FOOD POISONING WITH CHEMICALS

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FOOD POISONING

Food poisoning is a condition occures when someone gets sick from eating food or drink that has gone bad or is contaminated

There are two kinds of food poisonings

By toxic agents

By infectious agents

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Everyone is eating not natural, but artificial food which are chemically modified in various ways.
Chemical ingredients like preservatives, artificial colours, flavours and various other agents are used in the food industry

Eat a fresh, natural diet

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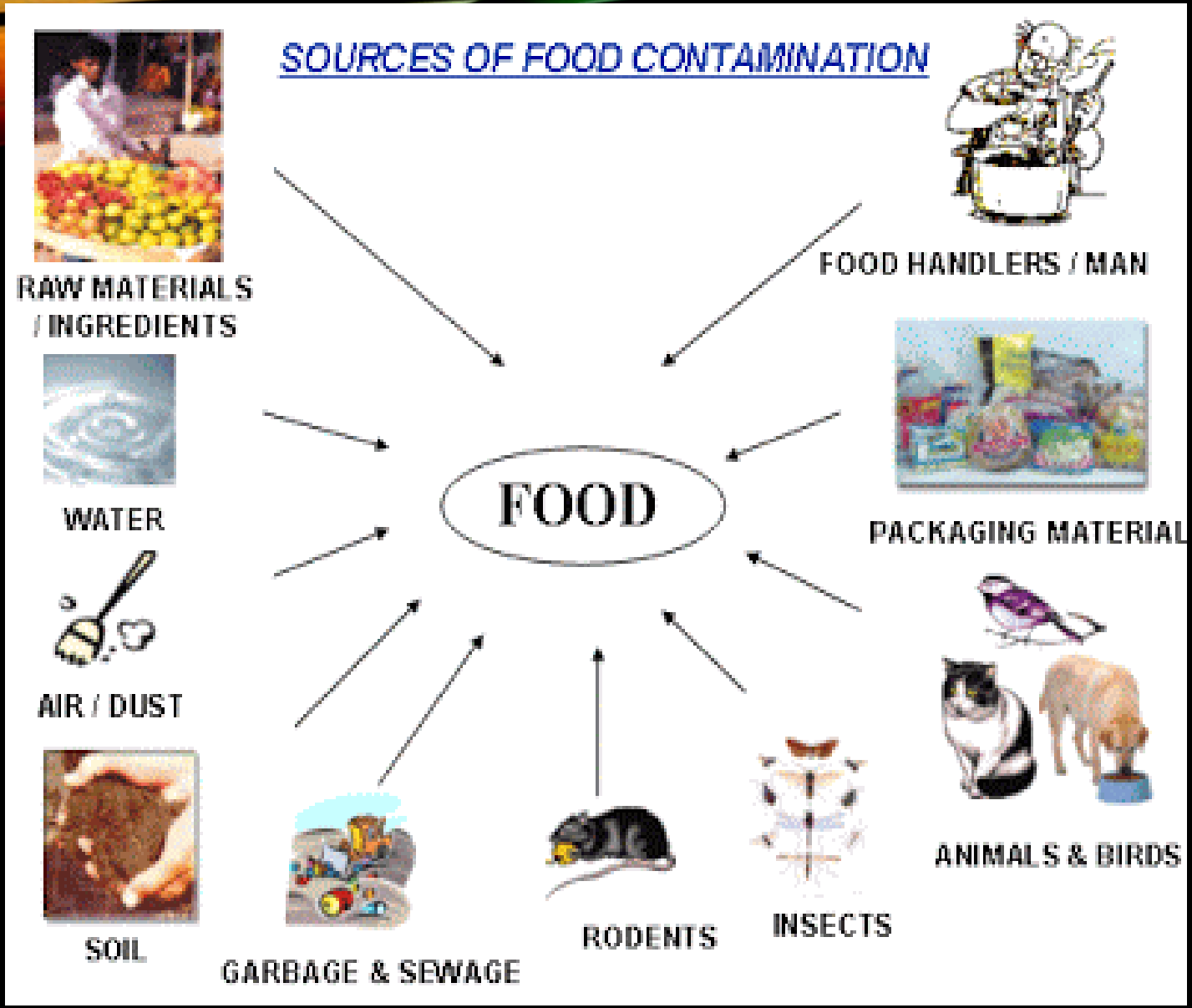

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Food additives

Defined as chemical substances deliberately added to food, directly or indirectly, in known or regulated quantities, for purposes of assisting in the processing of food, preservation of food, or in improving the flavour, texture, or appearance of food

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The food additives can be classified into

Preservatives,
Antioxidants,
Flavours,
Flavour enhancers,
Food colourings,
Sweeteners,
Vitamins, etc.

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HARMFUL FOOD ADDITIVES YOU MUST AVOID

MONOSODIUM GLUTAMATE (MSG)

Canned Food

Salad Dressings

ARTIFICIAL COLORING

Candies

Ice cream

HIGH FRUCTOSE CORN SYRUP

BROMINATED VEGETABLE OIL (BVO)

Potato Chips

Soda

ASPARTAME

Yogurt

Chewing Gum

BUTYLATED HYDROXYANISOLE
BUTYLATED HYDROXYTOLUENE

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E - Numbers

Thousands of food additives are known with different names (trade and generic) and some names are quite long to be written on a label

European Union has classified food additives into different groups and given a unique number for its identification, which is called as E-number

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A range of E-numbers are given for the following categories of food additives

E100 - E199 Colours
E200 - E299 Preservatives
E300 - E399 Antioxidants, Acidity regulators
E400 - E499 Thickeners, Stabilisers, Emulsifiers
E500 - E599 Acidity regulators, Anti-caking agents
E600 - E699 Flavour enhancers
E700 - E799 Antibiotics
E900 - E999 Miscellaneous
E1000 - E1599 Additional chemicals

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Food items prohibited to add flavours.

tea leaves,
coffee,
baking powder,
bakery products,
margarine,
vinegar,
white sugar,
products with cocoa,
brown sugar,
dairy products, milk and milk powder,
wine made of fruits,
food products with malt,
spices, cereals, fats and oils,
ice cream, pasta, noodles,
fish, meat, vegetables and fruits

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Sweeteners

Natural sugars are an important class of food additives that give sweetness and energy

Table sugar obtained from sugar cane is a sweet-tasting carbohydrate called sucrose

Health problems including tooth decay, obesity and diabetes may occure

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Food preservatives

Preservatives

- Substances added to food to slow down or prevent the growth of microorganisms.
- Examples:

  Salt, vinegar, sugar, sodium benzoate, sodium nitrate, sulphur dioxide

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Common food preservatives

Chemical Preservatives

- Different chemical preservatives are used, which involves
  1. Traditional chemical food preservatives
     - Sugar
     - Salt
  2. Acidulants
     - Benzoic acid
     - Sorbic acid
     - Lactic acid
  3. Gaseous chemical food preservatives/ leavening agents
     - Sulphur dioxide and sulphites
     - Carbondioxide

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Antioxidants

Ascorbic acid (vitamin C)

Citric Acid

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Flavours and flavour enhancers

Flavour enhancers increase the desirable taste of food when used at levels below their independent detection thresholds

Monosodium glutamate / (MSG)

MSG is a sodium salt of the naturally occurring non-essential amino acid, glutamic acid, with the trade names of Ajinomoto, Vetsin and Accent

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Monosodium glutamate / (MSG)

It was once predominately made from wheat gluten, but is now mostly made from bacterial fermentation

MSG is safer for most people when eaten at customary levels

Some people may have MSG intolerance which causes "MSG symptom complex" and a worsening of asthmatic symptoms, migraine headaches, food allergies in children, obesity and hyperactivity in children

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Monosodium glutamate (E/INS 621),
Disodium 5' guanylate (E/INS 627) or
Disodium 5' inosinate (E/INS 631) is used in any food product it should be indicated on the label

Also the usage of the above flavours for infants' food products (below 3 years) is prohibited

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Read the label

Avoid common food products that may contain small amounts of MSG if you are highly sensitive to MSG

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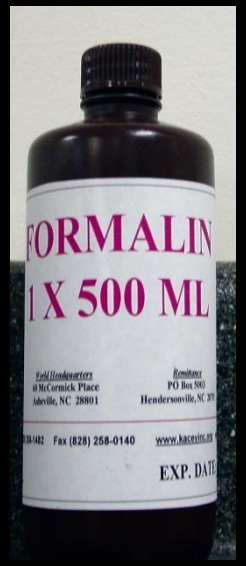
Formaldihyde / Formalin

Formalin is made by dissolving formaldehyde gas in water and it is a colourless and strong smelling liquid



Formalin is a chemical used in the textile, plastic, paper and construction industry and for embalming corpses

Once formalin is used on food it cannot be removed by washing or even cooking

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Formalin could cause

Serious headache , giddiness,
Stomach ache
Dehydration
Severe pain in mouth, inflammation, irritation in the Mouth lead to mouth ulcers, and throat ulcers
Vomiting , diarrhoea
Chest pain
Liver and lung problems,
Cancers
Death also were reported

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HOW TO IDENTIFY FORMALINATED FRUITS

A fresh fruit is always firm or soft on touch.
Skin shows natural look which changes day by day

A fruit dipped in formalin solution feels hard on touch. Colour of the fruits skin becomes dull and will not change over time

Usually the smell of fruits attract many insects. So, fresh fruits are surrounded by many fruit loving insects

But fruits with formalin, are free from flies, bees, ants or any other fruit loving insects

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How to identify formalin treated fruits

Smell them, the formaldehyde gives a feeling of burning nose

To be safe, before cooking, washing well is highly recommended

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HOW TO IDENTIFY FORMALINATED FISH

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HOW TO IDENTIFY FORMALIN TREATED FISH AND DRY FISH

- No specific smell and no flies on fish
- Rubbery and hard texture on pressing the fish and no soft texture
- Eyes not bright and sparkling, gills are bright red, with hard scales
- Dry fish hard and whitish without a smell
- Dry fish shinning without any worms on surface
- Burning sensation of throat and stomach after eating formalin treated dry fish

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Check for Formalin in Curd

Turn the pot upside down. If the curd stays firm and the contents don't spill out Do not buy

If the coating (yodaya) on top is thick and curd can be cut into slices, Do not buy
Look for the date of expiry

If it has a long shelf life of several months - sometimes as long as 6-9 months, it is bound to be laced with plenty of formalin to give it a long shelf life

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To Reduce Intake of Pesticides Contaminated Foods

It is difficult for a consumer to determine whether vegetables or fruits contain pesticide residues as often they do not have any noticeable smell, taste or visual defect

Grow Your Own Fruits and Veggies In Your Garden

Use only Organic Repellents for your Garden

Always wash the product before eating them

Identify the fruits and vegetables with the highest pesticide load

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Steps to be taken to reduce dietary contamination from pesticides

- Thoroughly rinse and scrub fruits and vegetables
- Peel them if necessary
- Remove outer leaves of leafy vegetables, such as cauliflower, cabbage
- Trim fat from meat, poultry and fish; discard oils and fats in broths and drippings
- Throw back the big fish as the little ones have less time to take up and concentrate pesticides and other harmful residues

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USE OF ETHEPHONE IN FRUIT RIPENING

Consuming fruits is a very healthy habit, and in the past ,fruits have been ripen naturally and eaten, but at present due to the demand and increased selling of fruits for more profits, majority of fruits are been prematureally ripen by chemicals

Due to this chemical usage for fruits ripping various short term and long term health hazards identified

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IDENTIFICATION OF FRUITS TREATED BY EXCESS ETHEPHON

- Absence of smooth, surface and patches, signs of invasion by insects
- Presence of evenly ripen smooth, regular surface without wrinkles and shiny
- Presence of dark yellow colour in the outer surface and dark green raw area when cut, or yellow colour restricted only to outer surface
- Appearance of green patches on yellow surface of the fruits
- Absence of Juice inside the fruits
- Presence of artificial smell and taste

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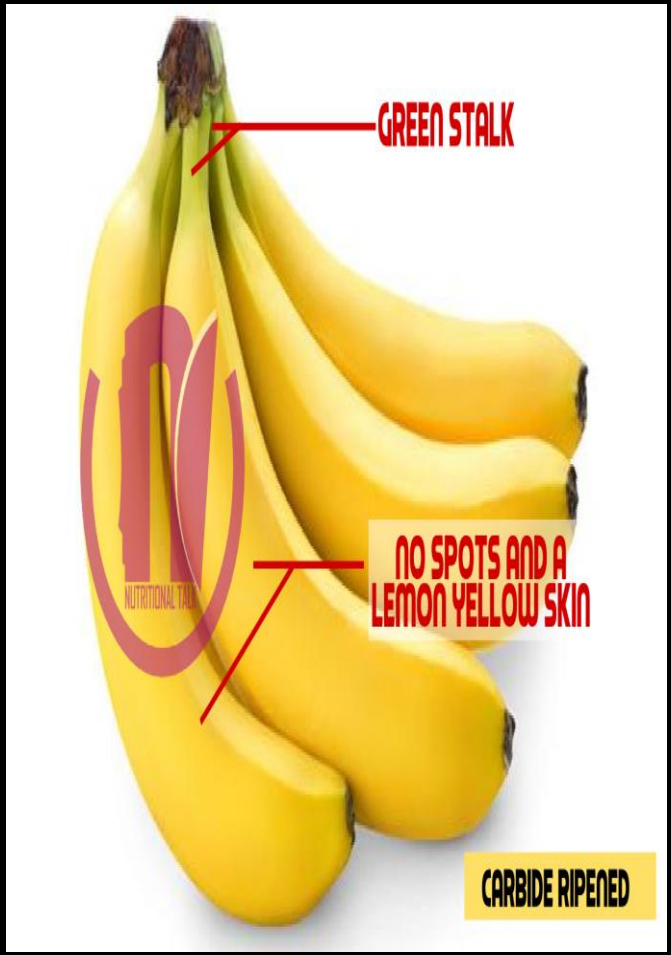

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HEALTH HAZARDS OF CHEMICALLY TREATED FRUITS

- Burning sensation and ulceration of mouth , stomach , throat
- Vomiting and Diarrhoea with or without bleeding
- Patches on the skin
- Permanent damage to eyes
- Body Weakness
- Numbness of Hands
- Cough
- Headache
- Poor sleep

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Labelling of Food

Generally require that all food ingredients, including direct additives, be listed on the package label by their common names in order of weight Nutrition information is also required

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CONTENTS OF A FOOD LABEL

Label should be clearly, permanently printed and pasted on the front of the pack

Food pack main table should contain below mentioned statements

- Common Name of the food item should be clearly mentioned at least in 2 Languages on the Label
- If there is a Trade name or specific name to the product it should be mentioned at least in 1 or more language

❖ **How and where to store and how to use (usually Refrigerated food should store between 25 to 30 Temperature)**

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- Below mentioned details should be indicated at least in one or more language in either one table on a label

- **Registration No**
- **Batch No or symbol No**
- **Date of Expire**
- **Date Manufacture**
- **In Re- packaging after importing , date of manufacture and date of Re- package**
- **List of of the product and their common names and quantities used in order to identify easily.**
- **Name and the Address of the manufacturer and packaging parson or distributor**
- **For imported products Name and Address of the importer, packaging person, and distributor with the country of manufacturing.**

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