

# Colorectal cancer screening in the EU: The present state.

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## EUROPEAN COLORECTAL CANCER DAYS

### BRNO 2012: Prevention and screening



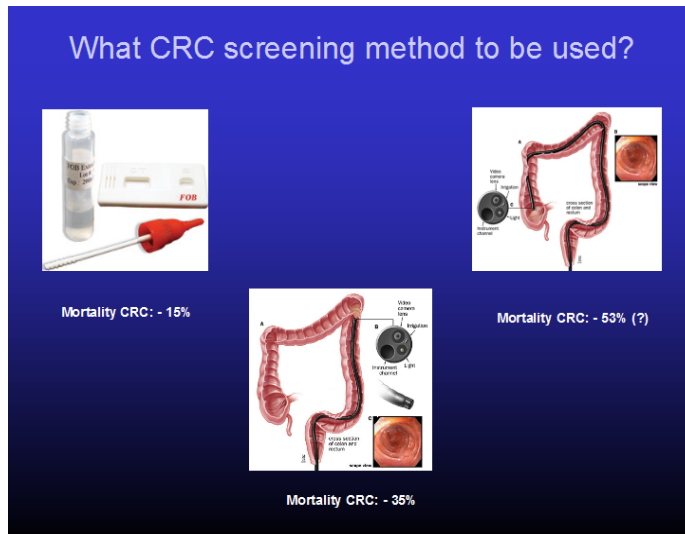
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# CRC screening in Europe and elsewhere: Methods

What CRC screening method to be used?



Mortality CRC: - 15%

Mortality CRC: - 53% (?)

Mortality CRC: - 35%

Atkin et al. Lancet 2010; 375: 1624-33

Segnan et al. J Nat Cancer Inst 2011; 103: 1310-22

**sigmoidoscopy**

Zauber et al. NEJM 2012; 366:687-696

**Colonoscopy +++**

Quintero et al. NEJM 2012: 697-706

**Colonoscopy = FIT**

**Acceptance of and participation in various CRC screening methods depend less on the invasiveness of the test than on the efficacy in terms of neoplasia detection!**

Hol et al. Brit J Cancer 2010; 102: 972-980

## ALTERNATIVES

CT colonography

Capsule endoscopy

Faecal tests

Blood tests

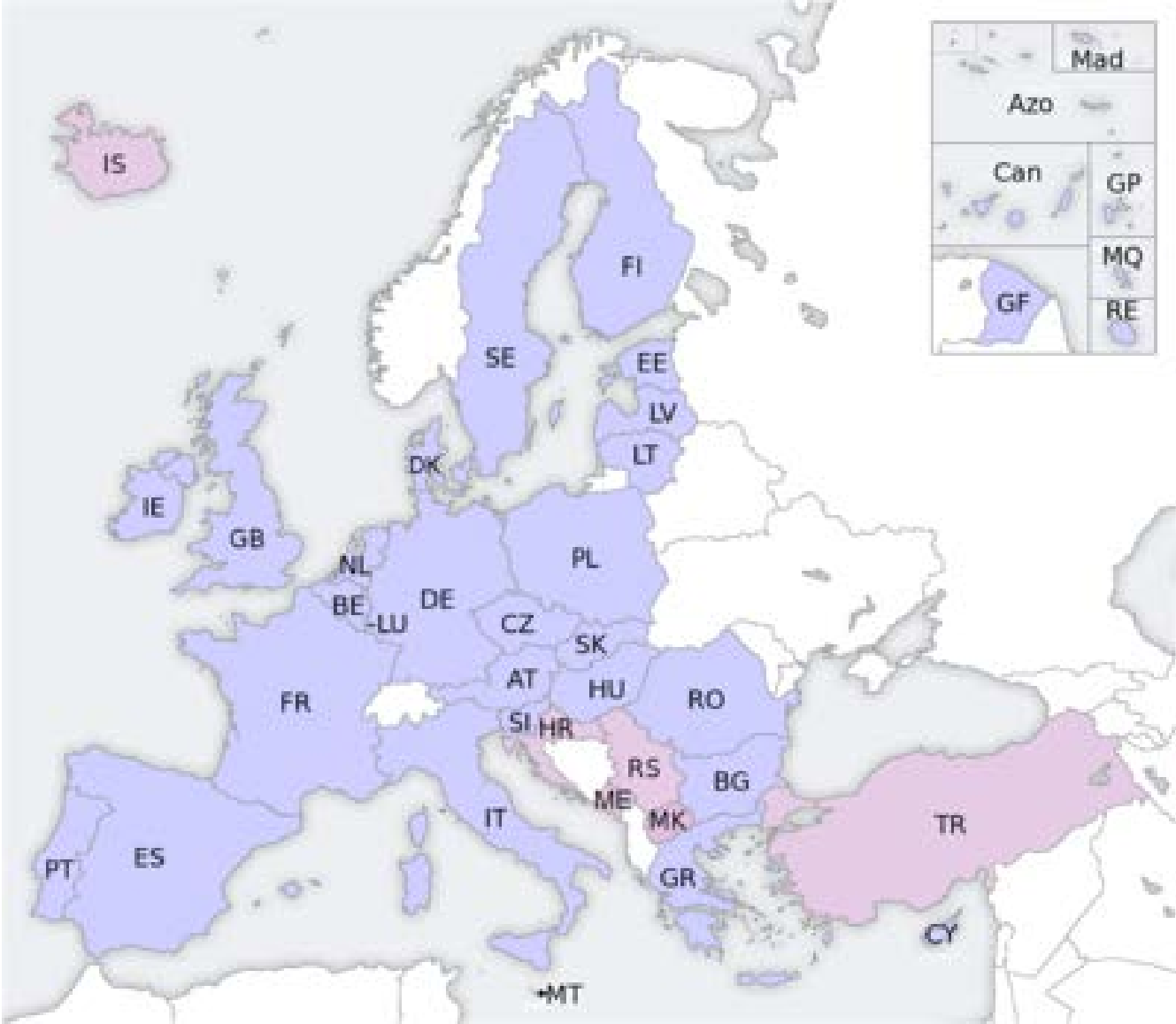
Risk factor profiles

**NOTHING OF THIS HAS PASSED THE MASS TEST!**



The "Screeno" Automobile

# The EUROPEAN UNION: 27 countries, more or less united!



# Colorectal Cancer Screening in *Italy*

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**Scope for improvement!**

# Still quite a way to go!

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# Who is to be blamed?

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*Motivi addotti per la non esecuzione della ricerca  
del sangue occulto a scopo preventivo  
Intervistati 50-69enni  
Pool Asl – Passi 2010*



# CRC screening in *Germany*

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## Outcomes and costs

# CRC screening in Germany

## The opportunistic way!

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**Right in time:**

**Pox CP et al.**

**Efficacy of a nationwide screening colonoscopy program for colorectal cancer  
Gastroenterology 2012, March 20 [Epub ahead of print]**

**2.821.392 screening colonoscopies in 2100 practices**

**Cumulative participation rate: females 17.2%; males 15.5%**

**adenoma detection: f 16.7%; m 25.8%**

**advanced adenomas: in 6.4%**

**carcinomas: in 0.9% (stage I: 47.3%; II: 22.3%; III: 20.7%; IV: 9.6%**

**serious complications: 0.58/1000 colonoscopies**



**Right in time:**

**2.821.392 x €216 = €60.942.067.000 earned (Sieg et al, Z Gastroenterol 2007)**

**Gastroenterologists fight the crisis!**



# What else is there?

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**A decision of the European Council in 2003 (2003/878/EC)**

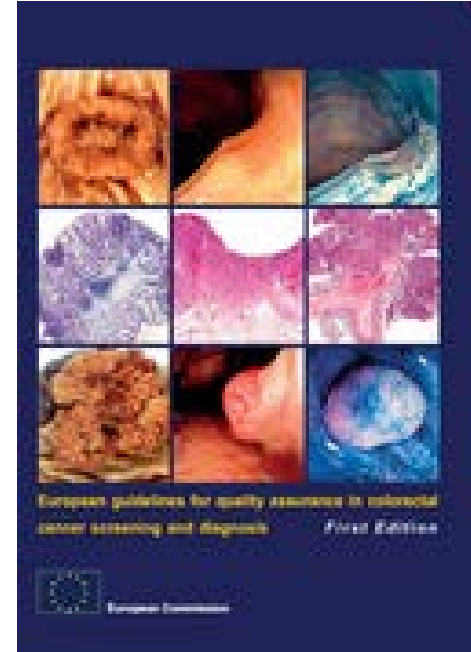
**Many conferences, stakeholders, pro' and con's**

**Finally, 2010, excellent “European guidelines for quality assurance in colorectal cancer screening and diagnosis” by Nereo Segnan, Julietta Patnick and Lawrence von Karsa + 99 co-authors from Europe and the rest of the world.**

**The recommendation:**

**Population-based CRC screening!**

- public
- democratic
- administration-controlled





# “Opportunistic” CRC screening: what is this?

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**Target individuals are not personally invited**

**The screening method is not legally decided**

**The costs are not necessarily be covered by the public (but they can!)**

**Screening initiative is up to the individual and to motivated providers**

**Ambition and fantasy govern more than uniform administration**

**Most CRC screening actions started “opportunistic”, some still are: US, Germany, Poland, et al.**

**Top examples:** BASF, Boehringer Ingelheim, EADS

**Thanks to:** [www.felix-burda-stiftung .de](http://www.felix-burda-stiftung.de)

**Own Experience:** Marbachtalklinik (acc: 58% sigmo);  
Personnel Academisch Ziekenhuis Maastricht (acc: 40% colo)



# CRC screening in Europe?

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**The reality!**

# CRC Screening in the European Union on 04-05-2012

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**“population-based”**                      **N= 9**

B, DK, ES, F, GB, I, NL, SF, SV

**Coverage between 10 and 100 per cent**

**“opportunistic”**                        **N= 7**

A, CZ, D, GR, L, P, PL

**Coverage (per definition) 100 per cent,  
per reality 10 and 100 per cent**

**“pilot”**                                      **N= 2**

IRL, S

**“not yet; unknown”**                **N= 9**

BG, CY, EST, H, LT, LV, M, R, SK

**NW**



**SE**

# United European Gastroenterology (UEG)

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## The “Written Declaration” in the European Parliament

# The UEG and the Written Declaration 68/2010

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- **68/2010**
- **Written declaration on the fight against colorectal cancer in the European Union**
- *The European Parliament,*
- **having regard to Rule 123 of its Rules of Procedure,**
- **A. whereas in the EU yearly there are over 400.000 new cases and 200.000 deaths of colorectal cancer (CRC), CRC being the 2nd most frequent cancer killer,**
- **B. whereas CRC is associated with lifestyle factors (obesity, lack of exercise, alcohol and smoking) tackling these factors will decrease CRC development,**
- **C. whereas screening in some EU countries has already lowered CRC mortality, in other screening activities have not been initiated,**
- **D. whereas early detection of CRC will not only lead to a reduction of 40% mortality rate but will also significantly reduce treatment costs,**
- **E. whereas, following the European Commission, the fight against CRC should be a priority in public health as death by CRC is preventable with the medical tools available in the EU,**
- **1. Calls on the Commission and the Member states**
- **to support in the EU awareness campaigns on lifestyle factors causing CRC, aiming particularly at teenagers and young adults,**
- **to stimulate implementation of CRC screening best practice in all EU countries and to publish progress reports every 2 years;**
- **to make dissemination of CRC screening related research and knowledge a priority in upcoming work programmes of Research Framework Programme 7 and the EU Health Programme;**
- **to introduce nationwide CRC screening, in accordance with EU guidelines;**
- **2. Instructs its President to forward this declaration, together with the names of the signatories, to the Council, the Commission and the parliaments of the Member States.**



# UEG initiatives and events

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**www.e-learning.ueg.eu: e-learning programme “Colorectal cancer” (5 credits CME)**

**European Society of Digestive Oncology (ESDO) activities**

**Brno Conference, ... **today!****

**European Cancer Week with Patient Advocacy Groups, May/June, Rome**

**Introducing cancer prevention in the running EU research programme “Framework 7” and the future “Horizon 2020” (2014-2020)**

**You could read our weekly EU News on [www.ueg.eu](http://www.ueg.eu) and learn that the European Union is highly interested in:**

**“Primary Prevention”**

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# And now:

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## “Prevention”

# Prevention?

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## Colorectal cancer screening:

**Early diagnosis** of cancer and **“secondary prevention”** by polypectomy in individuals at increased or normal risk

**“Tertiary prevention”** as control and prevention of metachronous lesions

**“Primary prevention”**: early action against all known risk factors for a disease in order to diminish or avoid the occurrence of the disease precursors or its definite manifestation.

## Established risk factors for colorectal cancer:

age  
heredity/familiarity  
smoking  
overweight  
heavy alcohol use  
low physical activity



**Only for colorectal cancer?**

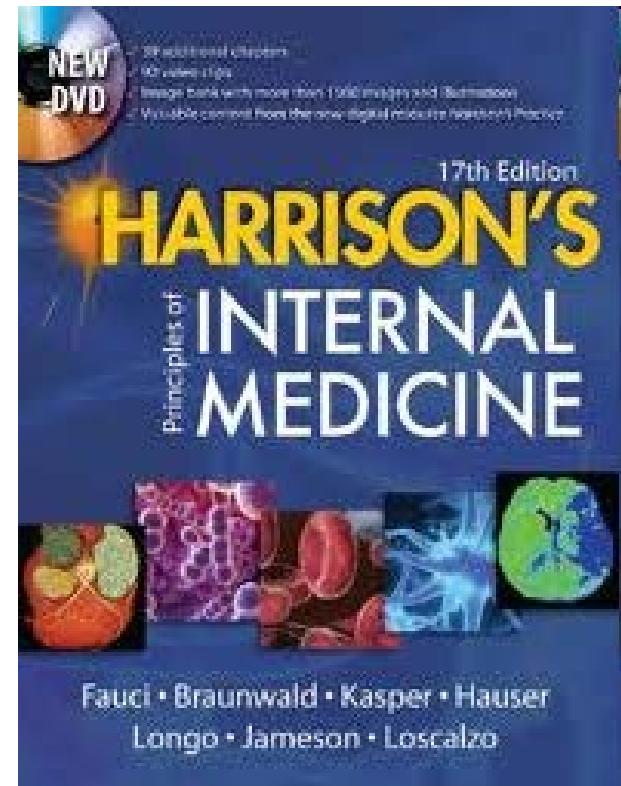
# CRC risk factors shared with:

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- cancer of oesophagus, stomach, liver, and pancreas
- cancer of lungs, breast, uterus, et al
  
- cardio-vascular disorders
- metabolic syndrome
- diabetes
- osteoarthritis

Are we endoscopists,  
gastroenterologists, internists,  
endocrinologists, cardiologists ...

...or just good doctors?



# In colorectal cancer: Primary prevention works!

## Kirkegaard et al. BMJ 2010: 341: 1-8

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- 55487 subjects (50-64 yrs) in a prospective study
- Five lifestyle recommendations:
  - *Smoking*
  - *Physical activity*
  - *Alcohol intake*
  - *Waist circumference*
  - *Diet (fruit, vegetables, fibres, red and processed meat)*
- Results
  - Median follow up 9.9. yrs
  - 1.9% CRC diagnosed
  - 13% (4-22%) attributable to lack of adherence 1 recommendation
  - 23% (9-37%) attributable to lack of adherence 5 recommendations



# A provocation:

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**Prevention as an integrated part of a  
“Healthcare Production Chain”**



# Isolated Colorectal Cancer Screening or Integrated Cancer prevention?

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Seven in one stroke!



- Every **single organ screening** – especially population-wide – **is a considerable investment** in effort, time and money
- This might be the reason, why so many regional and national communities have not yet started colorectal cancer screening
- As **all legal, administrative and organisational measures necessary for any organ screening are similar, should we not combine screening and other preventive actions** in dedicated units, on the PUBLIC as well as on the MEDICAL level?
- We could **save expenses, increase the general understanding of prevention and booster the scientific and practical collaboration** between interested medical specialities

# A Provocative Suggestion!

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A newly designed **HEALTHCARE PYRAMID**:

**Prevention – Acute Care – Chronic Care – Rehabilitation**

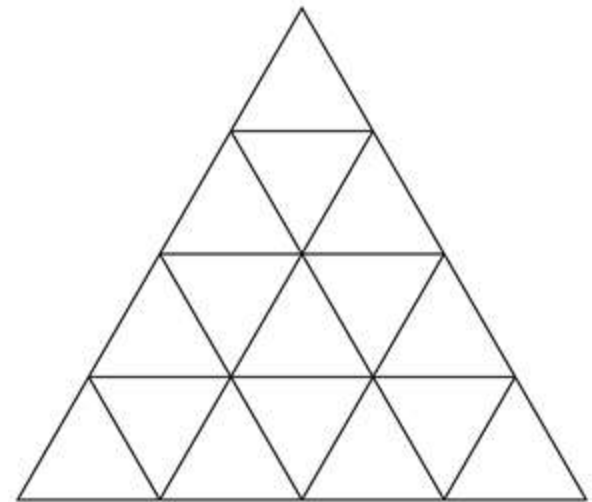
What could it look like?

**Academic Centre: Collection data;  
research; development**

**General District Hospital: Regional  
guidelines, organisation, regional education**

**Local hospital: local screening  
actions (specialists; laboratories)**

**General Practitioner: Holistic view;  
knows risk factor profile; trusted by patient/family**



**Stockbrugger R, Digestive Diseases, in print DOI: 10.1159/000337005**

# And in Europe?

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**The National Cancer Institute USA**



**The International Agency for Cancer Research  
in Lyon**



**European Centre for Disease  
Prevention and Control**

**Do we need a European Centre for  
Cancer Prevention?**

**And if YES, where should it be?**



# My very personal conclusion

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**Paradise seems to be definitely lost,  
but apples can still be used for a healthier lifestyle!**