Map *my*Gene

XXX
DISEASE SUSCEPTIBILITY
DNA TEST REPORT
17th February 2020

Code number: **XXXXXX**
Sex: Female
Country:

Map *my* **Gene**

Health Risk Report

Genetic Risks Ranging From Medium-High to High			
Disease	**Risk Index**	**Risk Level**	**Degree of risk**
Breast Cancer	2.93	9	High
Hypothyroidism	2.68	9	High
Lung Cancer	1.73	8	Medium-High
Colon Cancer	1.69	8	Medium-High
Type II Diabetes	1.23	7	Medium-High
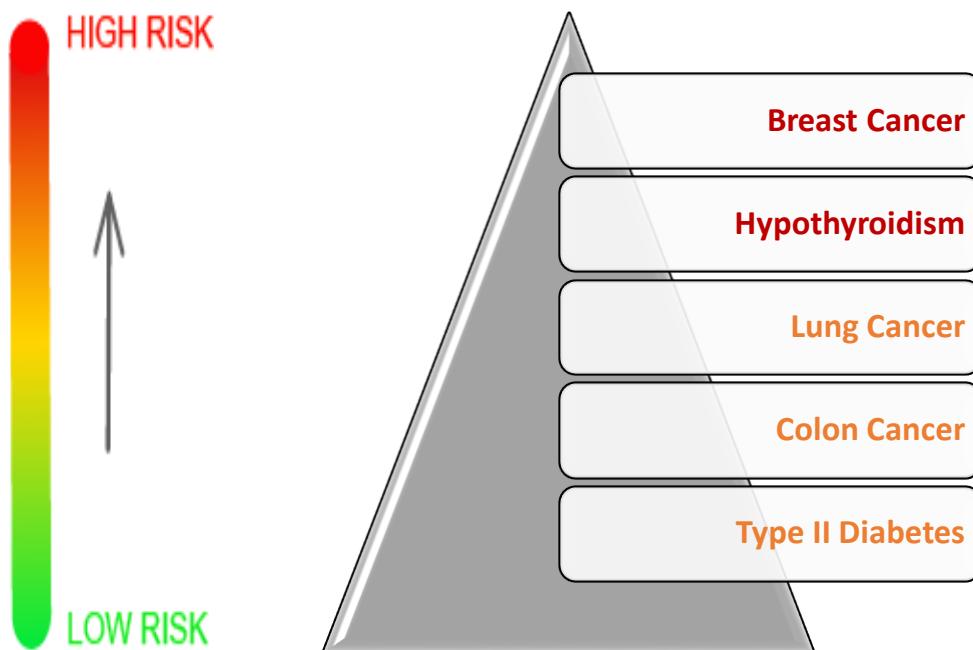
HIGH RISK

Breast Cancer

Hypothyroidism

Lung Cancer

Colon Cancer

Type II Diabetes

LOW RISK

Disease Risk Assessment

Cardiovascular Disorders

No.	Disease	Risk Index	Risk Level	Degree of risk
1	Thromboembolism	0	0	Low
2	Intracranial Aneurysm	0	0	Low
3	Peripheral Arterial Disease	0	0	Low
4	Atherosclerosis	0	0	Low
5	Atrial Fibrillation	0.57	1	Low
6	Hypertrophic Cardiomyopathy	0.75	4	Medium
7	Rheumatic Heart Disease	0.42	2	Low
8	Abdominal Aortic Aneurysm	0.5	2	Low
9	High Blood Pressure	0.75	4	Medium
10	Cardiovascular Disease	0.25	1	Low
11	Dilated Cardiomyopathy	0	0	Low
12	Myocardial infarction	0	0	Low
13	Heart Failure	0	0	Low
14	Vascular Dementia	0.63	3	Low
15	Stroke	0	0	Low

Respiratory Disorders

No.	Disease	Risk Index	Risk Level	Degree of risk
16	Tuberculosis (TB)	0.5	2	Low
17	Pulmonary Fibrosis	0	0	Low
18	Chronic sinusitis	0	0	Low
19	Chronic Obstructive Pulmonary Disease (COPD)	1.12	5	Medium
20	Infections Of The Upper Respiratory Tract	0	0	Low
21	Asthma	0	0	Low
22	Lung Cancer	1.73	8	Medium-High

Biliary Disorders

No.	Disease	Risk Index	Risk Level	Degree of risk
23	Non-alcoholic Fatty Liver	0	0	Low
24	Liver Fibrosis	1.13	3	Low
25	Cirrhosis	1.17	4	Medium
26	Alcoholic Hepatitis	2.25	6	Medium
27	Primary Biliary Cirrhosis	0.77	3	Low
28	Cancer Of Biliary Duct	0.62	1	Low
29	Chronic Pancreatitis	2	5	Medium
30	Pancreatic Cancer	0	0	Low
31	Liver Cancer	0	0	Low
32	Gallbladder Cancer	0.94	3	Low
33	Gallstones	0.42	1	Low

Digestive Disorders

No.	Disease	Risk Index	Risk Level	Degree of risk
34	Crohn's Disease	0.37	1	Low
35	Ulcerative Colitis (UC)	1.15	6	Medium
36	Chylous Diarrhoea	0	0	Low
37	Chronic Gastritis	0	1	Low
38	Gastric Ulcer	0	0	Low
39	Stomach Cancer	0	1	Low
40	Colon Cancer	1.69	8	Medium-High

Cerebral/ Neurological Disorders

No.	Disease	Risk Index	Risk Level	Degree of risk
41	Brain Cancer	0	0	Low
42	Schizophrenia	1.33	4	Medium
43	Alzheimer's Disease (AD)	0.55	0	Low
44	Parkinson	0	0	Low

45	Obsessive Compulsive Disorder (OCD)	0	0	Low
46	Social Phobia	0.92	4	Medium
47	Diabetic Neuropathy	2.43	6	Medium
48	Neuroblastoma	0.96	3	Low
49	Multiple Sclerosis	0	0	Low
50	Sciatica	0	0	Low

Eye/Skin/Mouth/Nose/Ear Disorders

No.	Disease	Risk Index	Risk Level	Degree of risk
51	Age-related Macular Degeneration	2.5	1	Low
52	Glaucoma	0.62	3	Low
53	Diabetic Retinopathy	2.18	2	Low
54	Hearing Loss	0	0	Low
55	Otitis	0.75	3	Low
56	Skin Cancer	1.8	6	Medium
57	Malignant Melanoma	0	0	Low
58	Psoriasis	0	0	Low
59	Oral Cancer	0	0	Low
60	Periodontitis	0.8	3	Low
61	Laryngeal Cancer	0.85	3	Low
62	Nasopharyngeal Cancer	0.39	1	Low
63	Esophageal Cancer	0.67	2	Low

Endocrine Disorders

No.	Disease	Risk Index	Risk Level	Degree of risk
64	Type-2 Diabetes	1.23	7	Medium-High
65	Type-1 Diabetes	0.61	2	Low
66	Hypercholesterolemia	1	4	Medium
67	Hyperlipidemia	0.65	1	Low
68	Thyroid Cancer	0.57	1	Low
69	Hypothyroidism	2.68	9	High

70	Hyperparathyroidism	0.5	3	Low
71	Goiter	0.5	3	Low
72	Graves' Disease	0.65	1	Low

Urinary Disorders

No.	Disease	Risk Index	Risk Level	Degree of risk
73	IgA Nephropathy	0	0	Low
74	Chronic Kidney Disease	1.85	6	Medium
75	Kidney Stones	0.82	4	Medium
76	Diabetic Nephropathy	0	0	Low
77	Bladder Cancer	0.47	2	Low
78	Renal Carcinoma	0	0	Low

Muscolo-Skeletal Disorders

No.	Disease	Risk Index	Risk Level	Degree of risk
79	Rheumatoid Arthritis	0.47	1	Low
80	Ankylosing Spondylitis	0.75	1	Low
81	Osteoarthritis	0	0	Low
82	Osteoporosis	0.38	1	Low
83	Gout	1.7	4	Medium

Female-Related Disorders

No.	Disease	Risk Index	Risk Level	Degree of risk
84	Gestational Diabetes Mellitus	0.53	1	Low
85	Pre-eclampsia	0	0	Low
86	Endometriosis	0	0	Low
87	Endometrial Cancer	1.27	5	Medium
88	Breast Cancer	2.93	9	High
89	Ovarian Cancer	0	0	Low
90	Carcinoma of Uterine Cervix	0	0	Low

Others				
No.	**Disease**	**Risk Index**	**Risk Level**	**Degree of risk**
91	Lymphoma Cancer	0.42	1	Low
91	Hodgkin's Lymphoma	0.85	4	Medium
92	Non-Hodgkin's Lymphoma	0	0	Low
93	Leukemia	0	0	Low
94	Aplastic Anemia	0	0	Low
95	Sjögren's Syndrome	0	0	Low
96	Systemic Lupus Erythematosis	0.4	1	Low
97	Chronic Hepatitis B	0.42	1	Low
98	Myeloma Multiplex	1.45	3	Low
99	Resistance to HIV & AIDS	0	0	Low
100	Hemochromatosis	0.42	1	Low

Breast Cancer

Breast cancer is the presence of mutated cells in the breast tissues, which is primarily due to genetic and environmental factors. Breast cancer may present itself as a metastatic disease that has the potential to spread to other parts of the body. Common sites of metastasis include bone, liver, lung and brain. This can be accompanied with unexplained weight loss, fever, chills, joint pain and jaundice. Early stages of breast cancer does not present any symptoms, and therefore it is vital to undergo regular mammogram checks and treat any abnormalities early.

Chest wall
blood vessels
malignant tumor
nipple
mamory ducts
fat cells
intercostal muscle
pectoral muscle
rib bone
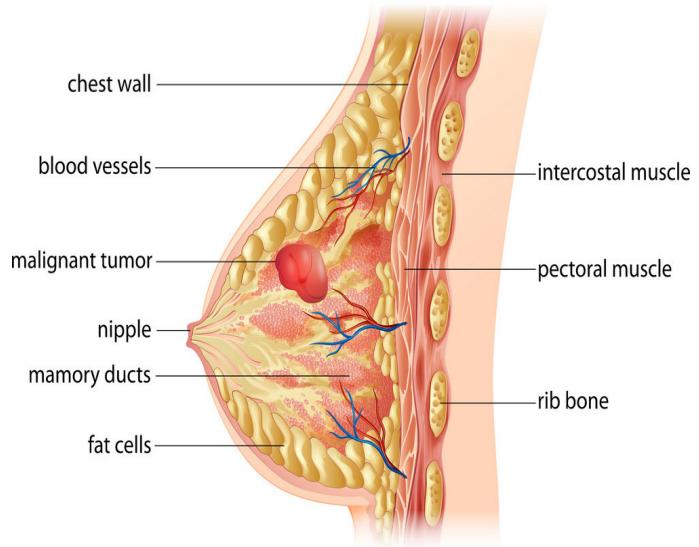
Risk Factors

- Age
- Family history of breast cancer
- History of presence of ovarian cancer
- Irregular menstruation
- Late menopause
- Had hormone replacement therapy
- Alcohol consumption
- Giving birth after the age of 30

Clinical Symptoms

- Painless lumps
- Unusual discharge from the nipple
- Persistent rash around the nipple
- Retracted nipples
- Swollen or thickened skin
- Change in overall shape of the breast

NIPPLE CHANGES INVERSION

SWELLING OF ALL OR PART OF BREAST

PAIN OF BREAST

DIMPLED OR DEPRESSED SKIN

BLOODY DISCHARGE

A LUMP IN THE BREAST

VISIBLE LUMP ON ARMPIT

THE DESTRUCTION OF THE SKIN
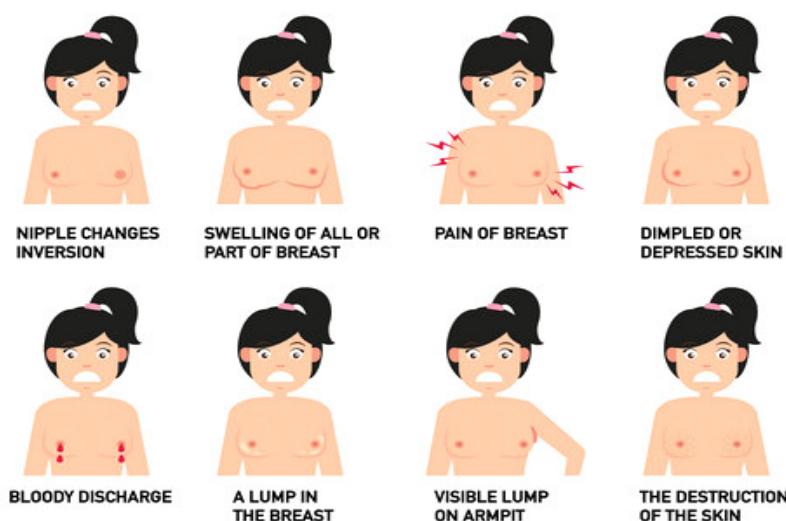
Breast Cancer

Prevention

- Conduct self check regularly.
- Abstain from alcohol and smoking.
- Weight control
- Regular exercise
- Breastfeeding provides beneficial properties and therefore encouraged.
- Use progesterone cream once tested with high estrogen levels.
- Avoid carcinogenic foods(barbequed, grilled, charred meats).
- Avoid hormonal contraceptives(birth control pills, IUD).
- Avoid exposure to radiation and environmental pollution.
- Reduce the frequency of dying hair or working with hair dye.

Nutritional Recommendations:

- Avoid milk and dairy products
- Increase intake of anticarcinogenic foods(sweet potato, green tea, etc)
- Increase fiber(vegetables, seeds, nuts, whole grains) intake
- Increase intake of antioxidative fruits(pineapples, cherries, grapes, plums)
- Increase intake of onions and garlic
- Increase intake of fish(salmon, tuna)
- Increase intake of cruciferous vegetables(cabbage, broccoli, brussel sprouts)
- Drink spring or filter water
- Opt for organic food/meat products
- Add longan and wild yam in your diet
- Limit the intake of royal jelly and honey

Hypothyroidism

Hypothyroidism is a condition whereby the underactive thyroid gland does not produce enough thyroid hormones to meet the body's needs, thus slowing down the body's functions — primarily homeostasis and metabolism.
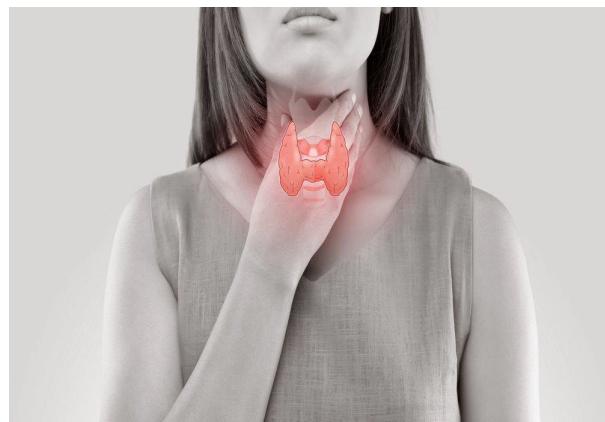
Risk Factors

- Female gender
- Family history of hypothyroidism
- Older age
- History with thyroid problem
- History of other autoimmune diseases
- Pregnant or delivered a baby within the past six months

Symptoms

- Fatigue and sluggishness
- Weight gain
- Increased sensitivity to cold
- Dry hair and hair loss
- Swollen tongue
- Irregular menstrual periods
- Depression

Prevention

Research has shown that goitrogens (found in broccoli, brussels sprouts, cabbage, cauliflower, kale, turnips) and isoflavones(found in soy), are potentially dangerous compounds which increases the risk of contracting hypothyroidism. Goitrogens is capable of disrupting the thyroid's functionality of utilizing iodine, and therefore it is highly recommended to cook cruciferous vegetables prior to consumption, and limit them to 5 ounces a day. High fiber diets, fatty foods, caffeine, isoflavones and gluten(found in bread, pasta, rice) are also capable of disrupting the absorption of thyroid medications. Higher doses of thyroid medication is recommended if adopting a high fiber diet.

Alcohol has a toxic effect on the thyroid glands and can cause havoc in the regulation of thyroid hormone levels in the body and suppresses the thyroid's ability to produce hormones. It is highly recommended to stay away from alcohol.

Hypothyroidism

Recommended Herbs for Hypothyroidism
Black Cohosh is especially good for treating menstrual problems associated with hypothyroidism. It's a popular treatment for menopausal women, treats symptoms of PMS and may help with infertility.
Kelp is sometimes given to people with hypothyroidism because iodine deficiency is linked to the disorder in some parts of the world.
St. John's Wort could be helpful if you suffer from depression, a symptom that often accompanies low thyroid function.
Cayenne supplements can help with blood circulation by strengthening the heart. An improvement in circulation can alleviate the cold extremities that are common with hypothyroidism.
Fenugreek, longan, wild yam, brussel sprouts and broccoli are also helpful to balance the level of estrogen. Too high of estrogen can cause hypothyroidism.

Food and Herbs to Avoid
Some studies indicate that there are certain foods and herbs that should be limited or avoided if you have hypothyroidism, such as tofu, soy milk, dairy products and meats.
Ginseng, astragalus, bamboo, burdock, echinacea, ginger and lemon balm are among the herbs that you should avoid in the early stages of hypothyroidism.

Recommendations:

• Reduce the frequency of taking soy products, honey, royal jelly, chicken and dairy products as they are estrogen donors.
• Ensure the proper intake of iodine which is found in iodized salt, kelp and seaweed to enhance the thyroid health.
• Replace your refined salt with iodized salt.

Lung Cancer

Lung cancer begins in the tissues of the lungs, when there is a mutation in the cells lining the air passages which cause excessive cell growth responsible for tumor development.

Symptoms

- Cough that worsens overtime
- Chest pain
- Coughing up blood
- Shortness of breath
- Loss of appetite or weight loss
- Fatigue
- Headache
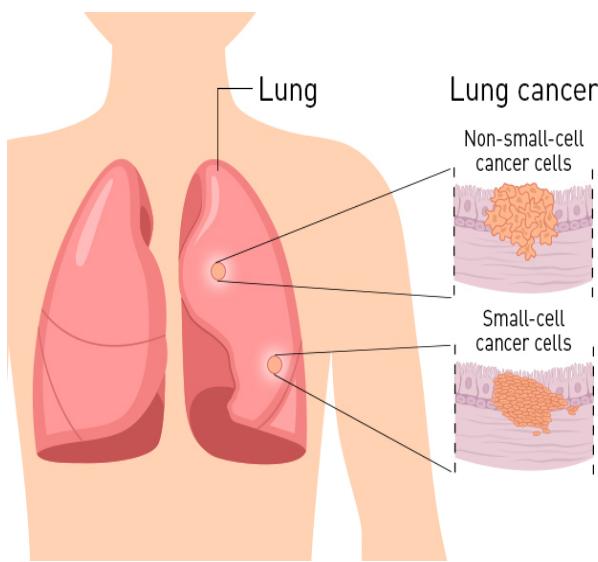
Prevention

A wide aspect of elements contributing to this condition involves one's medical history, smoking habits, exposure to environmental and occupational substances, diet, and family history of lung cancer. To target prevention, these aspects have to be addressed in order to minimize the risk of developing lung cancer.

Environment
The first step to prevent lung cancer is to evaluate your environment and the air quality of your vicinity. It is advisable to avoid living near factories, incinerators, laboratories, and construction workplaces. Family members and friends who smoke should be avoided as well. This is to minimize exposure to second-hand smoke, toxic fumes, carcinogens and radon gas — a byproduct caused by the breakdown of uranium in soil, rock and water.

Lifestyle
Avoid smoking and vaping. Regular exercise is highly recommended as it also plays a role in cancer prevention as the body's immune system is strengthened. If possible, choose to exercise at natural habitats such as a forest or beach. It is good for the body to be exposed to negative-ions. Lastly, sleeping early and adequately helps the body to recover to its optimum as it goes through innate detoxing in a state of rest.

Diet
Eat a diet packed with fruits and vegetables. Food sources of vitamins and nutrients are best. Taking probiotics and antioxidant supplements help too. Avoid taking excessive antibiotics as it will weaken the body's immune system, and drink more tea as it provides polyphenols and antioxidants that can help combat against free-radicals.

Lung Cancer

Research has proven that the consumption of hydrogen water improves quality of life, immunity and longevity. Hydrogen has an antioxidant effect that neutralizes over-reactive oxygen molecules to produce a stable compound— water. Over-reactive oxygen molecules are produced when free oxygen molecules bind to electrons that were leaked out of the cell's powerhouse— mitochondria, potentially damage cells and genes which ultimately contribute to detrimental conditions, diseases and aging. Hydrogen is also capable of reducing inflammation, strengthening cell membranes, promoting fat metabolism and regulating gene expressions. Drinking hydrogen water is highly recommended to secure these health benefits.

🥦 Recommendations:

• Avoid active or passive smoking.
• Avoid contact with harmful aerosol — mosquito coils incense, perfume, sawn wood powder, dust, coal, gas and other volatile organic compounds.
• Prevent hazardous fumes from the kitchen — avoid working in the kitchen for long hours as cooking fumes is damaging to the lungs.
• Aerobic or breathing exercise is of utmost importance in keeping the lungs healthy.
• Avoid working as a hair-stylist, a chef or a construction worker to avoid occupational hazards.
• Foods such as pears, melon, bird nest, white fungus, luo hanguo and cordyceps are good for the lungs.
• Avoid lateral sleeping position to protect the lungs.
• Supplementing Vitamin C, Echinacea, Manuka honey and Propolis is recommended.
• Exercising regularly is very important to keep the lungs vibrant and healthy.

Colon Cancer

Colon cancer begins as intestinal polyps that usually form in the inner lining of the large intestine, which can progress into a cancerous tumor that invade, replace and destroy normal cells. It can also spread to other areas of the body in severe cases. Risk factors include genetics, age, family history, environment, diet, and lifestyle. Having certain diseases or conditions may place people at higher risk for colon cancer, these include those who have ulcerative colitis or Crohn's disease, and those with a history of breast, uterine or ovarian cancer.
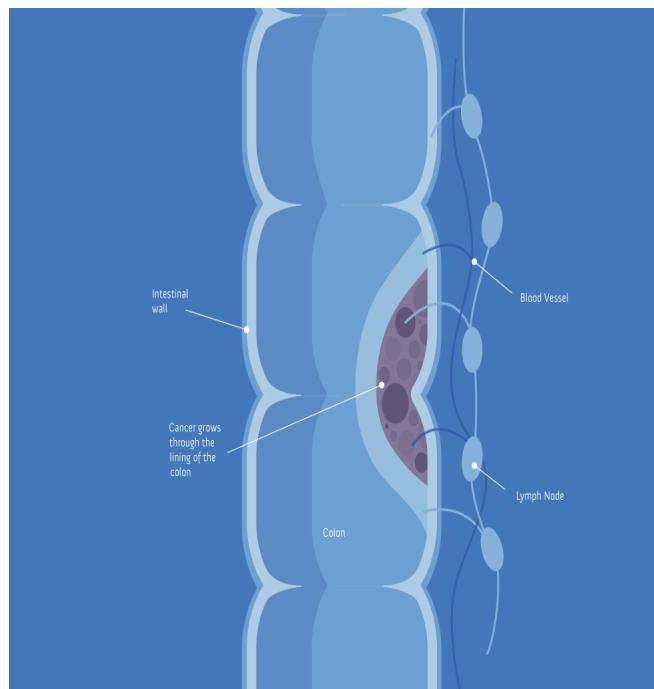
Risk Factors

- Older age
- Genetics
- Family history of colon cancer
- Exposure to radiation
- Sedentary lifestyle
- High fat diet
- Alcohol consumption

Clinical Symptoms

- Changes in bowel habits
- Frequently feel full or bloated
- Unexplained weight loss
- Blood in the stool
- Fatigue
- Nausea

Prevention

Diet

In order to prevent colon cancer, it is vital to improve one's diet and food choices. This is to prevent the development of intestinal polyps and excessive weight gain. A cleaner diet can be achieved by taking more fruits and vegetables, drinking adequate water, limiting fat intake and increasing fiber and probiotics intake for optimal digestion. Supplementing with additional calcium, folate and vitamin D has shown to decrease colon cancer risk as well.

Research has proven that the consumption of hydrogen water improves quality of life, immunity and longevity. Hydrogen has an antioxidant effect that neutralizes over-reactive oxygen molecules to produce a stable compound— water. Over-reactive oxygen molecules are produced when free oxygen molecules bind to electrons that were leaked out of the cell's powerhouse— mitochondria, potentially damage cells and genes which ultimately contribute to detrimental conditions, diseases and aging. Hydrogen is also capable of reducing inflammation, strengthening cell membranes, promoting fat metabolism and regulating gene expressions. Drinking hydrogen water is highly recommended to secure these health benefits.

Colon Cancer

Lifestyle

Regular exercise helps improve peristalsis and bowel movements which promotes digestion and transition. If you are living a sedentary lifestyle, you may compensate by going to the gym, taking long walks and playing sports.

Environment

In order to avoid temptation, it is wise to control what type of food you have in the refrigerator and shelves. Avoid purchasing meat with high fat content, canned or processed foods, and alcohol. Always opt for healthier options when it comes to snacking.
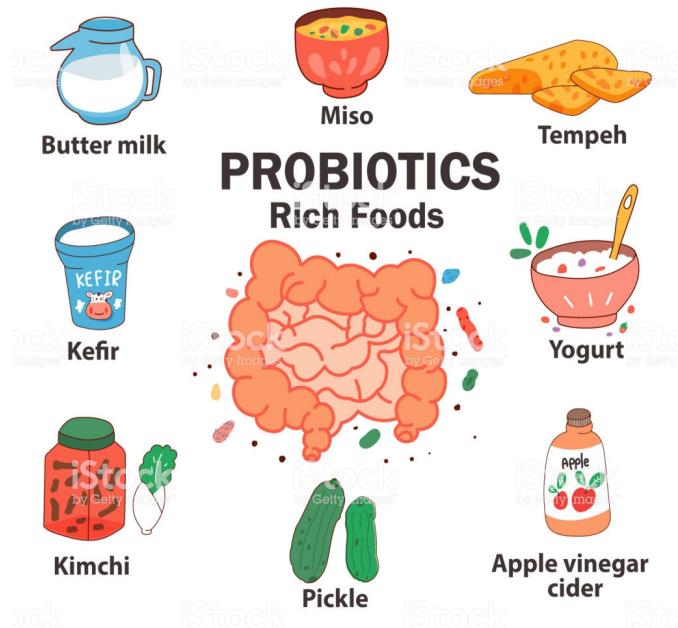

Recommendations:

- Addressing small polyps before they become cancerous
- Avoid diets high in fat, alcohol, protein, calories, red and white meat
- Use of aspirin may decrease the risk of colon cancer
- Increase probiotic intake— good bacteria helps keep bad bacteria at bay
- Consume apple cider vinegar— beneficial to intestinal flora
- Eat foods rich in fiber

Type II Diabetes

Diabetes is a chronic condition that impairs the body's ability to metabolize glucose, our primary source of fuel. Type II diabetes can be caused by either low production of insulin hormones for the regulation of blood sugar levels, or the body's resistance to the effects of insulin.

This condition eventually exhaust the pancreas, resulting in a decrease in the production of insulin hormone, causing higher blood sugar levels.
There is no cure for this condition, but adopting a positive lifestyle changes has shown to help manage the condition. The cornerstone of Type II diabetes management is by adopting a healthy diet, regular physical activity and maintaining a healthy body weight.
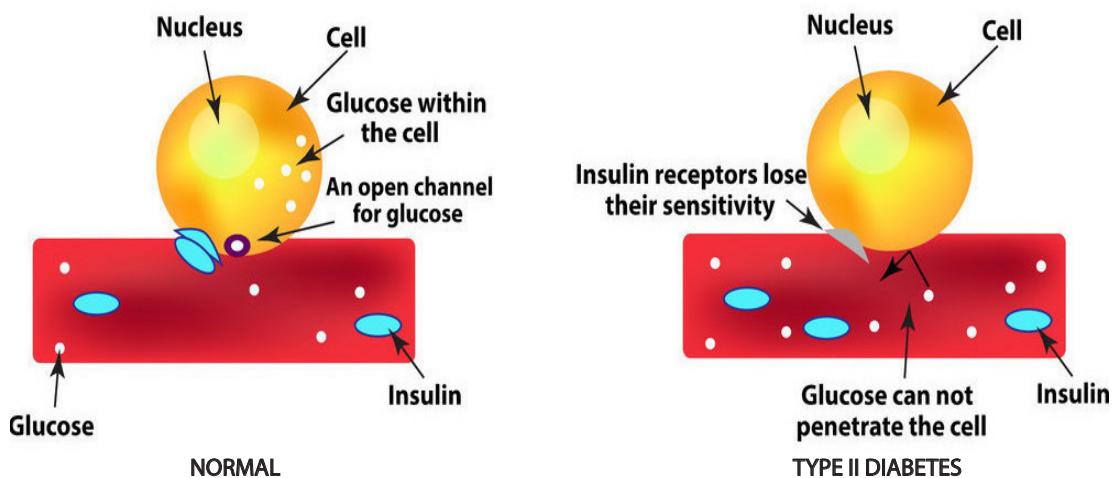
Symptoms

- Increased thirst and hunger
- Frequent urination
- Unintended weight loss
- Fatigue
- Blurred vision
- Slow-healing sores and wounds
- Frequent infections

Risk Factors

- Age
- Being overweight
- Physical inactivity
- Family history
- Race — Caucasians are less susceptible
- Having polycystic overian syndrome

Type II Diabetes

Prevention

Dietary Guidance

Scheduled meals
Have at least three meals a day at specific time brackets, following recommended daily servings to avoid overeating.

Avoid high-sugar foods (sugar, rock sugar, brown sugar, glucose, maltose, honey, toffee, fruit candy, canned fruit, sugary drinks, cream cake, chocolate, ice-cream, starchy food)

Avoid food rich in saturated fatty acids
This includes fats, lard, animal skin, beef, and canned meat.

Avoid high cholesterol foods
High-cholesterol foods: egg yolk, squid, cuttlefish, animal offal, shrimp cake and so on.

Consume more high-fiber food (buckwheat noodles, cornmeal, oats, noodles, sorghum, rice, mung beans, spinach, celery, chives, bean sprouts, seaweed)

Lifestyle Guidance

- Strive for ideal body weight through physical activity and a healthy diet.
- Avoid active and passive smoking.
- Refrain from drinking alcohol.

Nutritional Recommendations:

- Avoid fish oil supplements that contains para-aminobenzoic acid
- Avoid salt and white flour products
- Do not take extremely large doses of vitamins B1, B3 and C
- Propolis, baby bittergourd and fenugreek helps lower blood sugar levels
- Take more chromium-rich foods(wheat germ, cabbage, tomato, onion, etc)
- Take more selenium-rich foods(mushrooms, algae foods, etc)
- Take more zinc-rich foods(walnut, apricot, chestnut, hazelnut, etc)