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Mini Review

Dietary Influence on Carcinogenesis

AF Ogori[1]* and MO Eke[2]

[1]*Department of Home Science, Faculty of Agriculture, Federal University, Gashua, Gashua, Yobe State, Nigeria*

[2]*Department of Food Science and Technology, Federal University of Agriculture, Makurdi, Benue State, Nigeria*

***Corresponding Author**: AF Ogori, Department of Home Science, Faculty of Agriculture, Federal University, Gashua, Gashua, Yobe State, Nigeria.

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Abstract

Cancer is a disease which is regulated genetically. Fundamentally, a disorder in neoplasia or adjacent or surrounding cells death.

Keywords: *Cancer; Neoplasia; Dietary Habits*

Introduction

Cancer is a disease which is regulated genetically. Fundamentally, a disorder in neoplasia or adjacent or surrounding cells death. This results from expression of inappropriate genes which alter the physical appearance of the transformed tissue and confer properties of abnormal growth, invasiveness and the potential for metastasis or final cell death [1]. These inducers agents could be chemical, toxins, environmental activities or influences and dietary habits. There exists cancer of the breast, skin, tongue, colon, kidney etc.

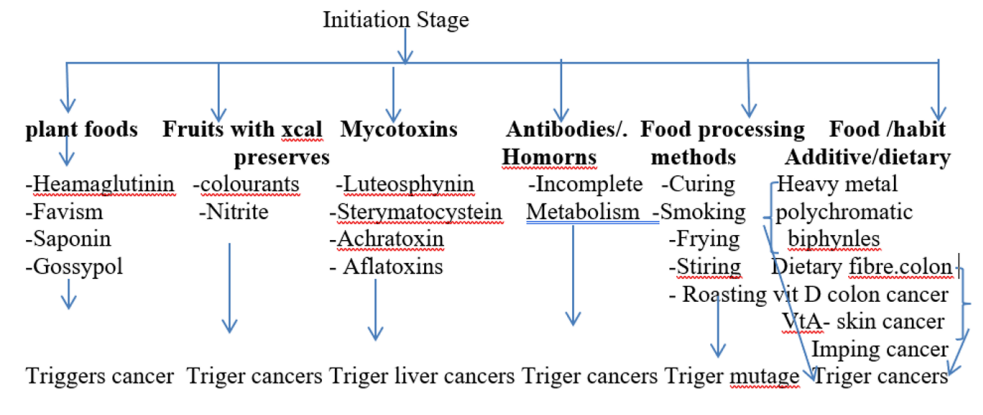
Stages of carcinogenesis

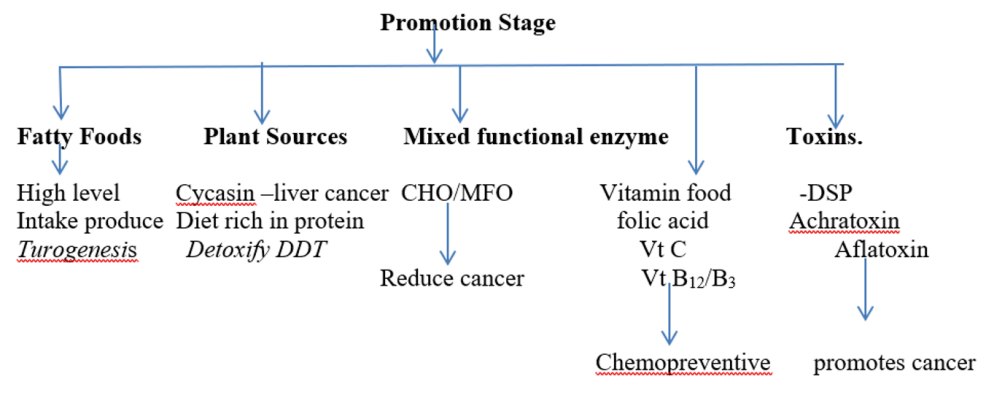
The stage of initiation: Chemical induced carcinogenesis, the initial step is the reaction of DNA with electrophilic or free radical moieties or molecules to form adducts or binds. These binders might be called fixation additives with no measurable threshold or dose**.** This stage is not irreversible until the body cell mutation is fixed by DNA replication.

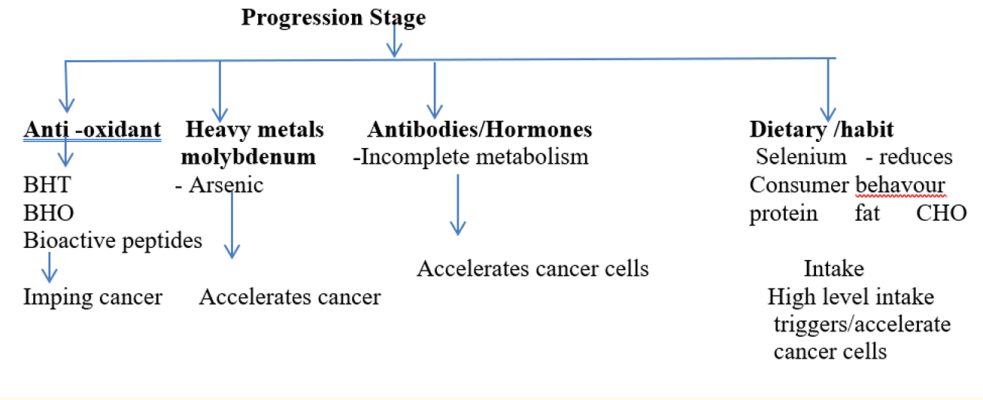
The stage of promotion: Cancer Promoting agents increase the risk of cancer development here by increasing the rate of proliferation of normal cells death and by selectively increasing the growth of initiated cells by advancing maximal response threshold. This stage is reversible and is environmentally modulated.

The stage of progression: Here physical cell transpositions and other changes may occur which alter the genomic environment of the cell, organ or tissue and result in marked changes in growth rate, invasiveness, metastatic capability and membrane composition as a result of cell depletion and irreversible progression caused by cell or tissue instability. Here it is characterized by cell, tissue and organ instability and the development of irreversible progression, damaged, death and surrounding malignant cells [2,3].

The initiation, promotion and progression during carcinogenesis lead to matured cancer. Below schematic depicts dietary influences at various stages of carcinogenesis.







Conclusion

Dietary influence on cancer has been studied and is being studied. Dietary moieties have been experimented to reduce or promote and sometimes progress cancer either directly or using other chemical or microbial subtractions at initiation, promotion and progressive stages. However, food habits, food and source habitat, proper and adequate dieting at deficiencies and detoxification activity levels of nutrient can primarily imping cancer initiation.

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