#### How hot is Chilli Powder?

Chilli powder is the name given to any spice blend that is made mostly from chilles. Ground red chilles are used throughout in Indian cuisine. Chillies are those quintessential Indian spices that find usage in almost all types of cuisine. You can make your own chili powder at home or can get ready to use chilli powder. Readymade chilli powder saves time and effort of drying and grinding. There are different brands of chilli powders available on the market today. Many brands claim to be the reddest and spiciest of them all- but how pungent are they really? Sometimes these chilli powders are adulterated with a carcinogenic dye, used for colouring waxes, shoe polish and petrol. But which brand is best? Nine popular brands of chilli powder available on the market were tested. The brands were Badshah Red Chilli Powder, Catch Red Chilli Powder, Everest Kashmiri Lal, Everest Tikha Lal, Golden Harvest Kashmiri Mirch Powder, MDH Deggi Mirch, Morarka Organic Red Chilli Powder, Ramdev Chilli Powder and 24 MANTRA Organic.

#### **Parameters Tested**

All the brands were tested comply with and fall well within the parameters set by the Bureau of Indian Standards (BIS). However when it comes to measure chilly heat/ pungency, tests revealed that some brands are much hotter than others.

### Scoville Heat Unit (SHU)

The Scoville Heat Unit Scale also referred to as the Scoville Scale, or Scoville Chart, is a long-standing measure of the hotness of chile peppers. Capsaicin is a chemical compound that stimulates chemical receptor nerve endings in the skin. The number of Scoville heat units (SHU) indicates the amount of capsaicin present in a particular pepper. The scale was developed in 1912 by American chemist Wilbur Scoville, to rate the pungency or heat of peppers. The test involved a solution of a pepper extract diluted in sugar syrup until the heat is no longer detectable to a group of tasters. The amount of dilution (pepper & sugar syrup) provides a measure on the Scoville Scale.

The "heat level" of the chilli has nothing to do with the color of a chilli pepper. Rather, the color generally signifies the maturity of the fruit. The "heat" varies a from harvest to harvest and even from pod to pod on the same plant.

#### How these tested

The reference methods used in for testing these brands were:

- Methods of Test for Spices and Condiments (2<sup>nd</sup> revision) and
- Method for test for pungency of chillies by Scoville heat units (1<sup>st</sup> revision)

## **Key Findings**

Everest Kashmiri Lal, Everest Tikha Lal and Ramdev Chilli Powder have SHU 48,000 while Badshah Red Chilli Powder, Catch Red Chilli Powder, Golden Harvest Kashmiri Mirch Powder, 24 MANTRA Organic and MDH Deggi Mirch have SHU 60,000.

MORARKA Organic Red Chilli Powder has 72,000 SHU.

How these brands fared on SHU

Hottest: 72,000 SHU

**MORARKA Organic Red Chilli Powder** has turned out to be hottest in lab test. It is the most expensive brand.

Very Hot: 60,000 SHU



Badshah Red Chilli Powder is pretty spicy and cheapest brand.

**Catch Red Chilli Powder** is within reasonably priced range and gives a spicier mix for consumers who fond for more pungent dishes.





**Golden Harvest Kashmiri Mirch Powder** 

It has well pungent and towards costlier side.

### 24 MANTRA Organic

It fared well in the pungency test and has added bonus of being organic. It is comparatively more priced.





## **MDH Deggi Mirch**

It offers a medium level of pungency to the food. It is also one of the costly brands.

Hot: 48,000 SHU

#### **Everest Kashmiri Lal**

It gives the same level of pungency as cheaper brands. It gives the vibrant red colour to the food.





**Everest Tikha Lal** 

This brand adds the necessary punch to the food and is inexpensive also.

#### Ramdev Chilli Powder

It gives a less spicy punch than other brands. It is also not so priced.



### **Recommendations for Healthy Eating**

Most red chille peppers are quite rich in vitamin C as well as vitamin A. Chile peppers also are a good

source of B vitamins, especially vitamin B6 and folic acid. Peppers contain large amounts of potassium, magnesium and iron too. Delnaaz Chanduwadia, chief dietician, INHS Asvini, Mumbai, says, 'Apart from adding a spicy zing to food, they help in preventing cataracts and rheumatoid arthritis, and reducing inflammation. Capsicum (bell pepper) has higher vitamin C content than oranges. It acts as a detoxicant and aids in food digestion. It is also known to be an anti biotic. They are also known to stimulate appetite and aid weight loss, as they increase metabolism. Chillies reduce the amount of insulin the body needs to lower blood sugar levels after a meal by up to 60%. They are also known to improve the lipid profile.



Apart from all these positive health benefits, chillies have a few negative aspects also. Nutritionist also lists the harmful things like increased thirst and perspiration, gastrointestinal reflux disorder, acidity, heart burn, stomach and bowel ulcers, haemorrhoids and swelling, pain and bleeding post bowel movement as things to be careful about.

#### How to test for adulteration at home

- Take a little chilli powder and sprinkle it in a bowl of water.
- Keep it aside for around 10 minutes.
- Pure powder will sink to the bottom of the bowl.
- If there are wood flakes they will float on the surface of the water.
- If any colour is added it will change the colour of water.

The bottom line is, be aware of the possibilities of spice adulteration and test it. The mantra of the day is buy from reliable sources. Buy organic when you can as these products are under more stringent rules. Look for trusted labeling or, return to traditional methods. Buy whole spice and grind or grate or crush your own. The flavour difference is stunning and very memorable. You may never return to the 'convenient but questionable' stale powdered form.

## **Chilli Powder Test Results**

	Scoville Index (SHU)	Package (g)	Price (Rs.)
Everest Kashmiri Lal	48,000	100	45
Everest Tikha Lal	48,000	100	24
Ramdev Chilli Powder	48,000	100	24
Badshah Red Chilli Powder	60,000	100	23
Catch Red Chilli Powder	60,000	100	25
Golden Harvest Kashmiri Mirch			
Powder	60,000	100	45
MDH Deggi Mirch	60,000	100	46
24 MANTRA Organic	60,000	100	40
MORARKA Organic Red Chilli Powder	72,000	250	130

# **Scoville Chilli Heat Chart**

A scale of pungency of various chillies

	Scoville Heat Units
Type of Peppers	(SHU)
Bell Pepper (Simla Mirch)	0
Pimento	100-900
Kashmiri Mirch	1,500-2,00
Rocotillo Pepper	1,000-2,500
Jalapeno	2,500-10,000
Green Chillies(Hari Mirch)	15,000-30,000
Cayenne Pepper (Lal Mirch)	30,000-50,000
Bird's Eye Chilli	50,000-100,000
Red Savina Pepper	2,50,000-4,50,000
Bhut Jalokia (Ghost Pepper)	Over 1 million
Trinidad Moruga Scorpion Pepper	1.2-2 million
Carolina Reaper	1.5-2 million

Source: Right Choice March 2014

http://www.eatmorechiles.com/Scoville\_Heat.html