

APPENDIX 5

Table 3²⁴³ - Examples of food/agriculture and agri-food products grown/manufactured in Canada with functional ingredients providing health benefits

Food/food product	Functional Ingredient	Key Health Benefits
Salmon, trout	Omega-3 DHA and EPA	Aids in proper brain and eye development in babies and children; Can reduce high levels of blood fat (triglycerides).
Apples	Anthocyanins Quercetin	May prevent certain forms of cancer. Has the potential to slow the growth of prostate and lung cancers.
Blueberries, strawberries	Anthocyanins Ellagic acid	May enhance the removal of cholesterol from the blood. Lowers risk of death from certain cancers.
Cranberries	Proanthocyanidins Quinic acid	Prevent certain bacteria (such as E.coli) from adhering to the bladder wall. Reduces the risk of kidney stones.
Broccoli, cauliflower and cabbage	Sulphoraphane Indoles	In lab studies, stopped the growth of cancerous tumours of the breast, endometrium, cervix, lung, colon and liver. Lowers risk of breast cancer.
Canola oil	Omega-3 ALA* Plant sterols	Reduces heart disease risk by competing with cholesterol for absorption into the small intestine. Lower blood levels of “bad” LDL cholesterol.
Carrots	Carotenoids	Prevents heart disease and the oxidation of LDL cholesterol
Flax	Omega-3 ALA* Phytoestrogen lignans	Lowers risk of heart disease, stroke and diabetes by reducing levels of blood fat (triglycerides). May prevent breast, colon, and lung cancers.
Garlic, onions	Allicin Allyl sulphides Quercetin Prebiotic fibre	Fights bacterial and fungal growth. Helps the body get rid of carcinogens. May reduce risk of heart disease. May improve digestion and regularity.
Oats, barley	D glucan soluble fibre	Contributes to diabetes prevention by lowering blood sugar levels.
Pears	Anthocyanins	May enhance the removal of cholesterol from the blood.
Potatoes	Quercetin	Has potential to slow the growth of prostate and lung cancers.
Pulses (dried beans, lentils)	Saponins Protease inhibitors Phytic acid Inositol PKP	Protect cells from genetic damage that can lead to cancer. Slow the growth of several types of tumours in lab studies. May prevent certain cancers. Has been shown to reduce the risk of breast cancer.
Soy	Isoflavones	Pre-menopausal intake reduces risk of breast cancer later in life; Reduces risk and progression of prostate cancer.
Spinach, kale	Lutein Zeaxanthin	Protects the retina and lens of the eye from oxidative damage; Offers protection against sun-induced oxidative damage on the skin.
Tomatoes	Lycopene	Plays a role in preventing heart attacks in people who have already suffered an infarct.

*ALA (alpha linolenic acid) is an essential fatty acid that must be obtained from the diet as it is not made in the body. When consumed, small amounts of ALA are converted to EPA and DHA omega-3 fatty acids. Adapted from Newsletter The Satellite Special Edition, 2008, November by MarS Landing, Pg 3