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**Common myths about fighting cancer**

JOHN NAISH, The Times, 12:00AM June 13, 2014



The media is awash with theories about fighting cancer Source: ThinkStock

IN the Middle Ages, people used amulets and incantations to ward off visitations by lethally agonising ailments. They also traded magical practices and potions in futile attempts to cure them.

We are more sophisticated and scientific these days, but not, it seems, when it comes to cancer.

The media is awash with modern myths about how we bring the ­disease upon ourselves and how we can prevent it — what, though, does science tell us about cancer?

**‘Healthy’ foods raise your chances of avoiding cancer or of beating it**

Scientific studies have failed to find any reliable evidence in support of fare such as organic veg or tumour-killing “superfoods”.

In March, University of Oxford investigators reported on 225,000 middle-aged British women whose eating habits they had followed over nine years, to see whether pesticide-free ­organic food made a difference to their overall chances of developing 16 of the most common ­cancers.

“We found no evidence that a woman’s overall risk was ­decreased if she generally ate ­organic food,” said Tim Key, an epidemiologist who led the res­earch, published in the British *Journal of Cancer*.

Nor is there reliable evidence to back internet claims so-called superfoods such as honey, blueberries, beetroot, broccoli or garlic help to prevent cancer or cure it.

Karol Sikora, a consultant oncologist based at Hammersmith Hospital in London, says: “I’ve looked at quite a few faddy diets that claim to help cancer patients over the 40 years I’ve been an oncologist. I have never found one that does what it claims to do.”

Similar conclusions were reported this year at the American Association for Cancer Research.

Walter Willett, a Harvard epidemiologist and expert in cancer and nutrition, concludes all that can be said with any assurance is that it is important to avoid obesity and excess alcohol.

**Screening is always beneficial**

We’d like to believe that regular screening always helps to catch cancers early and treat them more effectively, but mammograms are controversial.

Last year, a study in the *Journal of the Royal Society of Medicine* concluded that over four decades “the data shows that, at least as yet, there is no evidence of an effect of breast screening on population-level breast cancer mortality”.

A survey of study evidence in the *British Medical Journal*in 2009 concluded that up to a third of all screening-detected breast cancers may, in fact, be overdiagnosed. The abnormalities they identified would not have gone on to become cancers, but women with them endured unnecessary treatment such as surgery and chemotherapy.

Evidence suggests that finding tumours later through self-examination is just as effective as “catching them early”.

A similar pattern is emerging in thyroid cancer screening in people who have no family history of the disease.

Ray Moynihan, a senior research fellow at Bond University in Queensland and a world expert in overdiagnosis, says diagnoses of this condition have also been rising rapidly. “While the chances of tests detecting a thyroid ‘abnormality’ are high,” he says, “the risk it will ever cause harm is low.”

**A positive ­attitude can help overcome cancer**

Common sense seems to decree that the anxious and impatient are more likely to bring cancer up­on their stress-wracked selves, but patients who remain ­up-beat bolster their bodies’ cancer-combating abilities. Evidence suggests, however, that tumours are no respecters of personality or willpower. Last month, researchers who studied more than 2000 cancer patients for more than five years concluded in the *British Journal of Cancer*: “Personality is not associated with an increased risk of the incidence of cancer or cancer-­related mortality.”

Kat Arney, the science communications manager at Cancer Research UK, says: “These myths are pernicious because they make people who develop cancer feel that they are to blame for getting the disease. They also make ­people feel they are a ­failure if the disease persists.”

**Breast cancer always comes in the form of a lump**

A lump may indicate breast cancer (or indeed one of many harmless conditions such as cysts or noncancerous tumours called ­fibroadenomas), but this is simple advice: there are other important signs women should check for during self-examination.

These include: swelling; skin irritation or dimpling; breast or nipple pain; nipple retraction, redness, scaliness or thickening of the nipple or breast skin.

Another possible sign is a discharge other than breast milk.

Breast cancer can also spread to underarm lymph nodes and cause swelling there before a ­tumour in the breast is large enough to be felt.

**Genetic tests can tell you if you are going to get cancer**

Like hi-tech fortune-tellers, commercial companies have appeared promising to predict your cancer risk by examining your DNA.

It is true that some mutations of a few genes, such as BRCA1 and BRCA2, can indicate significantly raised risk in people with family histories of prostate, breast, ovarian and pancreatic cancer.

But, with most genes, their role in cancer is uncertain, ­particularly as they interact in complex ways with other genes. Last November, the US Food and Drug Administration ordered the gene-testing company 23andMe to stop selling a home-testing service for cancer and other diseases because it had not provided evidence that the testing worked.

This month, Kara Maxwell, who led a University of Pennsylvania study of gene-array testing results, said: “We’re in a time where the testing technology has outpaced what we know from a clinical standpoint.

“It can provoke a lot of anxiety when you tell a patient, ‘We found a change in your DNA and we don’t know what it means.’ ”

**If a woman gets the HPV vaccine, she no longer needs smear tests**

The vaccine against human papilloma virus (HPV) is no get-out-of-jail-free card.

It only protects against two of the dozen-plus strains of HPV that can cause cervical cancer.

Even then the vaccination is only fully effective when given to women who have not yet been exposed to HPV — that is, virgins.

Thus all women, including those who are vaccinated, will still need routine cervical smear testing.

**Taking antioxidant supplements lowers your risk of cancer**

Over the past decade, antioxidants have em­erged as a go-to supplement for preventing cancer, but scientific investigation shows their promise to be empty.

A review of 12 clinical ­studies by the Mayo Clinic has found that antioxidant supplements do not lower cancer risk.

Moreover, it found that betacarotene (an antioxidant) supplements increase the risk of smoking-related ­cancers.

The findings have been backed by other research suggesting that women who took antioxidant supplements containing betacarotene, vitamin C or vitamin E developed cancer at the same rate as women who didn’t use the supplements.

This month, researchers from Johns Hopkins University in Baltimore reported that resveratrol, an antioxidant found in red wine and dark chocolate, had no effect on the health or longevity of nearly 800 villagers from the wine-drinking Chianti region of Italy.

**Ovarian cancer has no symptoms**

Ovarian cancer is the fourth most common lethal cancer in women and has become known as the ­“silent killer” owing to the belief that it has no symptoms until it reaches its final stages. This is not the case.

It is a myth.

The belief may have led many women to dismiss their symptoms as irritations.

Women should seek advice if they suffer from one or more of the following symptoms for more than three weeks: weight loss; back pain; changes in bowel habit; rectal bleeding.

Other symptoms include ­persistent bloating, abdominal swelling, pelvic or abdominal pain, feeling full quickly or loss of appetite. Symptoms are likely to be accompanied by extreme ­tiredness.

**There is a cure for cancer already but ­scientists won’t use it**

Kat Arney, at Cancer Research UK, says there is “a persistent myth that we know everything about cancer and we are either being rubbish about putting the cure into effect or are deliberately not doing that because we want to keep our jobs going”.

“We get accused of this all the time,” she says.

“It is extremely upsetting. Many of us work in cancer care because we have lost someone we loved to the disease and want to change things for the better.”

She adds: “There can’t be an overall cure for cancer because it is a term that covers more than 200 different diseases.

“Furthermore, the precise ­nature of each disease can be unique to each patient’s body.

“We are making progress ­developing increasingly effective therapies for many cancers, but for others, such as lung cancer, where only 10 per cent of patients will live for at least five years, the outlook is still not good.”

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