

Cancer Concerns: driving change towards organic foods?

Controversies, Science and Politics.

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Presentation outline

- Cancer Burden
- Risk Factors
- Food and cancer



CANCER IN AFRICA - THE NEW REALITY



THE AFRICAN ORGANISATION FOR RESEARCH
AND TRAINING IN CANCER (AORTIC)
IS PLEASED TO ANNOUNCE ITS SEVENTH
INTERNATIONAL CONFERENCE ON THE
BURDEN OF CANCER IN AFRICA.
IT WILL TAKE PLACE IN DAR ES SALAAM,
TANZANIA FROM 11-14 NOVEMBER 2009 AT
THE KUNDUCHI BEACH HOTEL AND RESORT.



64. The Secretary-General...with Member States...
to submit by the end of 2012 to the General Assembly...
for consideration by Member States, options for
strengthening and facilitating multi-sectoral action for the
prevention and control of non-communicable diseases

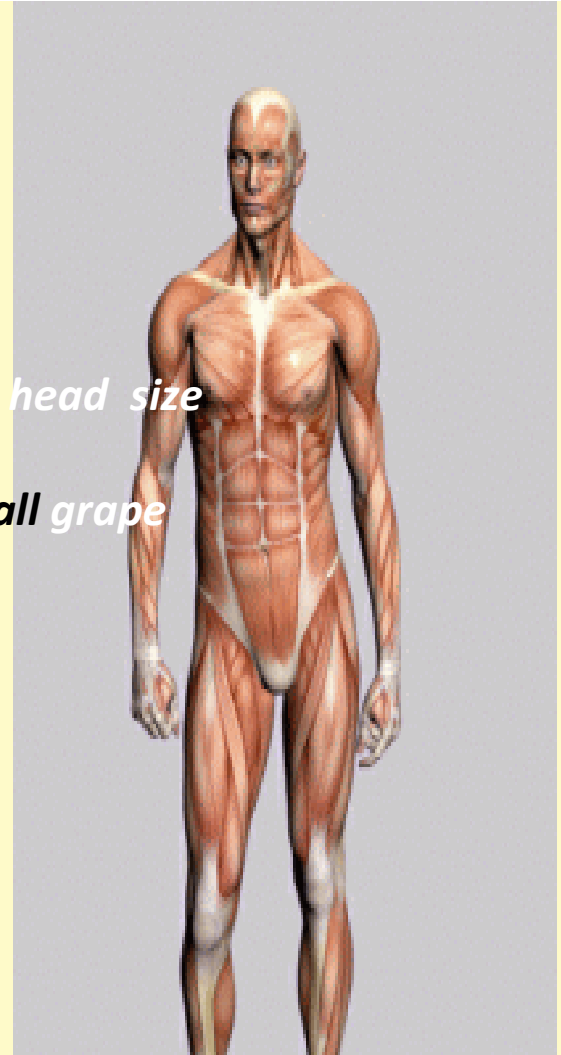
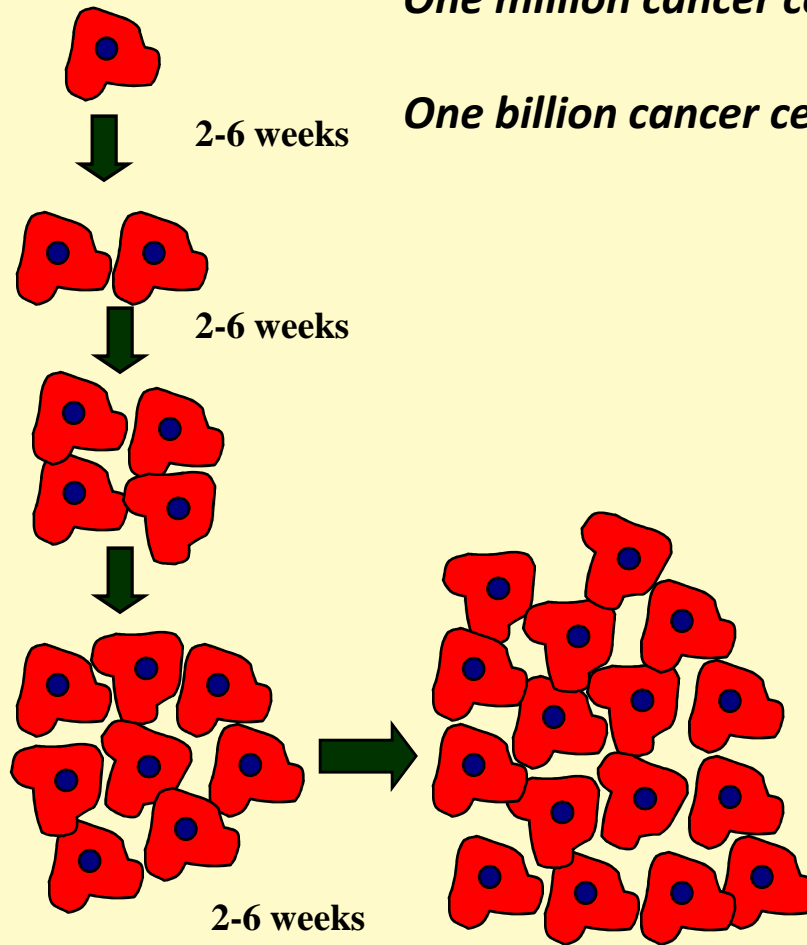
UN NCD HLM Political Declaration clause 64, 16 September 2011

What is Cancer?

Size of cancer cells:

One million cancer cells = pin head size


One billion cancer cells = small grape



Cancer results from damage to DNA. DNA is in every cell and directs all its actions. In a normal cell, when DNA gets damaged the cell either repairs the damage or the cell dies.

There are Four Major Groups of Noncommunicable Diseases

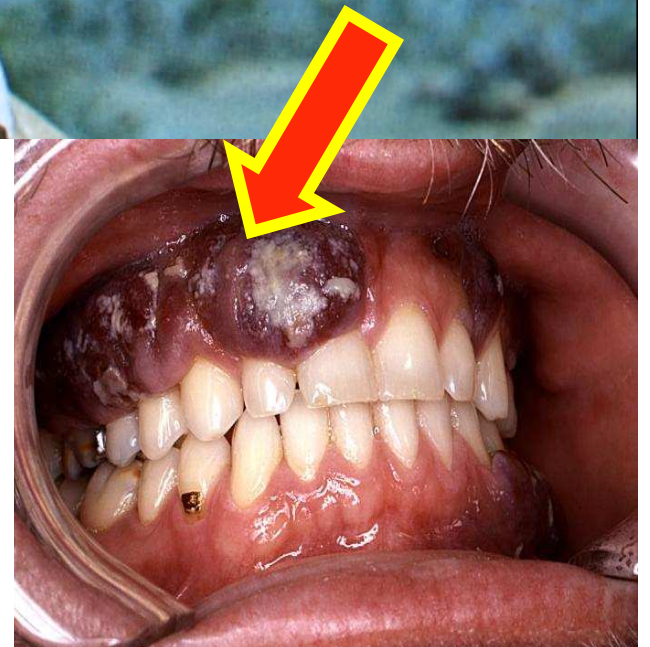
Four major lifestyles related risk factors



		Modifiable causative risk factors			
		Tobacco use	Unhealthy diets	Physical inactivity	Harmful use of alcohol
Noncommunicable diseases	Heart disease and stroke	✓	✓	✓	✓
	Diabetes	✓	✓	✓	✓
	Cancer	✓	✓	✓	✓
	Chronic lung disease	✓			

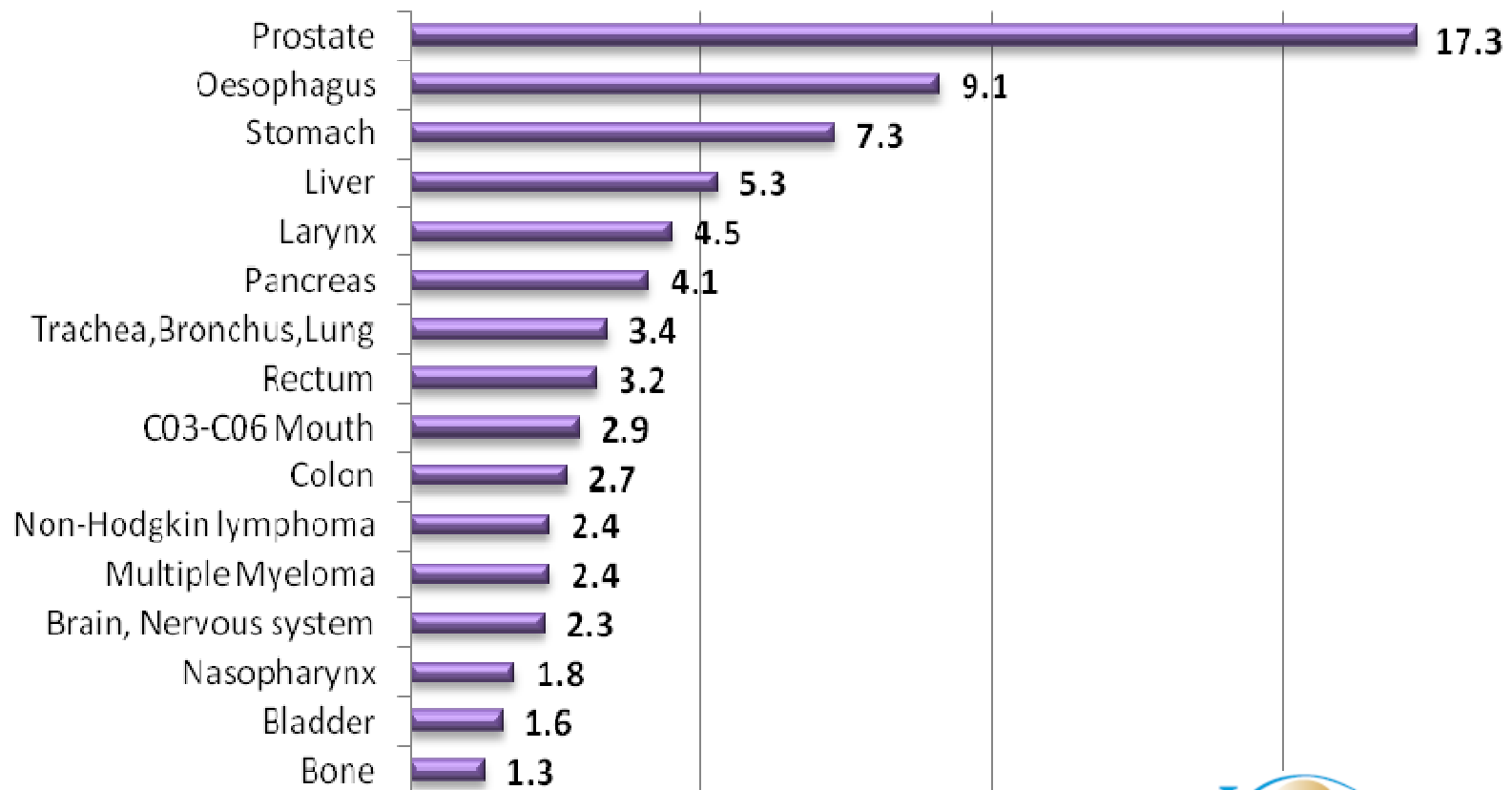


Avoid
Smoking or
Chewing
Tobacco



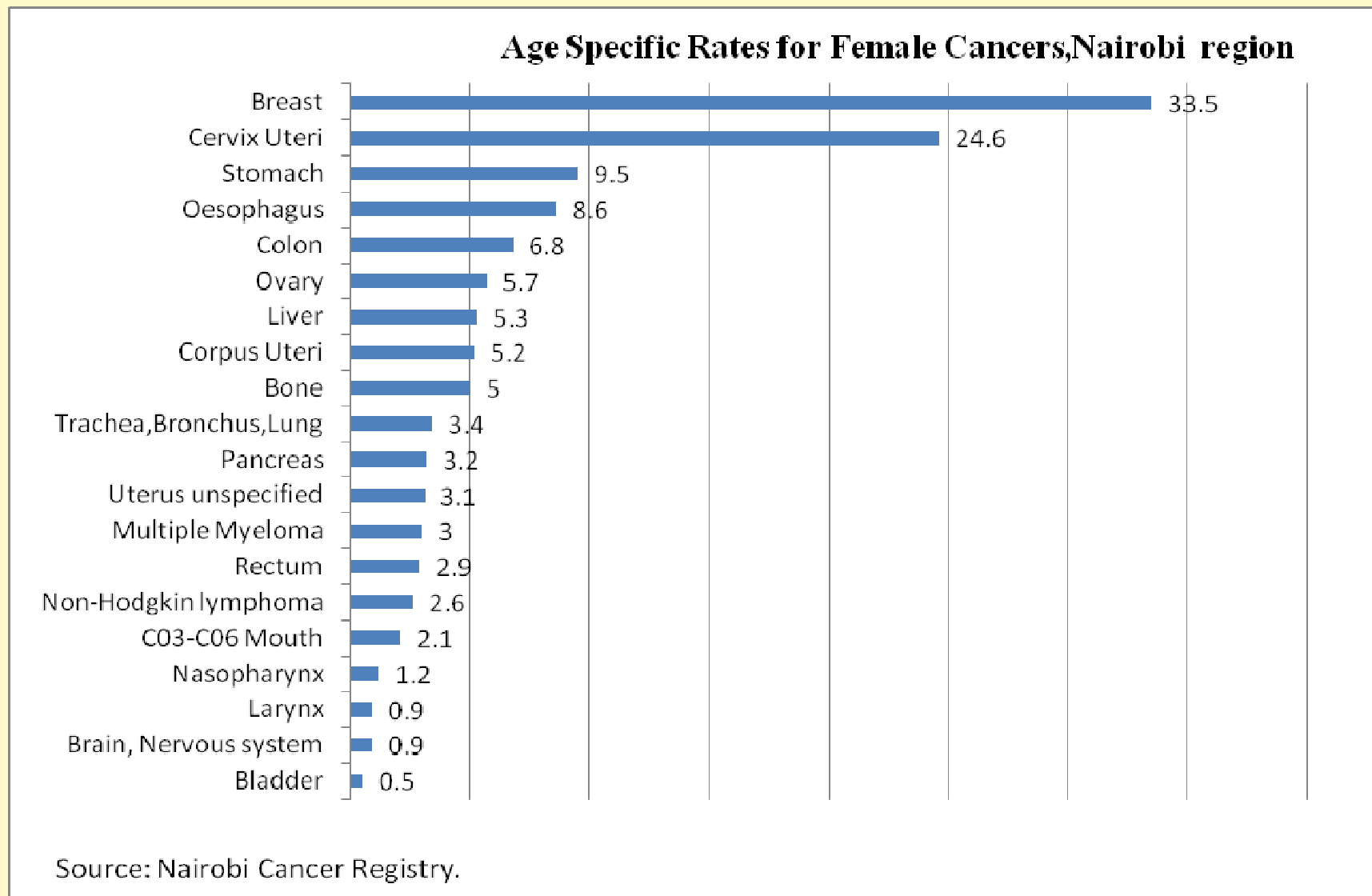
Common cancers in Men as seen in NCR- KEMRI

Age Specific Rates for Male Cancers, Nairobi Region.



Source: Nairobi Cancer Registry-KEMRI.

Common cancers in Women as seen in NCR- KEMRI

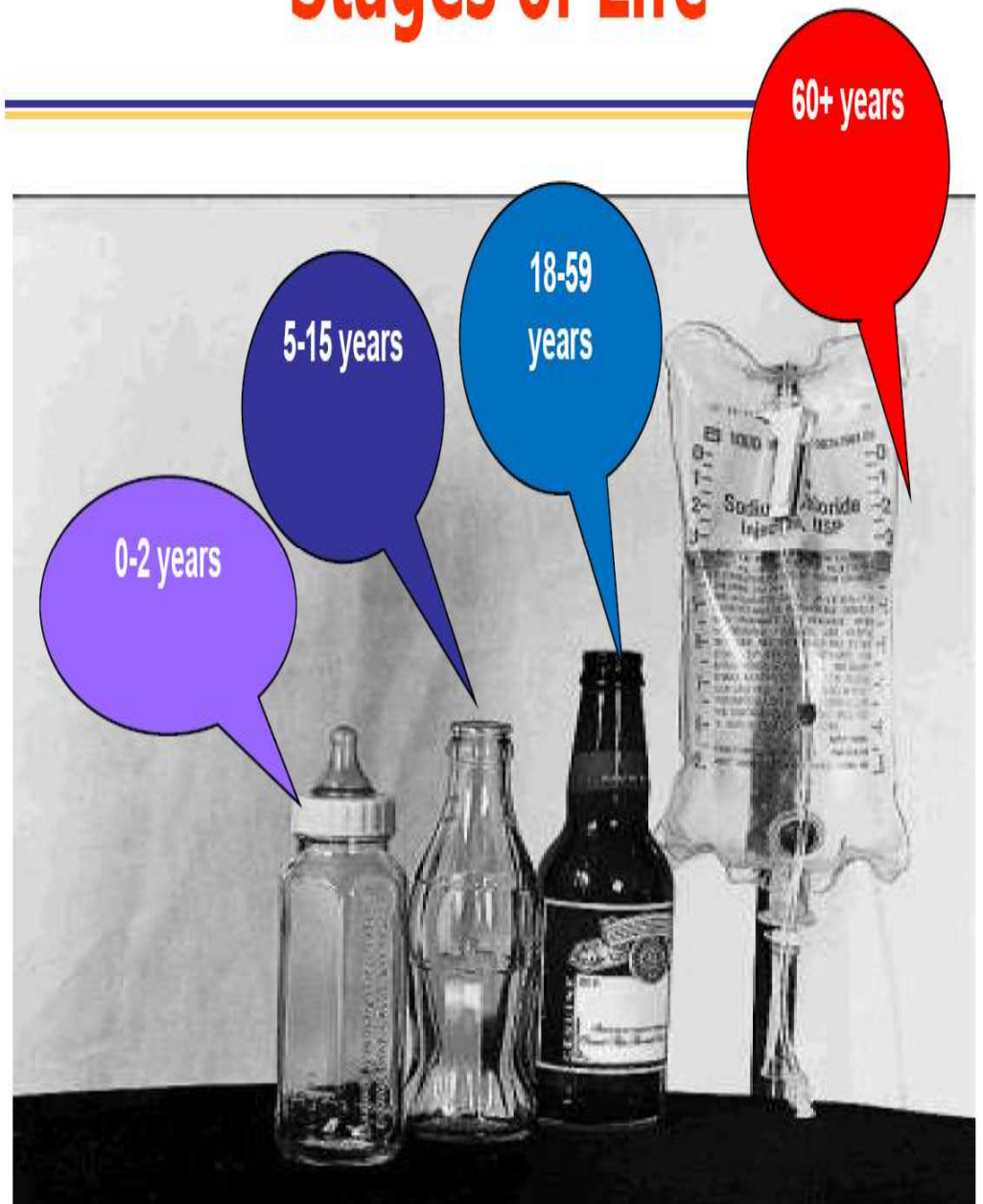


Local data – Nairobi Cancer Registry KEMRI.

- Breast and cervical : 40 % of female cancers.
- Prostate cancer in men 17.3/100,000 closely followed by oesophageal cancer (9.1/100,000)
 - Young people (<40 years)
 - Rising cases of lung cancer
 - Virus-related cancers – HIV (Kaposi sarcoma), HPV (Cervical), Hepatitis B(liver cancer)
- Childhood: lymphomas, retinoblastoma, non-hodgkins lymphomas are very common

FOOD & CANCER

Stages of Life



FOOD AND CANCER

Dietary preferences and food composition are influenced by:

- production
- processing
- storage
- marketing
- distribution
- technological innovations
- Industrialization &Economic development

FOOD AND CANCER

Food additives

- Prolong shelf and storage life
- Enhance color, flavor, and texture.

Role of food additives in cancer risk Controversial.

- Food processing eg refining of grains lowers the amount of fiber and other compounds thus increasing the cancer risk.

FOOD AND CANCER

Meat.

Increased risk of colorectal cancer

- Red meats
- Processed meats: *culprit* - nitrites, added to, hams, hot dogs, etc



FOOD AND CANCER

Alcohol

Increased risk of cancers of the mouth, gums, tongue, throat, larynx (voice box), esophagus, liver, breast, and the colon and rectum.

Coffee.

No evidence that coffee or caffeine increases the risk of cancer.



Foods and Cancer

Dietary fiber.

- Humans cannot digest fibre.
- Good sources of fiber are dried beans, vegetables, whole grains, and fruits.
- Dietary fiber linked with a lower risk of some types of cancer, especially colorectal cancer

Food and Cancer

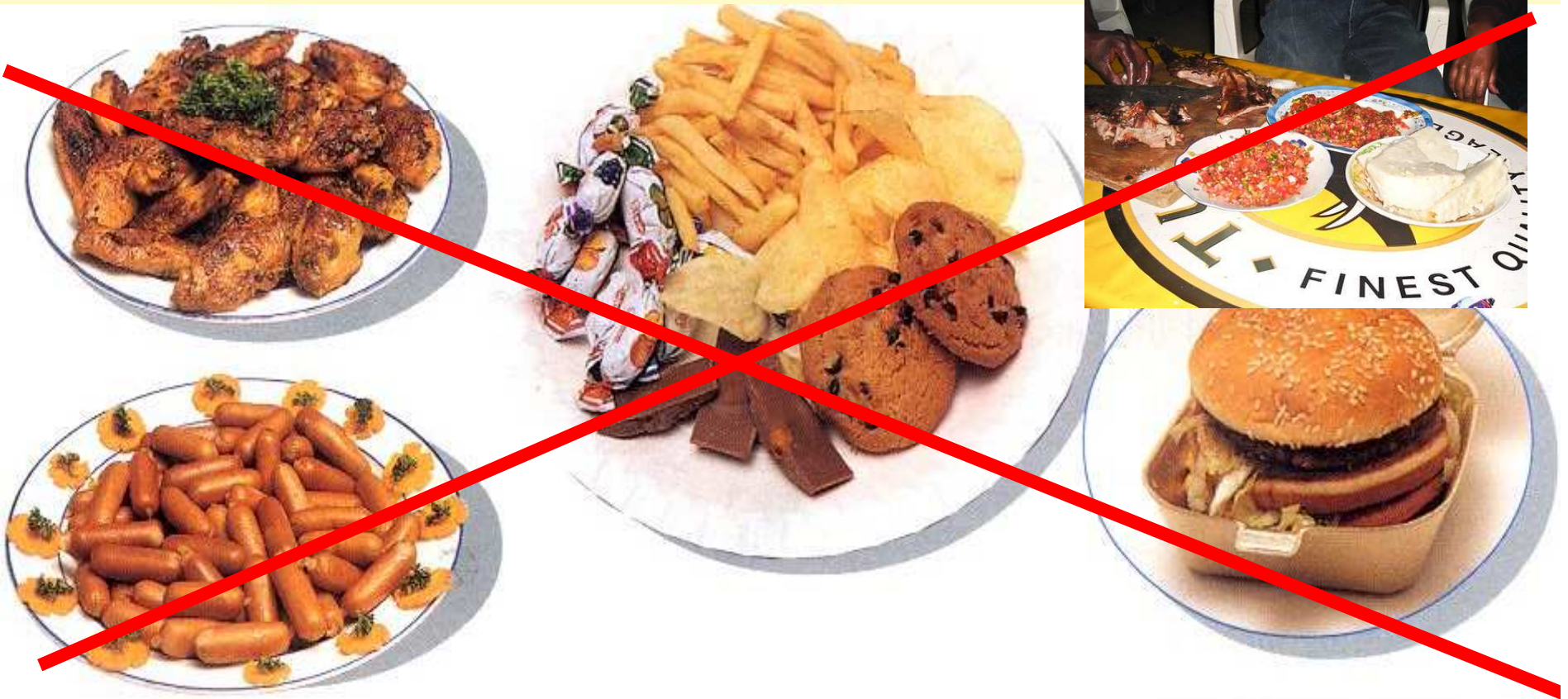
Fish, Vegetables, Fruits

- Fish is a rich source of omega-3 fatty acids which are cancer protective in animals and may play same role in man.
- A diet rich in vegetables, fruits, and other plant-based foods may reduce the risk of cancer



Unhealthy Foods

At the risk of causing a RIOT, too much of these is unhealthy !!



**..a sign of things to come...
or things that have already come?**



Nutritional Supplements.

- No evidence to show micronutrients taken as supplements are good for your long-term health.
- They are not superior to vegetables, fruits, beans, and grains from which they are extracted.
- No evidence to show they protect people from cancer.

Carcinogens: Aflatoxins!



Kenyan herbal drugs 'highly' contaminated

By ARTHUR OKWEMBA

Posted Sunday, February 7 2010 at 14:54

A huge percentage of Kenyan herbal medicines contain unacceptably high levels of disease causing organisms. The government's National Quality Control Laboratory (NQCL) tested 18 samples of herbal drugs sold to Kenyans and found all of them to be contaminated.

The products studied were collected from some of the leading clinics and outlets in Nairobi.

A number of them were found to contain an organism notorious for the production of aflatoxins. Aflatoxins are a leading cause of cancer.

The news will come as a shocker to millions of Kenyans who depend on herbal drugs because of the high costs of conventional medicine.

Aflatoxin- Kitui District On Alert

The People Daily Page: 4 on Sat
19th May 2007,



DUAL CONSULTATION

Organic foods

Foods produced without using modern synthetic inputs such as

- 1. Pesticides**
- 2. Chemical fertilizers**
- 3. Do not contain GMO's**
- 4. Not processed using irradiation, industrial solvents, or chemical food additives**

Pollutants contained in pesticides are thought to bio-magnify throughout the food chain and bio-accumulate in organisms leading to increased cancer risk.

Do organic foods carry a lower risk of cancer?

Organic foods

Factors limiting the purchase of organic foods:

- limited availability,
- high price,
- lack of trust in organic labels
- insufficient knowledge of organic foodstuffs

Factors influencing the move to organic foods.

- Perceived quality
- Family considerations
- Health concerns
- Political, religious and ethical reasons
- High Social economic status

(Fotopoulos & Krystallis, 2002; Honkanen et al., 2006; Hughner et al., 2007).



FreakingNews.com



FreakingNews.com

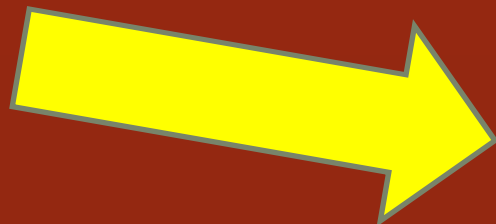
GMO/ Bioengineered Foods?

GMO/ Bioengineered Foods.

- Made by adding genes from other plants or organisms to increase resistance to pests; slow spoilage; improve yield, flavor, nutrient content, or other qualities.
- No proof that genetically modified foods increase or decrease cancer risk.
- Lack of proof of harm is not the same as proof of safety.



**And more dimensions of
causation and prevention**



**Cultural
Political
Ideological**

2009 WCRF/AICR Policy Report, chapters 2-6

Giessen Declaration, 2005: www.iunns.org

The Istanbul Declaration, 2009: www.wfpha.org

GMO/ Bioengineered Foods.

Science.

Are GMO/ Bioengineered Foods risk free?

Political issues

Are GMO/ Bioengineered Foods the solution to Africa's hunger problem?

Ethics of Hunger?





The Hyderabad Statement

All significant advances in population health
require and involve the use of law.
There are no known exceptions to this rule

2009 WCRF/AICR policy report examples, chapters 2-6
Public Health Foundation of India meeting on law and public health, August 2008



Pathological answer

Death was caused by a
bullet penetrating the brain



Sociological (legal) question

Who bought the gun,
who fired it, and why?



Eating as a Political issue.

- Would our politicians support the regulation of advertising of unhealthy foods to children?
- Would they be compromised by the industry?
- Should they be held morally responsible for failing to support legislation to regulate unhealthy diets and the resultant ill health?



Medical answer

Death was caused by
squamous cell carcinoma of the lung



Political question

Who bribed politicians
to conceal the evidence on smoking?



**Before
treatment**

19 11:03AM

**Same
patient
After
treatment**

25 3:52PM



21. Poverty, uneven distribution of wealth, lack of education, rapid urbanization and population ageing, and the economic, social, gender, political, behavioural, and environmental determinants of health, are among the contributing factors to the rising incidence and prevalence of non-communicable diseases

Obesity in China increased over 150 per cent between 1996 and 2006
UN NCD HLM Political Declaration clause 21, 16 September 2011

TAKE HOME MESSAGE

Focus on reduction /elimination of exposure to cancer-causing factors and lifestyle modification.

- **Immunization against, or treatment of cancer causing infectious agents**
- **Tobacco control programs**
- **Reduction of excessive alcohol consumption**
- **Control of occupational hazards**
- **Dietary & physical activity interventions**

**If we don't act now.. Cancer
& lifestyle diseases Will...**



Join the Fight!

JOIN



www.kenyacancer.org