European Code Against Cancer, 5th Edition14 ways you can help prevent cancer



Recommendation 5 for Individuals on Diet

Eat whole grains, vegetables, legumes, and fruits as a major part of your daily diet. Limit red meat, and avoid processed meat.

Key summary

- · There is strong evidence that eating whole grains and foods containing dietary fibre can help lower the risk of colorectal cancer.
- There is also strong evidence of a protective link between eating non-starchy vegetables and fruits and aerodigestive cancers, including cancers of the mouth, pharynx and larynx, nasopharynx, oesophagus, lung, stomach, and colorectum.
- Diets rich in whole grains, non-starchy vegetables, legumes, and fruits contribute to reducing cancer risk; eating red and processed meat increases risk of colorectal cancer.

Diet and cancer

There are major differences in food choices and typical diets between different European populations. However, overall, the consumption of fruits and vegetables remains low. In 2019, only 1 in 8 people in the European Union (EU) ate the recommended five or more portions of fruits and vegetables per day. Red meat consumption was double the recommended 350–500 grams per week. In 16 of the 27 EU Member States, the average intake of whole grains is below 50 grams per day, which is not enough dietary fibre.

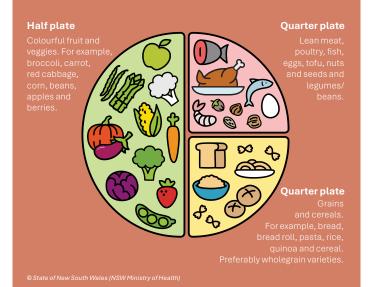
- Eating a high-fibre diet can help lower the risk of colorectal cancer by promoting healthy gut bacteria, speeding up digestion, and increasing stool bulk.
 Fibre also helps reduce insulin resistance, which is another risk factor for colorectal cancer.
- · Fruits and non-starchy vegetables are rich in nutrients such as fibre, vitamins, and minerals that may lower cancer risk. These foods are likely to work together to provide protective effects and also support healthy gut bacteria (microbiome), further reducing cancer risk
- Red and processed meats can be particularly risky due to their high levels of haem iron and fat, which can contribute to development of cancer, especially colorectal cancer. Consumption of processed meat can cause cancer, as it is classified as 'carcinogenic to humans', and consumption of red meat is classified as 'probably carcinogenic'.

Actions to reduce your cancer risk

Eat whole grains, vegetables, legumes, and fruits as a major part of your daily diet. These foods are rich in dietary fibre, vitamins, and minerals. Diets with a greater proportion of plant-based foods, such as whole grains, non-starchy vegetables, and fruits, have been linked to reduced risks of various types of cancer. Buying fruits and vegetables in-season makes them more affordable.

Limit consumption of red meat, and avoid processed meat. Eating less red meat and avoiding processed meat lowers the risk of colorectal cancer. Legumes (or pulses) are rich in fibre and high-quality proteins and are a good alternative to red and processed meats.

Figure 1: An example of a plate where plant-based foods are a major part of the meal.



This plate emphasizes intake of minimally processed, nutrient-dense plant foods that provide fibre, nutrients, and compounds that may help protect against cancer and other chronic diseases.

International Agency for Research on Cancer



Co-benefits for the prevention of noncommunicable diseases (NCDs) with similar risk factors and opportunities for health promotion

A diet rich in plant-based foods (fruits, vegetables, fibre, whole grains) is beneficial for cardiovascular and coronary health, and for reducing risks of diabetes, overweight and obesity, and mortality. Consumption of red meat and processed meat has been consistently associated with increased risks of cardiovascular diseases and diabetes. Reduced consumption of red and processed meat, and its substitution with plant-based foods, has been linked with reduced cardiovascular risk.

What do we mean by...

Whole grains. Grains and grain products that include the entire grain seed. Unlike refined grains, whole grains retain their fibre, B vitamins, and other micronutrients, which are mainly found in the outer layers. Grains include wheat, rice, maize (corn), millet, sorghum, barley, oats, and rye. Eating brown rice, and whole-grain bread and pasta also increases consumption of whole grains.

Non-starchy vegetables. Carrots, beets, parsnips, turnips, and swedes as well as green, leafy vegetables (such as spinach and lettuce), cruciferous vegetables (the cabbage family, bok [pak] choy, broccoli, and watercress), and allium vegetables (such as onions, garlic, and leeks).

Legumes (or Pulses). Beans, lentils, peas, and chickpeas are a source of protein and dietary fibre.

Red meat. Meat from beef, veal, pork, lamb, mutton, horse, and goat.

Processed meat. Meat that has been transformed through salting, curing, fermentation, smoking, adding substances such as nitrites, or other processes to enhance flavour or improve preservation. Processed meat includes ham, salami, bacon, and some sausages, such as frankfurters and chorizo.

Myths versus Facts

MYTH: Dietary supplements can substitute for a healthy diet in preventing cancer.

FACT: There is no evidence that dietary supplements can reduce the risk of cancer. Dietary supplements are products that contain a "dietary ingredient" intended to achieve levels of consumption of macronutrients and other food components beyond what is usually achievable through diet alone. It is possible to achieve all your dietary needs, and obtain sufficient quantities of micronutrients or other food components, through diet alone. Aside from specific population groups (for example, vitamin B12 for people over the age of 50 who have difficulty absorbing naturally occurring vitamin B12; iron and folic acid supplements for those who may become or are pregnant), there is no need to take dietary supplements.

MYTH: Anti-cancer superfoods exist.

FACT: Superfoods are a group offoods that are claimed to provide health-enhancing benefits, including protecting against cancer. There is no such thing as a single superfood or an anticancer diet. Following a healthy and balanced diet, by eating plenty of foods of plant origin, limiting red meat, and avoiding processed meat, helps reduce the risk of cancer and other NCDs.

Learn about policies that help support healthier diets

Effective policies promoting the adoption of plant-based diets and reducing the consumption of red and processed meats have the potential to lower the risk of cancer, leading to favourable health results and a reduction in health inequalities. Some examples are:

- · Lowering taxes on and decreasing prices of healthy products, so that everyone can access and afford a healthier die
- Making the healthy choice the easiest option by improving the affordability, accessibility, and availability of healthier foods and drinks
- Providing nutritional education in school settings and easily understood nutrition labelling on food packaging to enable people to make healthier dietary decisions.



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