## 9 Incredible Health Facts About Chilli Peppers

Chilies are incredibly rich in vitamins and minerals, particularly vitamin C. In fact, ripe chilies are among the richest sources of vitamin C available. Surprisingly, a red bell pepper contains more than double the amount of vitamin C compared to an orange, surpassing your daily recommended intake. Additionally, chilies contain essential nutrients such as vitamin B6, vitamin B9 (folate), vitamin K1, potassium, iron, magnesium, and beta-carotene, which are converted into vitamin A by the body.

One of the key components in chilies is capsaicin, responsible for its spicy flavor. Capsaicin is most concentrated in the placental tissue that holds the seeds, rather than in the seeds themselves. Removing the seeds while cooking is often recommended to reduce spiciness because they are coated with this placental tissue. The capsaicin receptor, known as transient receptor potential vanilloid 1 (TRPV1), is responsible for detecting the "heat" of chilies.

## Additional Benefits of consuming chilies:

Cardiovascular/Heart Health: Studies conducted on hamsters fed a high-cholesterol diet revealed that supplementing their diet with capsaicin reduced total cholesterol levels. Furthermore, capsaicinoids found in chilies can decrease bad cholesterol levels without affecting good cholesterol levels. Capsaicin was also found to reduce deposits in blood vessels that contribute to arterial narrowing, potentially preventing strokes or heart attacks.

IBS/Gastrointestinal Health: Countries, where people consume larger quantities of chilies daily, tend to have lower occurrences of functional gut diseases like irritable bowel

syndrome (IBS). Studies on IBS patients demonstrated that consuming chilies significantly improved abdominal pain compared to a placebo. Chilies have also shown promise in relieving symptoms of functional dyspepsia (indigestion).

Thermoregulatory Effects: Chilies are commonly consumed in tropical countries to cope with hot weather. Capsaicin induces skin vasodilation and perspiration, promoting heat loss and aiding in temperature regulation. Early research in animals showed that injecting capsaicin decreased body temperature while desensitizing animals to capsaicin reduced this effect.

Analgesic: Pain Relief: Chili extracts were first noted for their pain-reducing properties in treating toothaches. Topical use of capsaicin has been found to effectively manage skin disorders, shingles, muscle strains, arthritis-related disorders, diabetic neuropathy, and other pain conditions. It has even shown efficacy in treating chronic migraines and cluster headaches.

**Incontinence:** TRPV1 receptors play a role in detecting bladder filling and are implicated in overactive bladder diseases. Capsaicin has been used successfully to reduce bladder overactivity.

Alzheimer's Disease: Geographic correlations between Alzheimer's incidents and spicy food consumption have been observed. Studies conducted on mice found that capsaicin intake reduced brain amyloid beta burden and rescued cognitive decline, suggesting it may have potential therapeutic benefits for Alzheimer's disease.

**Diabetes and Obesity**: TRPV1 is present in metabolically active tissues, making it a target for research in obesity, type 2 diabetes, and non-alcoholic fatty liver disease. In animal studies, capsaicin treatment improved obesity, fasting glucose, insulin, leptin, inflammatory markers, adipose tissue, and liver triglyceride levels.

Cancer: Capsaicin has exhibited anti-cancer properties by inhibiting the growth of various cancer cell lines, including breast cancer, colon cancer, esophageal carcinoma, gastric cancer, leukemia, lung cancer, pancreatic cancer, prostate cancer, and more. It has also shown the potential in decreasing tumor progression in animal models.

These findings demonstrate the diverse health benefits of consuming chilies and suggest their potential for therapeutic applications in various health conditions.