#### Food Adulteration

- Food adulterants
- Health effects
- Adulterant detection tests

#### What is food adulteration?

Food adulteration is the act of intentionally debasing the quality of food offered for sale either by the admixture or substitution of inferior substances or by the removal of some valuable ingredient

#### Food is declared adulterated if:

- a substance is added which depreciates or injuriously affects it
- cheaper or inferior substances are substituted wholly or in part
- any valuable or necessary constituent has been wholly or in part abstracted
- it is an imitation
- it is coloured or otherwise treated, to improve its appearance or if it contains any added substance injurious to health

# Some common adulterants and the diseases caused by them

Milk: Cow/buffalo milk can be adulterated with

starch, milk powder and urea

**Health effect:** 

Cancer or acute renal failure



### Tur dal, Turmeric powder, mixed spices, saffron

Adulterants: Metanil yellow, a non-permitted color is a common adulterant in food items like laddu, tur dal and turmeric.

Health effect: tumor and cancer



#### Ghee

Adulterants: Ghee essence is used in vanaspati or cheaper oils and passed off as pure ghee. This type of ghee will not solidify like normal ghee. It may also not have that grainy texture of pure ghee.

#### **Health effect:**

Cancer or acute renal failure



#### Sugar, Salt

Adulterants: With chalk powder and white sand.

Health effect

Stomach disorder



#### Tea powder

Adulterants: With used tea leaves, dye or artificial colour, iron fillings.

Health effect
Cancer, tetanus



#### Chilli powder

Adulterants: Chilli powder: Sudan red, Red brick powder, grit, sand, dirt, non-permitted colors and saw dust.

Health effect: Stomach disorder, sudan dye is carsinogenic

#### Sweets

Adulterants: Metanil yellow

Health effect:tumor and cancer



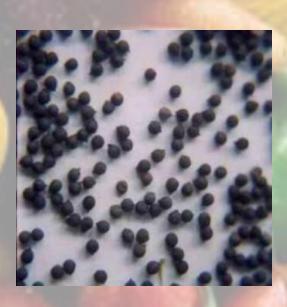


#### Mustard seeds and vegetable oil

<u>Adulterants</u>: Argemone seeds and argemone oil <u>Health effect</u>: Epidemic dropsy









Adulterants: Jaggery, Sugar, corn syrup

Health effect: Obesity, Diabetes, Eyes and





#### Few more common adulterants

Asafoetida: Soap stone and other earthy matter is used for adulteration.

Cumin seeds: Grass seeds are camouflaged and colored with charcoal dust

Turmeric: Lead chromate is used to give turmeric its natural color. It is very harmful.(Causes anemia abortion, paralysis, brain damage)

Coriander powder: With dung powder.

Fruits: Arsenic sprayed (causes dizziness, chills, cramps, paralysis, death)

### What can you do about this?



## Well, that is your homework for the day. List it down

