**Okerewa Alice**

**Bch306 assignment**

**Question : Write on the various ways to assess the integrity of liver following an exposure to a named toxicant**

Named toxicant : AFLATOXIN

Ways of access the integrity of liver

This includes

1 biochemical

2 hematologic evaluations

**Biochemical parameters**: Some of the biochemical markers such as serum bilirubin, alanine amino transferase, aspartate amino transferase, ratio of aminotransferases, alkaline phosphatase, gamma glutamyl transferase, 5′

**What are aflatoxins?**

Aflatoxins are a family of toxins produced by certain fungi that are found on agricultural crops such as maize (corn), peanuts, cottonseed, and tree nuts. The main fungi that produce aflatoxins are Aspergillus flavus and Aspergillus parasiticus, which are abundant in warm and humid regions of the world. Aflatoxin-producing fungi can contaminate crops in the field, at harvest, and during storage.

**Which cancers are associated with exposure to aflatoxins?**

Exposure to aflatoxins is associated with an increased risk of liver cancer.

**How can aflatoxin exposure be reduced?**

You can reduce your aflatoxin exposure by buying only major commercial brands of nuts and nut butters and by discarding nuts that look moldy, discolored, or shriveled. To help minimize risk, the U.S. Food and Drug Administration (FDA) tests foods that may contain aflatoxins, such as peanuts and peanut butter. To date, no outbreak of human illness caused by aflatoxins has been reported in the United States, but such outbreaks have occurred in some developing countries.

**Test for aflatoxin**

Aflatoxins. Aflatoxin, a toxin from a naturally occurring mold, is a Group 1 carcinogen proven to cause cancer in humans

marker enzyme such as glutathione s\_transferase can be use to test for complete diagnosis

Several analytical methods for detecting AFs in food samples have been mostly based on high‐performance liquid chromatography (HPLC)/fluorescence, tandem mass spectroscopy, and real‐time mass spectrometry.