OXIGENESIS

Oxygen Renewed

OUR BACKGROUND: RESEARCH

About Us

Since its inception in 1996, OXIGENESIS has specialized in developing unique oxygen-infused formulations for the nutritional, cosmeceutical and industrial markets. Our products are marketed and distributed under the trade names of our customers around the globe.

Our core product is ASO® Activated Stabilized Oxygen, a proprietary liquid oxygen solution with a remarkable range of applications across a growing list of fields and industries.

The Evolution of ASO®

1984 – Began initial R&D to create earliest formulation of ASO® for the wastewater treatment industry. A 3% solution strength (30,000 p.p.m. of O_4) was developed and early antimicrobial tests conducted to determine efficacy. This was the introduction of the world's first pH balanced stabilized oxygen solution.

1989 - Continued R&D increased ASO® concentration to 5% (50,000 p.p.m.) Independent lab studies confirm ASO®'s efficacy as a biocidal agent. ASO® first released as consumer product.

1991 - Continued research increased ASO® concentration to 10% (100,000 p.p.m.)

1995 - Independent antimicrobial research completed at Cal Poly State University verifies ASO® as an effective sanitizing agent.

> "We find that Stabilized Oxygen is very effective when used as a sanitizing disinfectant on Cat's Claw. The results of this study show that on average the [ASO® sample] showed a reduction of 85.7% of total molds on the powder and a 82.9% reduction of the chips. The [ASO® sample] showed a 78.6% reduction in mold cfu/gm and a 90.2% reduction on the chips. Based on these findings, Stabilized Oxygen shows great promise as a sanitizing agent for herbs, spices and other agricultural products where a significant reduction in mold colony forming units is required to enhance/maintain quality, reduce spoilage and extend shelf life."
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> *From: A Microbiological Evaluation of Stabilized Oxygen on Cat's Claw, 1995. Dr. Joseph Montecalvo, Jr., Ph.D., Central Coast Consulting and Professor of Food Sciences, California Polytechnic State University, San Luis Obispo, California.*

1996 - Continued research increased ASO® concentration to 25% (250,000 p.p.m.)

1996 - ASO® released for industrial, agricultural, sports nutrition and therapeutic applications.

1996 – Japanese study confirms that consuming ASO® as a dietary supplement increases the amount of oxygen in the blood stream.

> "Each subjects' partial pressure of oxygen was relatively stable prior to ASO® consumption, but then rose immediately after ASO® consumption. The partial pressure of oxygen peaked 90 to 120 minutes after ASO® consumption, after which it gradually dropped, eventually reaching its pre-ASO® consumption level. In a subject with a particularly low baseline, a significant increase was observed."
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> *From: Testing to test the effectiveness of ASO® and its effect on the partial pressure of oxygen in arterial blood, 1996. Suntory International, Japan.*

1996 - Independent research confirms ASO® as an effective tooth whitener and breath spray.

> "The concentration of all bacteria recovered from all exposed plates show a high percent reduction of bacterial contaminates (Staphlococcus epidermis, Streptococcus faecalis, Escherichia coli, Pseudomonas flourescens, Enterobacter aerogens and Aspergillus niger). This factor proves that the...[ASO®] product is effective in reducing bacterial contamination."
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> *From: Tri-Tech Analytical Laboratories, Inc.: Inhibitory Residue Test, 1996. Cosmetic Manufacturers, Longwood Florida.*

1999 – In conjunction with the University of Utah, The U.S. Marine Corps conducts tests on the effects of ASO® on military personnel during extended mountaineering training.

> "In short, in both measurable parameters and subjective observations, the test subjects in the group treated with the oxygen supplement [ASO®] experienced the following to a greater degree than the control group:
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> - Greater stamina and endurance
> - Reduced muscle fatigue
> - More energy
> - Less out of breath
> - Greater feeling of strength
> - Felt that the product helped them perform better."
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> *From: Effect of stabilized oxygen consumed with water on blood and urine markers of oxidative stress and blood oxygen saturation during extended military mountaineering training at moderate altitude, 1999. Eldon W. Askew, Ph.D., Donald E. Roberts, Ph.D., James E. Reading, M.A., Jeffrey M. Pfeiffer, M.S., Lt. Lance Orr, MC, USNR. Department of Human Performance, Naval Health Research Center, San Diego, CA; the Division of Foods and Nutrition, University of Utah, Salt Lake City, Utah; and the Marine Corps Mountain Warfare Training Center, Bridgeport, CA.*

2003 – Independent tests demonstrate less pain and better muscle recovery in athletes after ingestion of ASO®.

> "The analysis… indicated that the levels of lactate in the blood of the subjects during the 40 minute test, when compared to the 400 meter test, were different when compared to sampling done while exercising one week prior to the repetition of the test using the oxygen solution [ASO®]. In three test cases, there was a definite reduction in lactate levels in the blood in both the 40 minutes as well as the 400 meter running tests. There was also overall VO_2max improvement in the subjects for the 40 minute test."
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> *From: The Concentration of Lactate in the Blood and the Improvement of the Maximum Reception of Oxygen after the Ingestion of ASO Solution, 2003. Nicos Yiannaki Pericleous, M.Sc., ACSM.*

2004 - Continued research increased ASO® concentration to 35% (350,000 p.p.m.)

2004 – In independent parallel studies, ASO® improves health, promotes weight gain and reduces mortality in chickens and exotic birds.

> "Overall, this has been a very successful preliminary study and points towards areas that need to be examined further. The positive results of increased growth, weights, less mortality, overall improved health and vitality of the chickens, improved flavor of the meat in taste tests and improved acceptability of the end products were all observed in this study. Further detailed studies need to be conducted with ASO® at lesser and greater dosage levels to find the optimum rate of treatment and benefits. In the end a major factor in the overall success and acceptance of ASO® use by the industry will be the cost to benefit ratio.
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> Another parallel ASO® study was conducted with exotic birds that also indicates an increased health benefit across the board and increased survivability of hatching eggs. The study was conducted on various kinds of exotic birds from rare breed chickens to parrots, canaries, etc. Mr. Melis Charalambides, breeder and owner of Birdlife Cyprus, stated that with the use of ASO® in the drinking water of his exotic bird flock, he noticed a more healthy condition in the birds but more importantly it was also the very first time ever that all the eggs had hatched without any losses. This would seem to indicate a better, stronger and more viable egg. Mr. Charalambides is the Chairman of the Birdlife Cyprus Association and raises exotic birds on his own farm on a non-commercial basis."
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> *From: ASO® Activated Oxygen - Cyprus Broiler Study, 2004. Dr. Antonio Rotou, DVM and Dr. Andreas Rotou, DVM. Conducted at a poultry farm located in Lymbia Village, Larnaca, Cyprus.*

2004 – Researchers test the effects of ASO® on competitive sprinters. Sprinters who consume ASO® maintain similar & sustained times in competition scenarios.

"Conclusion: A definite improvement was noticed in between the sprints of the trials with placebo and the controlled ASO® stabilized liquid oxygen. This would indicate the fact that athletes who consumed ASO® stabilized liquid oxygen were able to reproduce similar and sustained effort during both sprints as compared to those that consumed the placebo."

From: Stabilized Liquid Oxygen As an Erogenic Aid for Sprinters In a Competition/Heat Scenario, 2004. Dr. Hj Danish Zaheer Hj Zaheeruddin MD, PhD.; David Hennessy, Bsc, Sports Medicine & Research Centre, Department of Youth & Sports; Brunei, Darussalam.

2006 - ASO® tested as a potential disinfectant for produce and plant seeds.

"ASO® reduced the incidence of Alternaria zinniae on zinnia seeds. Control seeds (0%) had 85% (17 of 20) while seeds soaked for 48 hours in a 100% solution of ASO® had 20% (4 of 20) with A. zinniae. Conidia or hyphae contaminating the surface of the zinnia seeds were probably killed by the ASO®, but hyphae within the seed coat probably escaped.

Germination rates tended to be increased by the ASO®, although our results did not show an increased germination rate with soaking for 48 hours in a 100% solution of ASO®. Control seeds soaked for 48 hours had a 65% (13 of 20) germination while seeds soaking for 24 hours in ASO® had a 90% (18 of 20) germination.

Under conditions where seed lots are heavily infested with Alternaria zinniae, seed disinfection with ASO® prior to seeding can reduce the incidence of damping off and blight of zinnia. Additionally, seed germination rates would be increased, resulting in many more healthy plants.

With the additional characteristics of having no toxicity to humans or animals and being biodegradable, ASO® Activated Oxygen shows promise being used as a disinfectant of fruits and vegetables and other food products in addition to being used to produce clean seeds and increase seed germination rates."

From: Use of ASO® Activated Oxygen to Control Alternaria Zinniae, 2006. Dr. Michael A. Yoshimura, Ph.D., A.M. Chiri, C. Sanders, E. Shea, M. Treber and M. Williams. School of Biological Sciences, Phytopathology Department, California Polytechnic State University, San Luis Obispo, California.

2015 - Indiana State University completes a six month, in-depth study on the effects of ASO® in relation to exercise performance and recovery.

"The main finding from the current battery of tests is that ingestion of [ASO®] significantly improved post-exercise recovery from high-intensity aerobic exercise via enhanced lactate clearance. Drinking [ASO®] did result in a statistically significant improvement in post-exercise. Enhancing post-exercise recovery from training is of significant

benefit to competitive athletes as it is likely to increase the rate of training adaptation in the long term. Additionally, many athletic events over short and middle distances, even up to 5,000 meters, require multiple races over the course of a competition. The ability to clear lactate more efficiently and hence recover faster in the early rounds of competition is of clear benefit to an athlete. Post-exerciser recovery is also of significant importance in team-based sports (i.e. soccer, basketball, football). Any intervention which may enhance clearance of lactate during a player's recovery would therefore likely improve overall performance in these sports."

From: An investigation of the ergogenic and physiological effects of ingesting a high concentration oxygen supplement on subsequent exercise performance in running, Jan 2015. Dr. Neil Fleming, Ph.D., Department of Kinesiology, Recreation and Sports, Indiana State University.

D I S C L A I M E R :

What is a dietary supplement?

The U.S. Congress defined the term "dietary supplement" in the Dietary Supplement Health and Education Act (DSHEA) of 1994. A dietary supplement is a product taken by mouth that contains a "dietary ingredient" intended to supplement the diet. The "dietary ingredients" in these products may include: vitamins, minerals, herbs or other botanicals, amino acids, and substances such as enzymes, organ tissues, glandulars, and metabolites.

Dietary supplements can also be extracts or concentrates, and may be found in many forms such as tablets, capsules, softgels, gelcaps, liquids, or powders. They can also be in other forms, such as a bar, but if they are, information on their label must not represent the product as a conventional food or a sole item of a meal or diet. Whatever their form may be, DSHEA places dietary supplements in a special category under the general umbrella of "foods," not drugs, and requires that every supplement be labeled a dietary supplement.

What is a "new dietary ingredient" in a dietary supplement?

The Dietary Supplement Health and Education Act (DSHEA) of 1994 defined both of the terms "dietary ingredient" and "new dietary ingredient" as components of dietary supplements. In order for an ingredient of a dietary supplement to be a "dietary ingredient," it must be one or any combination of the following substances:

- *a vitamin,*
- *a mineral,*
- *an herb or other botanical,*
- *an amino acid,*
- *a dietary substance for use by man to supplement the diet by increasing the total dietary intake (e.g., enzymes or tissues from organs or glands), or*
- *a concentrate, metabolite, constituent or extract.*

A "new dietary ingredient" is one that meets the above definition for a "dietary ingredient" and was not sold in the U.S. in a dietary supplement before October 15, 1994.

ASO® is only sold as a dietary supplement in accordance to the regulations established by the F.D.A.

PLEASE NOTE:

Oxigenesis does not practice medicine and is not rendering such professional services with regard to the information enclosed. The user acknowledges that laws vary from state to state and country to country and change over time.

Oxigenesis recommends that individuals discuss all medical interests, diagnostic, or physiological concerns with a qualified physician or health practitioner prior to purchasing and taking any stabilized oxygen dietary supplement or using any cosmeceutical or skin care product.

The information that has been presented is not intended to recommend that the products described herein are drugs, are to be used as a diagnosis for specific illnesses or conditions, nor as products to relieve or eliminate diseases or other physiological medical conditions or complications.

Always consult with a medical practitioner before taking any dietary supplement, especially if you are pregnant, nursing or under the supervision of a medical professional for any reason.

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