



PATIENT & CAREGIVER EDUCATION

Indole-3-Carbinol

This information describes the common uses of Indole-3-Carbinol, how it works, and its possible side effects.

Tell your healthcare providers about any dietary supplements you're taking, such as herbs, vitamins, minerals, and natural or home remedies. This will help them manage your care and keep you safe.

What is it?

Indole 3-carbinol has cancer-preventive effects, but it has not been shown to treat cancer in humans.

Indole-3-carbinol, also called I3C, is a resulting compound that comes from eating vegetables such as Brussels sprouts, cabbage, cauliflower, broccoli, and kale. It is known to stimulate detoxifying enzymes in the gut and liver. Because diets high in these vegetables slow cancer growth in animals, I3C is thought to be a good candidate for cancer prevention.

Lab studies suggest that I3C may have activity across various tumor types, or enhance activity of some chemotherapy drugs. However, other animal studies suggest that I3C might also promote tumor growth. Additional studies and human clinical trials are needed to determine the circumstances under which I3C might be suitable for cancer prevention.

What are the potential uses and benefits?

- **To prevent cancer**

Lab studies suggest that I3C may protect against a variety of cancers, but some animal studies suggest that I3C supplementation might have tumor-promoting effects. More studies including clinical trials are needed.

- **To treat viral infections**

Lab studies suggest immune function and antiviral effects, but no studies have been conducted in humans.

What are the side effects?

- Skin rash

What else do I need to know?

Do Not Take if:

- You are taking **cytochrome P450 1A2 substrate drugs**: Lab studies suggest I3C may reduce the effectiveness of these drugs. Clinical relevance has yet to be determined.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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