Food Quality and the Environment as Determinants of Health

Food quality and the environment as determinants of health were topics of discussion throughout the Conversation on Health. The importance of addressing issues related to affordability, access, quality and the production of food were highlighted in many of the discussions and submissions. Maintaining good health through access to good food and the quality of the food served in institutional settings and through meal delivery services were also among the topics discussed. Inter-related with the quality of food was the interplay between the physical environment and our health. We received input on the importance of recycling, regulating waste disposal, pollution, global warming, parks, recreation, transportation, agriculture and education on the environment. Here is a selection of what participants had to say on the subject of food quality, the environment and their effects on the health of British Columbians.

Food Production and Regulation (Quality)

The use of pesticides and herbicides in agriculture and the use of hormones in raising poultry and cattle was a concern to participants. Many would like to see a ban on pesticides, herbicides and hormones in the production of food. Genetic engineering was also cited as problematic as biotechnology has consequences for the health of the population which are often unknown. Some others suggested re-examining current meat inspection laws, working to establish co-operative organic farming practices, banning agricultural chemicals and working to support farmers who want to run organic food production businesses.

Participants were concerned that large industrialized food production companies are producing foods with too many processed additives resulting in nutrient loss and other unknown side effects. They believe there should be increased regulation imposed on processed food companies and foreign food imports, and a process to ensure their advertising is accurate and truthful. Other ideas and suggestions included banning trans fats from all food products sold in British Columbia, imposing heavy taxes on companies that manufacture and distribute unhealthy foods, reducing the number of permits provided to fast food restaurants, mandatory health warning labels on unhealthy foods, and a move to ensure British Columbia is a genetically-modified food free province by 2010.
Food Quality in Hospitals, Long-Term Care Facilities and For Seniors

The issue of quality was the focus of input relating to food in hospitals, long-term care facilities and seniors. Participants want to see patients and seniors provided with good, nutritious, healthy food that promotes well-being and is conducive to healing. There was support to put a stop to frozen, re-heated or re-thermalized foods being served in hospitals, long-term care facilities and to seniors receiving meal delivery services.

Affordability and Access to Healthy Food

Many expressed concern that good healthy food, particularly organic produce, is too costly or unavailable, especially in some rural areas. Some feel that specific attention should be paid to low-income individuals and families who may have bigger challenges in accessing high quality food. The majority of participants would like to see healthy foods subsidized, a greater emphasis on food security, and more support for farmers markets and school gardens that increase accessibility to good food.

Specific Issues Relating to Aboriginal British Columbians

Specific concerns raised by Aboriginal communities included a lack of traditional food gathering locations, changes to traditional diets, over-fishing, limited access to traditional foods and the absence of cultural management strategies to manage the transfer of traditional knowledge around food gathering. Their suggestions for improvement included: ensuring there is good access to traditional foods; setting aside adequate tracts of land for the protection, conservation and restoration of indigenous food systems; and, establishing educational programs in Aboriginal communities which focus on applying traditional concepts and guidelines surrounding the sharing and eating of traditional foods and medicines.

Health and Education Relating to Food

Participants believe that the food choices people make have a significant impact on their overall health and well-being. They particularly feel that the increased incidence of cancer and chronic disease in the province relates directly to the types of food choices British Columbians are making. Poor food choices cited by participants included: poor eating habits; malnutrition; vitamin and mineral deficiencies; food sensitivities; eating too much animal protein, the toxic chemicals or additives in food; and, ingesting trans fats, sulphites, sugar or monosodium glutamate (MSG).
Education on healthy food and diets, removal of junk food from schools, instituting healthy food programs in schools, and increasing awareness on what calories really mean were among the suggestions made to improve the overall health of the population.

Water, the Environment and Population Health
Participants in the Conversation on Health expressed significant concerns regarding the quality of our environment and its direct impact on individual and population health. Numerous chronic conditions, such as respiratory illness and asthma, can be attributed to the state of our environment. Participants offered the following solutions to improve the quality of British Columbia’s environment: put anti-smoking legislation in place; tax herbicides and pesticides; have environmental education be mandatory for all British Columbians; establish better recycling programs; impose anti-idling laws; provide more incentives to take public transportation; make more cities walkable; and, increase the number of bike trails in communities.

Conclusion
Participants were vocal in expressing their concerns about how food and the environment can contribute to good health. Although concerned with the availability and affordability of good healthy food and the current state of our physical environment, British Columbians suggest that increased consumer education, individual choice, a provincial focus on cleaning up the environment, and increasing support for healthy food manufacturers and farmers can lead to better population health.
Food Quality and the Environment as Determinants of Health

This chapter includes the following topics:

- Aboriginal Food Quality
- Affordability and Access
- Food and Population Health
- Education and Public Awareness
- Quality Control
- Food Production
- Food Quality in Hospitals, Long-term Care Facilities and for Seniors
- Water and Environment Quality
- The Environment and its Effect on Health
- Regulation, Recycling, Pollution and Global Warming
- Parks, Recreation, Transportation and other Governmental Jurisdictions on the Environment
- Agriculture
- First Nations Communities and the Environment
- Education and the Environment

Related Electronic Written Submissions

<table>
<thead>
<tr>
<th>Chronic Diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitted by the Health Officers’ Council of British Columbia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitted by the BC College of Family Physicians</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Cost of Eating in BC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dieticians of Canada</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aboriginal Conversation on Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vancouver Coastal Health</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sunshine Coast Conversations on Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women’s Health Advisory Network, the Sunshine Coast Hospital and Health Care Auxiliary and the Seniors Network Advisory Group</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Role of the Health Authority in Population Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitted by the Vancouver Coastal Health (Advisory Committees)</td>
</tr>
</tbody>
</table>
Related Electronic Written Submissions

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxic Corn: Summary of New Scientific Evidence on the Health Dangers Posed by Genetically Engineered Food</td>
<td>GreenPeace</td>
</tr>
<tr>
<td>Noxious Earth Energies Affecting Our Health</td>
<td>John Living</td>
</tr>
<tr>
<td>Submission to the Conversation on Health</td>
<td>Submitted by the BC Cancer Agency</td>
</tr>
<tr>
<td>A Submission to the Conversation on Health</td>
<td>Submitted by the Canadian Cancer Society</td>
</tr>
<tr>
<td>Research on Child Health – Final Report (Quantitative Research)</td>
<td>BC Children's Hospital Foundation</td>
</tr>
<tr>
<td>Submission to the Conversation on Health</td>
<td>Submitted by the Representative for Children and Youth</td>
</tr>
<tr>
<td>Do No Harm</td>
<td>AD-AV Society</td>
</tr>
</tbody>
</table>

Related Chapters

Many of the topics discussed by participants in the Conversation on Health overlap; additional feedback related to this theme may be found in other chapters including: Health Promotion and Social Determinants of Health.

Aboriginal Food Quality

Comments and Concerns

- There is a lack of food gathering places which has an effect on health.
- First Nations people have to travel more now to access fishing and hunting resources.
- It is difficult to find traditional foods and medicines that do not have pesticides or chemicals.
- Teachers in schools need to be aware that some children have allergies and have gotten sick from food that is served at school.
- It can take 400 years to adjust to new diets. Aboriginal people have had less than 100 years which is causing problems.
• Colonial settlers introduced a diet that was not centered on seasonal harvests. Store bought meats, dairy products as well as saturated fats and carbohydrates from various plant sources and fruits, vegetables, and grains that are highly processed were introduced.

• Research has shown that Aboriginal populations from Canada, the United States and Australia have several attributes that lead to the higher prevalence of diabetes. A change from a traditional diet to a carbohydrate diet that consists of highly processed foods and a shift to a sedentary lifestyle from a nomadic one has contributed to this.

• First Nations peoples bodies are reacting to the cumulative effects of toxic contamination that has made its way through the food system via large scale agricultural production.

• Social factors that lead to poor mental health can be attributed to loneliness and isolation from traditional land, families and communities, as well as from a cycle of oppression and food deprivation that was experienced in residential schools and poverty stricken homes.

• Residential schools introduced unhealthy foods. The new diseases are coming from what we eat as traditional foods are no longer available.

• Health Canada is blocking traditional food methods because of standards. Good healthy foods are starting to get polluted and over-fished.

• The provincial government needs to consider Aboriginal values when granting licenses to develop crown land without consideration of traditional food territory.

• There are real struggles surrounding traditional responsibility to the land and nature and the relationship with aboriginal food systems.

• The intergenerational transmission of food related knowledge has been disrupted since contact with non-indigenous peoples and has lead to the erosion of indigenous food systems and way of life.

• The capitalist economy is forcing indigenous parents to assimilate. This makes it difficult to pass on traditional food and medicine related knowledge. Failure to manage the transfer of such knowledge and the lack of cultural management strategies and practices does not contribute to the stability of aboriginal communities.

• One of the reasons for poor health among Aboriginal seniors is that they no longer have access to traditional foods.
Ideas and Suggestions

- Aboriginal peoples should go out and hunt, fish and gather with family and friends.
- Traditional foods are the best medicine in Aboriginal communities.
- The government should set aside adequate tracts of land for the protection, conservation and restoration of indigenous food systems.
- Government needs to recognize the sovereignty of traditional picking areas.
- There need to be secure land areas so that traditional foods are available.
- The Indigenous Food Sovereignty Conference hopes to provide opportunities to establish or enhance traditional food trade relationships between various nations in the interior region. The Indigenous Food Sovereignty report contains important information on restoring food systems.
- The cultural concept of food as medicine promotes a holistic approach to maintaining and restoring health to our bodies and the ecosystems that provide us with our food.
- An annual Interior of British Columbia Indigenous Food Sovereignty Conference and planning committee has been established to organize the time and space for traditional indigenous harvesters to voice their concern, express solutions, and to address the insecurity of indigenous food systems in the Southern Interior of British Columbia. This conference has created a province-wide working group within the various indigenous nations of British Columbia, and in turn has the ability to influence and monitor policy. The Interior of British Columbia Indigenous Food Sovereignty Conference participated in the International Planning Committee on Food Sovereignty (a forum on land territory and dignity).
- In Aboriginal communities, healthy choices should be taught based on indigenous knowledge and wisdom. This means learning and applying cultural concepts and protocols that set out guidelines for the most appropriate way of learning; sharing, and eating indigenous foods and medicines.
- There should be funding and support for community-based indigenous food related projects.
- Aboriginal people should take responsibility to respond to individual and family food needs in a healthy way.
Affordability and Access

Comments and Concerns

- Organic and healthy food is too costly or unavailable, especially in rural areas.
- Good food is not affordable and there is a lack of unprocessed, fresh and organic food choices.
- The cost of junk food is cheaper than healthy food.
- A healthy diet can be very expensive, especially if a diet is required to be organic.
- Everyone has a right to quality food in adequate quantity.
- Low-income individuals or families cannot afford a healthy diet.
- The provincial government needs to address the root cause of household food insecurity and poverty. If poverty is not addressed, the government will find it challenging to achieve the health targets that have been set out for 2010.
- Food insecurity and low-income wages reduce the food choices individuals and families can make. This results in a higher consumption of inexpensive, easily accessible and energy dense foods that lack nutritional value.
- Alcohol has universal pricing but food does not.
- When the government promotes the benefits of fresh fruit and vegetables, the prices of those goods skyrocket, while highly processed junk foods are less costly.
- Low-income parents cannot afford proper nutrition for their children. Children can be provided with the best education on fitness and nutrition, but if there is no money available to their parents to purchase healthy foods, the curriculum will not have the desired benefits. We need to look at providing dollars to improve nutrition in the home as well as more knowledge in schools and for the public.
- There are areas within British Columbia that have a high density of poor children living in unhealthy environments and may be going to bed hungry or living on a diet from the food bank that is high in fat and white sugar.
- It is difficult to shop for healthy foods without transportation so many people are forced to shop at a corner convenience store. This doubles the cost of food and provides little or no choice for fresh vegetables.
- Organic foods are now available in our supermarkets with increasing prevalence.
- Farmers’ markets are becoming more popular which benefits local economies.
• Local community programs pick surplus fruit for food banks or there are allotment gardens to grow food for the food bank.

• Wider varieties of quality foods are readily available.

**Ideas and Suggestions**

• Subsidize healthy food to increase accessibility.

• Establish a regional food strategy.

• Have school gardens.

• Offer incentives to grocery stores to carry local produce.

• Relax the laws on farmers’ markets to make healthier foods more accessible.

• Bring back Buy BC programs.

• Subsidize whole grain foods, fresh fruits and vegetables, lean meats and fish and low-fat dairy goods.

• Provide food banks with a list of healthy foods so that they can be more health-oriented.

• Rally grocery stores to provide incentives for students and give them a discount for purchasing one of a selection of healthy foods.

• Institute a guaranteed annual income so that people can afford healthy food.

• Educate all health authority staff on food security as a health issue.

• Link food security issues to income, the impacts of immigration, racism and gender.

• Build links with municipalities in the area of food security.

• Remove taxes from organic, whole foods and drinks.

• Community kitchens should be encouraged.

• Establish grocery stores in small communities so that people do not have to commute so far to have access to fresh produce.
Food and Population Health

Comments and Concerns

- Kids are being bullied for eating properly.
- Restaurants located in the vicinity of schools can result in unhealthy food choices by students. Education on nutrition may prevent or moderate their consumption.
- An increase in cancer and other illnesses can be attributed to poor eating habits, malnutrition, vitamin or mineral deficiencies, or food sensitivities.
- Many food related illnesses can be attributed to social factors such as high levels of stress, trauma, depression and low self-esteem.
- Super-sizing food is unhealthy.
- The number of children who are obese and developing type II diabetes is on the rise. The types of diets that are being promoted result in unhealthy lifestyles.
- Medications are being prescribed instead of examining diet and as a result, health problems are not being treated properly.
- People are developing chronic diseases due to nutritionally deficient food.
- Sue fast food companies for the effects of their junk food on health.
- The higher incidence of disease may be attributed to the many toxic ingredients found in food products. For example, cancer, heart attacks and strokes.
- The national vitamin B intake recommendations may be too low for active individuals.
- Canadians do not recognize the higher cost of less healthy food on their wallets or their health.
- Obesity is an epidemic in North America. One half of the population is grossly overweight. This is a direct result of the increased consumption of highly refined carbohydrates in fast food and junk food that society has become addicted to.
- Wormwood is sometimes used to help cleanse the body of chemicals ingested from processed foods.
- Children in elementary schools have too many celebrations with foods that are not nutritious. For example, cupcakes for birthdays or candy awards being given for school work.
- Eating healthy is a challenge for youth. Girls between the ages of 10-14 find it harder to stay away from junk food than boys who are ages 15-16.
• Diet and nutrition is the key to our good health and many people are unaware of the deficiencies they might have due to poor nutrition, such as undiagnosed medical problems.

• A North American diet consists of nearly all foods which contribute to an acidic environment. The majority of alkaline foods are not commonly eaten, and it is difficult to find alkaline-rich foods in the grocery stores.

• It was known during the 1970s that trans fats in the diet of a woman during pregnancy could affect the health and development of the foetus.

• The presence of nitrates and sulphites in food cause cancer.

• Too many products are being consumed that have white flour, sugar, trans fats and preservatives.

• Cooking foods eliminates nutrients and we are eating too much animal protein. This results in a depletion of vitamins and minerals in our diets.

• The junk food industry does not pay for the health care costs that are a result of their products, British Columbians do.

• An important consideration is that 70 per cent of cancers could be entirely prevented through simple lifestyle changes that start with diet.

• A healthy balanced diet can help to maintain a proper balance of neurotransmitters sending messages to the brain that make a person happy, sad, sleepy or awake.

• The food industry has moved away from using monosodium glutamate (MSG) and towards other ingredients. This has been good for those who suffer from headaches, reproductive disorders, endocrine system imbalances, appetite control problems and nervous system disorders.

• People are making the choice to buy organic food to avoid the chemicals that some believe are making people sick.

**Ideas and Suggestions**

• Limit the availability of pop and junk foods that are causing a higher incidence of diabetes.

• Revise the Canada Food Guide, it wrongly discourages fats.

• Good pre-natal care that includes information on good nutrition is vital.

• The Government should offer free nutritional tours of supermarkets.

• Eat foods that are in season and avoid imported foods.
• Eat foods that come from within one hundred miles of one's home.
• An improved diet can reduce death from cardiovascular disease, stroke, cancer, and diabetes.
• A reduction in consumption of monosodium glutamate (MSG) will allow a person to rebalance their appetite and return to normal appetite control.
• Encourage nutritional supplements; they slow aging of the brain down.
• Promote raw food diets.
• Antioxidants contribute to good health.
• Athletes with poor or restricted diets should consider taking multivitamin supplements.

**Education and Public Awareness**

**Comments and Concerns**

• There is a lack of nutritional education in schools as well as a lack of availability of healthy food in schools.
• There is a bombardment of advertising of processed food products.
• There are no incentives to buy healthy foods.
• There is a lot of advertising devoted to unhealthy foods that is directed at children and aired during their favorite shows and sports programs.
• People are talking about the need for health education and nutritional programs and are looking for solutions.
• There has been a recent move by government to promote healthy choices for food in schools.
• Junk food has been banned from schools and there has been a slow introduction of quality food into school cafeterias. Pop machines in schools now have juice and water available. There are healthy choices available in school lunch programs.
• Parents are packing healthier snacks that their kids can share.
Ideas and Suggestions

- Parents should stop giving kids pop in the morning.
- Increase advertising on healthy food and diets. Encourage people to pass up fast food and to pack a healthy lunch instead.
- Establish a fruit or fruit juice program with local products instead of pop in schools.
- Increase access to and affordability of healthy foods for children in school.
- The government should establish cafeteria policies that have ministry health requirements and have to be carried out by schools.
- Increase awareness on what calories mean.
- Make school lunch programs available in rural and Aboriginal communities.
- Use education and media to get the healthy eating message across.
- Give every school-aged child a bottle of water at their desks.
- The government should counter junk food advertising with health advertising.
- Establish composting workshops.
- There should be a province-wide initiative to supply nutrition services to infant development programs.
- The Ministry of Health should continue to expand the School Fruit and Vegetable Program across British Columbia.

Quality Control

Comments and Concerns

- Although food is abundant, the quality is continuously declining.
- There is a lack of control over the large industrialized companies to ensure food quality is the priority versus profits.
- Importing foods from other countries can introduce unwanted diseases and deprives farmers of a local market for their produce or products.
- The nutritional value of our food supply is steadily decreasing and as a result, people are not getting the nutrients they need to stay well.
- There is a lack of control over large industrialized food producers to ensure food quality.
• Big food chains are taking over the organic industry and driving prices down. Farmers are unable to provide produce at lower prices.
• Food imported from Mexico contributes to pollution.
• The advertising of food products is not always truthful.
• Contemporary food processing methods result in nutrient loss by boiling or deep frying. This results in essential nutrients being broken down, and allows for a build-up of carcinogens and toxins from utensils and storage containers such as Teflon, aluminum, and plastic.
• There are too many processed additives in our food, the effects of which are unknown. For example, sugar is over-abundant in many foods and is often hidden.
• Imported foods have been grown under different regulations than local foods. There is a risk of excessive pesticide and hormone use, restricted chemicals, medicated chickens, and non-organic farming practices.
• There should be quality control over the ingredients in vitamins.
• It is hard to make healthy food choices, so there needs to be a limit to the amount of additives added to food.
• A quarter of the calories that British Columbians consume come from junk food. We are innately predisposed to want fatty, sweet and salty foods but our environment has changed.
• There should be stricter labeling requirements. For example, a label that reads ‘low salt’ may still not be healthy.
• Metabolic disruptors in most foods, such as hydrogenated oils, sodium nitrate, saturated animal fats and homogenized milk fats, can cause disease.
• Very few food additives have been adequately tested individually, such as dyes, chemical additives, preservatives and flavour enhancers, therefore, the possible synergistic interactions and their effect on an individual’s health is unknown.
• Imposing a tax on junk food is not a good answer as it will not reduce consumption. British Columbians are taxed enough and for those who rarely consume junk food it does not pose a health concern.
• Pop is not healthy and is high in sugar.
• Breakfast cereals, often the ones that appeal to children, contain high levels of sugar and chemicals.
• Sugar laden foods are not only unhealthy but cheaper than their healthy substitutes.
• Nothing is done to remove aspartame, genetically modified foods or fluoride from our food. Furthermore, accurate information on these needs to be released.

• There is a lack of minerals in our diets.

• Research shows that produce now contains fewer nutrients than before.

• If the Canadian government would stop caving in to the dairy and meat industries, we might have a Canada Food Guide that would lead to a healthy diet.

• Food labels containing autolyzed or hydrolyzed vegetable proteins are also hidden sources of monosodium glutamate (MSG).

• Talk to restaurants about making their menus healthier.

• Foods labeled as natural may contain questionable taste additives like yeast extract but are not required to label them.

• Nutritional information is required to be listed on all processed foods, for example, trans fat content.

• Institution food quality does not meet the provincial guidelines.

• Food labeling has improved but still needs to be expanded.

Ideas and Suggestions

• The Canada Food Inspection Agency should be inspecting food to guarantee that it is healthy.

• Ban trans fats and other harmful chemicals in the production of food.

• There should be long-term studies conducted on how genetically engineered foods affect human health.

• There needs to be an inquiry into the food packaging industry to reduce the toxins that are introduced into packaged food.

• The food industry needs to be made accountable for additives put in food, farming practices that are not environmentally friendly or genetically altered, and pollution resulting from production.

• The government should heavily tax products that contain dangerous man-made chemicals.

• Put health warnings on the labels of foods or other products, such as household cleaners, that contain known carcinogens.

• Put warning labels on fatty foods or high-calorie foods and drinks.
• Ensure that food labels are coded in a simple way with bigger lettering so that seniors and children can understand nutritional information.

• Establish a provincial ban on trans fats.

• Establish legislation on pharmaceuticals in the food chain.

• The government needs to pressure food companies to reduce the inclusion of harmful ingredients in foods.

• Ensure that produce that is labeled as organic is in fact organic.

• Increase co-ordination between government, cancer societies and medical professionals to be more aggressive with food, tobacco and other companies to take responsibility for chemicals, pesticides, hormones and excess sugar and salt in foods.

• Reduce the number of permits for fast food outlets.

• Increase research on food-borne and water-borne diseases and have better disease reporting mechanisms between the doctor and the laboratory.

• Sodium and salt levels in food are too high and should be clearly labeled with salt and sodium content.

• Establish an additional tax for food manufacturers that introduce toxins into the food chain.

• Adopt the United Kingdom’s simple food labeling system of green, amber or red dots that indicate how healthy the food choice you are making is.

• Legislate that advertisers are not allowed to target children in advertising unhealthy food.

• Ensure that the 2010 Olympics are genetically engineered food free.

• Establish a ban in British Columbia on selling any product with genetically engineered ingredients.

• Make it mandatory to label all foods that have genetically engineered ingredients.

• Biotechnology safety tests should be run by Health Canada to ensure that results are not biased.

• Ban aspartame and sucralose from all foods.

• Talk to grocery stores about stocking healthier alternatives.

• Restaurants should be required to disclose nutrition and calorie information on menu items.

• All foods containing fatty acids should have warning labels on the packages.
• The Watchdog Committee should give guidelines as to which additives, preservatives and colours can be used in foods.

• There should be a series of incentives and penalties for companies to produce healthier foods and products instead of imposing a tax for individuals.

• Consider using stevia as an alternative to sugar in food products.

• British Columbians should know which foods are good or bad directly from government so that suppliers cannot influence buyers no matter how much clout they have.

• Encourage fast food restaurants to serve salads.

• Products containing high levels of phosphoric acid should come with consumer warning labels.

• Do not allow food industry representatives to sit on any advisory boards relating to food guidelines and policies.

• Force meat, poultry and fish sold in stores to have labels that state their origin, feeding practices and sodium content.

**Food Production**

**Comments and Concerns**

• Livestock in the food chain are overmedicated.

• Mono-culture depletes the soil and nutritional value of food due in part to the synthetic fertilizers and chemicals commonly used in food production.

• We do not know what is put in our vegetables, cattle or pigs.

• Green peas from China are a huge warning as to what the future may bring for food quality.

• Many chronic diseases are caused by a lack of control over food ingredients and other products.

• The salt content in food is too high.

• The nutritional value of produce grown on multi-use (in a year) land does not have the same nutritional value as produce grown on a one-crop-a-year ground.

• Food that is imported from long distances loses its nutritional value.

• Tuna contains four times the mercury allowable under legislation.
• The Canadian government has lowered standards for pesticide use on fruits and vegetables.

• Eliminate illness causing ingredients like pesticides and chemicals in foods.

• Genetic engineering refers to the use of techniques of modern biotechnology such as recombinant DNA or cell fusion that overcome the natural reproductive barriers in order to artificially move genetic material between species. Genetic engineering allows scientists to take the DNA from one organism, such as a bacterium or a salmon, and insert it into another, such as a tomato or a corn plant, creating transgenic, or genetically engineered, organisms that are also known as genetically modified organisms. The results are not found in nature and cannot be achieved by traditional cross-breeding techniques.

• Biotechnology in food production can introduce proteins, to which some individuals may have potentially fatal allergies, into foods that were previously free of these allergens.

• NK603 was produced by a technique called particle bombardment. This technique involves shooting shards of metal with gene plasmids attached into the cell nucleus of the target organism. One particular danger of this technology is that it is impossible to predict where the genes will end up within the genome of the resulting organism. Many scientists now see this as an inherent flaw in the science behind genetic engineering as a consensus is growing that placement within the genome plays a fundamental role in gene behaviour.

• The emergence of genetically engineered food in Canada has been met with resistance and scepticism as to its benefits and safety. Overwhelmingly and consistently, Canadians have responded to polls and to public input processes held by federal and provincial levels of government by saying that they do not want genetically engineered food, and if genetically engineered food is to be allowed, it needs to be labelled so that consumers have the right to avoid it. In British Columbia, the most recent poll conducted in December 2006, showed 79 per cent of voters want genetically engineered food labelled before the next provincial election in 2009. Previously, in 2001, a public input process held by the newly elected Liberal government received 99.1 per cent support for mandatory genetically engineered labelling legislation, among the 891 groups and individuals who made submissions.

**Ideas and Suggestions**

• Stop genetic food modification by establishing a ban on genetically modified seeds.

• Revisit meat inspection laws.
• Subsidize and support farmers who want to be organic.
• Establish organic farming co-operatives.
• Pay farmers fair prices for their produce. Allow farm gate sales of local meats and poultry.
• Encourage people to start home gardens.
• Protect berry picking areas.
• Consider the possibility of marketing un-pasteurized milk products.
• Ban all agricultural chemicals.

**Food Quality in Hospitals, Long Term Care Facilities and For Seniors**

**Comments and Concerns**

• Food service delivery programs to seniors have poor food quality.
• The food quality in hospitals, care homes and institutions is poor and often does not meet the criteria set out by the Canada Food Guide.
• Frozen, reheated food served in hospitals and care homes is not appealing and does not taste good. The food is often cold when served and mealtimes are not pleasurable for patients.
• There is an increased presence of junk food in hospitals.
• The quality of food served in hospitals does not contribute to patients’ convalescence or assist them in increasing their strength so they can be released. If the food quality were higher there might be less of a waste of food and money.
• Seniors in private homes or lodges are being fed the same thing with little variety and little room for choices. There is also a lack of fresh fruits and vegetables in their diets.
• Seniors receiving pensions suffer from lack of proper food and vitamins which reflects directly in their health conditions.
• The quality of food provided to patients in hospital is so poor that it is not conducive to healing due to the lack of nutrient quality, the scarcity of visual appeal and the awful taste.
• Hospital meals are inadequate for sick people. Nutrition is not a priority and the food is poorly prepared.
• Hospitals should buy local food, and edibility and nutrition should be a priority.

• Contracting out of food preparation for facilities and hospitals is not a good idea as many of the containers are difficult to open and the quality is poor.

**Ideas and Suggestions**

• Ensure that seniors’ meal delivery programs are nutritious and have a good delivery system.

• If re-thermalized meals are deemed appropriate for the sick and elderly they should also be served to elected officials in the legislature and to the board of directors of health authorities.

• Go back to having cooking facilities in hospitals.

• Ensure that there is an adequate amount of fiber in the food served in seniors’ facilities.

• Have regular inspections of food served in hospitals.

• The nutritionists at hospitals should change their hours so they can teach families about nutritional cooking.

• Introduce universal malnutrition screening of all admitted patients and include a record of all meals eaten along with medications taken and vital signs.

• Offer hospital patients the option of paying for meals that come from a restaurant in the hospital. This way, families could also have the option of eating with patients if they were able.

• Gather menu planning input from residents and have it monitored by a nutritionist to make improvements.

• Have organic food in hospitals.

**Outstanding Questions**

• How do you make eating healthy foods cool for kids to eat?

• How can parents be educated on what is healthy to send in lunches so that kids are not being sent to school with pre-packaged foods?

• Has it been considered that there is a direct relationship between the rising cost of health care and the increasing number of fast food restaurants and other junk food producing industries?
• Does the food served in hospitals and other care facilities meet the nutritional guidelines of Health Canada?

• Why can fast-food companies market to children with their health outcomes being so bad and tobacco companies cannot?

Water and Environment Quality

The Environment and its Effects on Health

Comments and Concerns

• The government needs to make improving the environment a priority, as it has direct links to ensuring the population of the province is healthier.

• The environment has a significant impact on individual health.

• There is a need to look at how the quality of our environment can cause higher rates of cancer due to mining.

• Mercury is a cause for clinical depression.

• Society has become over hygienic.

• Diseases such as multiple sclerosis, Parkinson’s, progressive degenerative brain diseases and Lupus are caused by environmental factors.

• Talking about obesity and cancer without looking at the environment is nonsensical.

• Recognize the root causes of health care issues, especially in resource based communities that have poor air quality.

• The Crofton pulp mill affects the health of surrounding areas due to the levels of arsenic, lead and mercury being introduced into the environment and subsequently effecting individuals.

• Poor lifestyle choices and the increasing amounts of environmental pollutants will eventually overwhelm the health care system.

• Poisoning from chlorine in swimming pools and other sources should be investigated as they cause heart problems.

• There are noxious earth energies affecting health.

• There need to be better controls on what goes into animal feed. Antibiotics in animal feed contribute to the presence of drug resistant bacteria.
• We are facing a 200 percent increase in childhood cancers because of White Technology.
• Polluted underground streams have a negative effect on health.
• There is a possible link between the presence of superbugs and untreated sewage and eating fish.
• Smokers are blamed for so much pollution, but cars and buses are far more toxic and the fumes cannot be avoided on the sidewalk.
• Contaminated water used for the irrigation of produce, recreation (swimming or boating) or shellfish harvesting poses a serious risk to human health.
• Clean drinking water is a health issue and those governing health care must be given the power to protect watersheds from pollutants and development. Watershed protection should come under the sustainability section of the Canada Health Act.

**Ideas and Suggestions**

• Asthma can be attributed to the presence of chlorine, fluoride in water, fire retardants in the home, as well as other chemicals found in the home. There is a need for home air treatment devices.
• Chemical companies should be required to properly and vigorously test toxic chemicals for their toxic effects before allowing them to be introduced. People are the guinea pigs and companies learn of cancers and other ill effects of the chemical decades later.
• Mercury amalgams should be outlawed due to their negative effects on health. Specifically, mercury amalgams for fillings and any levels of mercury found in food items.
• Toxic chemicals used to treat fleas and cockroaches should be banned due to their potential effects on health.
• We could prevent health problems by forcing car manufacturers to get better gas mileage which could cause less tail pipe emissions. This would clean up the environment and prevent health problems.
• A recognizable, carcinogenic, or cancer-causing symbol would assist consumers so that informed choices could be made when considering a purchase.
• Encouraging composting versus out door burning could cut down on respiratory illnesses.
• Include the health status of the population and the ecosystem as a criterion in any scale or method used to assess prosperity.

• Allocate significant research funds to the prevention of environmentally-induced diseases and work closely with the office of the Commissioner on Sustainable Development.

• Use the carbon footprint readout for health profiles.

• The government should consider environmental ideas as part of the response to health care suggestions.

• A recent project to test the blood of some families across Canada for toxins is a good idea. This will shed some light on the toxic mix of chemicals that we carry around inside us which seem to trigger more and more cancers each year.

• Increase measures to reduce exposure to occupational and environmental carcinogens.

**Regulation, Recycling, Pollution and Global Warming**

**Comments and Concerns**

• In the past two centuries we have done more to damage our environment, our fellow beings and ourselves than in all preceding millennia.

• Do not allow forest fires to burn as they are affecting the natural regeneration of various berries and other plant species.

• There needs to be a reduction in green house gases.

• Chemicals, such as endocrine disruptors in plastics, are being allowed and are having harmful effects on our reproductive systems.

• Much of the health care system is built on single-use and disposable items. The use of toxic substances, especially in cleaning, is a problem. Stopping uranium exploration should be a government priority.

• Climate change is going to cause ecosystem shifts that will change populations and food systems. This will have an environmental impact.

• Health researchers have identified thousands of environmental pollutants affecting health but the agricultural and chemical industries claim that chemicals are being used within the acceptable limits.

• The Vancouver Island Health Authority’s plan to construct a new hospital between Courtenay and Campbell River would be outside of the existing community
infrastructure. This would mean more travel would be required, and global warming would increase.

• Communities should be responsible for taking care of their own refuse.

• Junk food companies have poor environmental practices, for example the use of Styrofoam.

• Despite the promise by Government to reduce greenhouse gas emissions and have a healthier province by 2010, two coal mines were re-opened in British Columbia.

• When tainted toothpaste was identified in Canada it was not removed from the shelves until after the United States became aware of it.

• Industry is polluting the environment with the support of government and it is killing people without recourse.

• We have a severe problem with algae blooms contaminating our fresh drinking water.

• If new coal burning plants are allowed in the Interior of British Columbia we will damage our environment further as well as our health.

• Do not put wind turbines that generate noise pollution any closer than two kilometers away from residences. The larger the turbine the larger the buffer should be.

• We should oppose the proposal made by the Federal Minister of Resources to use nuclear energy to fuel the oil sands. There would be a serious impact on the health and environment of the citizens of Alberta and also the potential for serious accidents which do not respect provincial boundaries.

• We should oppose any relaxing of current environmental standards and oppose the current Federal Security and Prosperity Partnership; the standards in Canada, the United States and Mexico are already too low.

• It will now be impossible to remove all carcinogens from our environment but 50 to 60 per cent could be eliminated.
Ideas and Suggestions

Ideas about Recycling
Ideas about Environmental Regulation
Ideas about Air and Water Quality
Ideas about Pollution and Global Warming

• Ideas about recycling:
  - More staff should be allocated for enforcement and monitoring of the environment. Develop integrated management plans for all areas that put the environment and sustainability first. Make recycling easy and creating garbage difficult.
  - Establish more recycling centres and programs. These need to be accessible and should be part of an integrated management plan that puts sustainability of the environment first.
  - Remote locations need to have greater accessibility to recycling containers through either drop-off locations or pick-up services.
  - Increase the deposit on alcohol cans and bottles to at least $1.00 to reduce littering.

• Ideas about environmental regulation:
  - When conducting an environmental assessment of developments the assessment should be paralleled with a human health assessment of the potential health effects of the development. Research and monitoring of human health effects should be funded equally by government and industry and should have public involvement in the nature and quality of monitoring and research. Both Government and industry should be accountable for imposing risk to human health.
  - Make it illegal to sell any chemical fragrances or tobacco in any facility that sells health care products or food.
  - Establish a policy that does not allow smoking inside foster homes.
  - We need to regulate and eliminate the use of harmful household products that are known poisons and carcinogens but are still permitted to be sold in stores.
  - Establish legislation that would require consumer products to be labeled if they contain a known or possible carcinogen. Make the symbol visually recognizable for consumers. Use a different symbol for each hazard class, such as a carcinogen.
• Direct tax dollars towards reducing pollution and the widespread use of chemicals that are linked to cancer.
• The province should establish 100% smoke-free legislation.
• Government should ban the sale and use of cosmetic herbicides and pesticides.
• Toughen provincial legislation around second-hand smoke in areas such as playgrounds and outdoor patios.
• Dramatically increase taxes on disposable single-use items.
• There needs to be a better approach to controlling environmental toxins that are linked directly to cancer.
• Establish more laws on pollution.
• Establish anti-smoking legislation and designated smoking areas.
• Require janitorial staff in facilities to use only environmentally friendly cleaning products.
• Prohibit the introduction of new toxic chemicals until Government-approved tests have been conducted.
• More funding should be put towards improving air quality. If there were more stringent regulations for air quality there could be a reduction in how many people develop chronic diseases as a result of poor air quality.
• British Columbia’s building code regulations need to be enforced to control the emissions of radon gas in homes.
• Put up anti-idling signs in communities and impose fines for violations.
• There need to be stricter environmental and occupational health laws that are enforced to prevent disease. The British Columbia Workers Compensation Board needs to be forced to do more education on prevention. Furthermore, the Ministry of Environment needs to have a bigger budget for inspectors and prosecutors in enforcement.
• Legislate a ban on pesticides and other toxic chemicals in our food, cleaning materials, industry and general environment. This would result in a significant reduction of the rate of cancer.
• The health care system should regulate the chemicals in pharmaceuticals so that they do not impact the environment in a negative way.
• Establish standards for healthy workplaces and schools by installing operable windows and full spectrum lights.
• There should be a mandatory requirement for environmental assessment of new technologies.

• Revoke the Seabed Agreement and close the Nanoose Bay testing site. This will eliminate serious environmental and health consequences that result from testing.

• There should be radioactive gauges and safety levels set for computers, cell phones, microwaves, and all appliances that give off radioactive and electromagnetic waves. Perhaps we could regulate the use of shields of these devices.

• Ban the production, use and export of asbestos from Canada.

• A ban on cleaning products should be considered.

• Advocate with other countries to reduce environmental contributors to cancer.

• Municipalities should ban the commercial use of pesticides.

• **Ideas about pollution and global warming:**

  • British Columbia needs clean air and a healthy environment.

  • The movement of personnel, patients and visitors to regional hospitals could be assisted by an hourly public transport system. Two communities could work with the province and perhaps fund four hydrogen-fuelled vehicles. This would reduce the carbon footprint.

  • Increase environmental protection.

  • The Ministry of Health and the Ministry of Environment should be integrated. Link climate change to health care.

  • Have more condominium projects that are designed to support a healthier environment. This means using non-toxic paints, built-in water recycling, low-flush toilets and low-volume showers.

  • British Columbians should have a right to clean air as opposed to the right to smoke.

  • Recognize the role of environmental pollution in all types of cancer. It is a result of heavy industry releasing pollution into the atmosphere and the workplace.

  • Partner with international bodies with regards to nuclear testing, nuclear plants, war weaponry, and industrial pollutants of oceans and air that circulate throughout the world.
Create drop-off areas one block away from schools so that children are not exposed to exhaust. However, schools should have an area for students with disabilities that is closer.

Reduce electro-magnetic field radiation by replacing cell towers with fiber-optics running to the curb with much lower power devices to bring the signal to the phones.

The tobacco, car and truck industries, and the oil and gas industries should contribute to the cost of health care and cleaning up of the environment.

Make people who pollute pay and use the money to develop prevention programs.

Oil companies should be given one year to rid pollutants from their fuel.

Plastic manufacturers should have to pay for the harm they inflict on the environment and people.

The Government has a responsibility to protect British Columbians from substances that are addictive or poisonous in any way.

Diesel emissions from the Vancouver Port amount to more pollution that all cars, buses and trucks on the roads. By 2020, diesel emissions will increase three fold. This is because of the port expansion at Deltaport will triple in the number of marine vessels, trucks and rail traffic.

Laundry for facilities should be done locally and not trucked out. This will reduce pollution on the environment.

Ideas about air and water quality:

There needs to be greater emphasis on improving British Columbia’s air quality.

There is a need to look at how we regulate or fail to regulate the pollution of our air, land and water.

There needs to be better protection of rivers from mining and logging.

Put more money towards infrastructure for private water systems, rural water systems and community sewers.

There is concern that the water quality is not good in British Columbia.

The Municipal Act and the Canada Health Act should be amended so that the criteria for sewer services and treatment should be based on population density.

British Columbia should adopt the European standards of water quality and sewage treatment.
There is a need to be more rigorous with testing of municipal drinking water to reduce the possibility of contracting a water-borne disease.

Boil water advisories are not good enough for people with compromised immune systems as they can get ill just coming in contact with contaminated water.

There should be support for upgrading technology that improves efficiency and promotes clean air and water.

**Parks, Recreation, Transportation and other Governmental Jurisdictions on the Environment**

**Comments and Concerns**

- All terrain vehicles, motor bikes, motor boats, and jet skis have a damaging effect on the environment.
- Sidewalks are not being cleared of snow.
- One region, independent of financial assistance from government, established a comprehensive parks and recreation program.
- We need to reduce traffic noise, congestion and pollution as they affect health.
- Developing a locally based organic food supply will become necessary because transportation of food represents 20 per cent of North American fossil fuel use.
- Persistent loud noises are bad for health.
- Vancouver and Richmond noise by-laws do not apply to the airport.
- Local governments are extremely important in this because through good local planning it provides the infrastructure for people to walk and bike safely which are often keys to providing the opportunity for people to get out and enjoy physical activity in a safe environment.

**Ideas and Suggestions**

- Neighborhood parks need to be made safe. The lack of safety in local parks is contributing to childhood obesity. If there were an increase in social services, drug addicts, homeless people and other groups would not need to take over the parks.
- Look at the trail system for walking and biking. More funds should be put towards trails such as the Olympic trail. This will help get people off the road and will help to reduce health care costs.
• British Columbia should complete the Trans Canada Trail.
• Encourage carpooling, bicycling, taking the bus and walking.
• Provide incentives for people to take the bus.
• Encourage people to buy locally, compost and reduce green house gas emissions.
• The Government should increase the investment they make in transportation infrastructure and ensure that communities are walkable. This benefits everyone, from children to people with disabilities, and creates a social environment that is conducive to healthy living.
• Convert public transportation to bio-diesel or other alternative fuels.
• Increase the number of bike trails in communities.
• Encourage parents to stop driving their children to school, and encourage the children to take the bus.
• The Government should recognize community contributors to healthy living initiatives, such as community gardens or bike paths.
• The Government should take strong steps to protect the environment and take a stand on urban sprawl and highway expansion as they are harmful to health.
• Cities should have more protected green spaces and should be committed to green construction standards.
• Establish clean-up crews around communities to pick up garbage.
• Bring back mandatory inspection of vehicles; it would do wonders for air quality and the province’s carbon footprint.
• Make our communities more walkable.
• Make bicycling paths mandatory with all future road, highway and subdivision planning and development.
• Establish interstitial green space for families with children to encourage social interaction.
• Mandate that the province protect watersheds as well as test water.
• The government should subsidize the purchase of hybrid cars for people who cannot afford them.
Agriculture

Concerns and Comments

- Our agricultural land reserve is precious.

Idea and Suggestions

- Tax pesticides and herbicides.
- Restrict the use of pesticides and herbicides in some areas.
- Provide more education on the benefits and dangers of using pesticides and herbicides in some areas.
- There needs to be better regulation of toxins, such as pesticides, herbicides, and fertilizers that are found in food, soil, air or water.
- Examination of the effects of environmental byproducts, antibiotics and hormones in food is needed.
- Buy local compost.
- The Ministry of Health should recommend to the Government of British Columbia that they implement province-wide pesticide-restriction legislation and consumer right-to-know legislation.

First Nations Communities and the Environment

Comments and Concerns

- The government of British Columbia must prevent the location and disposal of toxic and hazardous waste on lands and areas inhabited by First Nations.
- Need to look at the water quality on reserves.
- There is a concern with the air quality in the Fraser Valley.
- There is a need to clean up corporate contamination.
- Aboriginal people care about their land and seeing what is happening makes them sick.
- Upper respiratory problems are on the rise for youth, we need to look at why.
Ideas and Suggestions

- Government needs to focus their money on root problems. Deal with air, water and food quality.
- There needs to be cleaner water filtering for drinking water.
- Involve Aboriginal people in land-use planning at the municipal level.
- There should be more education and awareness on aboriginal food gathering places. The loss of food gathering places affects the health of aboriginal British Columbians.
- The misuse of traditional food gathering places (land and water) needs to be addressed. This means that resources would be monitored and laws enforced.
- Access to and protection of traditional food gathering places is critical to the long-term health of aboriginal communities. This can be achieved by placing a moratorium on industrial development until green house gases are reduced.
- There needs to be strict control over what goes into animal feeds.
- The provincial government needs to consider the value of crown land when granting licenses to develop land, including the value of the land as traditional food gathering territory. The economic impact of losing a food site source for indigenous purposes is not factored into decisions of economic development. There needs to be respect for biodiversity values and the continued presence of indigenous peoples.

Education and the Environment

Ideas and Suggestions

- Educate children on the importance of community gardens, animals and ecosystems. It will help them get in touch with their environment.
- Teach gardening, farming and nutrition in schools.
- Target youth as the audience for environmental awareness campaigns to change the mindset of the next generation.
- Establish programs like Act Now BC for other themes, such as the environment. Use concepts like Bike to Work Week as an opportunity to convey important messages to the public.
- Have environmental education for all Canadians.
• Do more public education on radon poisoning and what you can do about it. For example, buying a radon detector for your basement.

**Outstanding Questions**

• Are regulations concerning sewage treatment set up to protect human health and the environment?

• Why is our water contaminated in so many areas resulting in boil water advisories?

• Can we combine our environmental improvement policies with health care by having someone or an organization provincially in charge to reduce hospital waste?

• Why are hospitals not going green? Why are they not having contests to see which one can cut paper use or electricity the most?

• Should the Government be giving subsidies to farmers who pollute our food with toxic pesticides?

• What are we allowing people to dump sewage into Shuswap Lake’s drinking water reservoir?

• How much is climate change going to affect health care costs and what aspects of the system will come under the most strain as a result?

• How many people are using walking or bicycle trails?