The Health Sciences Academy®

Nutrition for Cancer Prevention and Longevity ™

Knowledge-Based Certification

Certification Curriculum

Summary Course Overview

1	Understanding the ageing process	12	Metabolic syndrome and blood sugar management
2	What is cancer?	13	Coeliac disease and gluten sensitivity
3	The biology of cancer	14	Caloric restriction, fasting, and low-protein diets
4	What is carcinogenesis?	15	Alkaline diet and ketogenic diet
5	Cancer detection and screening	16	Animal food sources
6	Common treatments	17	Pescatarian, vegetarian and vegan diets
7	Cancer classification	18	Vitamins and minerals for optimal health
8	Manuals for the prevention of common cancers	19	Phytochemicals and good health
9	Risk factors of ageing and disease	20	Holistic approach to healthy living
10	Dietary prevention strategies	21	Guidebook to longevity and disease prevention
11	Importance of finding your healthy weight		Certification

BONUS

Nutrition for Cancer Prevention and Longevity

Unit	Content
1	Introduction to nutrition for cancer prevention and longevity
2	Understanding the aging process
3	How cells regulate the ageing process
4	What is cancer?
5	The biology of cancer
6	From a normal cell to a cancer cell
7	What is carcinogenesis?
8	Angiogenesis and metastasis
9	Introduction to cancer detection and screening
10	Cancer detection and screening methods

Nutrition for Cancer Prevention and Longevity

Unit	Content
11	Biomarkers of cancer and ageing
12	Cancer grading and staging
13	Genetic testing
14	Understanding a pathology report
15	Questions to ask your doctor: Diagnosis
16	Introduction to cancer treatments
17	Conventional cancer treatments
18	Immunotherapy treatment
19	Additional immunotherapies and nanotechnology
20	Clinical trial

Nutrition for Cancer Prevention and Longevity

Unit	Content
21	What to ask your doctor: Treatment
22	Cancer classification
23	What to ask your doctor: Cancer
BONUS 24	BONUS: Manual for solid cancer prevention
BONUS 25	BONUS: Manual for blood and lymph cancer prevention
26	Introduction to risk factors
27	Lifestyle risk factors
28	Environmental risk factors
29	Is stress a risk factor?
30	Nutritional influences on ageing and cancer: superfoods, fibre, probiotics

Nutrition for Cancer Prevention and Longevity

Unit	Content
31	Nutritional influences on ageing and cancer: soy and sugar
32	Food preparation
33	Food additives
34	Finding your healthy weight
35	Obesity and cancer risk
36	Metabolic syndrome and blood sugar management
37	Coeliac disease and gluten sensitivity
38	Fasting and caloric restriction
39	Low-protein diet
40	Alkaline and ketogenic diet

Nutrition for Cancer Prevention and Longevity

Unit	Content
41	Meat, cancer risk, and longevity
42	Fish, cancer risk, and longevity
43	Dairy, cancer risk, and longevity
44	Pescatarian, vegetarian, and vegan diets
45	Vitamins for optimal health
46	Minerals for optimal health
47	Phytochemicals for good health (part 1)
48	Phytochemicals and good health (part 2)
49	Benefits of meditation and yoga
50	Benefits of acupuncture, massage and oils

Nutrition for Cancer Prevention and Longevity

Unit	Content
51	Benefits of exercise
52	Benefits of good sleep
53	Guidebook to longevity and disease prevention
	Final exam and certification

0. Devising your personal strategy

Unit	Here's what you'll learn	Extra support material
0.1 Introduction to nutrition for cancer prevention and longevity	▪ This is a 'Harvard level' course ▪ Why should you study cancer biology? ▪ Cancer is the #2 cause of death worldwide… ▪ …BUT you can reduce your risk ▪ Is prevention a guarantee? ▪ Why this course will change your life ▪ Telling fact from fiction ▪ The outline of the course ▪ The aim of the course ▪ Going from knowledge to practice	▪ My Personal Notes ▪ Research Study ▪ Your Personal Strategy Questionnaire ▪ Videos

1. Understanding the ageing process

Unit	Here's what you'll learn	Extra support material
1.1 How cells regulate the ageing process	▪ To be or not to be ▪ Crisis leads to cell death ▪ Senescence and ageing ▪ Discovery of telomeres ▪ What are telomeres? ▪ Telomeres shorten over time ▪ Telomerase maintains telomeres ▪ Plastic tips on your shoelaces ▪ Free radicals and ageing ▪ Free radicals damage our cells ▪ ROS may result in cell death ▪ Hydrogen peroxide in our cells? ▪ Breaking down hydrogen peroxide ▪ Insulin-like growth factor 1 ▪ Somatopause	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

1. Understanding the ageing process

Unit	Here's what you'll learn	Extra support material
1.1 How cells regulate the ageing process	▪ IGF-1 and ageing ▪ GFD and ageing ▪ Glutathione the antioxidant ▪ What does this mean for you?	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

2. What is cancer?

Unit	Here's what you'll learn	Extra support material
2.1 What is cancer?	▪ The big C ▪ What makes cancer, cancer? ▪ Some common types of cancer ▪ Cancer the crab ▪ Myth buster: Is cancer a new disease? ▪ So why don't we have a cure? ▪ Cancer incidence rate ▪ Cancer mortality rate ▪ Incidence vs mortality rates ▪ Worldwide cancer rates ▪ How to examine cancer ▪ Epidemiology in cancer ▪ Lung cancer ▪ Lung cancer incidence vs mortality ▪ Lung cancer and smoking ▪ Lung cancer and cigarettes	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

2. What is cancer?

Unit	Here's what you'll learn	Extra support material
2.1 What is cancer?	▪ Risk factors ▪ Using risk factors to our benefit ▪ Cancer rates are higher in men ▪ Mortality rates: males vs females ▪ Why men have increased rates ▪ Race and ethnicity ▪ Is cancer a disease of the wealthy?	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

3. The biology of cancer

Unit	Here's what you'll learn	Extra support material
3.1 The biology of cancer 3.2 From a normal cell to a cancer cell	▪ Can cancer be transmitted? ▪ Yes… when a virus causes cancer ▪ Viruses can lead to human cancer ▪ Viral life cycle ▪ Myth buster: Is cancer contagious? ▪ HPV and cervical cancer ▪ HPV and cancer risk ▪ Vaccination against HPV ▪ Viruses: 20% of cancers ▪ Our own genes give us cancer ▪ Activating oncogenes ▪ Tumour Suppressor Genes ▪ Oncogenes and TSGs Types ▪ Function of cancer genes ▪ Oncogenes vs TSGs ▪ Good genes gone bad	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

3. The biology of cancer

Unit	Here's what you'll learn	Extra support material
3.1 The biology of cancer 3.2 From a normal cell to a cancer cell	▪ What roles do proteins have? ▪ DNA mutations may change protein ▪ Mutation in retinoblastoma ▪ Cancer requires several changes ▪ Multiple changes lead to cancer ▪ All cancers have altered genes ▪ Changing your gene expression ▪ What is epigenetics? ▪ Many forms of expression ▪ Genes can be switched on and off ▪ Same code, different expression? ▪ Genetic-epigenetic interactions ▪ Cell immortalisation ▪ Cell immortality ▪ Who is Henrietta Lacks? ▪ The Immortal Life of Henrietta Lacks	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

3. The biology of cancer

Unit	Here's what you'll learn	Extra support material
3.1 The biology of cancer 3.2 From a normal cell to a cancer cell	▪ HeLa cells in science research ▪ Cancer cells increase telomerase ▪ Increased telomerase = immortality ▪ What does this mean to you?	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

4. What is carcinogenesis?

Unit	Here's what you'll learn	Extra support material
4.1 What is carcinogenesis? 4.2 Angiogenesis and metastasis	▪ Cancer is a multi-step process ▪ Carcinogenesis definition ▪ Three stages of carcinogenesis ▪ Steps a cancer cell may go through ▪ Tumour progression ▪ What is tumourigenesis? ▪ Tumourigenesis vs carcinogenesis ▪ Myth buster: Warts are from frogs? ▪ Myth buster: Are warts cancer? ▪ Cells are in constant flux ▪ The time course to cancer ▪ Possible paths of a mutated cell ▪ Preventing carcinogenesis ▪ What characterises cancer? ▪ The 6 hallmarks of cancer ▪ What is the stroma? ▪ Tumours are subpopulation of cells	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

4. What is carcinogenesis?

Unit	Here's what you'll learn	Extra support material
4.1 What is carcinogenesis? 4.2 Angiogenesis and metastasis	▪ Tumours are subpopulation of cells ▪ Tumours need the stroma ▪ Tumour microenvironment ▪ Crosstalk between cells ▪ What is angiogenesis? ▪ Angiogenesis and disease ▪ Tumour hypoxia ▪ Cancer cells hijack blood vessels ▪ Metastasis of cancer cells ▪ Metastasis in the blood stream ▪ Metastatic cells ▪ Common Metastasis Sites ▪ Circulation dictates metastatic sites ▪ Bone metastases ▪ Why bone metastases? ▪ Liver metastases ▪ Why liver metastases?	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

5. Cancer detection and screening

Unit	Here's what you'll learn	Extra support material
5.1 Introduction to cancer detection and screening 5.2 Cancer detection and screening methods 5.3 Biomarkers of cancer and ageing 5.4 Grading and staging 5.5 Genetic testing 5.6 Understanding a pathology report 5.7 What to ask your doctor: diagnostics	▪ Early detection is crucial ▪ When to get tested? ▪ Increased incidence due to testing ▪ To treat or not to treat? ▪ It is YOUR decision ▪ Finding out you have cell changes ▪ Predictive genetic testing ▪ Treatment focused genetic testing ▪ Complications with genetic testing ▪ Testing increases over-diagnosis ▪ Ductal carcinoma in situ (DCIS) ▪ Increase in DCIS cases ▪ Should you treat DCIS? ▪ Risk vs benefits of screening ▪ Breast cancer over-diagnosis ▪ Cervical cancer screening	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

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5.1 Introduction to cancer detection and screening 5.2 Cancer detection and screening methods 5.3 Biomarkers of cancer and ageing 5.4 Grading and staging 5.5 Genetic testing 5.6 Understanding a pathology report 5.7 What to ask your doctor: diagnostics	▪ What does this mean for you? ▪ How to diagnose cancer? ▪ Visual exam ▪ Family history ▪ Example family tree ▪ Creating a family tree ▪ Understanding a family tree ▪ Example hereditary cancers ▪ Online self-assessment quiz ▪ The link between different cancers ▪ Blood tests ▪ Testing for biomarkers? ▪ Biomarker PSA ▪ Biopsy ▪ Myth buster: Can a biopsy spread cancer? ▪ Types of biopsies	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

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5.1 Introduction to cancer detection and screening 5.2 Cancer detection and screening methods 5.3 Biomarkers of cancer and ageing 5.4 Grading and staging 5.5 Genetic testing 5.6 Understanding a pathology report 5.7 What to ask your doctor: diagnostics	▪ Comparing types of biopsies ▪ Ultrasound imaging ▪ Identification with ultrasound ▪ Ultrasound to detect cancer ▪ The discovery of X-Rays ▪ X-Rays ▪ Electromagnetic spectrum ▪ Benefit vs risk of X-Rays ▪ Computed tomography scan ▪ CT scan of a brain ▪ Drawbacks of CT scans ▪ CT scans and cancer risk ▪ Positron Emission Tomography scan ▪ PET scan ▪ Magnetic Resonance Imaging ▪ MRI	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

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5.1 Introduction to cancer detection and screening 5.2 Cancer detection and screening methods 5.3 Biomarkers of cancer and ageing 5.4 Grading and staging 5.5 Genetic testing 5.6 Understanding a pathology report 5.7 What to ask your doctor: diagnostics	▪ MRI and pregnancy ▪ Barium X-Ray enema ▪ Barium enema procedure ▪ Preparing for barium X-Ray enema ▪ What are biomarkers? ▪ Biomarkers alone are not enough ▪ Tumour Biomarkers ▪ HER2/neu ▪ Types of tumour biomarkers ▪ Potential biomarkers ▪ NCI-MATCH Trials ▪ Common cancer biomarkers ▪ Biomarkers of ageing ▪ Proposed biomarkers of healthy ageing ▪ Identification of new biomarkers ▪ The epigenetic clock	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

5. Cancer detection and screening

Unit	Here's what you'll learn	Extra support material
5.1 Introduction to cancer detection and screening 5.2 Cancer detection and screening methods 5.3 Biomarkers of cancer and ageing 5.4 Grading and staging 5.5 Genetic testing 5.6 Understanding a pathology report 5.7 What to ask your doctor: diagnostics	▪ Pathology reports ▪ Grading systems ▪ Normal cell differentiation ▪ Stem cell differentiation ▪ Cancer cells are undifferentiated ▪ Grading for most cancers ▪ Grading scale for most cancers ▪ Breast cancer grading ▪ Prostate cancer grading ▪ Prostate cancer grading scale ▪ Staging ▪ Staging Scale ▪ TNM cancer staging scale ▪ What is genetic testing? ▪ Testing by a medical professional ▪ Online Testing	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

5. Cancer detection and screening

Unit	Here's what you'll learn	Extra support material
5.1 Introduction to cancer detection and screening 5.2 Cancer detection and screening methods 5.3 Biomarkers of cancer and ageing 5.4 Grading and staging 5.5 Genetic testing 5.6 Understanding a pathology report 5.7 What to ask your doctor: diagnostics	▪ Online genetic testing ▪ Online health report ▪ Example: EGFR ▪ Benefits of genetic testing ▪ Pre-emptive surgery ▪ Drawbacks of genetic testing ▪ Impact on family ▪ Genetic counselling ▪ Genetic Counselling Resources ▪ What is a pathology report? ▪ Outline of a pathology report ▪ Colon biopsy pathology report ▪ Tumour size ▪ Grade vs Stage ▪ Microscopic Findings ▪ Differentiation	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

5. Cancer detection and screening

Unit	Here's what you'll learn	Extra support material
5.1 Introduction to cancer detection and screening 5.2 Cancer detection and screening methods 5.3 Biomarkers of cancer and ageing 5.4 Grading and staging 5.5 Genetic testing 5.6 Understanding a pathology report 5.7 What to ask your doctor: diagnostics	▪ Molecular testing ▪ Other terms you might see ▪ Common terms ▪ Prognostic tests ▪ Knee scraping pathology report ▪ Pathology report from skin biopsy	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

6. Cancer treatments

Unit	Here's what you'll learn	Extra support material
6.1 Introduction to cancer treatments 6.2 Conventional treatments 6.3 Immunotherapy treatment options 6.4 Additional immunotherapies 6.5 Clinical trials 6.6 What to ask your doctor: treatment	▪ Treatment options ▪ More options available ▪ Combination treatment ▪ Myth buster: Is there a cure already? ▪ Complications with treatments ▪ Multidrug resistance ▪ MDR in patients ▪ What is a placebo? ▪ Krebiozen is the cure ▪ New Krebiozen is the cure ▪ Understanding the placebo effect ▪ Our thoughts influence our body ▪ Just one theory ▪ The nocebo effect ▪ Thinking there is pain causes pain ▪ Causes of placebo/nocebo effects?	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

6. Cancer treatments

Unit	Here's what you'll learn	Extra support material
6.1 Introduction to cancer treatments 6.2 Conventional treatments 6.3 Immunotherapy treatment options 6.4 Additional immunotherapies 6.5 Clinical trials 6.6 What to ask your doctor: treatment	▪ Surgery ▪ Surgery biopsy ▪ Surgery diagnosis ▪ Surgery side effects ▪ Decreasing surgery side effects ▪ Radiation ▪ External beam radiation therapy ▪ EBRT machine ▪ Internal radiation therapy ▪ Systemic radiation therapy ▪ Systemic radiation therapy summary ▪ Example: Zevalin ▪ Proton beam therapy ▪ Decreasing radiation side effects ▪ Mustard gas and WWII ▪ Chemotherapy discovery	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

6. Cancer treatments

Unit	Here's what you'll learn	Extra support material
6.1 Introduction to cancer treatments 6.2 Conventional treatments 6.3 Immunotherapy treatment options 6.4 Additional immunotherapies 6.5 Clinical trials 6.6 What to ask your doctor: treatment	▪ What is chemotherapy? ▪ Chemotherapy drugs ▪ Targeting fast growing cells ▪ Chemo targets cancer cells ▪ Chemotherapy administration ▪ Chemotherapy side effects overview ▪ Chemotherapy and hair loss ▪ Growth of hair ▪ Other chemotherapy side effects ▪ Immune system ▪ Immunotherapy ▪ Types of immunotherapy ▪ Monoclonal antibodies ▪ Monoclonal antibody functions ▪ Immune system targeting ▪ CD antigens	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

6. Cancer treatments

Unit	Here's what you'll learn	Extra support material
6.1 Introduction to cancer treatments 6.2 Conventional treatments 6.3 Immunotherapy treatment options 6.4 Additional immunotherapies 6.5 Clinical trials 6.6 What to ask your doctor: treatment	▪ Rituximab ▪ Rituximab targets CD20 ▪ How rituximab works ▪ Growth inhibition ▪ EGFR and survival ▪ EFGR inhibition ▪ Anti-angiogenesis ▪ VEGF ▪ VEGF expression in cancer cells ▪ Cancer diagnosis ▪ Looking for metastases ▪ Radiation delivery ▪ Chemotherapy delivery ▪ Chemotherapy delivery examples ▪ Monoclonal antibody side effects ▪ Non-specific immunotherapies ▪ Interferons and interleukins	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

6. Cancer treatments

Unit	Here's what you'll learn	Extra support material
6.1 Introduction to cancer treatments 6.2 Conventional treatments 6.3 Immunotherapy treatment options 6.4 Additional immunotherapies 6.5 Clinical trials 6.6 What to ask your doctor: treatment	▪ Cancer Vaccines ▪ Virus replication ▪ Preventive cancer vaccines ▪ Treatment cancer vaccines ▪ HBV and liver cancer ▪ Nanotechnology ▪ Nanocarrier advantages ▪ Doxorubicin HCl liposome ▪ Types of immunotherapy ▪ Immune checkpoint proteins ▪ Ipilimimab ▪ Non-specific immunotherapies ▪ Cancer Vaccines ▪ Virus replication ▪ Goals of a vaccine ▪ Preventive cancer vaccines	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

6. Cancer treatments

Unit	Here's what you'll learn	Extra support material
6.1 Introduction to cancer treatments 6.2 Conventional treatments 6.3 Immunotherapy treatment options 6.4 Additional immunotherapies 6.5 Clinical trials 6.6 What to ask your doctor: treatment	▪ Treatment cancer vaccines ▪ HBV and liver cancer ▪ Nanotechnology ▪ Nanocarrier advantages ▪ Doxorubicin HCl liposome ▪ What are clinical trials? ▪ Before the clinical trials ▪ Types of clinical trials ▪ Why do we need clinical trials? ▪ Why a drug fails in clinical trials ▪ Design of clinical trials ▪ Choosing the right endpoint ▪ Review boards ▪ Review board contact information ▪ Clinical trial phases ▪ Comparison of the trial phases ▪ Should you enroll in a clinical trial?	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

6. Cancer treatments

Unit	Here's what you'll learn	Extra support material
6.1 Introduction to cancer treatments 6.2 Conventional treatments 6.3 Immunotherapy treatment options 6.4 Additional immunotherapies 6.5 Clinical trials 6.6 What to ask your doctor: treatment	▪ Caution with clinical trials ▪ Benefits of clinical trials ▪ Finding clinical trials near you	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

7. Cancer classification

Unit	Here's what you'll learn	Extra support material
7.1 Cancer classification 7.2 What to ask your doctor: cancers	▪ Why learn cancer classification? ▪ Cancer classification ▪ Histological cancer classification ▪ Major tissue types ▪ Carcinomas ▪ Carcinoma subtypes ▪ Tissues sites of common carcinomas ▪ 1. Sarcomas ▪ Connective tissue ▪ Common types of sarcomas ▪ 2. Hematopoietic cancers ▪ Bone marrow ▪ Platelets ▪ Red blood cells ▪ White blood cells ▪ White blood cells types	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

7. Cancer classification

Unit	Here's what you'll learn	Extra support material
7.1 Cancer classification 7.2 What to ask your doctor: cancers	▪ Leukaemia ▪ Lymphatic system cancer ▪ Lymphomas ▪ Myeloma ▪ Hematopoietic cancers ▪ 3. Neuronal tumours ▪ Glial cancers protect neurons ▪ Brain cancer ▪ Neuronal tumour types ▪ "Other" cancer types ▪ Melanomas ▪ Teratomas	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ What to ask your doctor handouts

BONUS

8. Manuals for the prevention of common cancers

Unit	Here's what you'll learn	Extra support material
8.1 Manual for solid cancer prevention 8.2 Manual for blood and lymph cancer prevention	▪ About this unit ▪ Things to note ▪ Incidence vs mortality ▪ Worldwide cancer rates ▪ Non-melanoma skin cancer ▪ Lung cancer ▪ Epidemiology ▪ Subtypes ▪ Risk factors: smoking ▪ Lung cancer and smoking ▪ Risk factors: other than smoking ▪ Lung cancer summary ▪ Lung cancer prevention tips ▪ Breast cancer ▪ Epidemiology ▪ Anatomy of the breast ▪ Subtypes	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

BONUS

8. Manuals for the prevention of common cancers

Unit	Here's what you'll learn	Extra support material
8.1 Manual for solid cancer prevention 8.2 Manual for blood and lymph cancer prevention	▪ Breast cancer cell receptors ▪ Molecular subtypes ▪ Risk factors: mutations ▪ Myth Buster: Do tight bras cause cancer? ▪ Risk factors: density and hormones ▪ Risk factors: reproduction ▪ Risk factors: pregnancy ▪ Protection factors ▪ Breast cancer summary ▪ Breast cancer prevention tips ▪ Colorectal cancer ▪ Anatomy of the colon ▪ Epidemiology ▪ Subtypes ▪ Diagnosis ▪ Colorectal cancer summary ▪ Colorectal cancer prevention tips	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

BONUS

8. Manuals for the prevention of common cancers

Unit	Here's what you'll learn	Extra support material
8.1 Manual for solid cancer prevention 8.2 Manual for blood and lymph cancer prevention	▪ Prostate cancer ▪ Anatomy of the prostate ▪ Epidemiology ▪ Prostate cancer summary ▪ Prostate cancer prevention tips ▪ Pancreatic cancer ▪ Anatomy of the pancreas ▪ Epidemiology ▪ Pancreatic cancer summary ▪ Pancreatic cancer prevention tips ▪ Skin cancer ▪ Melanoma ▪ Epidemiology ▪ Diagnosis ▪ ABCDEs of skin cancer detection ▪ Skin cancer summary ▪ Skin cancer prevention tips	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

BONUS

8. Manuals for the prevention of common cancers

Unit	Here's what you'll learn	Extra support material
8.1 Manual for solid cancer prevention 8.2 Manual for blood and lymph cancer prevention	▪ About this unit ▪ Things to note ▪ Leukaemia ▪ Common symptoms ▪ Risk factors: radiation ▪ Risk factors: chemicals ▪ Diagnosis ▪ Types of leukaemia ▪ Origin of blood cells ▪ Acute Myeloid Leukaemia (AML) ▪ Acute Lymphocytic Leukaemia (ALL) ▪ Chronic Myeloid Leukaemia (CML) ▪ Chronic Lymphoblastic Leukaemia (CLL) ▪ Leukaemia types summary ▪ Leukaemia treatment ▪ Philadelphia chromosome ▪ Tyrosine kinase inhibitors	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

BONUS

8. Manuals for the prevention of common cancers

Unit	Here's what you'll learn	Extra support material
8.1 Manual for solid cancer prevention 8.2 Manual for blood and lymph cancer prevention	▪ Lymphatic system ▪ Lymphoma ▪ Lymph nodes ▪ Non-Hodgkin Lymphoma (NHL) ▪ NHL risk factors ▪ Hodgkin Lymphoma (HL) ▪ HL risk factors ▪ Lymphoma summary ▪ Myeloma ▪ Risk factors ▪ Diagnosis ▪ Treatment options ▪ Myeloma summary ▪ Blood cancer prevention tips	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

9. Risk factors of ageing and disease

Unit	Here's what you'll learn	Extra support material
9.1 Introduction to risk factors 9.2 Lifestyle risk factors 9.3 Environmental risk factors 9.4 Is stress a risk factor?	▪ Causes of cancer ▪ Most cancers may be preventable ▪ Causes vs. risk factors ▪ X causes cancer ▪ Common risk factors for cancer ▪ Common risk factors for ageing ▪ Types of risk factors ▪ What are carcinogens? ▪ Carcinogens sometimes increase risk ▪ IARC carcinogens ▪ IARC classifications ▪ Common Group 1 carcinogens ▪ Common Group 2A carcinogens ▪ Common Group 2B carcinogens ▪ Common carcinogens ▪ Coffee is a carcinogen?	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

9. Risk factors of ageing and disease

Unit	Here's what you'll learn	Extra support material
9.1 Introduction to risk factors 9.2 Lifestyle risk factors 9.3 Environmental risk factors 9.4 Is stress a risk factor?	▪ Carcinogens in coffee ▪ Avoid roasted coffee ▪ Coffee decreases cancer risk ▪ Anti-oxidants in coffee ▪ What about decaf? ▪ Coffee recommendations ▪ Hot beverages are carcinogenic ▪ Caffeic acid: group 2B carcinogen ▪ Caffeic acid decreased risk ▪ Natural carcinogens: oestrogen ▪ Hormone Replacement Therapy ▪ Smoking ▪ Carcinogens in tobacco smoke ▪ Tobacco carcinogens ▪ But chewing tobacco is ok right? ▪ Is nicotine and e-cigarettes safe? ▪ Loss of DNA repair	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

9. Risk factors of ageing and disease

Unit	Here's what you'll learn	Extra support material
9.1 Introduction to risk factors 9.2 Lifestyle risk factors 9.3 Environmental risk factors 9.4 Is stress a risk factor?	▪ p53 signalling ▪ Smoking increases ageing process ▪ Smoking increases wrinkles ▪ Alcohol ▪ Alcohol increases cancer risk ▪ Alcohol and cancer risk ▪ Alcohol and your body ▪ Good vs bad alcohol? ▪ Alcohol + Smoking ▪ Alcohol and ageing ▪ Sex causes cancer! ▪ HPV ▪ Factors that influence risk ▪ Stress ▪ Chronic stress and metastasis ▪ Chronic stress and immunity ▪ Indirect cancer risk	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

9. Risk factors of ageing and disease

Unit	Here's what you'll learn	Extra support material
9.1 Introduction to risk factors 9.2 Lifestyle risk factors 9.3 Environmental risk factors 9.4 Is stress a risk factor?	▪ Myth Buster: cell phones cause cancer? ▪ Cell phones: group 2B carcinogen ▪ Radiation waves ▪ The data behind cell phone cancer ▪ Cell phones and brain cancer ▪ Preventing cell phone cancer ▪ Myth Buster: microwaves cause cancer ▪ Testing microwaves ▪ Proper use of microwaves ▪ Ultraviolet rays ▪ UV penetration into skin layers ▪ Who is at risk? ▪ Occupational Cancer ▪ Asbestos exposure ▪ Benzene exposure ▪ Benzene in common drinks ▪ Common exposure and cancer risk	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

9. Risk factors of ageing and disease

Unit	Here's what you'll learn	Extra support material
9.1 Introduction to risk factors 9.2 Lifestyle risk factors 9.3 Environmental risk factors 9.4 Is stress a risk factor?	▪ How to decrease risk ▪ About this unit ▪ Types of stress ▪ 4 categories of physiological stress ▪ Physiological and oxidative stress ▪ Stress hormones ▪ The three main stress hormones ▪ The glucocorticoid hypothesis ▪ Stress hormone functions ▪ Other stress hormones ▪ Oxytocin the love hormone ▪ Chronic stress ▪ Acute stress ▪ Oxidative stress ▪ Stress pathways are linked ▪ Stress and the mitochondria ▪ Mitochondria damage and disease	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

9. Risk factors of ageing and disease

Unit	Here's what you'll learn	Extra support material
9.1 Introduction to risk factors 9.2 Lifestyle risk factors 9.3 Environmental risk factors 9.4 Is stress a risk factor?	▪ Your brain under distress ▪ Chronic stress and telomeres ▪ Longer stress = shorter telomeres ▪ Chronic stress and progression ▪ Stress increases metastasis ▪ How to decrease stress	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

10. Dietary prevention strategies

Unit	Here's what you'll learn	Extra support material
10.1 Nutritional influences on ageing and cancer: superfoods, fibre, and probiotics 10.2 Nutritional influences on ageing and cancer: soy and sugar 10.3 Food preparation 10.4 Food additives	▪ About this module ▪ Overview of what is to come ▪ Good diet = decreased risk ▪ Diet and cancer risk ▪ Carcinogens in food ▪ Interactions in our body ▪ The health of celery ▪ Myth Buster: Do GMOs cause cancer? ▪ Superfoods have super powers ▪ Benefits of superfoods ▪ Myth Buster: Are superfoods the cure? ▪ Diets rich in plant based foods ▪ Superfood examples ▪ Adding superfoods to your diet ▪ What is fibre? ▪ Fibre-rich foods ▪ Fibre and disease prevention	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

10. Dietary prevention strategies

Unit	Here's what you'll learn	Extra support material
10.1 Nutritional influences on ageing and cancer: superfoods, fibre, and probiotics 10.2 Nutritional influences on ageing and cancer: soy and sugar 10.3 Food preparation 10.4 Food additives	▪ Fibre and colorectal cancer ▪ Fibre and colon and rectal cancers ▪ Fibre and digestion ▪ Fibre and cancer prevention ▪ Adding fibre to your diet ▪ Probiotic dietary strategies ▪ Food sources of prebiotics ▪ Food sources of probiotics ▪ Probiotics prevent DNA damage ▪ Reducing incidence ▪ Soybeans ▪ Isoflavones and oestrogen in soy ▪ Isoflavones and cancer risk ▪ Soy and prostate cancer ▪ Soy and breast cancer risk ▪ Western vs Eastern consumption ▪ Isoflavone amounts in soy food	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

10. Dietary prevention strategies

Unit	Here's what you'll learn	Extra support material
10.1 Nutritional influences on ageing and cancer: superfoods, fibre, and probiotics 10.2 Nutritional influences on ageing and cancer: soy and sugar 10.3 Food preparation 10.4 Food additives	▪ Soy as an oestrogen mimic ▪ Soy consumption in women ▪ What does this mean for you? ▪ How much soy should you eat? ▪ Monitoring soy in your diet ▪ Sugar anyone? ▪ What is sugar? ▪ Myth Buster: Does sugar feed cancer? ▪ Excess sugar ▪ Sugar and cancer risk ▪ Sugar from fruits ▪ High-sugar foods to avoid ▪ Monitoring processed sugar in your diet ▪ What are pesticides? ▪ Pesticides and cancer in children ▪ Glyphosate ▪ Pesticides in agriculture	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

10. Dietary prevention strategies

Unit	Here's what you'll learn	Extra support material
10.1 Nutritional influences on ageing and cancer: superfoods, fibre, and probiotics 10.2 Nutritional influences on ageing and cancer: soy and sugar 10.3 Food preparation 10.4 Food additives	▪ Pesticides and workers ▪ Minimizing exposure ▪ "I only eat organic food" ▪ Natural vs man-made chemicals ▪ The poison is in the dose ▪ …and the species ▪ Pesticides in produce ▪ What are hormones? ▪ Physiologic effect of growth hormones ▪ Hormones in meat ▪ Myth Buster: Hormones in meat = early puberty? ▪ Hormones in adults ▪ What is BPA? ▪ BPA and cancer ▪ More carcinogens in plastics ▪ Replace old plastic containers	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

10. Dietary prevention strategies

Unit	Here's what you'll learn	Extra support material
10.1 Nutritional influences on ageing and cancer: superfoods, fibre, and probiotics 10.2 Nutritional influences on ageing and cancer: soy and sugar 10.3 Food preparation 10.4 Food additives	▪ Reducing risk ▪ Reducing BPA products ▪ What are food additives? ▪ What is food colouring? ▪ Food dyes and cancer risk ▪ Regulations of food dyes ▪ Why the differences? ▪ Reducing food dye products ▪ Aspartame (E951) ▪ Aspartame and cancer ▪ Consuming aspartame ▪ Reducing aspartame products ▪ BHA and BHT ▪ BHA as a carcinogen ▪ BHA is also an antioxidant ▪ What is acrylamide? ▪ Cooking creates acrylamide	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

10. Dietary prevention strategies

Unit	Here's what you'll learn	Extra support material
10.1 Nutritional influences on ageing and cancer: superfoods, fibre, and probiotics 10.2 Nutritional influences on ageing and cancer: soy and sugar 10.3 Food preparation 10.4 Food additives	▪ Crips and cancer? ▪ Cooling oil ▪ Omega 3:Omega 6 ▪ Omega 3:Omega 6 and cancer ▪ High-heat cooking oil and cancer ▪ Saturated fat in oils ▪ Oils high in polyunsaturated fat ▪ Which oils should you use? ▪ Suggested oils for cooking or off-heat ▪ The Nitrogen Cycle ▪ Uses of Nitrate and Nitrites ▪ Nitrate, nitrites and kidney cancer ▪ Nitrate, nitrites and cancer	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

11. Importance of finding your healthy weight

Unit	Here's what you'll learn	Extra support material
11.1 Finding your healthy weight 11.2 Obesity and cancer risk	▪ How to measure weight ▪ Body mass index ▪ Calculate your own BMI ▪ Athletes and BMI values ▪ Ethnicity and BMI values ▪ Overweight increases health risks ▪ Fat cells increase oxidative stress ▪ Obesity increases ageing ▪ Obesity and cancer risk ▪ Oxidative stress ▪ ROS, obesity, and cancer link ▪ Obesity contributes to cancer ▪ Pre-menopause, obesity, and BC ▪ Ethnicity matters ▪ Post-menopause, obesity, and BC ▪ Obesity and colon cancer ▪ Getting to your ideal weight	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ Practical Assignment ▪ Worksheet

11. Importance of finding your healthy weight

Unit	Here's what you'll learn	Extra support material
11.1 Finding your healthy weight 11.2 Obesity and cancer risk	▪ Cancer risk and being overweight ▪ IGF-1 regulates growth ▪ Effect of IFG-1 on the cell ▪ IGF-1 increases cancer and ageing ▪ Reducing IGF-1 levels ▪ IGF-1 and obesity in BC ▪ Diet increases cancer in mice ▪ IGF-1and obesity in PC ▪ Stage 4 colorectal cancer survival ▪ Mortality risk and BMI ▪ Childhood obesity ▪ Decreasing worldwide obesity	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ Practical Assignment ▪ Worksheet

12. Metabolic syndrome and blood sugar management

Unit	Here's what you'll learn	Extra support material
12.1 Metabolic syndrome and blood sugar management	▪ What is metabolism? ▪ Summary of human metabolism ▪ What is metabolic syndrome? ▪ Diagnosing metabolic syndrome ▪ Your metabolic syndrome risk ▪ Metabolic syndrome and cancer ▪ Increased cancer rates ▪ The chicken or the egg? ▪ Metabolic syndrome comes first ▪ The anti-aging Sirt1 gene ▪ Risk factors for colon cancer ▪ Metabolic syndrome and ageing ▪ So how can you reduce this? ▪ Excess glucose in the body ▪ Blood sugar and the insulin response ▪ What is the glycaemic index? ▪ GI categories and ranking	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ Low GI Grocery List ▪ My Personal Low GI Grocery List

12. Metabolic syndrome and blood sugar management

Unit	Here's what you'll learn	Extra support material
12.1 Metabolic syndrome and blood sugar management	▪ Managing the glycaemic response ▪ Reducing the GI with fibre ▪ Fibre for a lower GI ▪ High-fat tendencies ▪ Healthy fats for a lower body fat? ▪ Low intake of plant-based foods ▪ Reducing metabolic syndrome risk ▪ Low GI Grocery List ▪ My Personal Low GI Grocery List	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ Low GI Grocery List ▪ My Personal Low GI Grocery List

13. Coeliac disease and gluten sensitivity

Unit	Here's what you'll learn	Extra support material
13.1 Coeliac disease and gluten insensitivity	▪ What is gluten? ▪ Autoimmune disorder ▪ Normal vs damaged villi ▪ Symptoms of coeliac disease ▪ Symptoms of CD pre-diagnosis ▪ CD is a genetic disease ▪ HLA-DQ in CD patients ▪ Increased risk of other disorders ▪ Increased autoimmune disorders ▪ Complications in CD patients ▪ Intestinal lymphoma ▪ Mortality increase in CD patients ▪ 7 years from CD to lymphoma dx ▪ Later age of cancer dx in CD ▪ What about other cancers? ▪ Secondary effects increases risk ▪ Decreased risk of some cancers?	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

14. Caloric restriction, fasting and low-protein diets

Unit	Here's what you'll learn	Extra support material
14.1 Fasting and caloric restriction 14.2 Low-protein diet	▪ Disclaimer ▪ Which fast is for you? ▪ Side effects of fasting and CR ▪ Fasting definition ▪ Caloric restriction definition ▪ What does history say? ▪ CR in non-human animals ▪ The science behind CR ▪ CR and IGF-1 ▪ Understanding IGF-1 and CR ▪ CR and longevity ▪ CR in mice decreases cancer ▪ CR in humans decreases cancer risk ▪ What is intermittent fasting? ▪ Popular intermittent fasts ▪ Fasting during Ramadan	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ Practical assignments ▪ Worksheets

14. Caloric restriction, fasting and low-protein diets

Unit	Here's what you'll learn	Extra support material
14.1 Fasting and caloric restriction 14.2 Low-protein diet	▪ Fasting and prostate cancer ▪ Fasting and breast cancer ▪ Cancer cells avoid signals ▪ Fasting with chemotherapy ▪ Fasting in normal cells ▪ Fasting in cancer cells ▪ Fasting in chemo cancer cells ▪ Chemo target growing cells ▪ Improving radiation treatment ▪ Fasting and TKIs ▪ Resveratrol vs fasting ▪ Summary ▪ Disclaimer ▪ Your body needs protein ▪ What are low-protein diets? ▪ Recommendations of protein: grams ▪ Protein Requirement Calculator: g	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ Practical assignments ▪ Worksheets

14. Caloric restriction, fasting and low-protein diets

Unit	Here's what you'll learn	Extra support material
14.1 Fasting and caloric restriction 14.2 Low-protein diet	▪ Recommendations of protein: % ▪ Protein Requirement Calculator: % ▪ Different than low-caloric ▪ Protein content of foods ▪ Healthy individuals ▪ Low-protein and IGF-1 ▪ GHR mutations ▪ Middle aged on low-protein ▪ Over 65 on high diet ▪ Ratio of nutrients matters ▪ Importance of nutrient ratios ▪ Alzheimer's disease ▪ Slows age-related diseases ▪ Some side effects of low-protein ▪ Protein deficiency ▪ Protein deficiency symptoms	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ Practical assignments ▪ Worksheets

15. Alkaline diet and ketogenic diet

Unit	Here's what you'll learn	Extra support material
15.1 Alkaline diet and ketogenic diets	▪ What is ketosis? ▪ Does ketosis lead to acidemia? ▪ pH and foods ▪ Alkaline diet and cancer ▪ Foods and cancer environment ▪ Our body's pH system ▪ Blood pH scale ▪ How the body maintains blood pH ▪ Complications outside the range ▪ Problems with home pH testing ▪ Chemotherapy and pH ▪ Chemo and alkaline environment ▪ pH changes in your body ▪ Ketogenic diet ▪ The keto food pyramid ▪ Ketosis reduces seizures in children ▪ Eating for ketosis	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

15. Alkaline diet and ketogenic diet

Unit	Here's what you'll learn	Extra support material
15.1 Alkaline diet and ketogenic diets	▪ The process of ketogenesis ▪ Ketogenic diet types ▪ Ketogenic diet and disease ▪ Ketogenic diet and cancer ▪ Ketogenic diet and oxidative stress ▪ KD and cancer risk ▪ KD and metastatic cancer ▪ Maintaining the keto diet ▪ Side effects of the keto diet ▪ Ketogenic diet and longevity ▪ Things to watch out for ▪ Contraindications ▪ Some adverse effects in children ▪ Finding the best diet for you	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

16. Animal food sources

Unit	Here's what you'll learn	Extra support material
16.1 Meat, cancer risk, and longevity 16.2 Fish, cancer risk and longevity 16.3 Dairy, cancer risk, and longevity	▪ Processed and red meat ▪ High meat consumption ▪ Colorectal Cancer ▪ Mechanisms of risk ▪ High-fat diet ▪ Why red meat? ▪ Neu5Gc in red meat ▪ What were the study's results? ▪ Heme in red meat ▪ Mutagens from high-heat cooking ▪ What are HCAs and PAHs? ▪ N-Nitrosamines in processed meats ▪ Hormones in meat ▪ Could it be your genetics? ▪ AICR recommendations ▪ Include nutritious foods ▪ Cooking to reduce risk	▪ Test your knowledge exercises ▪ Your key takeaways

16. Animal food sources

Unit	Here's what you'll learn	Extra support material
16.1 Meat, cancer risk, and longevity 16.2 Fish, cancer risk and longevity 16.3 Dairy, cancer risk, and longevity	▪ Fish and fish oil ▪ Fish and cancer risk ▪ Variability with colon cancer ▪ Decreased blood cancer ▪ Reducing breast cancer ▪ Limiting ovarian and uterine cancer ▪ Increased risk for prostate cancer ▪ Fish oil and cell death ▪ Fish oil and COX-2 ▪ What's the deal with dioxins? ▪ The Seveso disaster ▪ PCBs in fish? ▪ What does mean for you? ▪ So, which species and which source? ▪ How much fish is too much? ▪ What is dairy? ▪ Key nutrients in dairy	▪ Test your knowledge exercises ▪ Your key takeaways

16. Animal food sources

Unit	Here's what you'll learn	Extra support material
16.1 Meat, cancer risk, and longevity 16.2 Fish, cancer risk and longevity 16.3 Dairy, cancer risk, and longevity	▪ Calcium in foods ▪ Calcium content of foods ▪ Dairy and cancer correlations ▪ Love your liver, ditch the dairy? ▪ Let's talk portions ▪ Too much of a good thing? ▪ Dairy and prostate cancer risk ▪ Strength in numbers ▪ Total dairy and breast cancer ▪ Strength in numbers ▪ Stomach cancer: is dairy protective? ▪ Eggs and prostate cancer ▪ One final caveat ▪ What does mean for you?	▪ Test your knowledge exercises ▪ Your key takeaways

17. Pescatarian, vegetarian and vegan diets

Unit	Here's what you'll learn	Extra support material
17. 1 Pescatarian, vegetarian, and vegan diets	▪ Diet terminology ▪ Myth buster: "Plants cured my cancer!" ▪ Vegetarians: decreased cancer risk ▪ Cancer rates lower in India ▪ Seventh-day Adventists in research ▪ Meat and cancer risk ▪ Meat vs fruit intake ▪ Vegetarians in the US ▪ Cancer risk associated with diet ▪ Vegetarians in the UK ▪ Meat-free but increased risk ▪ Diet and colorectal risk ▪ Pescatarians and colorectal cancer ▪ Prostate cancer risk ▪ Vegetarian: decreased PSA ▪ Vegetarian serum stops growth ▪ Breast cancer and soy	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

17. Pescatarian, vegetarian and vegan diets

Unit	Here's what you'll learn	Extra support material
17. 1 Pescatarian, vegetarian, and vegan diets	▪ Breast cancer risk ▪ Hormone changes in vegetarians ▪ Post-menopausal breast cancer risk ▪ Vegetarian breast cancer risk ▪ Lipid breakdown and cancer risk ▪ Does veganism increase apoptosis? ▪ What does this mean for you?	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

18. Vitamins and minerals for optimal health

Unit	Here's what you'll learn	Extra support material
18.1 Vitamins for optimal health 18.2 Minerals for optimal health	▪ What are vitamins? ▪ How do vitamins work? ▪ General observations ▪ Nutrient bioavailability ▪ Abbreviations and measures ▪ Vitamins for cancer and longevity ▪ Precaution with treatment ▪ How to use this guide ▪ About Vitamin A ▪ Vitamin A forms ▪ Vitamin A and cancer risk ▪ Vitamin A and smokers ▪ Vitamin A supplementation ▪ Vitamin A benefits ▪ Vitamin A and ageing ▪ About Vitamin B6 ▪ Vitamin B6 and cancer risk	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

18. Vitamins and minerals for optimal health

Unit	Here's what you'll learn	Extra support material
18.1 Vitamins for optimal health 18.2 Minerals for optimal health	▪ Vitamin B6 and lung cancer ▪ B6 and blood sugar levels ▪ Mechanism of action ▪ About Vitamin B12 ▪ Vitamin B12 and cancer risk ▪ Cobalamin in the blood ▪ Mechanisms of action ▪ Vitamin B12 for vegans ▪ About Vitamin C ▪ Vitamin C and disease ▪ Vitamin C and cancer risk ▪ Vitamin C as an anti-oxidant ▪ IV Vitamin C ▪ About Vitamin D ▪ Action and functions ▪ 10 mins a day or diet ▪ Sunlight and cancer	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

18. Vitamins and minerals for optimal health

Unit	Here's what you'll learn	Extra support material
18.1 Vitamins for optimal health 18.2 Minerals for optimal health	▪ Vitamin D and cancer risk ▪ VDR polymorphisms ▪ Vitamin D deficiency ▪ About Vitamin E ▪ The SELECT studies ▪ Prostate cancer in SELECT ▪ Men and vitamin E supplementation ▪ Vitamin E and cancer risk ▪ Vitamin E and bladder cancer ▪ Vitamin E and ovarian cancer ▪ Vitamin E in normal vs cancer cells ▪ Vitamin E and ageing ▪ About Vitamin K ▪ Vitamin K and prostate cancer ▪ Menaquinones lower risk ▪ Vitamin K and cancer cell lines ▪ Children and vitamin K	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

18. Vitamins and minerals for optimal health

Unit	Here's what you'll learn	Extra support material
18.1 Vitamins for optimal health 18.2 Minerals for optimal health	▪ What are minerals anyway? ▪ About Calcium ▪ Calcium and colorectal cancer risk ▪ Calcium and other cancers ▪ The source matters ▪ About Iron ▪ Plant-based sources of iron ▪ Iron requirements ▪ Iron and cancer ▪ Excess iron and liver cancer ▪ About Selenium ▪ Selenium in SELECT ▪ Selenium and prostate cancer ▪ Selenium and cancer ▪ About Zinc ▪ Zinc and cancer	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

18. Vitamins and minerals for optimal health

Unit	Here's what you'll learn	Extra support material
18.1 Vitamins for optimal health 18.2 Minerals for optimal health	▪ Zinc and prostate cancer risk ▪ Zinc composition in cells	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

19. Phytochemicals and good health

Unit	Here's what you'll learn	Extra support material
19.1 Phytochemicals and good health (part 1) 19.2 Phytochemicals and good health (part 2)	▪ Meaning of phytochemical ▪ No dietary reference values ▪ Phytochemicals in food ▪ How do phytochemicals work? ▪ Phytochemical general functions ▪ Phytochemical classifications ▪ Carotenoids ▪ Phenolics ▪ What to expect in this module ▪ Carotenoid family members ▪ Carotenoid summary ▪ Beta-carotene limits ▪ Beta-carotene and smoking ▪ Lycopene ▪ Lycopene and cancer risk ▪ Carotenoids and pancreatic cancer ▪ Alpha-carotene lowers mortality	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

19. Phytochemicals and good health

Unit	Here's what you'll learn	Extra support material
19.1 Phytochemicals and good health (part 1) 19.2 Phytochemicals and good health (part 2)	▪ Carotenoids inhibit metastasis ▪ Sources of carotenoids ▪ Flavonoids ▪ Flavonoid summary ▪ Catechins and Epicatechins ▪ Tea time ▪ Green tea and cancer prevention ▪ Epigallocatechin gallate (ECGC) ▪ Quercetin ▪ Quercetin in humans ▪ Organosulfides ▪ Organosulfide summary ▪ Allium compounds ▪ Garlic is protective ▪ How to cut an onion ▪ Isothiocyanates (ITCs) ▪ ITCs in the laboratory ▪ Isothiocyanates and human studies	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

19. Phytochemicals and good health

Unit	Here's what you'll learn	Extra support material
19.1 Phytochemicals and good health (part 1) 19.2 Phytochemicals and good health (part 2)	▪ Phenolic acids ▪ Phenolic acid summary ▪ Capsaicin is a carcinogen? ▪ Capsaicin cream ▪ Ellagic acid (EA) ▪ Myth Buster: Is ellagic acid the cure? ▪ Curcumin enhances chemotherapy ▪ Curcumin in humans ▪ Phytoestrogens ▪ Soy products and phytoestrogens ▪ Phytoestrogen summary ▪ Genistein ▪ Caffeic acid ▪ Caffeic acid summary ▪ Lentinan ▪ Lentinan summary ▪ More than 1 phytochemical ▪ Top phytochemical rich foods	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos

20. The holistic approach

Unit	Here's what you'll learn	Extra support material
20.1 Benefits of meditation and yoga 20.2 Benefits of acupuncture, massage, and oils 20.3 Benefits of exercise 20.4 Benefits of sleep	▪ Challenges with these studies ▪ What is meditation? ▪ Mindfulness ▪ One man's story ▪ There's an app for that ▪ Can meditation delay ageing? ▪ Meditation and telomeres ▪ Meditation or group therapy? ▪ Your telomeres love hugs ▪ Mindfulness and immunity ▪ Learn how to meditate ▪ How to meditate ▪ Preparing to meditate ▪ 1 minute meditation practice ▪ What is yoga? ▪ Myth Buster: Only pretzels need apply ▪ Yoga and cancer	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ Practical Assignments ▪ Worksheets

20. The holistic approach

Unit	Here's what you'll learn	Extra support material
20.1 Benefits of meditation and yoga 20.2 Benefits of acupuncture, massage, and oils 20.3 Benefits of exercise 20.4 Benefits of sleep	▪ Yoga and the immune system ▪ Yoga and cortisol ▪ Yoga instruction ▪ Super brain yoga instruction ▪ Super brain yoga instruction (continued 1) ▪ What is acupuncture? ▪ Eastern vs Western views ▪ Risk of bias ▪ Acupuncture and cancer ▪ Chemotherapy-induced nausea ▪ Acupuncture reduces pain ▪ Physiological effect of acupuncture ▪ What is massage therapy? ▪ Massage and stress hormones ▪ Massage and immunity ▪ Massage for cancer patients ▪ Treatment for cancer patients	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ Practical Assignments ▪ Worksheets

20. The holistic approach

Unit	Here's what you'll learn	Extra support material
20.1 Benefits of meditation and yoga 20.2 Benefits of acupuncture, massage, and oils 20.3 Benefits of exercise 20.4 Benefits of sleep	▪ Self-massage ▪ What is aromatherapy? ▪ Use of essential oils ▪ Myth Buster: Is cannabis oil the cure! ▪ Frankincense/ Boswellia sacra ▪ Lemon balm/Melissa officinalis L. ▪ Tea tree oil/ Melaleuca alternifolia ▪ Sage oil/Salvia ▪ Essential oils reference chart ▪ Many benefits of exercise ▪ Exercise guidelines ▪ Example exercises ▪ Does exercise prolong longevity ▪ The inverted J hypothesis ▪ Does the type of exercise matter? ▪ Exercise and longer telomeres ▪ Exercise reduces cancer risk	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ Practical Assignments ▪ Worksheets

20. The holistic approach

Unit	Here's what you'll learn	Extra support material
20.1 Benefits of meditation and yoga 20.2 Benefits of acupuncture, massage, and oils 20.3 Benefits of exercise 20.4 Benefits of sleep	▪ Decreased risk with exercise ▪ Exercise and breast cancer ▪ Incidence, treatment, and mortality ▪ Exercising during treatment ▪ Pre- and post-menopause ▪ Decreased IGF-1 and insulin ▪ Exercise increases apoptosis ▪ Decrease in IBS ▪ Increased immunity ▪ Combination of effects ▪ What does this mean for you? ▪ Stand up for yourself ▪ Making time for a break ▪ Tracking your exercise ▪ Why do we sleep? ▪ Myth Buster: Can you catch up on sleep? ▪ Epworth Sleepiness Scale	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ Practical Assignments ▪ Worksheets

20. The holistic approach

Unit	Here's what you'll learn	Extra support material
20.1 Benefits of meditation and yoga 20.2 Benefits of acupuncture, massage, and oils 20.3 Benefits of exercise 20.4 Benefits of sleep	▪ Types of sleep debt ▪ Cortisol regulation ▪ Melatonin regulation ▪ Cortisol and Melatonin Cycles ▪ Know your chronotype ▪ Lack of sleep and aging ▪ Altered metabolism ▪ Decreased thinking; increased ageing ▪ Lack of sleep and cancer ▪ Sleep debt correlation ▪ Cancer diagnosis affects sleep ▪ Tips for better sleep ▪ What temperature for sleep? ▪ Monitoring your sleep ▪ Which temperature for sleep?	▪ Test your knowledge exercises ▪ Your key takeaways ▪ Videos ▪ Practical Assignments ▪ Worksheets

21. Guidebook to longevity and disease prevention

Unit	Here's what you'll learn	Extra support material
21.1 Guidebook to longevity and disease prevention	▪ Cancer Prevention and Longevity Assessment ▪ Take action now ▪ Family/Self check ▪ General health ▪ Lifestyle ▪ Diet ▪ Prevention ▪ Understanding the answers ▪ 24-hours food recall ▪ 24-hour Food Recall Diary ▪ 24-hour Food Recall Diary Example ▪ What are your goals? ▪ Goal setting ▪ How to improve lifestyle habits ▪ Make yourself accountable ▪ How to alter your lifestyle	▪ Cancer Prevention and Longevity Assessment ▪ Practical Assessments ▪ Worksheets ▪ Shopping List

21. Guidebook to longevity and disease prevention

Unit	Here's what you'll learn	Extra support material
21.0 Guidebook to longevity and disease prevention	▪ The key is to start ▪ How to improve your diet ▪ Tips for meal planning ▪ Self-help ▪ Daily Action Tracker ▪ Daily Action Tracker Example ▪ Daily Food Diary ▪ Daily Food Diary Example ▪ Weekly Food Planner ▪ Weekly Checklist ▪ Plant based meal ideas ▪ Take action now ▪ Healthy Life Shopping List ▪ My Personal Shopping List ▪ Points to remember	▪ Cancer Prevention and Longevity Assessment ▪ Practical Assessments ▪ Worksheets ▪ Shopping List

21. Guidebook to longevity and disease prevention

Unit	Here's what you'll learn	Extra support material
21.0 Guidebook to longevity and disease prevention	▪ Food sources: antioxidants ▪ Food sources: vitamins ▪ Food sources: minerals ▪ Food sources: phytochemicals	▪ Cancer Prevention and Longevity Assessment ▪ Practical Assessments ▪ Worksheets ▪ Shopping List

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