

## Potential of probiotics

**Probiotics, commonly known as micro organisms that protect its host and prevent disease, are said to possess benefits for the prevention of colon cancer. Food Advisory Group's Vivianna Wou offers her perspectives.**

The gut contains billions of bacteria that play a vital role in the normal functioning of the digestive system, the lowering of blood cholesterol levels, the promotion of immune responses, and protection from colon cancer. They also prevent colonisation of the gut by harmful bacteria that may cause food poisoning, as well as perform a key role in the synthesis of certain vitamins.

Some of the factors affecting these bacteria in the gut that keep us healthy are stress, antibiotics, certain drugs and female hormones which may cause a proliferation of disease-causing bacteria. However, the taking of probiotics can help balance the microbes in the intestines.

Probiotics, the most widely available functional foods, can come in the form of yogurts, milk-based drinks (for example: Yakult or Vitagen), and fruit juices with added "friendly" bacteria. The most commonly used "friendly" bacteria are the lactobacilli (acidophilus) and bifido-bacteria (bifidus) families. Other foods that contain probiotics include sauerkraut, miso, and kim chee (a Korean dish made of fermented seasoned vegetables).

### **Prebiotic effect**

On the other hand, fructo-oligosaccharides (FOS), a form of soluble fibre found in many vegetables and fruits such as chicory, banana, artichokes and onions, can only be partially digested by humans, with the undigested portion serving as food for the "friendly" bacteria.

This is the prebiotic effect for the beneficial bacteria to multiply so that the harmful pathogenic bacteria and yeasts are suppressed and fewer toxins are produced as a result. This will then lead to better bowel tone, more regular movements and a reduction in digestive "upsets" by preventing any overgrowth of pathogenic bacteria.

Probiotics feed on prebiotics, and this supplementation with FOS has been shown to benefit those sections of the population who may have existing gut conditions or people on antibiotic therapy who will have lower levels of beneficial bacteria in their gut.

In order to treat specific conditions, you'll probably need to rely on a supplement, as some of the probiotic products have far fewer live organisms than their labels claim.

A favourable balance between the beneficial and the pathogenic bacteria must be kept to maintain a healthy system and its regular nature – to help safeguard this, the use of supplements containing beneficial bacteria, such as Acidophilus, in a capsule will help protect them from the highly acidic condition they encounter in the stomach. Look out for products that contain one billion bacteria in each daily serving!

### **Promoting detoxification**

The health benefit of colon cleansing products is hotly debated. Some people use it as a remedy for constipation but it is not a long-term solution, as it often recurs and some can

cause unnecessary bloating, cramps and diarrhoea. This can inhibit the body's ability to expel waste normally.

A combination of diet changes such as adding more fibre, adding probiotics and regular exercise may help promote detoxification in the colon system. More evidence supports the role of probiotics in cancer risk reduction, particularly colon cancer (Mital and Garg, 1995). The lactic acid cultures can alter the activity of faecal enzymes that are thought to play a role in the development of colon cancer.

In addition to probiotics, there is growing interest in prebiotics, listed by Gibson and Roberfroid (1995) as starches (whole grains, nuts and seeds), dietary fibres (vegetables, fruits, oats and barley) and oligosaccharides. Of these, oligosaccharides have received the most attention, and numerous health benefits have been attributed to them (Tomomatsu, 1994).

While a medical doctor should be consulted if a significant change in bowel patterns is experienced, your nutritionist or practitioner can help suggest products and lifestyle choices to reinforce your overall health.

[Recipe Sidebar]

### **Yogurt Smoothie**

½ -1 cup	natural or probiotic yogurt
1½ cup	100% chilled fruit juice (any kind)
1	banana
½ cup	strawberries
½ cup	berries
1	pear (cut into pieces with skin on)

Method:

Put all ingredients into a fruit blender and blend until smooth. Serve immediately.

### **Tropical Zesty Salad**

Ingredients:

1 bottle	VITAGEN LESS SUGAR Peach flavour
½ cup (75g)	MARIGOLD Low Fat Natural Yogurt
½	whole iceberg lettuce (wash and tear into pieces)
1	pear, cut into cubes
1	mango, cut into cubes
10	cherry tomatoes, cut into halves
2 tbsp	pine nut
2 tbsp	raisins

Method:

1. Place lettuce, pear, mango and cherry tomatoes in a salad bowl.
2. Mix VITAGEN LESS SUGAR and MARIGOLD Low Fat Natural Yoghurt, pour onto the salad.
3. Toss all the ingredients together.
4. Garnish salad with pine nuts and raisins.

[Credit Sidebar]

Food Advisory Group's principle consultant Vivianna Wou is a certified nutritionist who has worked and lived in the UK and Australia for the past 10 years. She was previously a food development technologist and consultant to several major food companies in the UK.

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