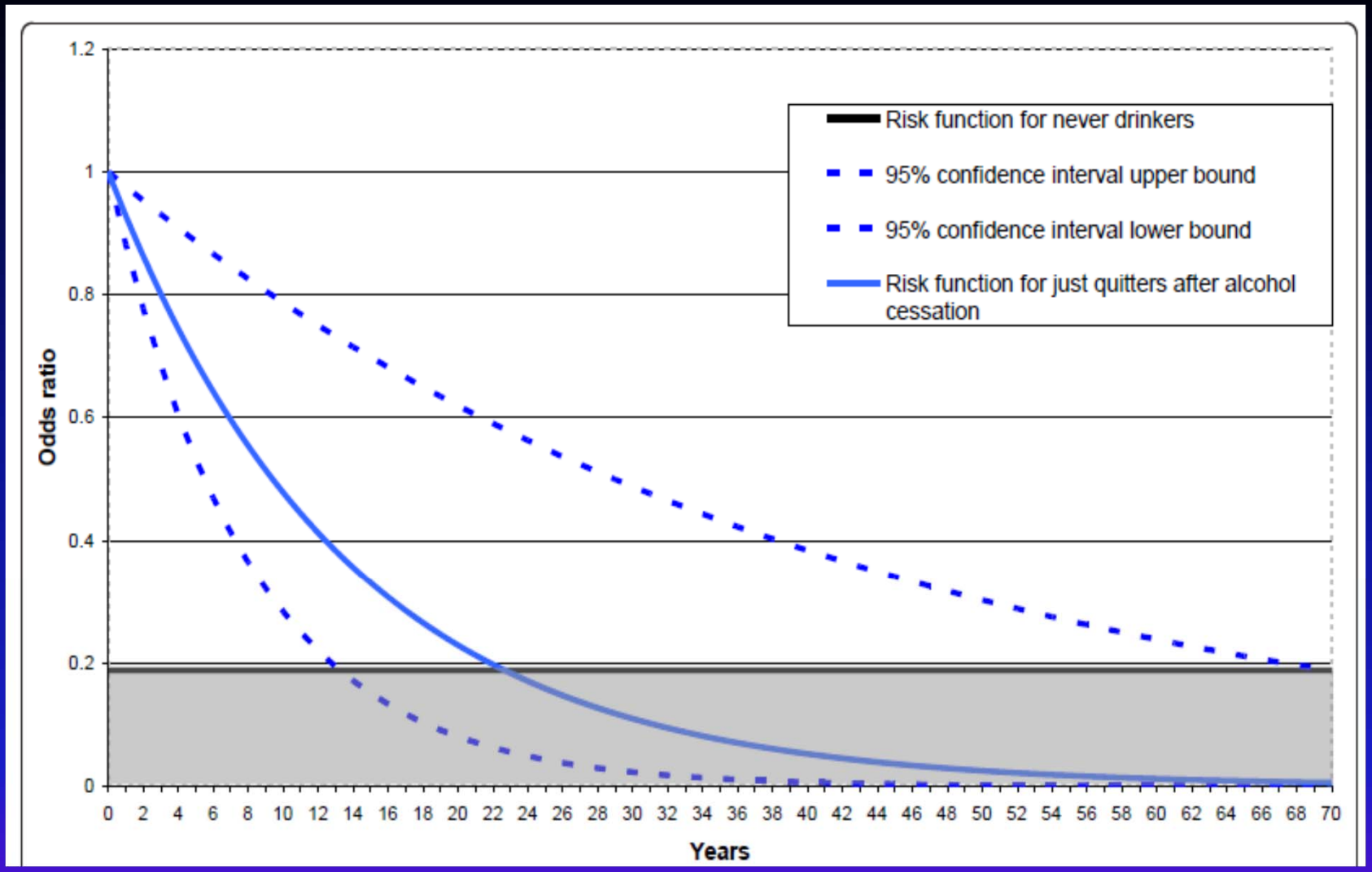
Adiposità intra-addominale



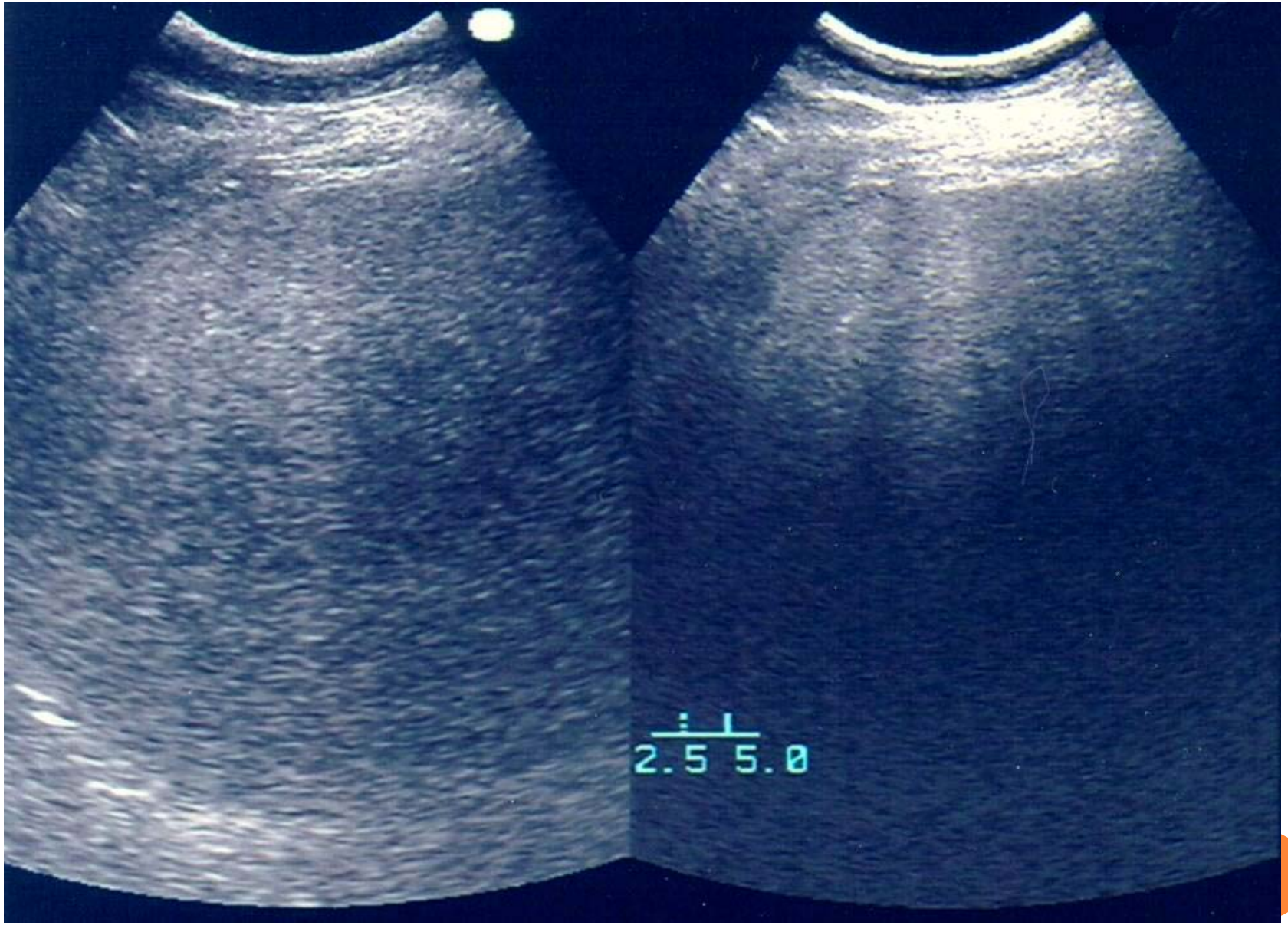


Distribuzione del tessuto adiposo


Hepatology
Cardiology
Inflammatory Mediators
Healthy Liver
Fatty Liver
Metabolic Syndrome
hs-CRP
↑ CVD Risk
↑ Insulin Resistance



Heckley GA et al, BMC Cancer 2011


2.5 5.0

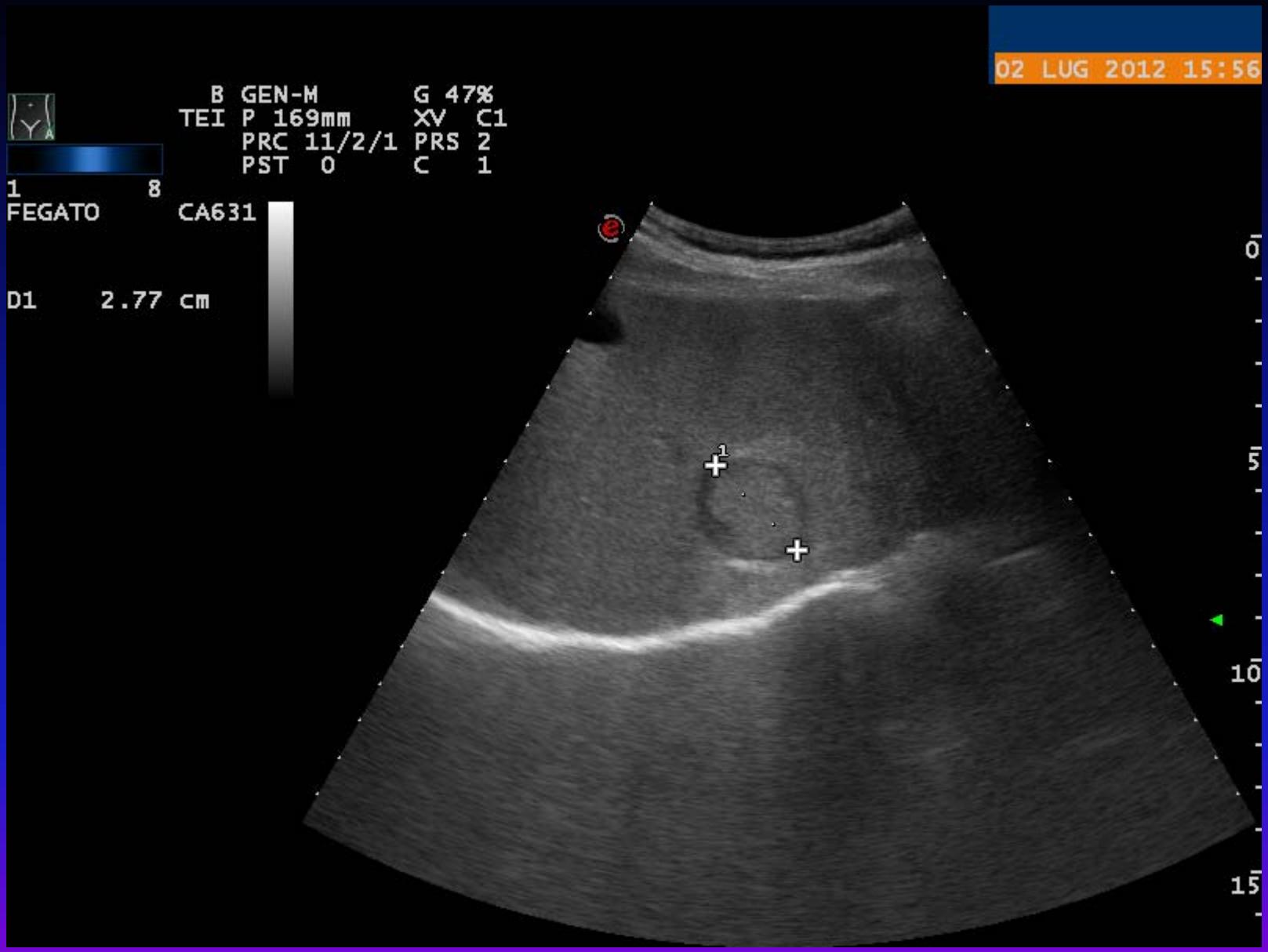
Gennaio – Giugno 2014 – Centro Alcologico Regionale (CAR) – Regione Liguria
Gianni Testino e Paolo Borro

Ecografie del CAR e/o esami in altre sedi ASL 3 Genovese

80 giovani < 25 anni (binge-drinkers): 21/80 (26.25%)

Maschi: 43%

Femmine: 57%


02 LUG 2012 15:56
B GEN-M G 47%
TEI P 169mm XV C1
PRC 11/2/1 PRS 2
PST 0 C 1
1 8
FEGATO CA631
D1 2.77 cm
0
5
10
15

SOGGETTI CON CONSUMO RISCHIOSO/DANNOSO E ALCOLDIPENDENTI

PRIMA VALUTAZIONE – PREVENZIONE SECONDARIA

Migliorare anamnesi alcologica/ Esame Obiettivo

Testa-Collo	Visita Neurologica/ETG Collo
Cavita' Orale, Faringe, Laringe	ORL (Laringoscopia)
Esofago-Stomaco	Infezione da Hp/ Endoscopia con biopsie
Colon-Retto	Sangue occulto feci/colonscopia (clisma TAC colon/ colonscopia virtuale)
Fegato e regione bilio-pancreatica	Valutazione HBV/ HCB/ HIV - ETG ogni 6 mesi
Polmone	Rx Torace
Prostata	PSA tot. e libero con rapporto (tot/libero) al di sotto dei 70 anni
Mammella	ETG se sotto i 40 anni Mammografia e/o ETG se oltre i 40 anni

Testino G, Patussi V, Scafato E et al, Alcologia 2013

OSPEDALE: LUOGO DI CURA E PREVENZIONE

Un ospedale che promuove la salute non si limita a fornire solo servizi e assistenza di elevata qualita'/specializzazione, ma sviluppa una cultura ed una struttura organizzativa finalizzata alla promozione della salute, estesa al ruolo attivo e partecipativo dei pazienti, delle loro famiglie, dello staff dell'azienda ospedaliera ed alla cooperazione attiva con la comunita' di riferimento.

V. Patussi, Centro Alcologico Regionale - Toscana


Grazie