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Why modern life DOES cause cancer: The fascinating research which backs what we all feared

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Cancer is often regarded in our society as a natural, if grim, part of the human condition — a dark shadow that hangs over our health. This is hardly surprising, given that one in three people develop cancer at some stage in their lives, with the disease ultimately responsible for a quarter of all deaths in Britain.

Yet it is possible that cancer is not nearly as natural as we might think.

Through research with fellow scientist Professor Michael Zimmerman, I have uncovered powerful evidence to suggest that cancer could largely be a modern phenomenon linked to our diet, environment and lifestyles.



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But what we discovered was striking. In all these studies, involving tens of thousands of individuals, we found hardly any. Among the hundreds of mummies we examined, only three definite incidences of cancer were detected: one from Chile, one from 14th-century Italy and one from ancient Egypt.

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Study: Researchers looked closely at remains that dated back thousands of years similar to this Egyptian mummy (file picture)

Significantly, we found ample evidence of other age-related conditions, such as osteoarthritis, which leads to bone degeneration, and atherosclerosis, which causes the arteries to harden.

If such diseases obviously existed in the ancient world, then why is the evidence missing for cancer?

Others have questioned the methods we used to test the mummies, claiming that modern techniques are not sophisticated enough to draw conclusions about the incidence of cancers.

But, once more, this does not stand up to scrutiny. My colleague Professor Zimmerman conducted experiments using cutting-edge scanners to see how well cancer tumours are preserved in mummified tissue. His tests found the process of mummification actually preserves such tumours very well.

So, contrary to the claims of our detractors, traces of cancer should undoubtedly have survived from the ancient world — if they existed.

That is all the more true because the absence of medical surgery at the time would have meant that any individual tumour would have remained within the body rather than being cut out.

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I am, therefore, sticking with our belief that, over the great sweeping narrative of history, cancer must have been extremely rare in the ancient world compared with today.

We suggest this huge difference may have been down to the changes in our lives that modern society has brought, from pollution to diet. Essentially, cancer has to be largely a man-made disease.

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Diet is a classic example. Today, we consume large quantities of processed foods (which have often been produced with huge amounts of cancer-causing pesticides or chemicals) and heavily-salted instant meals, as well as fatty takeaways and sugary drinks.

In contrast, the ancient Egyptians had a far healthier diet, which — for most of the population — consisted of fresh fish, fruit and vegetables. Occasionally, on feast days, they may have had meat.

Only in the highest echelon of Egyptian society did the priests have a much richer diet, including beef, alcohol, cakes and bread, because they had access to the foods provided for the gods' altars in the temples.

Neither did the peoples of the ancient world lead the sort of sedentary life that so many of us do today, glued to our desks at work and our sofas at home. Most of the population undertook exercise doing manual labour, working in - agriculture, construction or crafts.

In the absence of motorisation, even wealthy plutocrats had to walk or ride around. Furthermore, Egypt, like all

ancient societies, was primarily agrarian, with most people living in rural areas.

So they were free from many of the pressures of modern urban life, such as pollution, over-crowding and stress.



Stressful: Modern working life combined with a take-away diet can be factors in cancer

It should also be said that the ancient Egyptians, like the Romans and Greeks, had extremely good levels of hygiene, achieved through good water supplies, sewage and bathing facilities.

There was, as far as we know, little of the squalor and stench that we associate, say, with the East End of London in the Victorian era or the poverty-stricken slums of some burgeoning cities in the developing world.

A host of studies show that modern life can be a killer.

We have achieved the bizarre paradox of being simultaneously more frenzied in our lifestyles — and more sedentary.

We are constantly in motion while still sitting down, whether it be through commuting by car or working at a computer. We are surrounded by a cacophony of noise, emails and gadgets — and too many of us survive on an avalanche of fatty, processed foods.

Being overweight is a known risk factor for cancer. In women, the fatter you are, the more oestrogen your body produces, which may explain why overweight women are at greater risk of breast cancer (which is sensitive to oestrogen).

Obesity is associated with a greater risk of bowel cancer and linked to stomach, kidney, liver and gallbladder cancers, though it's not clear why.

Stress, meanwhile, has been cited in some studies as a trigger for the growth of cancerous tumours.

None of these factors were present in the ancient world, where life was altogether less complex.

I believe that is why we found so few incidences of cancer in all those mummies — and why we should all take heed of this message if we, too, are not to succumb to this most frightening disease.