

# Onco Immune Complex™



**CHANTILLY  
HEALTH**



## CLINICAL APPLICATIONS

- Supports Cell Metabolic Regulation
- Supports Immune System Modulation
- Maintains Healthy Cellular and Humoral (Th1/Th2) Immune Balance
- Promotes Optimal Natural Killer (NK) Cell Targeting Ability
- Promotes Coordinated Response of Macrophages, B cells and T Cells

*Onco Immune Complex™ contains a proprietary nutritional ingredient, Avemar. The active ingredient is produced by fermentation of wheat germ by baker's yeast and is standardized for the compound DMBQ (2,6-di-methoxy-substituted benzoquinones). More than 100 animal and human studies, resulting in more than 30 articles in peer-reviewed medical journals have demonstrated efficacy, mechanism of action and safety.*

**All Chantilly Natural Health® Formulas Meet or Exceed cGMP quality Standards**

## DISCUSSION

Onco Immune Complex™'s dramatic effects are the result of at least six different mechanisms of action. The most unique mechanism is its ability to selectively inhibit non-oxidative glucose metabolism in cells that typically use glucose at a 10-50 times higher rate than normal cells.<sup>[1]</sup> The formula does not have any effect upon the glucose metabolism of healthy cells unless it is given at 50 times the recommended dose.<sup>[2]</sup> Two other mechanisms are its actions of inhibition of PARP (poly-ADP-ribose), an enzyme needed to repair DNA breaks,<sup>[3]</sup> and enhancement of Caspase-3, an enzyme that initiates apoptosis.<sup>[4]</sup>

Research also demonstrates Onco Immune Complex™ restores normal metabolic pathways of healthy cells and increases production of their related RNA and DNA, while reducing synthesis of these nucleic acids in abnormal cells.<sup>[5]</sup> Furthermore, Onco Immune Complex™ assists the NK cells in identifying targets for attack by suppressing the abnormal cells' ability to generate a surface molecule ("MHC-1") used by these cells to mask themselves from the immune system.<sup>[6,7]</sup> Onco Immune Complex™ optimizes the functioning of macrophages, T cells and B cells and normalizes the imbalance of cellular and humoral (Th1/Th2) immune function that results from age and stress.<sup>[8,9,10]</sup> The formula also inhibits COX-1 and COX-2 enzymes.<sup>[11]</sup>

Dr. Albert Szent-Gyorgyi, a 1937 recipient of the Nobel Prize in Medicine initiated development of this formula. His theory regarding the stabilization of cell metabolism with DMBQ (2,6-dimethoxy-p-benzoquinone), a naturally-occurring molecule, inspired Dr. Maté Hidvegi of Hungary to develop and patent the formula in 1989.<sup>[12]</sup>

Onco Immune Complex™ is FDA GRAS-certified. Each single-serving packet of Onco Immune Complex™, delivered as an orange-flavored, instant drink mix, contains the same dose (8.5 g) of the identical Avemar consumed and well-tolerated in numerous clinical trials. Onco Immune Complex™ is used adjunctively to enhance standard protocols, or can be used by almost anyone as a stand-alone supplement for well-being. Hematological values remained within normal range after one, three, and five years of formula use.

Most people who use Onco Immune Complex™ daily have reported within three weeks they notice increased energy, improved appetite and a generally improved quality of life. However, depending upon the individual case, results may vary.



# Supplement Facts

Serving Size: 1 Package 5.53 g (0.2 oz.)  
Servings Per Container: 30

	Amount Per Serving	% Daily Value
Calories	20	
Total Carbohydrates	1 g	<1%*
Protein	3 g	6%*
Calcium	12 mg	1%
Iron	1 mg	6%
Magnesium	52 mg	13%
Zinc	2 mg	13%
Copper	0.1 mg	5%
Manganese	3 mg	150%
Chromium	7 mcg	6%
Molybdenum	26 mcg	35%
Sodium	10 mg	<1%
Potassium	170 mg	5%

\* Percent Daily Values are based on a 2,000 calorie diet.

**Ingredients:** Freeze-dried fermented wheat germ extract, stevia Reb-A extract, natural orange flavor.

**Allergen Statement:** This product contains wheat and yeast ingredients.

## REFERENCES

1. Wheat germ extract decreases glucose uptake and RNA ribose formation but increases fatty acid synthesis in MIA pancreatic adenocarcinoma cells. *Pancreas* Aug 2001;23(2):141-7 [PMID: 11484916]
2. Heimbach JT, et al. Safety studies regarding a standardized extract of fermented wheat germ. *Int J Toxicol.* 2007 May-Jun;26(3):253-9 [PMID: 17564907]
3. Comin-Anduix B, et al. Fermented wheat germ extract inhibits glycolysis/pentose cycle enzymes and induces apoptosis through poly(ADP-ribose) polymerase activation in Jurkat T-cell leukemia tumor cells. *J Biol Chem* 277: 46408-46414, 2002. [PMID: 12351627]
4. Farkas E. [Fermented wheat germ extract in the supportive therapy of colorectal cancer] *Orv Hetil.* 2005 Sep 11;146(37):1925-31 [PMID: 16255377]
5. Boros LG, et al. Wheat germ extract decreases glucose uptake and RNA ribose formation but increases fatty acid synthesis in MIA pancreatic adenocarcinoma cells. *Pancreas.* 2001 Aug;23(2):141-7.
6. Fermented wheat germ extract induces apoptosis and downregulation of major histocompatibility complex class I proteins in tumor T and B cell lines. *Int J Oncol* 2002;20: 563-570
7. Lopez-Botet M, Bellon T. Natural killer cell activation and inhibition by receptors for MHC class 1. *Curr Opin. Immunol.*1999 11:301-307
8. Studies of the effect of Avemar on tumor necrosis factor induced cytotoxicity and on TNF production of immune cells. Institute of Biochemistry, Biological Research Center of the Hungarian Academy of Science. Szeged, 1999
9. Effects of Avemar on the early events of the immune response. Institute of Genetics, Biological Research Center of the Hungarian Academy of Science. Szeged, 9. Effects of Avemar on the early events of the immune response. Institute of Genetics, Biological Research Center of the Hungarian Academy of Science. Szeged, 1999.
10. Effect of Avemar on macrophages and microvascular endothelial cells. Scientific meeting of the Albert Szent-Györgyi Medical and Pharmaceutical Center of the Szeged University. Szeged, Hungary, 2000
11. Illmer, C. et al. Immunologic and biochemical effects of the fermented wheat germ extract Avemar. *Exp. Biol. Med.* 2005 Feb;230:144-149 [PMID: 15673563]
12. Hidvegi, M., et al. Effect of Avemar and Avemar + vitamin C on tumor growth and metastasis in experimental animals. *Anti-cancer Res.* 1998 18:2353-2358

## CAUTIONS:

The following individuals should not use Onco Immune Complex™: pregnant or nursing women; recent organ or tissue recipients, G.I. bleeding from ulcers, malabsorption syndrome, gluten-sensitive enteropathies (celiac sprue), or hypersensitivity to gluten, wheat germ or any component(s) or ingredient(s) in Onco Immune Complex™. Discontinue 2 days prior to barium X-rays and resume 2 days after completion of the exam.

## STORAGE:

For best results, store Onco Immune Complex™'s sealed packets at room temperature not above 80 degrees. May be refrigerated.

\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.



## DOSING:

Pour 4 oz of cold water or juice into a shaker cup with a lid. Add one packet of Onco Immune Complex™, cover with lid, and shake until blended. It is best to consume within 30 minutes of mixing, one hour before or after a meal, and two hours before or after any drugs or other dietary supplements. Use one packet daily for best results. Two packets daily are recommended for individuals weighing > 199 lbs. Consult with a practitioner for use in children, with other supplements and/or for alternative dosing instructions. If loose stools occurs, take ½ dose in the morning and the other half in late afternoon. For long term results, use for at least six months. Safety has been demonstrated with daily use over several years.