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Appendix Cancer Is on the Rise Among Younger Generations

Analysis by Dr. Joseph Mercola | August 21, 2025

STORY AT-A-GLANCE

- Appendix cancer is now one of the fastest-growing gastrointestinal cancers among younger adults, with a third of cases occurring in people under 50 years old
- Researchers theorize that obesity, ultraprocessed foods, sedentary lifestyles, and environmental toxins since the 1970s are contributing to higher cancer rates in younger generations
- In addition, early-life exposure to colibactin-producing E. coli bacteria leaves genetic damage that trigger gastrointestinal cancers decades later
- Appendix cancer symptoms like bloating and abdominal pain are often mistaken for minor issues, making early detection extremely difficult
- Reduce linoleic acid (LA) intake, heal gut lining with bone broth, eat fermented foods, and replace processed foods with whole foods to protect your digestive health

Appendix cancer is rising at an alarming rate among younger adults, with new research indicating it's now one of the fastest-growing gastrointestinal cancers in this age group.[1]

As the name implies, this cancer affects the appendix — a small, finger-shaped pouch attached to your large intestine. It's characterized by symptoms like persistent bloating, unexplained weight loss, changes in bowel habits, and sudden abdominal pain — often leading to emergency surgeries when discovered late. The question is, how does it happen?

Investigating the Root Issues of Appendix Cancer

In a report by The Conversation, Justin Stebbing, a professor of biomedical sciences at Anglia Ruskin University, analyzed a study published in the Annals of Internal Medicine. Here, researchers shed light on appendix cancer, revealing a striking rise in cases among younger adults born after the 1970s. Until recently, statistics indicate that this cancer was rare — in fact, the report noted that "the incidence has tripled or even quadrupled in younger generations compared with those born in the 1940s."[2,3]

- **Experts are noticing the increase of cases —** While the overall cases remain small — 1.6 per 100,000 people[4] — the significant jump in younger adults is highly concerning. Compared to the 1945 cohort, rates tripled in the 1980 cohort and quadrupled in the 1985 cohort.

- **Theories on what's causing appendix cancers —** The Conversation noted that lifestyle changes since the 1970s are fueling the increase. People are becoming heavier, and obesity is known to heighten the risk of digestive cancer.[5] Younger generations have drastically different eating habits compared to their parents or grandparents, consuming more ultraprocessed foods, **beverages high in refined sugar**, and junk food, all of which are known to increase cancer risk.

  Alongside diet changes, physical activity levels have dropped dramatically. The shift toward sedentary lifestyles, with people spending extended periods sitting at desks or looking at screens, has emerged as another crucial factor.

- **New environmental factors impact your health —** Today's food industry heavily relies on industrialized processes involving plastics, chemicals, and deteriorating water quality, which are factors largely unknown to previous generations. While the evidence linking these environmental elements to appendix cancer is still developing, their potential role is strongly suspected by researchers.

  The Conversation also pointed out other underlying factors like gut microbiome changes. The widespread use of antibiotics in recent decades, especially in medicine and agriculture, **eventually disrupts the balance of beneficial bacteria in**

your gut. In turn, compromised gut function affects your overall health.

- **Diagnosing appendix cancer is difficult —** An additional challenge highlighted by The Conversation is the difficulty in diagnosing appendix cancer early. Unlike colon cancer, which is sometimes identified through colonoscopies, appendix cancer often remains hidden because its symptoms are subtle and commonly mistaken for less serious problems.

  Symptoms like mild abdominal pain, bloating, or changes in bowel habits are frequently dismissed as minor or temporary issues. As a result, appendix cancer is often only discovered when a patient undergoes surgery for suspected appendicitis.

- **Listening to your body will help you identify this disease early —** Because routine screening for appendix cancer is currently impractical due to its rarity and difficulty in detection, proactiveness when symptoms appear becomes critically important. If you're under 50 and notice persistent abdominal symptoms, seeking medical attention promptly can dramatically increase your chances of better outcomes.

- **Suggestions to lower risk —** To fight back against this alarming trend, The Conversation advocates precautionary measures like maintaining a healthy weight and adopting a balanced diet rich in fruits and vegetables. Additionally, steering clear of tobacco and moderating alcohol intake substantially decrease cancer risks.

Early Exposure to This Bacteria Is Linked to Digestive System Cancers

As mentioned earlier, appendix cancer and other gut-related cancers are believed to be caused by shared risk factors, such as changes in the gut microbiome.[6] Now, a different study followed that angle.

In a study published in Nature, researchers sought to analyze why colorectal cancer rates among younger people are rapidly rising worldwide. By examining 981 colorectal cancer cases from 11 different countries, they aimed to identify whether specific genetic

changes (known as mutations) varied based on age and geography, explaining why younger adults are becoming more vulnerable to this disease. After analysis, they noted that early exposure to bacteria is a strong risk factor.[7,8]

- **The prominent role of colibactin —** This is a harmful substance produced by certain types of E. coli strains found in the human gut. Researchers identified two clear genetic "fingerprints," or mutational signatures, SBS88 and ID18, which indicate colibactin exposure. These two signatures were much more common in countries with higher colorectal cancer rates.

  Even more notably, these signatures were three times more frequent in people diagnosed with colorectal cancer before age 40 compared to those diagnosed after age 70. In short, this indicates a clear link between colibactin-producing bacteria exposure early in life and the alarming rise in early-onset colorectal cancer.

- **Exposure timing sets the stage for cancer —** When researchers looked closer, they found colibactin exposure had left its mark very early, long before cancer was detectable. Specifically, genetic changes related to colibactin were consistently among the earliest mutations identified. These alterations can set the stage for cancer to develop at a younger age.

- **The mechanisms behind the damage caused by colibactin —** Research shows that colibactin often triggers harmful changes in a key gene called adenomatous polyposis coli (APC) — a crucial player that normally helps prevent cancer by controlling cell growth in the colon.

  In cases with colibactin exposure, about 25% of harmful mutations in the APC gene directly resulted from it. Such mutations essentially remove APC's protective effects, allowing cells to grow uncontrollably and dramatically raise your cancer risk.

- **Colibactin exposure affects everyone —** The results were consistent across multiple countries and ethnicities, underscoring the significant global impact of early-life colibactin exposure. The study also found these colibactin-related

mutations occurred predominantly in the distal colon and rectum, which are areas increasingly affected by early-onset colorectal cancers.

- **There are certain nuances between populations —** Interestingly, the study highlighted significant geographical differences in other cancer-causing mutation signatures as well.

  For example, mutations labeled SBS89 and ID_J appeared predominantly in Argentina, while SBS94 and another novel signature, SBS_F, were especially common in Colombia. Although the researchers are still unsure exactly what environmental or lifestyle factors underlie these country-specific mutations, the discoveries can open new paths for targeted prevention from future researchers.

- **The age and extent of colibactin exposure is critical —** Colibactin appears to cause lasting genetic damage during early life when the gut microbiome first takes shape. After initial exposure, these genetic scars remain dormant for decades before leading to cancer. Surprisingly, the current presence of colibactin-producing bacteria wasn't necessarily associated with active cancers, suggesting these early-life exposures can affect health outcomes many years later.

- **Prevention is still a better approach —** The researchers strongly suggest that preventing exposure to harmful colibactin-producing bacteria early in life could be a crucial strategy for reversing rising colorectal cancer rates among younger people. Identifying the sources of these harmful bacteria and learning how to limit exposure could help significantly lower early-onset colorectal cancer risk globally.

Practical Steps to Protect Your Gut and Reduce Cancer Risk

If you're worried about appendix cancer or gastrointestinal cancer, it's essential to understand that your lifestyle largely influences your risk. That said, here are my recommendations to help you protect your digestive function:

1. **Minimize your linoleic acid (LA) intake —** LA is a harmful polyunsaturated fat (PUF) commonly found in vegetable oils like soybean, sunflower, safflower, canola, and corn oil. It's also abundant in ultraprocessed foods, restaurant dishes, and even products marketed as "healthy" snacks.

   Start by carefully checking labels, and avoid these oils completely. Instead, cook your meals at home with natural fats like grass fed butter, ghee, or tallow. Reducing LA intake is one of the most powerful things you can do to lower inflammation and protect your gut lining from damage.

   What's problematic about LA is its pervasiveness. Even the meat you eat was likely raised with high-LA feed. To protect your health, I recommend keeping your intake below 5 grams per day. But if you can keep it below 2 grams per day, that's even better. For accurate tracking, download the upcoming Mercola Health Coach app, which contains the Seed Oil Sleuth feature — it measures your intake to a tenth of a gram.

2. **Heal your gut lining —** Your gut lining is your first defense against harmful bacteria and toxins. If you've been eating ultraprocessed foods high in LA, there's a good chance your gut barrier is compromised. To repair this, eat gut-supportive foods like bone broth, and foods rich in gelatin. These foods actively help rebuild the mucus lining of your gut, creating a stronger barrier against harmful toxins.

   Once your gut barrier begins to improve, then it's time to increase your intake of dietary fiber. For a deeper understanding of this topic, read "**Understanding Butyrate — The Key to Optimal Health and Well-Being**." There, I explain how you can slowly reintroduce dietary fiber to help your gut produce butyrate, which is an important short-chain fatty acid (SCFA) that further strengthens your gut barrier.

3. **Add more fermented foods to your diet —** Fermented foods like sauerkraut, kimchi, kefir, and natural yogurt contain beneficial bacteria that actively combat harmful bacteria in your gut. By adding these foods daily, you'll encourage a healthy

microbiome balance, reduce inflammation, and dramatically lower your cancer risk. Make sure these foods are homemade and free from added sugars and preservatives, as these reverse their beneficial effects.

4. **Replace processed foods with whole foods —** All the healthy food you've been eating will be for nothing if you continue to eat ultraprocessed food. They're high in refined sugars, unhealthy fats, and other additives, which directly feed harmful gut bacteria and inflammation, increasing your risk of cancer.

   As mentioned in a previous article, these foods worsen your mood and emotional health, creating a cycle of addiction. To break free, go cold turkey for five days to restructure your dopamine system.

Frequently Asked Questions (FAQs) About Rising Appendix Cancer Rates

Q: Why is appendix cancer becoming more common among younger adults?

A: Research shows appendix cancer rates are rapidly rising among adults under 50 due to significant lifestyle changes since the 1970s. Increased consumption of processed foods, sugary drinks, and processed meats, along with rising obesity and sedentary lifestyles, are major contributors. Environmental factors such as widespread antibiotic use and industrial chemicals also play a suspected role.

Q: What are the early signs of appendix cancer, and why is it often diagnosed late?

A: Early signs of appendix cancer include persistent bloating, unexplained weight loss, changes in bowel habits, and sudden abdominal pain. However, these symptoms are frequently mistaken for less serious conditions, causing delays in diagnosis. Since appendix cancer doesn't have specific screening tests, it often

remains undetected.

Q: How is the bacteria colibactin linked to colorectal and appendix cancers in younger people?

A: Colibactin is a harmful toxin produced by certain strains of E. coli in the human gut. Studies found colibactin exposure leaves genetic "fingerprints" called SBS88 and ID18, strongly associated with colorectal cancers diagnosed at younger ages. These genetic changes occur early in life and remain hidden for decades, eventually causing cells to become cancerous. Colibactin specifically damages the APC gene, a crucial defender against uncontrolled cell growth.

Q: Can lifestyle changes prevent appendix and colorectal cancers?

A: Yes. Lifestyle changes significantly reduce cancer risks. Maintaining a healthy weight, increasing physical activity, and eating a balanced diet rich in fruits, vegetables, whole grains, and fermented foods can decrease inflammation and protect gut health. Avoiding tobacco, reducing alcohol intake, and eliminating processed foods, especially those high in LA, further reduces your risk.

Q: What practical steps can you take immediately to protect your gut and lower cancer risk?

A: To lower your gastrointestinal cancer risk, start by:

- **Reducing harmful fats —** Eliminate vegetable oils like soybean, sunflower, canola, and corn oil from your diet.
- **Healing your gut lining —** Eat gut-supportive foods like bone broth to strengthen your gut barrier against toxins.

- **Adding fermented foods —** Regularly consume naturally fermented foods such as sauerkraut, kimchi, and kefir to repopulate healthy gut bacteria.
- **Replacing processed foods with whole foods —** Choose fresh, unprocessed meals instead of packaged and ultraprocessed items to decrease inflammation.

Sources and References

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