**TRUST YOUR GUT**

**Taking too many antibiotics ‘could increase your risk of bowel cancer’**

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Antibiotic use in early to mid life heightens the risk of polyps - growths which can go on to become cancerous

**LONG term use of antibiotics has been linked to an increased risk growths that can cause bowel cancer, experts have warned.**

Antibiotic use in early to mid life heightens the risk of polyps developing in the bowel and rectum – growths which can go on to become cancerous.

The findings add more weight to the theory that the type and diversity of bacteria in the gut, called the mircobiome, may play a role in developing cancer, the researchers said.

Antibiotics can alter the bacteria found in the gut by curbing the diversity and number of bacteria, and reducing resistance to hostile bugs.

Previous research points to a reduced amount of certain types of bacteria and an increased amount of others in patients with bowel cancer.

Looking at a nurses health study of more than 120,000 nurses aged between 30 and 55 in the US, researchers compared their colonoscopy results and antibiotic use.

They found that 1,195 polyps were newly diagnosed in this group.

Recent use of antibiotics within the past four years wasn’t associated with a heightened risk of a polyp diagnosis, but long term use in the past was.

Compared with those who hadn’t taken antibiotics for any extended period in their 20s and 30s, those who had taken them for two months or more were 36 per cent more likely to be diagnosed with polyps.

Similarly, women who had taken antibiotics for two months or more during their 40s and 50s were 69 per cent more likely to be diagnosed with polyps than those who hadn’t taken these drugs for any extended period.

Compared with women who had not been on antibiotics for any length of time from their 20s to their 50s, those who had taken these drugs for more than 15 days between the ages of 20 and 39, and between the ages of 40 and 59, were 73 per cent more likely to develop polyps.

More than 2,500 under-50s are diagnosed with bowel cancer in the UK each year – up 45 per cent in the last 12 years.

The researchers stressed that their work is an observational study and that no firm conclusions could be drawn about the cause and effect of polyps.

They did not investigate the type of antibiotics taken, nor did they investigate whether the polyps found were pre-existing before the antibiotics were used.

This might all have a crucial role the development of bowel cancer, added to which the bugs that require antibiotics may induce inflammation, which is a known risk for the development of bowel cancer say the researchers.

They concluded: “The findings, if confirmed by other studies, suggest the potential need to limit the use of antibiotics and sources of inflammation that may drive tumour formation.”

The findings were published in the journal Gut.