

# BREAKING NEWS!

## Dr. Ajay Goel explains New Grapeseed Research

### ***Research further validates the health benefits of VX1® French Grapeseed Extract***

While the ability of grape seed extract's oligomeric proanthocyanidins (OPC) to prevent tumors has been previously demonstrated, the underlying mechanisms have not been fully explored. A recent study, published in the journal *Scientific Reports*, has found several pathways by which a form of French grape seed OPC called VX1 prevents cancer, suppresses tumor formation, and inhibits tumor activity. [Toden S, Ravindranathan P, Gu J, Cardenas J, Yuchang M, Goel A. Oligomeric proanthocyanidins (OPCs) target cancer stem-like cells and suppress tumor organoid formation in colorectal cancer. *Sci Rep*. 2018 Feb 20;8(1):3335]

One of the most important findings was the way that OPCs from grape seed interfere with the ability of cancer stem cells to self-renew, and to re-emerge months or years after cancer treatment is completed.

"Cancer stem cells are able to hide, and are able to resist chemotherapy and other treatments," said Ajay Goel, Ph.D., Professor and Director, Center of Gastroenterology, Translational Genomics and Oncology, Baylor Scott & White Research Institute, Baylor University Medical Center, Dallas, TX, the lead author and principal investigator of the study.

"That is why cancer can recur at later dates. The cancer stem cells come out of hiding and start to proliferate. Unfortunately, these new cancer cells are highly resistant to chemotherapy. Finding an effective compound that suppress cancer stem-cell formation in the first place is extremely promising for long-term cancer survival. In this study, we demonstrated that OPCs from French grape seed suppress the creation of cancer stem cells in colorectal cancer, which shows great therapeutic potential. That is in addition to its ability to activate anti-cancer pathways in the body to prevent cancer and to slow tumor growth," stated Dr. Goel.

"This study was unique in that it not only showed the efficacy of OPCs in cancer cell lines, but also validated these findings in reducing colorectal cancer formation in an animal model. More importantly, the ability of OPCs to suppress cancer stem cell formation was confirmed using a new technique in which cells are harvested from a patient's colon cancer tumor and developed into a 3D-tumor organoids in a laboratory setting. This is a unique approach that can be used for studying the effect of an anti-cancer compound in the patient's own specific cancerous tumor. This validation provides a lot more confidence in these data for their validity in a human application," continued Dr. Goel.

It is important to note that the form of French grape seed extract used in the study, VX1, has unique specifications, including standardization for only low molecular weight, high absorption OPCs and containing no tannins. Therefore, results may not apply to other forms of grape seed extract.



Ajay Goel, PhD, is the world's leading researcher of curcumin's effect on cancer. He is a professor and director of the Center for Gastrointestinal Research and director of the Center for Translational Genomics and Oncology at Baylor University Medical Center in Dallas. Dr. Goel has spent more than 20 years researching cancer. He has been the lead author or contributor to over 100 scientific articles in peer-reviewed journals, and he's written a book titled *Curcumin: Nature's Answer to Cancer and Other Chronic Diseases*.