



Holistic Solutions Limited (尚盈方有限公司)

Unit 2302 New World Tower 1
18 Queen's Road Central, Hong Kong
Website : holisticsolutionshk.com

Tel: (852)26607638
Whatsapp: (852)93869048
Email : holisticsolutons2015@gmail.com



HIDROX® ,formulated by CREAGRI®, contains antioxidant polyphenols, especially hydroxytyrosol, obtained from the juice of fresh olives (Olea europaea).

POLYPHENOL RESEARCH STUDIES

POLYPHENOLICS/ANTIOXIDANTS-GENERAL

Antioxidants in Mediterranean diets; Visioli F; World Rev Nutr Diet 2000;87:43-55.

<https://www.ncbi.nlm.nih.gov/pubmed/10929526>

Free radical-scavenging actions of olive oil phenolics; Visioli F, Galli C; Lipids 1999;34 Suppl:S315.

<https://www.ncbi.nlm.nih.gov/pubmed/10419190>

Antioxidant and other activities of phenolics in olives/olive oil, typical components of the Mediterranean diet; Galli C, Visioli F; Lipids 1999;34 Suppl:S23-6.

<https://www.ncbi.nlm.nih.gov/pubmed/10419084>

Effect of dietary phenolic compounds on apoptosis of human cultured endothelial cells induced by oxidized LDL; Vieira O, Escargueil-Blanc I, Meilhac O, Basile JP, Laranjinha J, Almeida L, Salvayre R, Negre-Salvayre A; Br J Pharmacol 1998 Feb; 123(3): 565-73.

<https://www.ncbi.nlm.nih.gov/pubmed/9504398>

Free radical-scavenging properties of olive oil polyphenol; Visioli F, Bellomo G, Galli C; Biochem Biophys Res Commun 1998 Jun 9;247(1):60-4.

<https://www.ncbi.nlm.nih.gov/pubmed/9636654>

Inhibition of leukocyte 5-lipoxygenase by phenolics from virgin olive oil; de la Puerta R, Ruiz Gutierrez V, Houtl JR; Biochem Pharmacol 1999 Feb 15;57(4):445-9.

<https://www.ncbi.nlm.nih.gov/pubmed/9933033>

Biological effects of hydroxytyrosol, a polyphenol from olive oil endowed with antioxidant activity; Manna C, Ragione FD, Cucciolla V, Borriello A, D'Angelo S, Galletti Zappia V; *Adv Exp Med Biol* 1999;472:115-30.

<https://www.ncbi.nlm.nih.gov/pubmed/10736621>

'Waste waters' from olive oil production are rich in natural antioxidants; Visioli F, Vincenzi FF, Galli C; *Experientia* 1995 Jan 15; 51(1): 32-4.

<https://www.ncbi.nlm.nih.gov/pubmed/7843328>

CARDIOVASCULAR

Olive oil phenolic compounds inhibit homocysteine-induced endothelial cell adhesion regardless of their different antioxidant activity. Manna C, Napoli D, Cacciapuoti G, Porcelli M, Zappia V. *J Agric Food Chem*. 2009 May 13;57(9):3478-82.

<https://www.ncbi.nlm.nih.gov/pubmed/19358606>

Effects of olive oil polyphenols on erythrocyte oxidative damage. Paiva-Martins F, Fernandes J, Rocha S, Nascimento H, Vitorino R, Amado F, Borges F, Belo L, Santos-Silva A. *Mol Nutr Food Res*. 2009 May;53(5):609-16.

<https://www.ncbi.nlm.nih.gov/pubmed/19340892>

Inhibition of platelet aggregation by olive oil phenols via cAMP-phosphodiesterase. Dell'Agli M, Maschi O, Galli GV, Fagnani R, Dal Cero E, Caruso D, Bosisio E. *Br J Nutr*. 2008 May;99(5):945-51. Epub 2007 Oct 11.

<https://www.ncbi.nlm.nih.gov/pubmed/17927845>

Antithrombotic Components of Olive Oil; Visioli F, Galli C; *Curr Atheroscler Rep* 2001 Jan;3(1):64-67.

<https://link.springer.com/article/10.1007/s11883-001-0012-0>

Protective effect of olive oil and its phenolic compounds against low density lipoprotein oxidation; Fito M, Covas MI, Lamuela-Raventos RM, Vila J, Torrents L, de la Torre C, Marrugat J; *Lipids* 2000 Jun; 35(6): 633-8.

<https://www.ncbi.nlm.nih.gov/pubmed/10901425>

Olive oil and inhibition of low density lipoprotein oxidation. Role of phenolic compounds; Fito M, Covas MI, Lamuela-Raventos RM, Vila J, de la Torre C, Marrugat J; *Med Clin (Barc)* 2000 Jul 1; 115(5): 166-9.

<https://www.ncbi.nlm.nih.gov/pubmed/10996871>

Antithrombotic potential of olive oil administration in rabbits with elevated cholesterol; De La Cruz JP, Villalobos MA, Carmona JA, Martin-Romero M, Smith-Agreda JM, de la Cuesta FS; *Thromb Res* 2000 Nov 15;100(4):305-15.

<https://www.ncbi.nlm.nih.gov/pubmed/11113274>

Inhibition of human LDL lipid peroxidation by phenol-rich beverages and their impact on plasma total antioxidant capacity in humans; Serafini M, Laranjinha JA, Almeida LM, Maiani G; J Nutr Biochem 2000 Nov;11(11-12):585-590.

<https://www.ncbi.nlm.nih.gov/pubmed/11137897>

Diet and prevention of coronary heart disease: the potential role of phytochemicals; Visioli F, Borsani L, Galli C; Cardiovasc Res 2000 Aug 18;47(3):419-25.

<https://www.ncbi.nlm.nih.gov/pubmed/10963715>

Olive Oils Rich in Natural Catecholic Phenols Decrease Isoprostane Excretion in Humans; Visioli F, Caruso D, Galli C, Viappiani S, Galli G, Sala A; Biochem Biophys Res Commun 2000 Nov 30;278(3):797-799.

<https://www.ncbi.nlm.nih.gov/pubmed/11095986>

Effect of virgin olive oil phenolic compounds on in vitro oxidation of human low density lipoproteins; Caruso D, Berra B, Giavarini F, Cortesi N, Fedeli E, Galli G; Nutr Metab Cardiovasc Dis 1999 Jun;9(3):102-7.

<https://www.ncbi.nlm.nih.gov/pubmed/10464782>

Inhibition of leukocyte 5-lipoxygenase by phenolics from virgin olive oil; de la Puerta R, Ruiz Gutierrez V, Houtl JR; Biochem Pharmacol 1999 Feb 15;57(4):445-9.

<https://www.ncbi.nlm.nih.gov/pubmed/9933033>

The effect of minor constituents of olive oil on cardiovascular disease: new findings; Visioli F, Galli C; Nutr Rev 1998 May;56(5 Pt 1):142-7.

<https://www.ncbi.nlm.nih.gov/pubmed/9624884>

Inhibition of arachidonate lipoxygenase activities by 2-(3,4-dihydroxyphenyl) ethanol, a phenolic compound from olives; Kohyama N, Nagata T, Fujimoto S, Sekiya K; Biosci Biotechnol Biochem 1997 Feb;61(2):347-50.

<https://www.ncbi.nlm.nih.gov/pubmed/9058975>

Inhibition of platelet aggregation and eicosanoid production by phenolic components of olive oil; Petroni A, Blasevich M, Salami M, Papini N, Montedoro GF, Galli C; Thromb Res 1995 Apr 15;78(2):151-60.

<https://www.ncbi.nlm.nih.gov/pubmed/7482432>

Formation of F2-isoprostanes in oxidized low density lipoprotein: inhibitory effects of hydroxytyrosol; Salami M, Galli C, De Angelis L, Visioli F; Pharmacol Res 1995 May; 31(5):275-9.

<https://www.ncbi.nlm.nih.gov/pubmed/7479524>

Low density lipoprotein oxidation is inhibited in vitro by olive oil constituents; Visioli F, Bellomo G, Galli C; Atherosclerosis 1995 Sep;117(1):25-32.

<https://www.ncbi.nlm.nih.gov/pubmed/8546752>

ANTIMICROBIAL AND ANTIVIRAL ACTIVITY

Bactericidal activity of glutaraldehyde-like compounds from olive products. Medina E, Brenes M, García A, Romero C, de Castro A. *J Food Prot.* 2009 Dec;72(12):2611-4.

<https://www.ncbi.nlm.nih.gov/pubmed/20003748>

Mechanism of the antiviral effect of hydroxytyrosol on influenza virus appears to involve morphological change of the virus. Yamada K, Ogawa H, Hara A, Yoshida Y, Yonezawa Y, Karibe K, Nghia VB, Yoshimura H, Yamamoto Y, Yamada M, Nakamura K, Imai K. *Antiviral Res.* 2009 Jul;83(1):35-44.

<https://www.ncbi.nlm.nih.gov/pubmed/19501255>

On the in-vitro antimicrobial activity of oleuropein and hydroxytyrosol; Bisignano G, Tomaino A, Lo Cascio R, Crisafi G, Eccella N, Saija A; *J Pharm Pharmacol* 1999 Aug; 51(8):971-4.

<https://www.ncbi.nlm.nih.gov/pubmed/10504039>

Antibacterial polyphenols from olive oil mill waste waters; Capasso R, Evidente A, Schivo L, Orru G, Marcialis MA, Cristinzio G; *J Appl Bacteriol* 1995 Oct; 79(4): 393-8.

<https://www.ncbi.nlm.nih.gov/pubmed/7592132>

Antimicrobial activity and inhibition of aflatoxin B1 formation by olive plant tissue constituents; Paster N, Juven BJ, Harshemesh H; *J Appl Bacteriol* 1988 Apr; 64(4): 293-7.

<https://www.ncbi.nlm.nih.gov/pubmed/3139609>

Preparation of antimicrobial compounds by hydrolysis of oleuropein from green olives; Walter WM Jr, Fleming HP, Etchells JL; *Appl Microbiol* 1973 Nov; 26(5): 773-6.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC379900/>

Antimicrobial properties of oleuropein and products of its hydrolysis from green olives; Fleming HP, Walter WM Jr, Etchells JL; *Appl Microbiol* 1973 Nov; 26(5): 777-82.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC379901/>

Antimicrobial properties of natural phenols and related compounds; Jurd L, King AD Jr, Mihara K, Stanley WL; *Appl Microbiol* 1971 Mar;21(3):507-10.

<https://www.ncbi.nlm.nih.gov/pubmed/5553287>

CANCER

The antioxidant/anticancer potential of phenolic compounds isolated from olive oil; Owen RW, Giacosa A, Hull WE, Haubner R, Spiegelhalter B, Barstch H; Eur J Cancer 2000 Jun;36(10):1235-47.

<https://www.ncbi.nlm.nih.gov/pubmed/10882862>

Olive oil, diet and colorectal cancer: an ecological study and a hypothesis; Stoneham M, Goldacre M, Seagroatt V, Gill L; J Epidemiol Community Health 2000 Oct; 54 (10): 756-60

<https://www.ncbi.nlm.nih.gov/pubmed/10990479>

Olive oil and colon cancer; Health News 2000 Nov;6(11):8.

Olive oil, diet and colorectal cancer: an ecological study and a hypothesis.

<https://www.ncbi.nlm.nih.gov/pubmed/10990479>

Hydroxytyrosol, a natural molecule occurring in olive oil, induces cytochrome c-dependent apoptosis; Ragione FD, Cucciolla V, Borriello A, Pietra VD, Pontoni G, Racioppi L, Manna C, Galletti P, Zappia V; Biochem Biophys Res Commun 2000 Nov 30; 278(3): 733-9

<https://www.ncbi.nlm.nih.gov/pubmed/11095977>

Olive oil: suitability for use as a vehicle in the local lymph node assay; Basketter DA; Kimberly I; Contact Dermatitis, 35(3): 190-1 1996 Sep.

<https://www.ncbi.nlm.nih.gov/pubmed/20484859>

Olive oil, other dietary fats, and the risk of breast cancer (Italy); la Vecchia C, Negri E, Franceschi S, Decarli A, Giacosa A, Lipworth L; Cancer Causes Control, 6(6):545-50 1995 Nov.

<https://www.ncbi.nlm.nih.gov/pubmed/8580304>

Consumption of olive oil and specific food groups in relation to breast cancer risk in Greece; Trichopoulou A, Katsouyanni K, Stuver S, Tzala L, Gnardellis C, Rim, Trichopoulos D; J Natl Cancer Inst 1995 Jan 18;87(2):110-6. Olive oil and breast cancer; Trichopoulou A; Cancer Causes Control, 196(6):475-6 1995 Nov

<https://www.ncbi.nlm.nih.gov/pubmed/7503842>

NEUROPROTECTION

Cytoprotective effects of olive mill wastewater extract and its main constituent hydroxytyrosol in PC12 cells. Schaffer S, Müller WE, Eckert GP. *Pharmacol Res.* 2010 Jun 16 2010 [Epublished]

<https://www.ncbi.nlm.nih.gov/pubmed/20600919>

Quantification of phenolic antioxidants in rat cerebrospinal fluid by GC-MS after oral administration of compounds. Zafra-Gómez A, Luzón-Toro B, Jiménez-Díaz I, Ballesteros O, Navalón A. *J Pharm Biomed Anal.* 2010 Sep 21;53(1):103-8.

<https://www.ncbi.nlm.nih.gov/pubmed/20363576>

Hydroxytyrosol increases norepinephrine transporter function in pheochromocytoma cells. Luzón-Toro B, Geerlings A, Hilfiker S. *Nucl Med Biol.* 2008 Oct;35(7):801-4.

<https://www.ncbi.nlm.nih.gov/pubmed/18848665>

Neuroprotective effect of hydroxytyrosol and hydroxytyrosol acetate in rat brain slices subjected to hypoxia-reoxygenation. González-Correa JA, Navas MD, Lopez-Villodres JA, Trujillo M, Espartero JL, De La Cruz JP. *Neurosci Lett.* 2008 Dec 3;446(2-3):143-6.

<https://www.ncbi.nlm.nih.gov/pubmed/18809463>

Hydroxytyrosol-rich olive mill wastewater extract protects brain cells in vitro and ex vivo. Schaffer S, Podstawa M, Visioli F, Bogani P, Müller WE, Eckert GP. *J Agric Food Chem.* 2007 Jun 27;55(13):5043-9.

<https://www.ncbi.nlm.nih.gov/pubmed/17530860>

Is dopamine behind the health benefits of red wine? de la Torre R, Covas MI, Pujadas MA, Fitó M, Farré M. *Eur J Nutr.* 2006 Aug;45(5):307-10.

<https://www.ncbi.nlm.nih.gov/pubmed/16586149>

BONE, JOINT AND MUSCLE SUPPORT

Olive oil phenolic compounds inhibit homocysteine-induced endothelial cell adhesion regardless of their different antioxidant activity. Manna C, Napoli D, Cacciapuoti G, Porcelli M, Zappia V. *J Agric Food Chem.* 2009 May 13;57(9):3478-82.

<https://www.ncbi.nlm.nih.gov/pubmed/19358606>

Effects of olive oil polyphenols on erythrocyte oxidative damage. Paiva-Martins F, Fernandes J, Rocha S, Nascimento H, Vitorino R, Amado F, Borges F, Belo L, Santos-Silva A. *Mol Nutr Food Res.* 2009 May;53(5):609-16.

<https://www.ncbi.nlm.nih.gov/pubmed/19340892>

Inhibition of platelet aggregation by olive oil phenols via cAMP-phosphodiesterase. Dell'Agli M, Maschi O, Galli GV, Fagnani R, Dal Cero E, Caruso D, Bosisio E. *Br J Nutr.* 2008 May;99(5):945-51. Epub 2007 Oct 11.

<https://www.ncbi.nlm.nih.gov/pubmed/17927845>

HUMAN ANTIOXIDANT POTENTIAL

Antioxidant activity of olive polyphenols in humans: a review. Raederstorff D. Int J Vitam Nutr Res. 2009 May;79(3):152-65. Review.

<https://www.ncbi.nlm.nih.gov/pubmed/20209466>

Hydroxytyrosol induces antioxidant/detoxifiant enzymes and Nrf2 translocation via extracellular regulated kinases and phosphatidylinositol-3-kinase/protein kinase B pathways in HepG2 cells. Martín MA, Ramos S, Granado-Serrano AB, Rodríguez-Ramiro I, Trujillo M, Bravo L, Goya L. Mol Nutr Food Res. 2010 Jul;54(7):956-66.

<https://www.ncbi.nlm.nih.gov/pubmed/20166143>

Hypoglycemic and antioxidant effects of phenolic extracts and purified hydroxytyrosol from olive mill waste in vitro and in rats. Hamden K, Allouche N, Damak M, Elfeki A. Chem Biol Interact. 2009 Aug 14;180(3):421-32.

<https://www.ncbi.nlm.nih.gov/pubmed/19393637>

Oxidative DNA damage is prevented by extracts of olive oil, hydroxytyrosol, and other olive phenolic compounds in human blood mononuclear cells and HL60 cells. Fabiani R, Rosignoli P, De Bartolomeo A, Fuccelli R, Servili M, Montedoro GF, Morozzi G. J Nutr. 2008 Aug;138(8):1411-6.

<https://www.ncbi.nlm.nih.gov/pubmed/18641183>

Bioavailability of the phenolic compounds of the fruits (drupes) of *Olea europaea* (olives): impact on plasma antioxidant status in humans. Kountouri AM, Mylona A, Kaliora AC, Andrikopoulos NK. Phytomedicine. 2007 Oct;14(10):659-67.

<https://www.ncbi.nlm.nih.gov/pubmed/17870451>

SKIN HEALTH

The protective effects of hydroxytyrosol against UVB-induced DNA damage in HaCaT cells. Guo W, An Y, Jiang L, Geng C, Zhong L. Phytother Res. 2010 Mar;24(3):352-9.

<https://www.ncbi.nlm.nih.gov/pubmed/19610043>

PASSIVE SMOKING

Olive phenol hydroxytyrosol prevent passive smoking induced oxidative stress; Visioli F, Galli C, Plasmati E, Viappiani S, Hernandez A, Colombo C, Sala A; Circulation 2000 Oct 31; 102(18):2169-71.

<https://www.ncbi.nlm.nih.gov/pubmed/11056087>

MITOCHONDRIAL HEALTH AND AGING

Hydroxytyrosol protects against oxidative damage by simultaneous activation of mitochondrial biogenesis and phase II detoxifying enzyme systems in retinal pigment epithelial cells. Zhu L, Liu Z, Feng Z, Hao J, Shen W, Li X, Sun L, Sharman E, Wang Y, Wertz K, Weber P, Shi X, Liu J. J Nutr Biochem. 2010 Feb 9

<https://www.ncbi.nlm.nih.gov/pubmed/20149621>

Hydroxytyrosol promotes mitochondrial biogenesis and mitochondrial function in 3T3-L1 adipocytes. Hao J, Shen W, Yu G, Jia H, Li X, Feng Z, Wang Y, Weber P, Wertz K, Sharman E, Liu J. J Nutr Biochem. 2010 Jul;21(7):634-44.

<https://www.ncbi.nlm.nih.gov/pubmed/19576748>

Expression of the longevity proteins by both red and white wines and their cardioprotective components, resveratrol, tyrosol, and hydroxytyrosol. Mukherjee S, Lekli I, Gurusamy N, Bertelli AA, Das DK. Free Radic Biol Med. 2009 Mar 1;46(5):573-8.

<https://www.ncbi.nlm.nih.gov/pubmed/19071213>

Hydroxytyrosol protects retinal pigment epithelial cells from acrolein-induced oxidative stress and mitochondrial dysfunction. Liu Z, Sun L, Zhu L, Jia X, Li X, Jia H, Wang Y, Weber P, Long J, Liu J. J Neurochem. 2007 Oct 18.

<https://www.ncbi.nlm.nih.gov/pubmed/20938484>

FOOD PROTECTION

Effect of lipophilization of hydroxytyrosol on its antioxidant activity in fish oils and fish oil-in-water emulsions. Medina I, Lois S, Alcántara D, Lucas R, Morales JC. J Agric Food Chem. 2009 Oct 28;57(20):9773-9.

<https://www.ncbi.nlm.nih.gov/pubmed/19807127>

Hydroxytyrosol prevents oxidative deterioration in foodstuffs rich in fish lipids. Pazos M, Alonso A, Sánchez I, Medina I. J Agric Food Chem. 2008 May 14;56(9):3334-40.

<https://www.ncbi.nlm.nih.gov/pubmed/18426217>

Safety assessment of aqueous olive pulp extract as an antioxidant or antimicrobial agent in foods. Soni MG, Burdock GA, Christian MS, Bitler CM, Crea R. Food Chem Toxicol. 2006 Jul;44(7):903-15.

<https://www.ncbi.nlm.nih.gov/pubmed/16530907>