

## **Bowel cancer – Reducing the Risks**

Bowels cancer is the third most common cause of cancer affecting 1 in 20 people. There have been many studies on bowel cancers and know some of the things that make a difference.

First look at food. The food with the strongest positive correlation with colon cancer (ie harmful) is sugar (+0.74) and the foods with the strongest negative correlation with cancer (ie protective) are nuts, seeds and pulses (-0.58).

Other studies:

### 1) Red Meat

There is strong scientific evidence for a link between red meats (pork, lamb, beef) and bowel cancer and even stronger evidence that processed meats are linked. 58 studies have noted this correlation. Processed meat includes hot dogs, salami, bacon, sausage, ham and deli slices. Every 50 grams eaten daily (about one hot dog) increases the risk of bowel cancer by 21%. Ideally it is best to keep the intake of red meat down to 500 grams a week.

### 2) Abnormal Microbiome

The microbiome is the collection of bacteria in our gut. 90% of these are beneficial. The SYNCAN study found people who developed bowel cancer had less friendly bacteria and less diversity of bacteria.

However anything that damages the microbiome damages our health. This can include drugs (antibiotics, acid-blocking drugs, steroids, the contraceptive pill, non-steroidal anti-inflammatory drugs like ibuprofen). It can also be damaged by sugar, fizzy drinks, processed foods, chlorine, antiseptics and alcohol. Beneficial foods are fibre (from fruit and vegetables) and fermented foods (kefir, sauerkraut, pickled foods, sourdough, unpasteurised cheeses). The Boston nurse's study found those who had antibiotics for more than 15 days had higher rates of colon cancer. The SYNCAN study found a daily probiotic reduced the risk.

The message here is looking after our microbiome helps prevent bowel cancer.

### 3) Alcohol

There is good evidence that alcohol increases the risk of bowel cancer so keep alcoholic drinks down to 2 units daily (1 pint or 250mls wine) for men and 1 unit daily for women.

#### 4) Fibre

The evidence here is now strong and suggests that fibre rich foods such as wholegrains and vegetables protect against bowel cancer.

#### 5) Physical Activity

There is also evidence that physical activity protects. It protects against most types of cancer.

#### 6) Vitamin D

An analysis of 33 studies found that bowel cancer was 33% lower in those with the highest levels of Vitamin D. It increased survival rates in colon cancer by 48%.

Other studies found that a blood level of 82.5nmol/l gave a 21% protection against bowel cancer whereas a level of 105nmol/l gave 60% protection. What is so surprising is that both these levels are within the normal range for Vitamin D: (75 to 150 nmol/litre) and both are higher than average.

Most people will have even lower levels: on average between 25 and 55 nmol/l with the exception of outdoor workers whose levels are typically between 100-130 nmol/l.

These results suggest we need a lot of Vitamin D on board to protect us against cancers and few of us have enough. We evolved to live outdoors and Vitamin D comes mainly from sunshine. If you don't get much sunshine or have darker skin (making Vitamin D production from sunshine less efficient) consider supplementing. Ideally use 4000 IU daily in winter and 2000 IU daily in summer. It is also useful to get your levels checked as Vitamin D is so crucial to health.

#### 7) Folic Acid

A major study found people who ate the highest level of folate (900mcg daily) had a 30% lower risk than those taking the lowest amount (200mcg daily). Folate is a B vitamin. It can be supplemented by taking folic acid. It normally comes in 400mcg tablets so a good dose would be two tablets daily. However a better way of getting folate would be to take more in the diet. Folate comes from the word foliage so any green vegetable tends to be high in folate. It is also found in nuts, wheat germ and organ meats. But there is a potential problem in getting it from the diet. The food needs to be fresh. If you heat or freeze green vegetables you can lose up to 90% of the folate. Once the vegetables are picked 50% of the folate is gone within 1 day. So eat as these foods as fresh as possible and with the minimum of heating.

#### 8) Garlic

A study of women in Iowa found those that ate garlic more than once a week had half the rate of colon cancer.

#### 9) Multivitamins

A study in rats exposed to carcinogens and put on a high fat low fibre diet found that those given a multi-vitamin, multi-mineral daily did not develop tumours whilst the ones not given them developed precancerous lesions. Though not all animal studies are relevant to humans it is thought this cancer is similar in rats and the supplements may be protective.

#### 10) Vitamin A

Low Vitamin A is associated GI cancers including stomach, colon, rectal and upper GI.

#### 11) Curcumin

In a genetic condition called familial adenomatous polyposis, polyps often develop into colon cancer at a young age. Curcumin and quercetin (found in many fruits and vegetables) reduced both the number of size of polyps by other a half. And in patients with advanced cancer not responsive to standard treatment turmeric extract halted the progression of the disease in one-third of patients in about three months.

An interesting study looked at the links between fruit and vegetables consumption and colorectal cancer in Australia. Surprisingly different foods protected different parts of the colon. They found cruciferous vegetables (broccoli, cauliflower, Brussels sprouts and cabbage) gave the greatest protection from cancer of the ascending and transverse colon but total fruit and vegetable intake and in particular, carrots, apples and pumpkins, gave the greatest protection against cancer of the descending and sigmoid colon.

My take on this is that as you increase fruit and vegetables, nuts, herbs and spices in the diet and decrease meat and dairy the lower the risk of bowel cancer becomes.

#### 12) Mobile Phones

There have been 33 recorded cases of atypical breast cancers in women who kept their mobile phones in their bras. It is unlikely that people who keep their mobiles in their trouser pockets will be studied in the same way. However, it is likely to prove just as dangerous and a likely risk factor for bowel, bladder and prostate cancers.

See also leaflet (Foods that prevent cancer).