

1CAR - Central Avian Research Institute

Izatnagar - 243 122



ADDRESSING MYTHS AND RUMORS REGARDING CHICKEN MEAT & EGG

1. Eggs are non-vegetarian and cannot be consumed by vegetarian?

Eggs are two types. Fertile eggs (that contains embryo) and sterile/table eggs (that contains no embryo). All the eggs available in supermarkets, restaurants etc. are sterile eggs that means in any case they contain no embryo or chick. These eggs are table eggs and are equally considered as milk. Milk also contains animal cells same as in eggs. Fertile eggs are not available in market for consumption and only used for hatching chicks.

2. Eggs are produced only upon mating between male and female birds

Like in humans, regular periods or cycles that causes release of ova or eggs, same way the chicken also releases ova that gets reflected in eggs. Therefore, for female bird to lay egg male bird is absolutely not necessary and no need of any mating at all. Whether male is present or not, female chicken lays eggs continuously.

3. Injections of hormones are given to the chicken for faster growth which may not be good for human consumption.

For devolvement of high producing broiler chicken variety lot of R&D work in genetics & nutrition has taken place for last 2 to 3 decades. Current improved Broiler chickens available in market can grow up to 2.5 kilo in just a span of 40 days for which daily high protein feed is very important. Also, they are produced from best parents selected by excellent breeding plan. Therefore, no steroids are required for making meat birds fatty. Further, use of steroid hormones will increase the cost of production than returns. So, economically also it is not feasible for farmer to use hormones for better production.

4. Broiler Chickens is grown fast with chemicals and antibiotics hence harmful & responsible for Antimicrobial Residue.

No, Chickens are reared without continuous use of antibiotics, only it can be used as therapeutically during disease outbreak, with relevance Antimicrobial Residue following factors are also responsible for to AMR such as Ground water contamination with waste disposal, medical waste by individuals, self-medication of people at their own will and wish, Open defectation, urination under Indian scenario may also cause leakage of antibiotics in human food chain.

5. Eggs are adulterated and injected with harmful substances.

Eggs are the only food on this planet that cannot be adulterated or manipulated. It is what it is. They are the purest form.



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6. Plastic eggs are present in market & they harm the human health.

The concept of plastic eggs is complete misunderstanding. Sometimes shell of eggs in summer becomes very weak and thin due to loss of carbonates from bird. Because in summer feed intake of layer birds (110 gm) goes down (70-80 gm) so automatically calcium intake reduced which is majorly responsible for shell formation. Therefore, the appearance of eggs become elastic type shell & prone to damage. The artificial or plastic eggs preparation compounding with respect to all vital nutrient is not practically possible, and if so, it will be costlier and no one can go for it.

7. Chicken meat and egg contains high cholesterol. Or The eggs have high heat so should not be consumed in summer. Or Elder people and pregnant ladies are not supposed to eat eggs.

Eggs have lower energy content (72 Cal/egg) and packed with powerful nutrients, vitamins and other essential fatty acids such as (vit A, B complex, Zn, Mg, Cu, Fe, Ca, ect) which are incredibly health beneficial and can be easily digested by elderly people. Similarly, these nutrients are essential for the growing foetus for a better growth and functioning of newborn baby. Eggs also supports the physiological functioning during pregnancy.

8. Eggs become greenish colour after boiling and are very harmful to eat.

Excessive boiling of eggs causes release of iron and sulphide from the eggs itself causes slight greenish tinge to the yolk and these are hard cooked eggs. They are perfectly safe to consume.

9. How many eggs should be taken per day? People avoid yellow part of egg because of high cholesterol content.

For a healthy adult, it's safe to eat 3 eggs a day depending on how much other cholesterol is in diet. (**Healthline**)

10. Poultry is responsible for corona disease.

In India, there is not a single case of any bird being found positive to Coronavirus, also no scientific or medical evidence to show chicken or egg is transmitting Coronavirus, In Other view our Indian food habit system such as consuming boiled chicken / well cooked chicken gives us hygienic food and most of pathogens can't be survived in this high temperature, also In Indian food preparation includes ginger, garlic, spices, turmeric etc which having better antimicrobial and anti-oxidative property thus it helps to us to consume germ free food (chicken and eggs).

11. During bird flu in country people should not take meat or egg.

There is no scientific proof that the bird flu virus can affect a healthy human through poultry products like meat and eggs. As confirmed by the World Health Organisation, it is absolutely safe to eat bird eggs and/or meat if they are washed and cooked properly. Our Indian cooking system is such that because of heat as well as use of antibacterial ingredients



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like turmeric, garlic, ginger etc. kills all pathogens. They do not carry any viral strain responsible for bird flu hence it's safe to consume.

12. How to identify whether egg is a fresh or not?

If we keep very fresh eggs in water, it will sink in to the bottom of water and lay on their sides. If an egg stays at the bottom but stands on its small end, it's still acceptable to eat; just not quite as fresh and if the eggs floats on water it considered as old egg.

13. Egg blood spot is because of embryo present in egg.

During egg formation blood spots are the result of the rupturing of tiny blood vessels in the hen's ovaries or oviduct, less than 1% such chances/ cases found in case of commercial sterile eggs, and it doesn't have any relationship with embryo so it's totally safe to consume blood spotted egg.

Double egg is not safe and should not be taken.

Double egg contains two yolks, it is completely safe but contains two yolks instead of one yolk and those eggs weigh heavier and being sold at premium price and not commonly available in the market too. Out of every 100 eggs, bird lays 4-5 eggs as double yolk eggs and this is completely very normal.

14. Desi birds give more eggs.

Huge improvements have been made in desi birds for egg production over the past 60 years through steady genetic progress in balanced breeding programmes, which positively resulted improved egg production in newly developed strain than the desi birds.