

LATEST BETA

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How to Check Purity of Milk, Honey, Food Grains & Other Household Products: Common Tests Guidelines from FSSAI for Adulteration

The Food Safety and Standards Authority of India (FSSAI) has released a manual for quick detection of adulterants in everyday food items. As a part of a mandate to ensure safe food to the citizens, FSSAI conducts testing of food for different type of adulterants, chemicals and micro-biological contaminants and other safety parameters for food. The manual 'Detect Adulteration with Rapid Test (DART)' lists easy tests that can be done at home. With tests for items ranging from milk and milk products, oils and fats, sugars and confectionery to food grains and spices and condiments, the book aims to create awareness about food safety.



Here are Some Quick Tests to Check Adulteration in Household Food Items

1 Water adulteration in milk: Put a drop of milk on a polished slanting surface. Pure milk either stays or flows slowly leaving a

white trail behind. Milk adulterated with water will flow immediately without leaving a mark.

2 Other oils adulteration in coconut oil: Take coconut oil in a glass and place in refrigerator for 30 minutes. After refrigeration, coconut oil solidifies. If coconut oil is adulterated, then other oils remain as a separate layer.

3 Sugar adulteration in honey: Take a transparent glass of water. Add a drop of honey to the glass. Pure honey will not disperse in water. If the drop of honey disperses in water, it indicates the presence of added sugar.

4 Chalk powder adulteration in sugar: Take a transparent glass of water and dissolve 10gm of sugar in water. If sugar or *pithi* sugar or jaggery is mixed with chalk, the adulterant will settle down at the bottom.

5 Ergot adulterations in food grains: Ergot is a fungus containing poisonous substances in food grains. Put some grains in a transparent glass containing 20% of salt solution. Ergot floats over the surface while sound grains settle down. Purple black, longer sized grains show the presence of ergots.

6 Excess bran in wheat flour: Take a transparent glass of water. Sprinkle a spoon of wheat flour on the surface of water. Pure wheat flour will not show excess bran on water surface. Adulterated wheat flour shows excess bran floating on water surface.

7 Added colours in food grains: Add two teaspoons of food grains in a transparent glass of water and mix thoroughly. Pure food grains will not leave any colour. Adulterated food grains leave colour immediately in water.

8 Soap stone or earthy matter in asafoetida (*hing*): Shake little portion of hing with water and allow it to settle. Pure hing will not leave any soap stone or earthy matter at the bottom or else it is adulterated.

9 Artificial colours in chilli powder: Sprinkle chilli powder on the surface of water taken in a transparent glass. The artificial colours will immediately start descending in colour streaks.

10 Malachite green in green chilli/green vegetables: Take a cotton swab soaked in water or vegetable oil. Rub the outer green surface of a small part of green vegetable or chilli. If the cotton turns green, then it is adulterated with malachite green.

Food adulteration can have a range of harmful effects on health. Some of the adulterants are highly toxic for the body leading to heart failure, liver or kidney disorders and more. Adulteration also affects the quality of the product and its nutritive value thus leading to nutritive deficiency in our body.