# **BOWEL CANCER RISK: DIET & LIFESTYLE**

While no cancer is completely preventable, it is estimated that changes in diet and physical activity could reduce the incidence of bowel cancer by up to 75%.

# DECREASES BOWEL CANCER RISK<sup>ii</sup>



Convincing evidence that higher levels of **physical activity** protect against colon (not rectal) cancer.

Convincing evidence that consumption of foods containing dietary fibre protect against bowel cancer.



Evidence that consumption of **garlic**, **milk**, and **calcium**, probably protect against bowel cancer.



Limited suggestive evidence that consumption of non-starchy vegetables, fruits, or foods containing vitamin **D** in general protect against bowel cancer.

# INCREASES BOWEL CANCER RISKII



Convincing evidence that consumption of **red meat** and **processed meat** are causes of bowel cancer.

Convincing evidence that **body fatness** and **abdominal fatness** are causes of bowel cancer.



Evidence that consumption of **alcoholic drinks** is a cause of bowel cancer is convincing for men and probably for women.



Limited suggestive evidence that consumption of foods containing **iron**, **animal fats**, **sugars** or **cheese** are in general a cause of bowel cancer.

Bowel Cancer Australia provides a Nutrition Advisory Service. For enquiries or further information please visit **bowelcanceraustralia.org/nutritionist**.





# **BOWEL CANCER RISK: DIET & LIFESTYLE**

# **DECREASES BOWEL CANCER RISK**

#### PHYSICAL ACTIVITY

- Be physically active as part of everyday life. Greater frequency and intensity produces greater benefits.
- Studies show convincing evidence that higher levels of physical activity protect against colon cancer but not rectal cancer.

#### **HEALTHY TIPS**

- At least 30 minutes every day of brisk walking where heart rate is elevated, then raise to 60 minutes every day.
- Limit sedentary habits such as watching television.

## **FOODS CONTAINING DIETARY FIBRE**

- Dietary fibre is contained in plant foods.
- Updated data shows convincing evidence that foods containing dietary fibre protect against bowel cancer (10% decreased risk per 10g/day).
- Limited evidence suggesting non-starchy vegetables (i.e. green, leafy vegetables, broccoli, but not potato etc.) and fruits protect against bowel cancer.

#### **HEALTHY TIPS**

- Eat at least 5 servings (400g) of a variety of non-starchy vegetables and fruits every day.
- Eat relatively unprocessed cereals (grains) and/or pulses (legumes) with every meal.
- Limit refined starchy foods.
- Non-starchy foods are an important part of a diabetes diet.

## **GARLIC, MILK & CALCIUM**

 Studies show garlic, milk (9% decreased risk per 200g/day), and calcium (22% decreased risk for groups with the highest calcium intakes – dietary and supplemental sources) probably protect against bowel cancer.

## **HEALTHY TIPS**

- The World Health Organisation's (WHO) guidelines for adults is a daily dose of 2-5 g of fresh garlic (approx. 1 clove); 0.4-1.2g of dried garlic powder; 2-5 mg of garlic oil; 300 to 1,000mg of garlic extract; or other formulations that are equal to 2-5mg of allicin (the active component).<sup>III</sup>
- $\bullet$  1 cup (250ml  $\sim$  240g) of milk a day.
- 2½ serves a day of milk alternative with added calcium (100mgs per 100mls).

# **INCREASES BOWEL CANCER RISK**

#### **RED & PROCESSED MEAT**

- · Limit intake of red meat and avoid processed meat.
- Studies show convincing evidence of increased bowel cancer risk with consumption of red (17% increased risk per 100g/day) and processed meat (18% increased risk per 50g/day).

#### **HEALTHY TIPS**

- Consume less than 500g a week, very little if any to be processed.
- Cook meat carefully. Charred or blackened meats can damage the cells lining the bowel.
  - Partly cook meat inside to reduce cooking times on open flames, grills or BBQs.
- Keep cooking temperatures low and use marinades to protect meat from burning.

## **ALCOHOLIC DRINKS**

- · Limit alcoholic drinks.
- Studies show a 10% increased risk for bowel cancer per 10g ethanol/day.

#### **HEALTHY TIPS**

- Limit consumption to no more than two drinks a day for men and one drink a day for women, with two alcohol free days a week.
- A standard alcoholic drink contains approx. 9g of ethanol.
- A stubby of beer (375ml) ~ 15.4g ethanol.
- A stubby of light beer (375ml) ~ 7.9g ethanol.
- 1 glass of red wine (100ml) ~ 9.6g ethanol.
- 1 spirit nip (30ml) ~ 8.7g ethanol.

## **BODY FATNESS & ABDOMINAL FATNESS**

- Be as lean as possible within normal range of body weight.
- Studies show convincing evidence that (i) greater body fatness is a cause of bowel cancer (2% increased risk per kg/m²); (ii) abdominal fatness is a cause of bowel cancer (17% increased risk with increased waist to hip ratio).
- Type 2 diabetes is increasingly recognised as an independent risk factor for bowel cancer.

## HEALTHY TIPS

- Maintain body weight within the normal range from age 21.
- Avoid weight gain and increases in waist circumference throughout adulthood.
  - Aim for a BMI of 18.5-24.99.
- Waist circumference <80cm for women and <94cm for men.iv

## **SMOKING**

 There is now sufficient evidence that tobacco smoking is a cause of bowel cancer (38% increased risk for an increase of 40 cigarette per day).

## HEALTHY TIP

Quit smoking.

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i) World Cancer Research Fund (WCRF & American Institute for Cancer Research (AICR) 1997. Summary: Food nutrition and the prevention of cancer: a global perspective. Washington, DC: AICR ii) World Cancer Research Fund / American Institute for Cancer Research. Food, Nutrition, Physical Activity, and the Prevention of Cancer: A Global Perspective. Washington DC: AICR, 2007. World Cancer Research Fund / American Institute for Cancer Research. Continuous Update Project Report. Food, Nutrition, Physical Activity, and the Prevention of Colorectal Cancer. 2011. iii) National Cancer Institute 2013, Garlic and Cancer Prevention, available at http://www.cancer.gov/cancertopics/factsheet/Prevention/garlic-and-cancer-prevention. iv) http://www.measureup.gov.au

