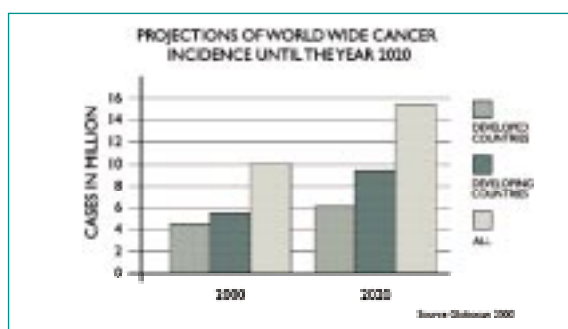




# CANCER

proportion is thought to be about 20% in developing countries and is projected to grow. As developing countries become urbanised, patterns of cancer, particularly those most strongly associated with diet and physical activity, tend to shift towards the patterns of economically developed countries. Cancer rates also change as populations move between countries and adopt different dietary patterns.



The relative importance of cancers as a cause of death is increasing. The incidence of lung cancer and cancers of the colon and rectum, breast and prostate, generally increases in parallel with economic development, as stomach cancer declines. Cancer is also strongly associated with social and economic status. Cancer risk factors are highest in groups with the least education. In addition, patients in the lower socioeconomic classes have consistently poorer survival rates than those in higher strata.

In recent years, substantial evidence has pointed to the link from overweight and obesity, to many types of cancer such as oesophagus, colorectum, breast, endometrium and kidney. The composition of the diet is also important since fruit and vegetables may have a protective effect by decreasing the risk for some cancer types such as oral, oesophageal, gastric and colorectal cancer.

Regular physical activity has also been seen to have a protective effect in reducing the risk of breast and colorectal cancer. High intake of preserved meat or red meat might be associated with increased risk of colorectal cancer. Another aspect of diet clearly related to cancer risk is the high consumption of alcoholic beverages, which convincingly increases the risk of the oral cavity, pharynx, larynx, oesophagus, liver and breast cancers.

## WHAT CAN BE DONE?

The wealth of knowledge that already exists about cancer risk factors provides obvious and ample scope for action to reduce the cancer burden of all countries. After tobacco, overweight and obesity seems to be the most important avoidable cause of cancer.

Given that poor nutrition, physical inactivity, obesity, tobacco and alcohol, are risk factors common to other chronic diseases, such as CVD, type 2 diabetes, and respiratory diseases, conducting a cancer prevention programme within the context of an integrated chronic disease prevention programme would be an effective national strategy.

Dietary factors that convincingly increase risk are:

- Overweight and obesity,
- Excess alcohol consumption (more than 2 units a day)
- Some forms of salting and fermenting fish
- Very hot (thermally) salty drinks and food
- Aflatoxins (fungal contaminants sometimes found on foods such as grains, peanuts, tree nuts, and cottonseed meal)

### EVIDENCE

### DECREASED RISK

### INCREASED RISK

EVIDENCE	DECREASED RISK	INCREASED RISK
<b>CONVINCING</b>	Physical activity (colorectum)	Overweight and obesity (oesophagus, colorectum, breast, endometrium, kidney) Alcohol (oral cavity, pharynx, larynx, oesophagus, liver; breast) Aflatoxin (liver) Chinese-style salted fish (nasopharynx)
<b>PROBABLE</b>	Fruit and vegetables (oral cavity, stomach, colorectum) Physical activity (breast)	Preserved meat (colorectum) oesophagus, Salt-preserved foods and salt (stomach) Very hot (thermally) drinks & food (oral cavity, pharynx, oesophagus)
<b>POSSIBLE/ INSUFFICIENT</b>	Fibre, soya, fish, n-3 fatty acids, carotenoids, vitamins B2, B6, folate, B2, B6, folate, B12, C, D, E, calcium, zinc, selenium, non-nutrient plant constituents, (eg allium, lignans, compounds, flavonoids, isoflavones)	Animal fats, heterocyclic amines, polycyclic aromatic hydrocarbons, nitrosamines

## KEY CONTACTS

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