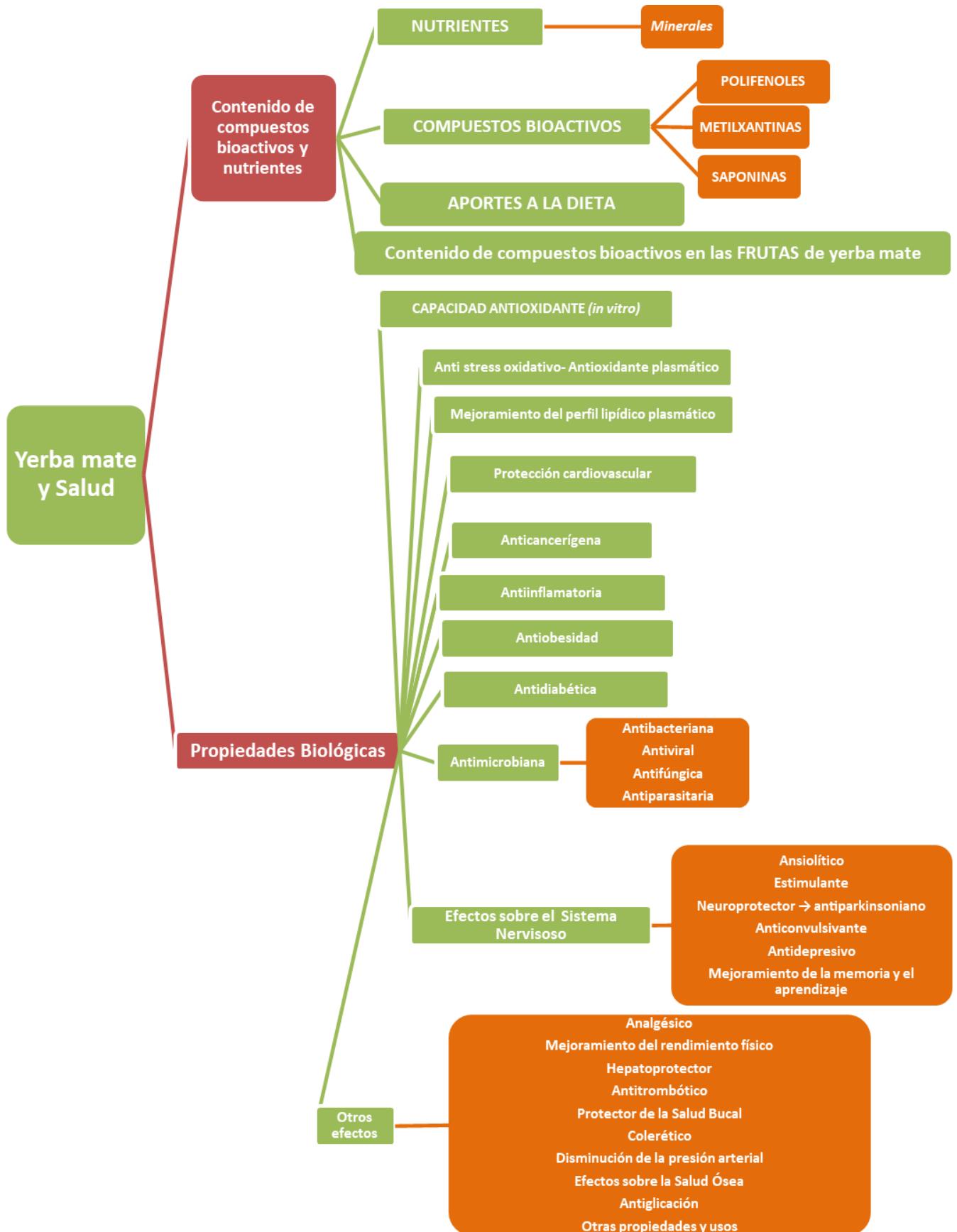


BASE DE DATOS DOCUMENTALES

YERBA MATE Y SALUD

**BASE DE DATOS DOCUMENTALES
YERBA MATE Y SALUD**

Categorías de la Base de Datos Documentales YERBA MATE Y SALUD



Lista de trabajos científicos YERBA MATE Y SALUD por categorías

NUTRIENTES Y COMPUESTOS BIOACTIVOS

**COMPUESTOS
BIOACTIVOS**

Polifenoles

Bastos y col. (2005)

Bastos y col. (2006b)

Bastos y col. (2007)

Blum-Silva y col. (2015)

Bojic y col. (2013)

Bravo y col. (2007)

Butiuk y col. (2016)

Cardozo y col. (2007)

Carini y col. (1998)

Clifford y Ramirez-Martinez
(1990)

Colpo y col. (2016)

Dartora y col. (2011)

de Oliveira y col. (2016)

Dugo y col. (2009)

Dutra y col. (2010)

Escalada y col. (2011)

Fernandes y col. (2016)

Ferreira da Silveira y col.
(2016a)

Filip y col. (2001)

Frizon y col. (2015)

Grujic y col. (2012)

Isolablella y col. (2010)

Jaiswal y col. (2010)

Lima y col. (2016)

Mazzafera (1997)

Meinhart y col. (2010)

Murakami y col. (2013)

Nakamura y col. (2009)

Pagliosa y col. (2010)

Peres y col. (2013)

Pinto y col. (2015)

Ricco y col. (1991)

Rivelli y col. (2007)

Schubert y col. (2007)

Souza y col. (2015)

Turner y col. (2011)

Valerga y col. (2012)

Valerga y col. (2013)

Vieira y col. (2010)

Zielinski y col. (2014)

Metiltxantinas

Athayde y col. (2007)

Bastos y col. (2005)

Bastos y col. (2006b)

Blum-Silva y col. (2015)

Bojic y col. (2013)

Cardozo y col. (2007)

Clifford y Ramirez-Martinez
(1990)

Dartora y col. (2011)

Isolabella y col. (2010)

Marx y col. (2003)

Mazzafera (1994)

Mazzafera (1997)

Meinhart y col. (2010)

Murakami y col. (2013)

Nakamura y col. (2009)

Pagliosa y col. (2010)

Pinto y col. (2015)

Rivelli y col. (2007)

Rodríguez Vaquero y col.
(2010)

BASE DE DATOS DOCUMENTALES
YERBA MATE Y SALUD

Saldaña y col. (1999)	Schenkel y col. (1996)	Pereira y col. (2016)
Scherer y col. (2002)	Sugimoto y col. (2009)	Ramallo y col. (1998)
Schubert y col. (2006)	NUTRIENTES	APORTES A LA DIETA
Schubert y col. (2007)	Ferreira da Silveira y col. (2016b) (carotenoides)	de Olivera y col. (2017)
Vieira y col. (2010)	Ramallo y col. (1998)	Gebara y col. (2017)
Saponinas	Souza y col. (2015)	Sanchez Boado y col. (2015)
Andrade y col. (2002)	Minerales	NUTRIENTES Y COMPUESTOS BIOACTIVOS DE LAS FRUTAS DE LA YERBA MATE
Coelho y col. (2010)	Baran y col. (2017)	Cogoi y col. (2013)
de Souza y col. (2011)	Barbosa y col. (2015)	Fernandes y col. (2017)
Gnoatto y col. (2005)	Carducci y col. (2000)	Pavei y col. (2007)
Gosmann y col. (1989)	Giulian y col. (2007)	Peixoto y col. (2012)
Gosmann y col. (1995)	Heinrichs y Malavolta (2001)	Schubert y col. (2007)
Kraemer y col. (1996)	Jacques y col. (2007)	Taketa y col. (2004b)
Martinet y col. (2001)	Maiocchi y col. (2016)	
Murakami y col. (2013)		
Nakamura y col. (2009)		

PROPIEDADES BIOLÓGICAS DE LA YERBA MATE

CAPACIDAD ANTIOXIDANTE	Bastos y col. (2006a)	Efing y col. (2009)
Actis Gorecka y col. (2002)	Bravo y col. (2007)	Escalada y col. (2011)
Anesini y col. (2006)	Chandra y de Mejía (2004)	Fernandes y col. (2016a)
Anesini y col. (2012)	Colpo y col. (2016)	Fernandes y col. (2016b)
Baran y col. (2017)	Dartora y col. (2011)	Fernandes y col. (2017)
	Dudonné y col. (2009)	Filip y col. (2000)

BASE DE DATOS DOCUMENTALES
YERBA MATE Y SALUD

Grujic y col. (2012)	Bracesco y col. (2003)	Balzan y col. (2013)
Hartwig y col. (2012)	Colpo y col. (2017)	Bravo y col. (2014)
Leonard y col. (2010)	da Cunha y col. (2011)	de Morais y col. (2009)
Murakami y col. (2013)	da Silva y col. (2008)	Fernandes y col. (2016a)
Pagliosa y col. (2010)	Erben y col. (2014)	Gao y col. (2013a)
Piovezan-Borges y col. (2016)	Fernandes y col. (2012)	Hussein y col. (2011b)
Portela y col. (2016)	Gugliucci y Bastos (2009)	Klein y col. (2011)
Rivelli y col. (2007)	Gugliucci y col. (1996)	Martins y col. (2010)
Rodríguez Vaquero y col. (2010)	Gugliucci y Stahl (1995)	Melo y col. (2007)
Sari y col. (2007)	Lanzetti y col. (2008)	Messina y col. (2015)
Schinella y col. (2000)	Lanzetti y col. (2012)	Morgan Martins y col. (2013)
Turner y col. (2011)	Martins y col. (2009)	Przygoda y col. (2010)
Valduga y col. (2016)	Matsumoto y col. (2009a)	Resende y col. (2015)
Vieira y col. (2010)	Matsumoto y col. (2009b)	Stein y col. (2005)
Zielinski y col. (2014)	Menini y col. (2009)	PROTECCIÓN CARDIOVASCULAR
ANTI ESTRÉS OXIDATIVO- ANTIOXIDANTE PLASMÁTICO	Morgan Martins y col. (2013)	
Barg y col. (2014)	Panza y col. (2016)	Balzan y col. (2013)
Bixby y col. (2005)	Pereira y col. (2017a)	Borges y col. (2013)
Boaventura y col. (2012)	Ranilla y col. (2012)	Cahuê y col. (2017)
Boaventura y col. (2013)	Rivelli y col. (2011)	Cardozo Junior y Morand (2016)
Boaventura y col. (2015b)	Sánchez Boado y col. (2015)	de Morais y col. (2009)
	Zenaro y col. (2014)	Fantinelli y col. (2016)
	MEJORAMIENTO DEL PERFIL LIPÍDICO	Gao y col. (2013a)

BASE DE DATOS DOCUMENTALES
YERBA MATE Y SALUD

Gao y col. (2013b)	Kaezer y col. (2012)	Arçari y col. (2009)
Gao y col. (2013c)	Miranda y col. (2008)	Arçari y col. (2013a)
González Arbeláez y col. (2016)	Pérez y col. (2014)	Arçari y col. (2013b)
Görgen y col. (2005)	Puangpraphant y col. (2011a)	Borges y col. (2013)
Menini y col. (2009)	Puangpraphant y col. (2011b)	Carmo y col. (2013)
Moraes-Pontilho y col. (2015)	Puangpraphant y col. (2013)	Choi y col. (2017)
Mosimann y col. (2006)	Ramírez-Mares y col. (2004)	Conceição y col. (2017)
Santiago y col. (2017)	Ramirez-Mares y col. (2016)	Fujii y col. (2014)
Schinella y col. (2005)	Souza y col. (2015)	Gambero y Ribeiro (2015)
Schinella y col. (2009)	Zapaterini y col. (2010)	Gamboa-Gómez y col. (2015)
Stein y col. (2005)	ANTIINFLAMATORIO	
Strassmann y col. (2008)	Arçari y col. (2011)	Gossman y col. (2012)
Yu y col. (2015)	Cittadini y col. (2017)	Hussein y col. (2011a)
ANTICANCERÍGENA		
Amigo-Benavent y col. (2017)	Dartora y col. (2013)	Hussein y col. (2011b)
Boaventura y col. (2015a)	Lanzetti y col. (2008)	Kang y col. (2012)
Bracesco y col. (2003)	Luz y col. (2016)	Kim y col. (2012)
Chandra y de Mejía (2004)	Muñoz-Culla y col. (2016)	Kim y col. (2015)
da Silva y col. (2009)	Puangpraphant y col. (2013)	Lima y col. (2014a)
De Mejía y col. (2005)	Puangpraphant y de Mejía (2009)	Lima y col. (2014b)
de Mejía y col. (2010)	Schinella y col. (2014)	Martins y col. (2010)
Frant y col. (2012)	Souza y col. (2015)	Melo y col. (2007)
Gnoatto y col. (2008)	ANTIOBESIDAD	
		Oh y col. (2016)
		Pang y col. (2008)
		Pimentel y col. (2013)
		Przygoda y col. (2010)

BASE DE DATOS DOCUMENTALES
YERBA MATE Y SALUD

Resende y col. (2012)

Resende y col. (2015)

Santos y col. (2014)

Silva y col. (2011)

ANTIDIABÉTICA

Arçari y col. (2011)

Arçari y col. (2013a)

Hussein y col. (2011b)

Kang y col. (2012)

Klein y col. (2011)

Melo y col. (2007)

Morgan Martins y col.
(2013)

Oliveira y col. (2008)

Przygoda y col. (2010)

Ríos y col. (2015)

ANTIMICROBIANA

Antibacteriana

Battagim y col. (2012)

Burris y col. (2011)

Burris y col. (2012b)

Burris y col. (2015)

Carelli y col. (2011)

Cogo y col. (2010) (anti
Helycobacter pylori)

de Biasi y col. (2009)

Fernandes y col. (2016b)

Fernandes y col. (2017)

Girolometto y col. (2009)

Kubo y col. (1993)
(anticariogénica)

Prado Martin y col. (2013)

Rempe y col. (2015)

Rempe y col. (2017)

Rodríguez Vaquero y col.
(2010)

Sari y col. (2007)

Tsai y col. (2008)
(anticariogénica)

Antiviral

Lückenmeyer y col. (2012)
(anti Herpes)

Müller y col. (2007) (anti
Herpes y anti Rabia)

Antiparasitario

Mullié y col. (2010) (anti
Malaria)

Taketa y col. (2004a)
(antitripanosómica)

Treter y col. (2010)
(antitricomonas)

Antifúngica

de Biasi y col. (2009)

Filip y col. (2010) (anti
Malazessia furfur)

**EFFECTOS SOBRE EL
SISTEMA NERVIOSO**

Ansiolítico

Santos y col. (2015)

Estimulante

Falconi y col. (2013)

Santos y col. (2015)

Torterolo y col. (2014)

Neuroprotector

Bortoli y col. (2017)

Colpo y col. (2007)

de Lima y col. (2017)

Gatto y col. (2015)
(antiparkinsoniano)

Ludka y col. (2016)

Melcón y col. (2014)
(antiparkinsoniano)

Milioli y col. (2007)
(antiparkinsoniano)

Santos Branco y col. (2013)

Santos y col. (2015)

Anticonvulsivante

Santos Branco y col. (2013)

BASE DE DATOS DOCUMENTALES
YERBA MATE Y SALUD

<i>Antidepresivo</i>	de Carvalho y col. (2016)	Tsai y col. (2008) (anticariogénica)
Moraes Reis y col. (2014)	Lim y col. (2015)	
<i>Mejoramiento de la memoria y aprendizaje</i>	<i>Mejoramiento del rendimiento físico</i>	<i>Colerético</i>
Prediger y col. (2008)	Alkhatib y Atcheson (2017)	Gorzalczany y col. (2001)
OTROS EFECTOS	Alkhatib y col. (2014)	<i>Disminución de la presión arterial</i>
<i>Anti-glicación</i>	<i>Hepatoprotector</i>	Muccillo Baisch y col. (1998)
Bains y Gugliucci (2017)	Tamura y col. (2013)	<i>Efectos sobre la Salud Ósea</i>
Gugliucci y col. (2009)	<i>Antitrombótico</i>	Brun y col. (2015)
Lucenford y Gugliucci (2005)	Dahmer y col. (2012)	Brun y col. (2016)
Melo y col. (2007)	<i>Protección de la salud bucal</i>	Conforti y col. (2012)
Oliveira y col. (2008)	Brasilino y col. (2017)	Pereira y col. (2017)
Pereira y col. (2012)	Filip y col. (2007)	<i>Otras propiedades y usos</i>
<i>Analgésico</i>	Kubo y col. (1993) (anticariogénica)	Ribeiro y col. (2017)

REVISIONES: NUTRIENTES, COMPUESTOS BIOACTIVOS Y PROPIEDADES BIOLÓGICAS DE LA YERBA MATE

Bracesco y col. (2011)	Fagundes y col. (2015)
Burris y col. (2012a)	Heck y de Mejía (2007)
Cuelho y col. (2015)	Riachi y De María (2017)

REFERENCIAS BIBLIOGRÁFICAS

BASE DE DATOS DOCUMENTALES
YERBA MATE Y SALUD

Actis-Goretta, L., Mackenzie, G. G., Oteiza, P. I., & Fraga, C. G. (2002). Comparative study on the antioxidant capacity of wines and other plant-derived beverages. *Annals of the New York Academy of Sciences*, 957, 279–83. Disponible en <http://www.ncbi.nlm.nih.gov/pubmed/12074981>

Agnieszka Baran, Agnieszka Gruszecka-Kosowska, Anna Kołton, Czesława Jasiewicz y Paweł Piwowar (2017). Content and health risk assessment of selected elements in the Yerba mate (*Ilex paraguariensis*, St. hilaire). *Human and Ecological Risk Assessment: An International Journal.* <https://doi.org/10.1080/10807039.2017.1406304>

Alkhatib, A. (2014). Yerba Maté (*Ilex paraguariensis*) ingestion augments fat oxidation and energy expenditure during exercise at various submaximal intensities. *Nutrition & Metabolism*, 11(1), 42. <http://doi.org/10.1186/1743-7075-11-42>

Alkhatib, A. y Atcheson, R. (2017). Yerba Maté (*Ilex paraguariensis*) Metabolic, Satiety, and Mood State Effects at Rest and during Prolonged Exercise. *Nutrients*, 9, 882, 1-15. Disponible en: <http://www.mdpi.com/2072-6643/9/8/882>

Amigo-Benavent, M., Wang, S. Mateos, R., Sarriá, B. y Bravo, L. (2017). Antiproliferative and cytotoxic effects of green coffee and yerba mate extracts, their main hydroxycinnamic acids, methylxanthine and metabolites in different human cell lines. *Food and Chemical Toxicology*, 106, 125-138. <http://dx.doi.org/10.1016/j.fct.2017.05.019>

Andrade, F. D. P., Piacente, S., Pizza, C., & Vilegas, W. (2002). Studies on the constituents of a Brazilian folk infusion. Isolation and structure elucidation of new triterpene saponins from *Ilex amara* leaves. *Journal of Agricultural and Food Chemistry*, 50(2), 255–261. <http://doi.org/10.1021/jf010863r>

YERBA MATE Y SALUD

Anesini, C., Ferraro, G., & Filip, R. (2006). Peroxidase-like activity of *Ilex paraguariensis*. Food Chemistry, 97(3), 459–464.
<http://doi.org/10.1016/j.foodchem.2005.05.025>

Anesini, C., Turner, S., Cogoi, L., & Filip, R. (2012). Study of the participation of caffeine and polyphenols on the overall antioxidant activity of mate (*Ilex paraguariensis*). LWT - Food Science and Technology, 45(2), 299–304. <http://doi.org/10.1016/j.lwt.2011.06.015>

Arçari, D. P., Bartchewsky, W., dos Santos, T. W., Oliveira, K. A., Funck, A., Pedrazzoli, J., ... Ribeiro, M. L. (2009). Antioesity effects of yerba maté extract (*Ilex paraguariensis*) in high-fat diet-induced obese mice. Obesity, 17(12), 2127–2133.
<http://doi.org/10.1038/oby.2009.158>

Arçari, D. P., Bartchewsky, W., dos Santos, T. W., Oliveira, K. A., DeOliveira, C. C., Gotardo, É. M., ... Ribeiro, M. L. (2011). Anti-inflammatory effects of yerba maté extract (*Ilex paraguariensis*) ameliorate insulin resistance in mice with high fat diet-induced obesity. Molecular and Cellular Endocrinology, 335(2), 110–115.
<http://doi.org/10.1016/j.mce.2011.01.003>

Arçari, D. P., Santos, J. C., Gambero, A., & Ribeiro, M. L. (2013b). The *in vitro* and *in vivo* effects of yerba mate (*Ilex paraguariensis*) extract on adipogenesis. Food Chemistry, 141(2), 809–815.
<http://doi.org/10.1016/j.foodchem.2013.04.062>

Arçari, D. P., Santos, J. C., Gambero, A., Ferraz, L. F. C., & Ribeiro, M. L. (2013a). Modulatory effects of yerba maté (*Ilex paraguariensis*) on the PI3K-AKT signaling pathway. Molecular Nutrition and Food Research, 57(10), 1882–1885. <http://doi.org/10.1002/mnfr.201200834>

Athayde, M. L., Coelho, G. C., & Schenkel, E. P. (2007). Populational Diversity on Methylxanthines Content of Maté (*Ilex paraguariensis* A . St . -Hil ., Aquifoliaceae). Latin American Journal of Pharmacy 26(2), 275–279.

BASE DE DATOS DOCUMENTALES
YERBA MATE Y SALUD

Disponible en
http://www.latamjpharm.org/resumenes/26/2/LAJOP_26_2_2_3.pdf

Bains, Y. y Gugliucci, A. (2017). *Ilex paraguariensis* and its main component chlorogenic acid inhibit fructose formation of advanced glycation endproducts with amino acids at conditions compatible with those in the digestive system. *Fitoterapia*, 117, 6-10.
<http://dx.doi.org/10.1016/j.fitote.2016.12.006>

Balzan, S., Hernandes, A., Reichert, C. L., Donaduzzi, C., Pires, V. A., Gasparotto, A., & Cardozo, E. L. (2013). Lipid-lowering effects of standardized extracts of *Ilex paraguariensis* in high-fat-diet rats. *Fitoterapia*, 86(1), 115–122. <http://doi.org/10.1016/j.fitote.2013.02.008>

Barbosa, J. Z., Zambon, L. M., Motta, A. C. V., & Wendling, I. (2015). Composition, Hot-Water Solubility of Elements and Nutritional Value of Fruits and leaves of yerba mate. *Ciência e Agrotecnologia*, 39(6), 593–603. <http://doi.org/10.1590/S1413-70542015000600006>

Barg, M., Rezin, G. T., Leffa, D. D., Balbinot, F., Gomes, L. M., Carvalho-Silva, M., ... Andrade, V. M. (2014). Evaluation of the protective effect of *Ilex paraguariensis* and *Camellia sinensis* extracts on the prevention of oxidative damage caused by ultraviolet radiation. *Environmental Toxicology and Pharmacology*, 37(1), 195–201.
<http://doi.org/10.1016/j.etap.2013.11.028>

Bastos, D. H. M., Fornari, A. C., De Queiroz, Y. S., Soares, R. A. M., & Torres, E. A. F. S. (2005). The chlorogenic acid and caffeine content of yerba maté (*Ilex paraguariensis*) beverages. *Acta Farmaceutica Bonaerense*, 24(1), 91–95. Disponible en
http://www.latamjpharm.org/trabajos/24/1/LAJOP_24_1_2_5_8KB_ZFG0I38.pdf

YERBA MATE Y SALUD

Bastos, D. H. M., Fornari, A. C., Queiroz, Y. S. & Torres, E. A. F. S. (2006b). Bioactive Compounds Content Of Chimarrão Infusions Related To The Moisture Of Yerba Mate (*Ilex paraguariensis*) Leaves. Brazilian Archives of Biology and Technology, 49(3), 399–404. Disponible en <http://direct.bl.uk/bld/PlaceOrder.do?UIN=192363730&ETOC=RN&from=searchengine>

Bastos, D. H. M., Ishimoto, E. Y., Ortiz M. Marques, M., Fernando Ferri, A., & Torres, E. A. F. S. (2006a). Essential oil and antioxidant activity of green mate and mate tea (*Ilex paraguariensis*) infusions. Journal of Food Composition and Analysis, 19(6-7), 538–543. <http://doi.org/10.1016/j.jfca.2005.03.002>

Bastos, D. H. M., Saldanha, L. a, Catharino, R. R., Sawaya, A., Cunha, I. B. S., Carvalho, P. O., & Eberlin, M. N. (2007). Phenolic antioxidants identified by {ESI-MS} from yerba mate (*Ilex paraguariensis*) and green tea (*Camellia sinensis*) extracts. Molecules, 12(3), 423–432. <http://doi.org/10.3390/12030423>

Battagim, J., de Souza, V. T., Miyasaka, N. R. S., da Silva Cunha, I. B., Sawaya, a C., de Piloto Fernandes, a M., ... de Oliveira Carvalho, P. (2011). Comparative study of the effect of green and roasted water extracts of mate (*Ilex paraguariensis*) on glucosyltransferase activity of *Streptococcus mutans*. Journal of Enzyme Inhibition and Medicinal Chemistry, 27(May 2011), 232–240. <http://doi.org/10.3109/14756366.2011.585986>

Bixby, M., Spieler, L., Menini, T., & Gugliucci, A. (2005). *Ilex paraguariensis* extracts are potent inhibitors of nitrosative stress: A comparative study with green tea and wines using a protein nitration model and mammalian cell cytotoxicity. Life Sciences, 77(3), 345–358. <http://doi.org/10.1016/j.lfs.2004.11.030>

Blum-Silva, C. H., Chaves, V. C., Schenkel, E. P., Coelho, G. C., & Reginatto, F. H. (2015). The influence of leaf age on methylxanthines, total phenolic content, and free radical scavenging capacity of *Ilex paraguariensis*

YERBA MATE Y SALUD

aqueous extracts. *Brazilian Journal of Pharmacognosy*, 25(1), 1–6.
<http://doi.org/10.1016/j.bjp.2015.01.002>

Boaventura, B. C. B., Amboni, R. D. de M. C., da Silva, E. L., Prudencio, E. S., Di Pietro, P. F., Malta, L. G., ... Liu, R. H. (2015a). Effect of *in vitro* digestion of yerba mate (*Ilex paraguariensis* A. St. Hil.) extract on the cellular antioxidant activity, antiproliferative activity and cytotoxicity toward HepG2 cells. *Food Research International*, 77, 257–263. <http://doi.org/10.1016/j.foodres.2015.05.004>

Boaventura, B. C. B., Di Pietro, P. F., Klein, G. A., Stefanuto, A., De Morais, E. C., De Andrade, F., ... Da Silva, E. L. (2013). Antioxidant potential of mate tea (*Ilex paraguariensis*) in type 2 diabetic mellitus and pre-diabetic individuals. *Journal of Functional Foods*, 5(3), 1057–1064. <http://doi.org/10.1016/j.jff.2013.03.001>

Boaventura, B. C. B., Di Pietro, P. F., Stefanuto, A., Klein, G. A., de Morais, E. C., de Andrade, F., ..., da Silva, E. L. (2012). Association of mate tea (*Ilex paraguariensis*) intake and dietary intervention and effects on oxidative stress biomarkers of dyslipidemic subjects. *Nutrition*, 28(6), 657–664. <http://doi.org/10.1016/j.nut.2011.10.017>

Boaventura, B. C., da Silva, E. L., Liu, R. H., Prudêncio, E. S., Di Pietro, P. F., Becker, A. M., & Amboni, R. D. de M. C. (2015b). Effect of yerba mate (*Ilex paraguariensis* A. St. Hil.) infusion obtained by freeze concentration technology on antioxidant status of healthy individuals. *LWT - Food Science and Technology*, 62(2), 948–954. <http://doi.org/10.1016/j.lwt.2015.02.028>

Bojić, M., Simon Haas, V., Šarić, D., & Maleš, Ž. (2013). Determination of flavonoids, phenolic acids, and xanthines in mate tea (*Ilex paraguariensis* St.-Hil.). *Journal of Analytical Methods in Chemistry*, 2013. <http://doi.org/10.1155/2013/658596>

YERBA MATE Y SALUD

Borges, M. C., Ramirez Vinolo, M. A., Nakajima, K., Alves de Castro, I., Bastos, D. H. M., Borelli, P., Fock, R. A., Tirapegui, J., Curi, R. & Rogero, M. M. (2013). The effect of mate tea (*Ilex paraguariensis*) on metabolic and inflammatory parameters in high-fat diet-fed Wistar rats. International Journal of Food Sciences and Nutrition, 64(II), 561–9.
<http://doi.org/10.3109/09637486.2012.759188>

Bortoli, P. M., Alves, C., Costa, E., Vanin, A. P., Sofiatti, J. R., Siqueira, D. P., Dallago, R. M., Treichel, H., Vargas, G. D. L. P. y Kaizer, R. R. (2017). *Ilex paraguariensis*: Potential antioxidant on aluminium toxicity, in an experimental model of Alzheimer's disease. Journal of Inorganic Biochemistry. Article in Press.
<https://doi.org/10.1016/j.jinorgbio.2017.11.001>

Bracesco, N., Dell, M., Rocha, A., Behtash, S., Menini, T., Gugliucci, A., & Nunes, E. (2003). Antioxidant activity of a botanical extract preparation of *Ilex paraguariensis*: prevention of DNA double-strand breaks in *Saccharomyces cerevisiae* and human low-density lipoprotein oxidation. Journal of Alternative and Complementary Medicine, 9(3), 379–87. <http://doi.org/10.1089/107555303765551606>

Bracesco, N., Sanchez, A. G., Contreras, V., Menini, T., & Gugliucci, A. (2011). Recent advances on *Ilex paraguariensis* research: Minireview. Journal of Ethnopharmacology, 136(3), 378–384.
<http://doi.org/10.1016/j.jep.2010.06.032>

Brasilino, M., Stringhetta-Garcia, C. T., Pereira, C. S., Pereira, A. A. F., Stringhetta, K., Leopoldino, A. M., Crivelini, M. M., Ervolino, E., Dornelles, R. C. M., de Melo Stevanato Nakamune, A. C., y Chaves-Neto, A. H. (2017). Mate tea (*Ilex paraguariensis*) improves bone formation in the alveolar socket healing after tooth extraction in rats. Clinical Oral Investigations, 2017, 1-13.
<https://doi.org/10.1007/s00784-017-2249-1>

Bravo, L., Goya, L., & Lecumberri, E. (2007). LC/MS characterization of phenolic constituents of mate (*Ilex paraguariensis*, St. Hil.) and its antioxidant

YERBA MATE Y SALUD

activity compared to commonly consumed beverages. *Food Research International*, 40(3), 393–405.
<http://doi.org/10.1016/j.foodres.2006.10.016>

Bravo, L., Mateos, R., Sarriá, B., Baeza, G., Lecumberri, E., Ramos, S., & Goya, L. (2014). Hypocholesterolaemic and antioxidant effects of yerba mate (*Ilex paraguariensis*) in high-cholesterol fed rats. *Fitoterapia*, 92, 219–229. <http://doi.org/10.1016/j.fitote.2013.11.007>

Brun, L. R., Brance, M. L., Lombarte, M., Maher, M. C., Di Loreto, V. E., & Rigalli, A. (2015). Effects of Yerba Mate (*Ilex paraguariensis*) on Histomorphometry, Biomechanics, and Densitometry on Bones in the Rat. *Calcified Tissue International*, 97(5), 527–534. <http://doi.org/10.1007/s00223-015-0043-0>

Brun, L. R., Lombarte, M., Maher, M. C., Retamozo, C., Di Loreto, V. Rigalli, A. (2016). Efecto de la yerba mate (*Ilex paraguariensis*) sobre el hueso de ratas ovariectomizadas. *Actualizaciones en Osteología*, 12 (3), 188-196. Disponible en: https://www.researchgate.net/publication/316585524_Effect_of_yerba_mate_Ilex_parguariensis_on_bone_in_ovariectomized_rats

Burris, K. P., Davidson, P. M., Stewart, C. N., & Harte, F. M. (2011). Antimicrobial Activity of Yerba Mate (*Ilex paraguariensis*) Aqueous Extracts against *Escherichia coli* O157:H7 and *Staphylococcus aureus*. *Journal of Food Science*, 76(6). <http://doi.org/10.1111/j.1750-3841.2011.02255.x>

Burris, K. P., Davidson, P. M., Stewart, C. N., Zivanovic, S., & Harte, F. M. (2012b). Aqueous extracts of yerba mate (*Ilex paraguariensis*) as a natural antimicrobial against *Escherichia coli* O157:H7 in a microbiological medium and pH 6.0 apple juice. *Journal of Food Protection*, 75(4), 753–7. <http://doi.org/10.4315/0362-028X.JFP-11-214>

YERBA MATE Y SALUD

Burris, K. P., Harte, F. M., Michael Davidson, P., Neal Stewart Jr, C., & Zivanovic, S. (2012a). Composition and Bioactive Properties of Yerba Mate (*Ilex paraguariensis* A. St.-Hil.): A Review. Chilean Journal of Agricultural Research, 72(2), 268–275. <http://doi.org/10.4067/S0718-58392012000200016>

Burris, K. P., Higginbotham, K. L., & Stewart, C. N. (2015). Aqueous extracts of yerba mate as bactericidal agents against methicillin-resistant *Staphylococcus aureus* in a microbiological medium and ground beef mixtures. Food Control, 50, 748–753. <http://doi.org/10.1016/j.foodcont.2014.10.021>

Butiuk, A. P., Martos, M. A., Adachi, O., & Hours, R. A. (2016). Study of the chlorogenic acid content in yerba mate (*Ilex paraguariensis* St. Hil.): Effect of plant fraction, processing step and harvesting season. Journal of Applied Research on Medicinal and Aromatic Plants, 3(1), 27–33. <http://doi.org/10.1016/j.jarmp.2015.12.003>

Cahuê, F., Souza, S., Martins dos Santos, C. F., Machado, V., Nascimento, J. H. M., Barcellos, L. y Salerno, V. P. (2017). Short-term consumption of *Ilex paraguariensis* extracts protects isolated hearts from ischemia/reperfusion injury and contradicts exercise-mediated cardioprotection. Applied Physiology, Nutrition, and Metabolism, 42(11), 1149-1157. <https://doi.org/10.1139/apnm-2017-0213>

Cardozo Junior, E. L., & Morand, C. (2016). Interest of mate (*Ilex paraguariensis* A. St.-Hil.) as a new natural functional food to preserve human cardiovascular health - A review. Journal of Functional Foods, 21, 440–454. <http://doi.org/10.1016/j.jff.2015.12.010>

Cardozo, E. L., Ferrarese-Filho, O., Filho, L. C., Ferrarese, M. de L. L., Donaduzzi, C. M., & Sturion, J. A. (2007). Methylxanthines and phenolic compounds in mate (*Ilex paraguariensis* St. Hil.) progenies grown in Brazil. Journal of Food Composition and Analysis, 20(7), 553–558. <http://doi.org/10.1016/j.jfca.2007.04.007>

YERBA MATE Y SALUD

Carducci, C. N., Dabas, P. C., & Muse, J. O. (2000). Bioactive Compounds Content of Chimarrão Infusions Related to the Moisture of Yerba Maté (*Ilex paraguariensis*) Leaves. *Journal of AOAC international* 83(5), 1167–1173. <http://dx.doi.org/10.1590/S1516-89132006000400007>

Carelli, G., Macedo, S. M. D., Valduga, A. L., Corazza, M. L., Oliveira, J. V., Franceschi, E., ... Jaskulski, M. R. (2011). Avaliação preliminar da atividade antimicrobiana do extrato de erva-mate (*Ilex paraguariensis* A. St.-Hil.) obtido por extração com CO₂ supercrítico. *Revista Brasileira de Plantas Medicinais*, 13(1), 110–115. <http://doi.org/10.1590/S1516-05722011000100016>

Carini, M., Facino, R. M., Aldini, G., & Calloni, M. (1998). Characterization of phenolic antioxidants from Maté (*Ilex Paraguayensis*) by liquid chromatography/mass spectrometry and liquid chromatography/tandem mass spectrometry. *Rapid Communications in Mass Spectrometry*, 12(22), 1813–1819. [http://doi.org/10.1002/\(SICI\)1097-0231\(19981130\)12:22<1813::AID-RCM379>3.0.CO;2-#](http://doi.org/10.1002/(SICI)1097-0231(19981130)12:22<1813::AID-RCM379>3.0.CO;2-#)

Carmo, L. S., Rogero, M. M., Cortez, M., Yamada, M., Jacob, P. S., Bastos, D. H. M., ... Ambrósio Fock, R. (2013). The Effects of Yerba Maté (*Ilex paraguariensis*) consumption on IL-1, IL-6, TNF-α and IL-10 production by bone marrow cells in wistar rats fed a high-fat diet. *International Journal for Vitamin and Nutrition Research*, 83(1), 26–35. <http://doi.org/10.1024/0300-9831/a000142>

Chandra, S., & de Mejía, E. G. (2004). Polyphenolic compounds, antioxidant capacity and quinone reductase activity of an aqueous extract of *Ardisia compressa* in comparision to Mate (*Ilex paraguaiensis*) and Green Teas (*Camellia sinensis*). *Journal of Agricultural and Food Chemistry*, 52, 3583–3589. <http://dx.doi.org/10.1021/jf0352632>

Choi, M. S., Park, H. J., Kim, S. R., Kim, D.Y., Jung U. J. (2017). Long-Term Dietary Supplementation with Yerba Mate Ameliorates Diet-Induced

YERBA MATE Y SALUD

Obesity and Metabolic Disorders in Mice by Regulating Energy Expenditure and Lipid Metabolism. Journal of Medicinal Food, 20(12), 1168-1175. <https://doi.org/10.1089/jmf.2017.3995>

Cittadini, M. C., García-Estévez, I., Escribano-Bailón, M. T., Rivas-Gonzalo, J. C., Valentich, M, A., Repossi, G. y Soria, E. A. (2017). Modulation of Fatty Acids and Interleukin-6 in Glioma Cells by South American Tea Extracts and their Phenolic Compounds. Nutrition and Cancer. <https://doi.org/10.1080/01635581.2018.1412484>

Clifford, M. N., & Ramirez-Martinez, J. R. (1990). Chlorogenic Acids and Purine Alkaloids of Maté (*Ilex paraguariensis*) Leaf and Beverage. Food Chemistry 35, 13–21. [http://dx.doi.org/10.1016/0308-8146\(90\)90126-O](http://dx.doi.org/10.1016/0308-8146(90)90126-O)

Coelho, G. C., Gnoatto, S. B., Bassani, V. L., & Schenkel, E. P. (2010). Quantification of saponins in extractive solution of mate leaves (*Ilex paraguariensis* A. St. Hil.). Journal of Medicinal Food, 13(2), 439–443. <http://doi.org/10.1089/jmf.2009.0046>

Cogo, L.L., Monteiro, C.L.B., Miguel, M.D., Miguel, O.G., Cunico, M.M., Ribeiro, M.L., de Camargo, E.R., Kussen, G. M. B., Nogueira, K. da S., Costa, L.M.D. (2010). Anti-*Helicobacter pylori* activity of plant extracts traditionally used for the treatment of gastrointestinal disorders. Brazilian Journal of Microbiology 41 (2), 304-309. <http://dx.doi.org/10.1590/S1517-83822010000200007>

Cogoi, L., Giacomino, M. S., Pellegrino, N., Anesini, C., & Filip, R. (2013). Nutritional and phytochemical study of *Ilex paraguariensis* fruits. Journal of Chemistry, 2013. <http://doi.org/10.1155/2013/750623>

Colpo, A. C., de Lima, M. E., Maya-López, M., Rosa, H., Márquez-Curiel, C., Galván-Arzate, S., Santamaría, A., Folmer V. (2017). Compounds from *Ilex paraguariensis* extracts confer antioxidant effects in the brains of rats subjected to chronic immobilization stress. Applied

YERBA MATE Y SALUD

Physiology, Nutrition and Metabolism, 42(11), 1172-1178.
<https://doi.org/10.1139/apnm-2017-0267>

Colpo, A. C., Rosa, H., Lima, M. E., Pazzini, C. E. F., De Camargo, V. B., Bassante, F. E. M., ... Folmer, V. (2016). Yerba mate (*Ilex paraguariensis* St. Hill.)-based beverages: How successive extraction influences the extract composition and its capacity to chelate iron and scavenge free radicals. Food Chemistry, 209, 185–195.
<http://doi.org/10.1016/j.foodchem.2016.04.059>

Colpo, G., Trevisol, F., Teixeira, A. M., Fachinetto, R., Pereira, R. P., Athayde, M. L., ... Burger, M. E. (2007). *Ilex paraguariensis* has antioxidant potential and attenuates haloperidol-induced orofacial dyskinesia and memory dysfunction in rats. Neurotoxicity Research, 12(3), 171–180. <http://doi.org/10.1007/BF03033914>

Conceição, E. P., Kaezer, A. R., Peixoto-Silva, N., Felzenszwalb, I., de Oliveira, E., Moura, E. G., Lisboa, P. C. Effects of *Ilex paraguariensis* (yerba mate) on the hypothalamic signalling of insulin and leptin and liver dysfunction in adult rats overfed during lactation. Journal of Developmental Origins of Health and Disease, 8(1), 123-132.
<http://dx.doi.org/10.1017/S2040174416000519>

Conforti, A. S., Gallo, M. E., & Saraví, F. D. (2012). Yerba Mate (*Ilex paraguariensis*) consumption is associated with higher bone mineral density in postmenopausal women. Bone, 50(1), 9–13.
<http://doi.org/10.1016/j.bone.2011.08.029>

Cuelho, C. H. F., Bonilha, I. de F., do Canto, G. S., & Manfron, M. P. (2015). Recent advances in the bioactive properties of yerba mate. Revista Cubana de Farmacia, 49(2), 375–383. Retrieved from http://bvs.sld.cu/revistas/far/vol49_2_15/far16215.htm

da Cunha, F. L. Da, Silva, C. M. G. Da, Almeida, M. G. De, Lameiro, T. M. D. M., Marques, L. H. S., Margarido, N. F., & Martinez, C. A. R. (2011).

YERBA MATE Y SALUD

Reduction in oxidative stress levels in the colonic mucosa without fecal stream after the application of enemas containing aqueous *Ilex paraguariensis* extract. Acta Cirurgica Brasileira / Sociedade Brasileira Para Desenvolvimento Pesquisa Em Cirurgia, 26(4), 289–296. <http://doi.org/10.1590/S0102-86502011000400008>

da Silva, E. L., Neiva, T. J. C., Shirai, M., Terao, J., & Abdalla, D. S. P. (2008). Acute ingestion of yerba mate infusion (*Ilex paraguariensis*) inhibits plasma and lipoprotein oxidation. Food Research International, 41(10), 973–979. <http://doi.org/10.1016/j.foodres.2008.08.004>

da Silva, J. F., Bidinotto, L. T., Furtado, K. S., Salvadori, D. M. F., Rivelli, D. P., Barros, S. B. de M., ... Barbisan, L. F. (2009). Maté attenuates DNA damage and carcinogenesis induced by diethylnitrosamine and thermal injury in rat esophagus. Food and Chemical Toxicology, 47(7), 1521–1529. <http://doi.org/10.1016/j.fct.2009.03.040>

Dahmer, T., Berger, M., Barlette, A. G., Reck, J., Segalin, J., Verza, S., ... Gosmann, G. (2012). Antithrombotic effect of chikusetsusaponin IVa isolated from *Ilex paraguariensis* (Maté). Journal of Medicinal Food, 15(12), 1073–80. <http://doi.org/10.1089/jmf.2011.0320>

Dartora, N., De Souza, L. M., Paiva, S. M. M., Scoparo, C. T., Iacomini, M., Gorin, P. A. J., ... Sasaki, G. L. (2013). Rhamnogalacturonan from *Ilex paraguariensis*: A potential adjuvant in sepsis treatment. Carbohydrate Polymers, 92(2), 1776–1782. <http://doi.org/10.1016/j.carbpol.2012.11.013>

Dartora, N., De Souza, L. M., Santana-Filho, A. P., Iacomini, M., Valduga, A. T., Gorin, P. A. J., & Sasaki, G. L. (2011). UPLC-PDA-MS evaluation of bioactive compounds from leaves of *Ilex paraguariensis* with different growth conditions, treatments and ageing. Food Chemistry, 129(4), 1453–1461. <http://doi.org/10.1016/j.foodchem.2011.05.112>

YERBA MATE Y SALUD

de Biasi, B., Grazziotin, N. A. & Hofmann Jr, A. E. (2009). Atividade antimicrobiana dos extratos de folhas e ramos da *Ilex paraguariensis* A. St.-Hil., Aquifoliaceae. Brazilian Journal of Pharmacognosy 19(2B), 582-585. <http://dx.doi.org/10.1590/S0102-695X2009000400013>

de Carvalho, E., de Oliveira, S., Nardi, V., Gelinski, T., Bortoluzzi, M., Maraschin, M., & Nardi, G. (2016). *Ilex paraguariensis* promotes orofacial pain relief after formalin injection: Involvement of noradrenergic pathway. *Pharmacognosy Research*, 8(5), 31. <http://doi.org/10.4103/0974-8490.178643>

de Lima, M. E., Colpo, A. C., Maya-López, M., Rosa, H., Túnez, I., Galván-Arzate, S., Santamaría, A. y Folmer, F. (2017). Protective effect of Yerba mate (*Ilex paraguariensis* St. Hill.) against oxidative damage in vitro in rat brain synaptosomal/mitochondrial P2fractions. *Journal of Functional Food*, 34, 447-452. <https://doi.org/10.1016/j.jff.2017.05.026>

de Mejía, E. G., Song, Y. S., Heck, C. I., & Ramírez-Mares, M. (2010). Yerba mate tea (*Ilex paraguariensis*): Phenolics, antioxidant capacity and in vitro inhibition of colon cancer cell proliferation. *Journal of Functional Foods*, 2(1), 23–34. <http://doi.org/10.1016/j.jff.2009.12.003>

de Mejía, E., Young, S. S., Ramirez-Mares, M. V., & Kobayashi, H. (2005). Effect of yerba mate (*Ilex paraguariensis*) tea on topoisomerase inhibition and oral carcinoma cell proliferation. *Journal of Agricultural and Food Chemistry*, 53(6), 1966–1973. <http://doi.org/10.1021/jf048158g>

de Morais, E. C., Stefanuto, A., Klein, G. A., Boaventura, B. C. B., De Andrade, F., Wazlawik, E., ... Da Silva, E. L. (2009). Consumption of yerba mate (*Ilex paraguariensis*) improves serum lipid parameters in healthy dyslipidemic subjects and provides an additional LDL-cholesterol reduction in individuals on statin therapy. *Journal of Agricultural and Food Chemistry*, 57(18), 8316–8324. <http://doi.org/10.1021/jf901660g>

YERBA MATE Y SALUD

de Oliveira, D. M., Sampaio, G. R., Pinto, C. B., Catharino, R. R., & Bastos, D. H. M. (2016). Bioavailability of chlorogenic acids in rats after acute ingestion of maté tea (*Ilex paraguariensis*) or 5-caffeoylquinic acid. European Journal of Nutrition, 1–16. <http://doi.org/10.1007/s00394-016-1290-1>

de Olivera, D. M., Sampaio, G. R., Pinto, C. B., Catharino, R. R., Bastos, D. H.M. (2017). Bioavailability of chlorogenic acids in rats after acute ingestion of maté tea (*Ilex paraguariensis*) or 5-caffeoylquinic acid. European Journal of Nutrition, 56 (8), 2541-2556. <https://doi.org/10.1007/s00394-016-1290-1>

de Resende, P. E., Kaiser, S., Pittol, V., Hoefel, A. L., D'Agostini Silva, R., Vieira Marques, C., ... Ortega, G. G. (2015). Influence of crude extract and bioactive fractions of *Ilex paraguariensis* A. St. Hil. (yerba mate) on the Wistar rat lipid metabolism. Journal of Functional Foods, 15, 440–451. <http://doi.org/10.1016/j.jff.2015.03.040>

de Resende, P. E., Verza, S. G., Kaiser, S., Gomes, L. F., Kucharski, L. C., & Ortega, G. G. (2012). The activity of mate saponins (*Ilex paraguariensis*) in intra-abdominal and epididymal fat, and glucose oxidation in male Wistar rats. Journal of Ethnopharmacology, 144(3), 735–740. <http://doi.org/10.1016/j.jep.2012.10.023>

de Souza, L. M., Dartora, N., Scoparo, C. T., Cipriani, T. R., Gorin, P. A. J., Iacomini, M., Sasaki, G. L. (2011). Comprehensive analysis of maté (*Ilex paraguariensis*) compounds: Development of chemical strategies for matesaponin analysis by mass spectrometry. Journal of Chromatography A, 1218(41), 7307–7315. <http://doi.org/10.1016/j.chroma.2011.08.047>

Dudonné, S., Vitrac, X., Coutiére, P., Woillez, M., & Mérillon, J. M. (2009). Comparative study of antioxidant properties and total phenolic content of 30 plant extracts of industrial interest using DPPH, ABTS, FRAP, SOD, and ORAC assays. Journal of Agricultural and Food Chemistry, 57(5), 1768–1774. <http://doi.org/10.1021/jf803011r>

YERBA MATE Y SALUD

Dugo, P., Cacciola, F., Donato, P., Jacques, R. A., Caramão, E. B., & Mondello, L. (2009). High efficiency liquid chromatography techniques coupled to mass spectrometry for the characterization of mate extracts. *Journal of Chromatography A*, 1216(43), 7213–7221.
<http://doi.org/10.1016/j.chroma.2009.08.030>

Dutra, F. L. G., Hoffmann-Ribani, R., & Ribani, M. (2010). Determinação de compostos fenólicos por cromatografia líquida de alta eficiencia isocrática durante estacionamento da erva-mate. *Química Nova*, 33(1), 119-123. <http://dx.doi.org/10.1590/S0100-40422010000100022>

Efing, L. C., Caliari, T. K., Nakashima, T., & de Freitas, R. J. S. (2009). Caracterização química e capacidade antioxidante da erva-mate (*Ilex paraguariensis* St. Hil.). *Boletim Centro de Pesquisa de Processamento de Alimentos*, 27(2), 241–246.
<http://dx.doi.org/10.5380/cep.v27i2.22034>

Erben, M., Poletta, G. L., & Simoniello, M. F. (2014). DNA Repair Activity of *Ilex paraguariensis* in Human Cells *In Vitro*. *Latin American Journal of Pharmacy* 33(2), 302–306. Disponible en http://www.latamjpharm.org/resumenes/33/2/LAJOP_33_2_1_18.pdf

Escalada, G., Escalada, G., Brumovsky, L. A., & Hartwig, V. G. (2011). Influencia de la zona de cultivo y procesamiento de la yerba mate sobre su contenido de polifenoles totales y capacidad antioxidante. *Revista de Ciencia y Tecnología*, 13(15), 66–74.

Fagundes, A., Danguy, L. B., Schmitt, V., Mazur, C. E. (2015). *Ilex paraguariensis*: Compostos bioativos e propriedades nutricionais na saúde. *Revista Brasileira de Obesidade, Nutrição e Emagrecimento.*, 5(42), 94–101. Disponible en <http://dialnet.unirioja.es/servlet/oaiart?codigo=4837941>

YERBA MATE Y SALUD

Falconi, A., Gutiérrez, M., Benedetto, L., Abin-Carriquiry, J. A., Bricesco, N., & Torterolo, P. (2013). Waking-promoting action of yerba mate (*Ilex paraguariensis*). *Sleep Science*, 6(1), 9–15. Disponible en <http://www.scopus.com/inward/record.url?eid=2-s2.0-84878832309&partnerID=40&md5=4fbaab6292ed0258600fc68609328918>

Fantinelli, J., González Arbeláez, L., Ciocci Pardo, A., Schinella, G., & Mosca, S. (2016). Comparative effects of natural products on ischemia-reperfusion injury: relation to their " *in vitro* " antioxidant capacity. *Boletín Latinoamericano Y Del Caribe de Plantas Medicinales Y Aromáticas*, 15(3), 151–163. Disponible en: <http://www.redalyc.org/articulo.oa?id=85645293003>

Fernandes, C. E. F., Kuhn, F., Scapinello, J., Lazarotto, M., Bohn, A., Boligon, A. A., ... Oliveira, J. V. (2016a). Phytochemical profile, antioxidant and hypolipemiant potential of *Ilex paraguariensis* fruit extracts. *Industrial Crops and Products*, 81, 139–146. <http://doi.org/10.1016/j.indcrop.2015.11.078>

Fernandes, C. E. F., Scapinello, J., Bohn, A., Boligon, A. A., Athayde, M. L., Magro, J. D., Palliga, M., Oliveira, J. V. y Tres, M. V. (2017). Phytochemical profile, antioxidant and antimicrobial activity of extracts obtained from erva-mate (*Ilex paraguariensis*) fruit using compressed propane and supercritical CO₂. *Journal of Food Science and Technology*, 54(1), 98-104. <https://doi.org/10.1007/s13197-016-2440-4>

Fernandes, C. E. F., Scapinello, J., Bohn, A., Boligon, A. A., Athayde, M. L., Magro, J. D., ... Tres, M. V. (2016b). Phytochemical profile, antioxidant and antimicrobial activity of extracts obtained from erva-mate (*Ilex paraguariensis*) fruit using compressed propane and supercritical CO₂. *Journal of Food Science and Technology*, 54(1), 98–104. <http://doi.org/10.1007/s13197-016-2440-4>

YERBA MATE Y SALUD

Fernandes, E. S., de Oliveira Machado, M., Becker, A. M., de Andrade, F., Maraschin, M., & da Silva, E. L. (2012). Yerba mate (*Ilex paraguariensis*) enhances the gene modulation and activity of paraoxonase-2: *In vitro* and *in vivo* studies. Nutrition, 28(11-12), 1157–1164. <http://doi.org/10.1016/j.nut.2012.04.011>

Ferreira da Silveira, T. F., Meinhart, A. D., Coutinho, J. P., de Souza, T. C. L., Cunha, E. C. E., de Moraes, M. R., & Godoy, H. T. (2016b). Content of lutein in aqueous extracts of yerba mate (*Ilex paraguariensis* St. Hil.). Food Research International, 82, 165–171. <http://doi.org/10.1016/j.foodres.2015.12.033>

Ferreira da Silveira, T. F., Meinhart, A. D., De Souza, T. C. L., Teixeira Filho, J., & Godoy, H. T. (2016a). Phenolic compounds from yerba mate based beverages - A multivariate optimisation. Food Chemistry, 190, 1159–1167. <http://doi.org/10.1016/j.foodchem.2015.06.031>

Filip, R., Davicino, R., Anesini, C. (2010). Antifungal activity of the aqueous extract of *Ilex paraguariensis* against *Malassezia furfur*. Phytotherapy Research, 24 (5), 715-719. <https://dx.doi.org/10.1002/ptr.3004>

Filip, R., López, P., Giberti, G., Coussio, J., & Ferraro, G. (2001). Phenolic compounds in seven South American *Ilex* species. Fitoterapia, 72(7), 774–778. [http://doi.org/http://dx.doi.org/10.1016/S0367-326X\(01\)00331-8](http://doi.org/http://dx.doi.org/10.1016/S0367-326X(01)00331-8)

Filip, R., Lotito, S. B., Ferraro, G., & Fraga, C. G. (2000). Antioxidant activity of *Ilex paraguariensis* and related species. Nutrition Research, 20(10), 1437–1446. [http://dx.doi.org/10.1016/S0271-5317\(00\)80024-X](http://dx.doi.org/10.1016/S0271-5317(00)80024-X)

Filip, R., Sebastian, T., Ferraro, G., & Anesini, C. (2007). Effect of *Ilex* extracts and isolated compounds on peroxidase secretion of rat submandibular glands. Food and Chemical Toxicology, 45(4), 649–655. <http://doi.org/10.1016/j.fct.2006.10.014>

YERBA MATE Y SALUD

Frant, M., Czajka, M., & Paduch, R. (2012). Yerba Maté (*Ilex paraguariensis*) effect on human colon normal and tumor cells. International Journal of Pharmaceutical Sciences and Research, 3(12), 4730-4737.
[http://dx.doi.org/10.13040/IJPSR.0975-8232.3\(12\).4730-37](http://dx.doi.org/10.13040/IJPSR.0975-8232.3(12).4730-37)

Frizon, C. N. T., Oliveira, G. A., Perussello, C. A., Peralta-Zamora, P. G., Camlofski, A. M. O., Rossa, Ü. B., & Hoffmann-Ribani, R. (2015). Determination of total phenolic compounds in yerba mate (*Ilex paraguariensis*) combining near infrared spectroscopy (NIR) and multivariate analysis. LWT - Food Science and Technology, 60(2), 795–801. <http://doi.org/10.1016/j.lwt.2014.10.030>

Fujii, T. M., Jacob, P. S., Yamada, M., Borges, M. C., Norde, M. M., Pantaleao, L. C., ... Rogero, M. M. (2014). Yerba Mate (*Ilex paraguariensis*) modulates NF-κB pathway and AKT expression in the liver of rats fed on a high-fat diet. International Journal of Food Sciences and Nutrition, 65(8), 967–976.
<http://doi.org/10.3109/09637486.2014.945153>

Gambero, A., & Ribeiro, M. L. (2015). The positive effects of yerba maté (*Ilex paraguariensis*) in obesity. Nutrients, 7(2), 730–750.
<http://doi.org/10.3390/nu7020730>

Gamboa-Gómez, C. I., Rocha-guzmán, N. E., Gallegos-infante, J. A., Moreno-jiménez, M. R., Vázquez-cabral, B. D., González-laredo, R. F., ... Ote, F. P. (2015). Review article : Plants with potential use on obesity and its complications. Excli Journal, 809–831.
<http://doi.org/10.17179/excli2015-186>

Gao, H., Liu, Z., Qu, X., & Zhao, Y. (2013c). Effects of Yerba Mate tea (*Ilex paraguariensis*) on vascular endothelial function and liver lipoprotein receptor gene expression in hyperlipidemic rats. Fitoterapia, 84(1), 264–272.
<http://doi.org/10.1016/j.fitote.2012.12.024>

YERBA MATE Y SALUD

Gao, H., Liu, Z., Wan, W., Qu, X., & Chen, M. (2013b). Aqueous extract of yerba mate tea lowers atherosclerotic risk factors in a rat hyperlipidemia model. *Phytotherapy Research*, 27(8), 1225–1231.
<http://doi.org/10.1002/ptr.4856>

Gao, H., Long, Y., Jiang, X., Liu, Z., Wang, D., Zhao, Y., ... Sun, B. liang. (2013a). Beneficial effects of Yerba Mate tea (*Ilex paraguariensis*) on hyperlipidemia in high-fat-fed hamsters. *Experimental Gerontology*, 48(6), 572–578. <http://doi.org/10.1016/j.exger.2013.03.008>

Gatto, E. M., Melcon, C., Parisi, V. L., Bartoloni, L., & Gonzalez, C. D. (2015). Inverse association between yerba mate consumption and idiopathic Parkinson's disease. A case-control study. *Journal of the Neurological Sciences*, 356(1-2), 163–167.
<http://doi.org/10.1016/j.jns.2015.06.043>

Gebara, K. S., Gasparotto-Junior, A., Santiago, P. G., Cardoso, C. A. L., de Souza, L. M., Morand, C., Costa, T. A. y Cardozo-Junior, E. L. (2017). Daily Intake of Chlorogenic Acids from Consumption of Maté (*Ilex paraguariensis* A.St.-Hil.) Traditional Beverages. *Journal of Agricultural and Food Chemistry*, 65 (46), 10093-10100.
<https://doi.org/10.1021/acs.jafc.7b04093>

Girolometto, G., Avancini, C.A.M., Carvalho, H.H.C., & Wiest, J.M. (2009). Antibacterial activity of yerba mate (*Ilex paraguariensis* A.St.-Hil.) extracts. *Revista Brasileira de Plantas Medicinais* 11 (1), 49-55.
<http://dx.doi.org/10.1590/S1516-05722009000100009>

Giulian, R., Santos, C. E. I. Dos, De Moraes Shubeita, S., Da Silva, L. M., Dias, J. F., & Yoneama, M. L. (2007). Elemental characterization of commercial mate tea leaves (*Ilex paraguariensis* A. St.-Hil.) before and after hot water infusion using ion beam techniques. *Journal of Agricultural and Food Chemistry*, 55(3), 741–746.
<http://doi.org/10.1021/jf062456r>

YERBA MATE Y SALUD

Gnoatto, S. C. B., Schenkel, E. P., & Bassani, V. L. (2005). HPLC Method to Assay Total Saponins in *Ilex paraguariensis* aqueous extract. Journal of the Brazilian Chemical Society 16(4), 723–726.
<http://dx.doi.org/10.1590/S0103-50532005000500007>

Gnoatto, S. C., Dassonville-Klimpt, A., Da Nascimento, S., Galéra, P., Boumediene, K., Gosmann, G., Sonnet, P. y Moslemi, S. (2008). Evaluation of ursolic acid isolated from *Ilex paraguariensis* and derivatives on aromatase inhibition. European Journal of Medicinal Chemistry, 43(9), 1865-77.
<https://doi.org/10.1016/j.ejmech.2007.11.021>

González Arbeláez, L. F., Fantinelli, J. C., Pardo, A. C., Caldiz, C. I., Ríos, J. L., Schinella, G. R., & Mosca, S. M. (2016). Effect of an *Ilex paraguariensis* (yerba mate) extract on infarct size in isolated rat hearts: the mechanisms involved. Food & Function, 7, 816–824.
<http://doi.org/10.1039/C5FO01255D>

Görgen, M., Turatti, K., Medeiros, A. R., Buffon, A., Bonan, C. D., Sarkis, J. J. F., & Pereira, G. S. (2005). Aqueous extract of *Ilex paraguariensis* decreases nucleotide hydrolysis in rat blood serum. Journal of Ethnopharmacology, 97(1), 73–77.
<http://doi.org/10.1016/j.jep.2004.10.015>

Gorzalczany, S., Filip, R., Alonso, M. del R., Miño, J., Ferraro, G. E., & Acevedo, C. (2001). Choleretic effect and intestinal propulsion of “mate” (*Ilex paraguariensis*) and its substitutes or adulterants. Journal of Ethnopharmacology, 75(2-3), 291–294.
[http://doi.org/10.1016/S0378-8741\(01\)00179-9](http://doi.org/10.1016/S0378-8741(01)00179-9)

Gosmann, G., Barlette, A. G., Dhamer, T., Arçari, D. P., Santos, J. C., de Camargo, E. R., ... Ribeiro, M. L. (2012). Phenolic Compounds from Maté (*Ilex paraguariensis*) Inhibit Adipogenesis in 3T3-L1 Preadipocytes. Plant Foods for Human Nutrition, 67(2), 156–161.
<http://doi.org/10.1007/s11130-012-0289-x>

YERBA MATE Y SALUD

Gosmann, G., Guillaume, D., Taketa, A. T., & Schenkel, E. P. (1995). Triterpenoid saponins from *Ilex paraguariensis*. Journal of Natural Products, 58(3), 438–441. <http://doi.org/10.1021/np50117a015>

Gosmann, G., Schenkel, E. P., & Seligmann, O. (1989). A new saponin form mate, *Ilex paraguariensis*. Journal of Natural Products, 52(January), 1367–1370. <http://doi.org/10.1021/np50066a036>

Grujic, N., Lepojevic, Z., Srdjenovic, B., Vladic, J., & Sudji, J. (2012). Effects of different extraction methods and conditions on the phenolic composition of mate tea extracts. Molecules, 17(3), 2518–2528. <http://doi.org/10.3390/molecules17032518>

Gugliucci, A. (1996). Antioxidant Effects of *Ilex paraguariensis*: Induction of Decreased Oxidability of Human LDL *in Vivo*. Biochemical and Biophysical Research Communications, 224 (2), 338–344. <https://dx.doi.org/10.1006/bbrc.1996.1030>

Gugliucci, A., & Bastos, D. H. M. (2009). Chlorogenic acid protects paraoxonase 1 activity in high density lipoprotein from inactivation caused by physiological concentrations of hypochlorite. Fitoterapia, 80(2), 138–142. <http://doi.org/10.1016/j.fitote.2009.01.001>

Gugliucci, A., & Stahl, A. J. (1995). Low density lipoprotein oxidation is inhibited by extracts of *Ilex paraguariensis*. Biochemistry and Molecular Biology International, 35(1), 47–56.

Gugliucci, A., Bastos, D. H. M., Schulze, J., & Souza, M. F. F. (2009). Caffeic and chlorogenic acids in *Ilex paraguariensis* extracts are the main inhibitors of AGE generation by methylglyoxal in model proteins. Fitoterapia, 80(6), 339–344. <http://doi.org/10.1016/j.fitote.2009.04.007>

YERBA MATE Y SALUD

Hartwig, V. G., Brumovsky, L. A., Fretes, R. M., & Boado, L. S. (2012). A novel procedure to measure the antioxidant capacity of Yerba maté extracts. Ciência e Tecnologia de Alimentos, 32(1), 126–133.
<http://doi.org/10.1590/S0101-20612012005000022>

Heck, C. I., & de Mejía, E. G. (2007). Yerba mate tea (*Ilex paraguariensis*): A comprehensive review on chemistry, health implications, and technological considerations. Journal of Food Science, 72(9).
<http://doi.org/10.1111/j.1750-3841.2007.00535.x>

Heinrichs, R., & Malavolta, E. (2001). Composição mineral do produto comercial da erva-mate (*Ilex paraguariensis* St. Hil.). Ciência Rural, 31(5), 781–785. <http://doi.org/10.1590/S0103-84782001000500007>

Hussein, G. M. E., Matsuda, H., Nakamura, S., Akiyama, T., Tamura, K., & Yoshikawa, M. (2011b). Protective and ameliorative effects of maté (*Ilex paraguariensis*) on metabolic syndrome in TSOD mice. Phytomedicine, 19(1), 88–97.
<http://doi.org/10.1016/j.phymed.2011.06.036>

Hussein, G. M. E., Matsuda, H., Nakamura, S., Hamao, M., Akiyama, T., Tamura, K., & Yoshikawa, M. (2011a). Mate Tea (*Ilex paraguariensis*) Promotes Satiety and Body Weight Lowering in Mice: Involvement of Glucagon-Like Peptide-1. Biological & Pharmaceutical Bulletin, 34(12), 1849–1855. <http://doi.org/10.1248/bpb.34.1849>

Isolabella, S., Cogoi, L., López, P., Anesini, C., Ferraro, G., & Filip, R. (2010). Study of the bioactive compounds variation during yerba mate (*Ilex paraguariensis*) processing. Food Chemistry, 122(3), 695–699. <http://doi.org/10.1016/j.foodchem.2010.03.039>

Jacques, R. A., Arruda, E. J., De Oliveira, L. C. S., De Oliveira, A. P., Dariva, C., De Oliveira, J. V., & Caramão, E. B. (2007). Influence of agronomic variables on the macronutrient and micronutrient contents and thermal behavior of mate tea leaves (*Ilex paraguariensis*). Journal of

YERBA MATE Y SALUD

Agricultural and Food Chemistry, 55(18), 7510–7516.
<http://doi.org/10.1021/jf071545g>

Jaiswal, R., Sovdat, T., Vivan, F., & Kuhnert, N. (2010). Profiling and characterization by LC-MSn of the chlorogenic acids and hydroxycinnamoylshikimate esters in maté (*Ilex paraguariensis*). Journal of Agricultural and Food Chemistry, 58(9), 5471–5484.
<http://doi.org/10.1021/jf904537z>

Kaezer, A. R., Aiub, C. A. F., Mazzei, J. L., Ribeiro-Pinto, L. F., & Felzenszwalb, I. (2012). Antimutagenic effect and phenolic content of green and roasted yerba mate beverages in different packages available in the Brazilian market. CyTA - Journal of Food, 10(2), 144–151.
<http://doi.org/10.1080/19476337.2011.601429>

Kang, Y. R., Lee, H. Y., Kim, J. H., Moon, D. I., Seo, M. Y., Park, S. H., ... Oh, H. G. (2012). Anti-obesity and anti-diabetic effects of Yerba Mate (*Ilex paraguariensis*) in C57BL/6J mice fed a high-fat diet. Laboratory Animal Research, 28(1), 23–29.
<https://dx.doi.org/10.5625%2Flar.2012.28.1.23>

Kim, H. J., Ko, J., Storni, C., Song, H. J., & Cho, Y. G. (2012). Effect of green mate in overweight volunteers: A randomized placebo-controlled human study. Journal of Functional Foods, 4(1), 287–293.
<http://doi.org/10.1016/j.jff.2011.12.005>

Kim, S.-Y., Oh, M.-R., Kim, M.-G., Chae, H.-J., & Chae, S.-W. (2015). Anti-obesity effects of Yerba Mate (*Ilex paraguariensis*): a randomized, double-blind, placebo-controlled clinical trial. BMC Complementary and Alternative Medicine, 15(1), 338. <http://doi.org/10.1186/s12906-015-0859-1>

Klein, G. A., Stefanuto, A., Boaventura, B. C., de Morais, E. C., Cavalcante, L. da S., de Andrade, F., ... da Silva, E. L. (2011). Mate Tea (*Ilex paraguariensis*) Improves Glycemic and Lipid Profiles of Type 2

YERBA MATE Y SALUD

Diabetes and Pre-Diabetes Individuals: A Pilot Study. Journal of the American College of Nutrition, 30(5), 320–332.
<http://doi.org/10.1080/07315724.2011.10719975>

Kraemer, K. H., Taketa, A. T. C., Schenkel, E. P., Gosmann, G., & Guillaume, D. (1996). Matesaponin 5, a highly polar saponin from *Ilex paraguariensis*. Phytochemistry, 42(4), 1119–1122.
[http://doi.org/10.1016/0031-9422\(96\)00036-2](http://doi.org/10.1016/0031-9422(96)00036-2)

Kubo, I., Muroi, H., & Himejima, M. (1993). Antibacterial activity against *Streptococcus mutans* of mate tea flavor components. Journal of Agricultural and Food Chemistry, 41(1), 107–111.
<http://doi.org/10.1021/jf00025a023>

Lanzetti, M., Barroso, M. V., Nesi, R. T., Lopes, A. A., Trajano, E. T. L., Alves, J. N., ... Valenca, S. S. (2012). Ready-to-drink mate® tea shows anti-inflammatory and antioxidant properties on a cigarette smoke exposure model. Food Research International, 48(2), 798–801.
<http://doi.org/10.1016/j.foodres.2012.06.025>

Lanzetti, M., Bezerra, F. S., Romana-Souza, B., Brando-Lima, A. C., Koatz, V. L. G., Porto, L. C., & Valenca, S. S. (2008). Mate tea reduced acute lung inflammation in mice exposed to cigarette smoke. Nutrition, 24(4), 375–381. <http://doi.org/10.1016/j.nut.2008.01.002>

Leonard, S. S., Hogans, V. J., Coppes-Petricorena, Z., Peer, C. J., Vining, T. A., Fleming, D. W., & Harris, G. K. (2010). Analysis of free-radical scavenging of yerba mate (*Ilex paraguariensis*) using electron spin resonance and radical-induced DNA damage. Journal of Food Science, 75(1), 14–20. <http://doi.org/10.1111/j.1750-3841.2009.01394.x>

Lim, D. W., Kim, J. G., Han, T., Jung, S. K., Lim, E. Y., Han, D., & Kim, Y. T. (2015). Analgesic Effect of *Ilex paraguariensis* Extract on Postoperative and

YERBA MATE Y SALUD

Neuropathic Pain in Rats. Biological and Pharmaceutical Bulletin, 38(38), 1573–1579. <http://doi.org/10.3390/molecules19011060>

Lima, J. D. P., Farah, A., King, B., De Paulis, T., & Martin, P. R. (2016). Distribution of Major Chlorogenic Acids and Related Compounds in Brazilian Green and Toasted *Ilex paraguariensis* (Maté) Leaves. Journal of Agricultural and Food Chemistry, 64(11), 2361–2370. <http://doi.org/10.1021/acs.jafc.6b00276>

Lima, N. D. S., De Oliveira, E., Da Silva, A. P. S., Maia, L. D. A., De Moura, E. G., & Lisboa, P. C. (2014a). Effects of *Ilex paraguariensis* (yerba mate) treatment on leptin resistance and inflammatory parameters in obese rats primed by early weaning. Life Sciences, 115(1), 29–35. <http://doi.org/10.1016/j.lfs.2014.09.003>

Lima, N. D. S., Franco, J. G., Peixoto-Silva, N., Maia, L. A., Kaezer, A., Felzenszwalb, I., ... Lisboa, P. C. (2014b). *Ilex paraguariensis* (yerba mate) improves endocrine and metabolic disorders in obese rats primed by early weaning. European Journal of Nutrition, 53(1), 73–82. <http://doi.org/10.1007/s00394-013-0500-3>

Lückemeyer, D. D., Müller, V. D. M., Moritz, M. I. G., Stoco, P. H., Schenkel, E. P., Barardi, C. R. M., ... Simões, C. M. O. (2012). Effects of *Ilex paraguariensis* A. St. Hil. (yerba mate) on herpes simplex virus types 1 and 2 replication. Phytotherapy Research, 26(4), 535–540. <http://doi.org/10.1002/ptr.3590>

Ludka, F. K., Tandler, L. de F., Kuminek, G., Olescowicz, G., Jacobsen, J.y Molz S. (2016). *Ilex paraguariensis* hydroalcoholic extract exerts antidepressant-like and neuroprotective effects: involvement of the NMDA receptor and the L-arginine-NO pathway. Behavioural Pharmacology, 27(4), 384–392. <https://doi.org/10.1097/FBP.0000000000000211>

YERBA MATE Y SALUD

Lunceford, N., & Gugliucci, A. (2005). *Ilex paraguariensis* extracts inhibit AGE formation more efficiently than green tea. *Fitoterapia*, 76(5), 419–427. <http://doi.org/10.1016/j.fitote.2005.03.021>

Luz, A. B. G., Da Silva, C. H. B., Nascimento, M. V. P. S., De Campos Facchin, B. M., Baratto, B., Fröde, T. S., ... Dalmarco, E. M. (2016). The anti-inflammatory effect of *Ilex paraguariensis* A. St. Hil (Mate) in a murine model of pleurisy. *International Immunopharmacology*, 36, 165–172. <http://doi.org/10.1016/j.intimp.2016.04.027>

Maiocchi, M. G., Del Vitto, L. A., Petenatti, M. E., Marchevsky, E. J., Avanza, M. V., Pellerano, R. G., & Petenatti, E. M. (2016). Multielemental composition and nutritional value of “dumosa” (*Ilex dumosa*), “yerba mate” (*I. paraguariensis*) and their commercial mixture in different forms of use. *Revista de La Facultad de Ciencias Agrarias*, 48(1), 145–159. Disponible en <http://www.redalyc.org/articulo.oa?id=382846012007>

Martinet, A., Ndjoko, K., Terreaux, C., Marston, A., Hostettmann, K., & Schutz, Y. (2001). NMR and LC-MSn characterisation of two minor saponins from *Ilex paraguariensis*. *Phytochemical Analysis*, 12(1), 48–52. [http://doi.org/10.1002/1099-1565\(200101/02\)12:1<48::AID-PCA560>3.0.CO;2-#](http://doi.org/10.1002/1099-1565(200101/02)12:1<48::AID-PCA560>3.0.CO;2-#)

Martins, F., Noso, T. M., Porto, V. B., Curiel, A., Gambero, A., Bastos, D. H. M., ... Carvalho, P. de O. (2010). Maté Tea Inhibits *In Vitro* Pancreatic Lipase Activity and Has Hypolipidemic Effect on High-fat Diet-induced Obese Mice. *Obesity*, 18(1), 42–47. <http://doi.org/10.1038/oby.2009.189>

Martins, F., Suzan, A. J., Cerutti, S. M., Arçari, D. P., Ribeiro, M. L., Bastos, D. H. M., & Carvalho, P. D. O. (2009). Consumption of mate tea (*Ilex paraguariensis*) decreases the oxidation of unsaturated fatty acids in mouse liver. *The British Journal of Nutrition*, 101(4), 527–532. <http://doi.org/10.1017/S000711450802504X>

YERBA MATE Y SALUD

Marx, F., Janssens, M., Urfer, P., & Scherer, R. (2003). Caffeine and Theobromine Composition of Mate (*Ilex paraguariensis*) leaves in five plantations of Misiones, Argentina . Plant Foods for Human. Nutrition, 58, 1 – 8.

<http://doi.org/10.1023/B:QUAL.0000041144.28025.fc>

Matsumoto, R. L. T., Bastos, D. H. M., Mendonça, S., Nunes, V. S., Bartchewsky, W., Ribeiro, M. L., & de Oliveira Carvalho, P. (2009b). Effects of mate tea (*Ilex paraguariensis*) ingestion on mRNA expression of antioxidant enzymes, lipid peroxidation, and total antioxidant status in healthy young women. Journal of Agricultural and Food Chemistry, 57(5), 1775–80. <http://doi.org/10.1021/jf803096g>

Matsumoto, R.L., Mendonça, S., de Oliveira, D.M., Souza, M.F., Bastos, D.H. (2009a). Effects of maté tea intake on *ex vivo* LDL peroxidation induced by three different pathways. Nutrients 1 (1), 18-29. <https://dx.doi.org/10.3390%2Fnut1010018>

Mazzafera, P. (1994). Caffeine, Theobromine, and Theophylline distribution in *Ilex paraguariensis*. Revista Brasileira de Fisiologia Vegetal 6(2), 149–151.

Mazzafera, P. (1997). Maté drinking: caffeine and phenolic acid intake. Food Chemistry, 60(1), 67–71. [http://doi.org/http://dx.doi.org/10.1016/S0308-8146\(96\)00311-1](http://doi.org/http://dx.doi.org/10.1016/S0308-8146(96)00311-1)

Meinhart, A. D., Bizzotto, C. S., Ballus, C. A., Rybka, A. C. P., Sobrinho, M. R., Cerro-Quintana, R. S., ... Godoy, H. T. (2010). Methylxanthines and phenolics content extracted during the consumption of mate (*Ilex paraguariensis* St. Hil) beverages. Journal of Agricultural and Food Chemistry, 58(4), 2188–2193. <http://doi.org/10.1021/jf903781w>

Melcón, C., Bartoloni, L., Parisi, V., González, C., Garreto, N., Arakaki, T., ... Gatto, E. (2014). Estudio caso-control en búsqueda de una asociación entre el consumo de yerba mate y la enfermedad de

YERBA MATE Y SALUD

Parkinson (datos preliminares). Neurologia Argentina, 6(1), 11–16.
<http://doi.org/10.1016/j.neuarg.2013.11.005>

Melo, S.S., Nunes, N.S.I., Baumgarten, C., Tressoldi, C., Faccin, G., Zanuzo, K., Michels, M.K., Cunha, N., Specht, S., Silva, M.W.(2007). Efeito da erva-mate (*Ilex paraguariensis* A. St. Hil.) sobre o perfil metabólico em ratos alimentados com dietas hiperlipídicas. Alimentos e Nutricao Araraquara, 18 (4), 439-447. Disponible en http://www.clinicanutrigene.com.br/_pdfs/efecto_erva_mate.pdf

Menini, T., Heck, C., Schulze, J., De Mejía, E., & Gugliucci, A. (2007). Protective action of *Ilex paraguariensis* extract against free radical inactivation of paraoxonase-1 in high-density lipoprotein. Planta Medica, 73(11), 1141–1147. <http://doi.org/10.1055/s-2007-981585>

Messina, D., Soto, C., Méndez, A., Corte, C., Kemnitz, M., Avena, V., ... Elizalde, R. P. (2015). Efecto hipolipemiante del consumo de mate en individuos dislipidémicos. Nutrición Hospitalaria, 31(5), 2131–2139. <http://doi.org/10.3305/nh.2015.31.5.8386>

Milioli, E. M., Cogni, P., Santos, C. C., Marcos, T. D., Yunes, V. M., Fernandes, M. S., Schoenfelder, T. & Costa-Campos, L. (2007) Effect of Acute Administration of Hydroalcohol Extract of *Ilex paraguariensis* St Hilaire (Aquifoliaceae) in Animal Models of Parkinson's Disease. Phytotherapy Research 21, 771–776. <https://dx.doi.org/10.1002/ptr.2166>

Miranda, D. D. C., Arçari, D. P., Pedrazzoli, J., Carvalho, P. D. O., Cerutti, S. M., Bastos, D. H. M., & Ribeiro, M. L. (2008). Protective effects of mate tea (*Ilex paraguariensis*) on H2O 2-induced DNA damage and DNA repair in mice. Mutagenesis, 23(4), 261–265. <http://doi.org/10.1093/mutage/gen011>

Moraes Pontilho, P., Nunes da Costa Teixeira A., Yuan, C., Alves Luzia, L., Markowicz Bastos, D.H., & Rondó, P.H. (2015). Yerba Mate (*Ilex*

YERBA MATE Y SALUD

paraguariensis A. St. Hil) and Risk Factors for Cardiovascular Diseases. Journal of Food and Nutrition Research, 3(3), 182–190.
<http://doi.org/10.12691/jfnr-3-3-9>

Moraes Reis, E. D., Neto, F. W. S., Cattani, V. B., Peroza, L. R., Busanello, A., Leal, C. Q., ... Fachinetto, R. (2014). Antidepressant-like effect of *Ilex paraguariensis* in rats. BioMed Research International, 2014.
<http://doi.org/10.1155/2014/958209>

Morgan-Martins, M. I., Silva, V. S., Licks, F., Colares, J. R., Schemitt, E. G., Forgiarini, L. F., ... Marroni, N. P. (2013). *Ilex paraguariensis* St. Hill (yerba mate) improves the metabolic profile of and protects against oxidative stress in exercised and non-exercised rats. International Journal of Pharma and Bio Sciences, 4(4). Disponible en
http://www.ijpbs.net/cms/php/upload/2951_pdf.pdf

Mosimann, A. L., Wilhelm-Filho, D., & Da Silva, E. L. (2006). Aqueous extract of *Ilex paraguariensis* attenuates the progression of atherosclerosis in cholesterol-fed rabbits. BioFactors, 26(1), 59–70.
<http://doi.org/10.1002/biof.5520260106>

Muccillo Baisch, A. L. M., Johnston, K. B., & Stein, F. L. P. (1998). Endothelium-dependent vasorelaxing activity of aqueous extracts of *Ilex paraguariensis* on mesenteric arterial bed of rats. Journal of Ethnopharmacology 60 (2), 133–139.
[http://dx.doi.org/10.1016/S0378-8741\(97\)00140-2](http://dx.doi.org/10.1016/S0378-8741(97)00140-2)

Müller, V., Chávez, J. H., Reginatto, F. H., Zucolotto, S. M., Niero, R., Navarro, D., Yunes, R. A., Schenkel, E. P., Barardi, C. R. M., Zanetti, C. R. & Simões, C. M. O. Evaluation of Antiviral Activity of South American Plant Extracts Against Herpes Simplex Virus Type 1 and Rabies Virus. Phytotherapy Research 21, 970-974.
<https://dx.doi.org/10.1002/ptr.2198>

YERBA MATE Y SALUD

Mullié, C., Jonet, A., Dassonville-Klimpt, A., Gosmann, G., & Sonnet, P. (2010). Inhibitory effect of ursolic acid derivatives on hydrogen peroxide- and glutathione-mediated degradation of hemin: A possible additional mechanism of action for antimalarial activity. *Experimental Parasitology*, 125(3), 202–207.
<http://doi.org/10.1016/j.exppara.2010.01.016>

Muñoz-Culla, M., Sáenz-Cuesta, M., Guereca-Barandiaran, M. J., Ribeiro, M. L., & Otaegui, D. (2016). Yerba mate (*Ilex paraguariensis*) inhibits lymphocyte activation *in vitro*. *Food & Function*, 7, 4556–4563.
<http://doi.org/10.1039/C6FO01061J>

Murakami, A. N. N., Amboni, R. D. D. M. C., Prudêncio, E. S., Amante, E. R., Fritzen-Freire, C. B., Boaventura, B. C. B., ... Maraschin, M. (2013). Concentration of biologically active compounds extracted from *Ilex paraguariensis* St. Hil. by nanofiltration. *Food Chemistry*, 141(1), 60–65. <http://doi.org/10.1016/j.foodchem.2013.02.119>

Nakamura, K. L., Lara, E., Junior, C., Donaduzzi, C. M., & Schuster, I. (2009). Genetic variation of phytochemical compounds in progenies of *Ilex paraguariensis* St . Hil . Crop Breeding and Applied Biotechnology 9, 116–123. Disponible en
<http://www.sbmp.org.br/cbab/siscbab/uploads/c8eb9791-e4cc-9ef6.pdf>

Oh, K.-E., Shin, H., Jeon, Y. H., Jo, Y. H., Lee, M. K., Lee, K. S., ... Lee, K. Y. (2016). Optimization of pancreatic lipase inhibitory and antioxidant activities of *Ilex paraguariensis* by using response surface methodology. *Archives of Pharmacal Research*, 39(7), 946–52.
<http://doi.org/10.1007/s12272-016-0768-y>

Oliveira, D. M., Freitas, H. S., Souza, M. F. F., Arçari, D. P., Ribeiro, M. L., Carvalho, P. O., & Bastos, D. H. M. (2008). Yerba Maté (*Ilex paraguariensis*) aqueous extract decreases intestinal SGLT1 gene expression but does not affect other biochemical parameters in

YERBA MATE Y SALUD

alloxan-diabetic wistar rats. Journal of Agricultural and Food Chemistry, 56(22), 10527–10532. <http://doi.org/10.1021/jf8021404>

Pagliosa, C. M., Vieira, M. A., Podestá, R., Maraschin, M., Zeni, A. L. B., Amante, E. R., & Amboni, R. D. de M. C. (2010). Methylxanthines, phenolic composition, and antioxidant activity of bark from residues from mate tree harvesting (*Ilex paraguariensis* A. St. Hil.). Food Chemistry, 122(1), 173–178. <http://doi.org/10.1016/j.foodchem.2010.02.040>

Pang, J., Choi, Y., & Park, T. (2008). *Ilex paraguariensis* extract ameliorates obesity induced by high-fat diet: Potential role of AMPK in the visceral adipose tissue. Archives of Biochemistry and Biophysics, 476(2), 178–185. <http://doi.org/10.1016/j.abb.2008.02.019>

Panza, V. P., Diefenthäler, F., Tamborindeguy, A. C., Camargo, C. de Q., de Moura, B. M., Brunetta, H. S., ... da Silva, E. L. (2016). Effects of mate tea consumption on muscle strength and oxidative stress markers after eccentric exercise. The British Journal of Nutrition, 1–9. <http://doi.org/10.1017/S000711451600043X>

Pavei, C., Guzatto, P., Ros Petrovick, P., Gosmann, G., & González-Ortega, G. (2007). Development and Validation of an HPLC Method for the Characterization and Assay of the Saponins from *Ilex paraguariensis* A. St.-Hil (Mate) Fruits. Journal of Liquid Chromatography & Related Technologies, 30(1), 87–95. <http://doi.org/10.1080/10826070601034311>

Peixoto, M. P. G., Kaiser, S., Verza, S. G., De Resende, P. E., Treter, J., Pavei, C., ... Ortega, G. G. (2012). LC-UV assay method and UPLC/Q-TOF-MS characterisation of saponins from *Ilex paraguariensis* A. St. Hil. (Mate) unripe fruits. Phytochemical Analysis, 23(4), 415–420. <http://doi.org/10.1002/pca.1374>

YERBA MATE Y SALUD

Pereira, A. A. F., Tirapeli, K.G., Chaves-Neto, A. H., da Silva Brasilino, M., da Rocha, C. Q., Belló-Klein, A., Llesuy, S. F., Dornelles, R. C. M. y Nakamune, A. C. M. S. (2017a). *Ilex paraguariensis* supplementation may be an effective nutritional approach to modulate oxidative stress during perimenopause. Experimental Gerontology, 90, 14-18. <https://doi.org/10.1016/j.exger.2017.01.011>

Pereira, C. C., Souza. A. O., Oreste, E. Q., Cidade, M. J. A., Cadore, S., Ribeiro, A. S., & Vieira, M. A. (2016). Acid Decomposition of Yerba Mate (*Ilex paraguariensis*) Using a Reflux System for the Evaluation of Al, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Na, Pb and Zn Contents by Atomic Spectrometric Techniques. Journal of the Brazilian Chemical Society 27(4), 685–693. <http://dx.doi.org/10.5935/0103-5053.20150317>

Pereira, C. S., Stringhetta-Garcia, C. T., da Silva Xavier, L., Tirapeli, K. G., Pereira, A. A. F., Kayahara, G. M., Tramarim, J. M., Crivelini, M. M., Padovani, K. S., Leopoldino, A. M., Louzada, M. J. Q., Belló-Klein, A., Llesuy, S. F., Ervolino, E., Dornelles, R. C. M., Chaves-Neto, A. H. y Nakamune, A. C. M. S. (2017b). *Ilex paraguariensis* decreases oxidative stress in bone and mitigates the damage in rats during perimenopause. Experimental Gerontology, 98, 148-152. <https://doi.org/10.1016/j.exger.2017.07.006>

Pereira, D. F., Kappel, V. D., Cazarolli, L. H., Boligon, A. A., Athayde, M. L., Guesser, S. M., ... Silva, F. R. M. B. (2012). Influence of the traditional Brazilian drink *Ilex paraguariensis* tea on glucose homeostasis. Phytomedicine, 19(10), 868–877. <http://doi.org/10.1016/j.phymed.2012.05.008>

Peres, R. G., Tonin, F. G., Tavares, M. F. M., & Rodriguez-Amaya, D. B. (2013). HPLC-DAD-ESI/MS identification and quantification of phenolic compounds in *Ilex paraguariensis* beverages and on-line evaluation of individual antioxidant activity. Molecules, 18(4), 3859–3871. <http://doi.org/10.3390/molecules18043859>

YERBA MATE Y SALUD

Pérez, J., Maldonado, M., Rojano, B., Alzate, F., Sáez, J., & Cardona, W. (2014). Comparative Antioxidant, Antiproliferative and Apoptotic Effects of *Ilex laurina* and *Ilex paraguariensis* on Colon Cancer Cells. Tropical Journal of Pharmaceutical Research, 13(8), 1279. <http://doi.org/10.4314/tjpr.v13i8.12>

Pimentel, G. D., Lira, F. S., Rosa, J. C., Caris, A. V., Pinheiro, F., Ribeiro, E. B., ... Oyama, L. M. (2013). Yerba mate extract (*Ilex paraguariensis*) attenuates both central and peripheral inflammatory effects of diet-induced obesity in rats. Journal of Nutritional Biochemistry, 24(5), 809–818. <http://doi.org/10.1016/j.jnutbio.2012.04.016>

Pinto, R. M. C., Lemes, B. M., Zielinski, A. A. F., Klein, T., de Paula, F., Kist, A., Marques, A. S. F., Nogueira, A., Demiate, I. M., & Beltrame, F. L. (2015). Detection and quantification of phytochemical markers of *Ilex paraguariensis* by liquid chromatography. Quimica Nova, 38(9), 1219-1225. <http://dx.doi.org/10.5935/0100-4042.20150117>

Piovezan-Borges, A. C., Valério-Júnior, C., Gonçalves, I. L., Mielniczki-Pereira, A. A., & Valduga, A. T. (2016). Antioxidant potential of yerba mate (*Ilex paraguariensis* St. Hil.) extracts in *Saccharomyces cerevisiae* deficient in oxidant defense genes. Revista Brasileira de Biologia, 76(2), 539–44. <http://doi.org/10.1590/1519-6984.01115>

Portela, J. L., Soares, D., Rosa, H., Roos, D. H., Pinton, S., Ávila, D. S., & Puntel, R. L. (2016). *Ilex paraguariensis* crude extract acts on protection and reversion from damage induced by t-butyl hydroperoxide in human erythrocytes: A comparative study with isolated caffeic and/or chlorogenic acids. Journal of the Science of Food and Agriculture 2016, <http://doi.org/10.1002/jsfa.8001>

Prado Martin, J. G., Porto, E., de Alencar, S. M., da Glória, E. M., Corrêa, C. B., & Ribeiro Cabral, I. S. (2013). Antimicrobial activity of yerba mate (*Ilex paraguariensis* St. Hil.) against food pathogens. Revista Argentina de Microbiología, 45(2), 93–98. [http://doi.org/10.1016/S0325-7541\(13\)70006-3](http://doi.org/10.1016/S0325-7541(13)70006-3)

YERBA MATE Y SALUD

Prediger, R. D. S., Fernandes, M. S., Rial, D., Wopereis, S., Pereira, V. S., Bosse, T. S., ... Costa-Campos, L. (2008). Effects of acute administration of the hydroalcoholic extract of mate tea leaves (*Ilex paraguariensis*) in animal models of learning and memory. *Journal of Ethnopharmacology*, 120(3), 465–473.
<http://doi.org/10.1016/j.jep.2008.09.018>

Przygoda, F., Martins, Z. Z. N., Castaldelli, A. P. A., Minella, T. T. V., Vieira, L. L. P., Cantelli, K., ... Padoin, M. J. M. (2010). Effect of erva-mate (*Ilex paraguariensis* A. St.-Hil., Aquifoliaceae) on serum cholesterol, triacylglycerides and glucose in Wistar rats fed a diet supplemented with fat and sugar. *Revista Brasileira de Farmacognosia*, 20(6), 956–961. <http://doi.org/10.1590/S0102-695X2010005000045>

Puangpraphant, S., & De Mejía, E. G. (2009). Saponins in yerba mate tea (*Ilex paraguariensis* A. St.-Hil) and quercetin synergistically inhibit iNOS and COX-2 in lipopolysaccharide-induced macrophages through NF- κ B pathways. *Journal of Agricultural and Food Chemistry*, 57(19), 8873–8883. <http://doi.org/10.1021/jf902255h>

Puangpraphant, S., Berhow, M. A., & de Mejía, E. G. (2011a). Mate (*Ilex paraguariensis* St. Hilaire) saponins induce caspase-3-dependent apoptosis in human colon cancer cells *in vitro*. *Food Chemistry*, 125(4), 1171–1178. <http://doi.org/10.1016/j.foodchem.2010.10.023>

Puangpraphant, S., Berhow, M. A., Vermillion, K., Potts, G., & Gonzalez de Mejía, E. (2011b). Dicaffeoylquinic acids in Yerba mate (*Ilex paraguariensis* St. Hilaire) inhibit NF- κ B nucleus translocation in macrophages and induce apoptosis by activating caspases-8 and -3 in human colon cancer cells. *Molecular Nutrition and Food Research*, 55(10), 1509–1522.
<http://doi.org/10.1002/mnfr.201100128>

Puangpraphant, S., Dia, V. P., De Mejía, E. G., Garcia, G., Berhow, M. A., & Wallig, M. A. (2013). Yerba mate tea and mate saponins prevented azoxymethane-induced inflammation of rat colon through

YERBA MATE Y SALUD

suppression of NF- κ B p65ser³¹¹ signaling via I κ B- α and GSK-3 β reduced phosphorylation. *BioFactors*, 39(4), 430–440.
<http://doi.org/10.1002/biof.1083>

Ramallo, L. A., Smorcewski, M., Valdez, E. C., Paredes, A. M., Schmalko, M. E. (1998). Contenido nutricional del extracto acuoso de yerba mate en tres formas diferentes de consumo. *La Alimentación Latinoamericana*, 225, pp. 48-52.

Ramirez-Mares, M. V., Chandra, S., & de Mejia, E. G. (2004). *In vitro* chemopreventive activity of *Camellia sinensis*, *Ilex paraguariensis*, and *Ardisia compressa* tea extracts and selected polyphenols. *Mutation Research* 554(2004), 53–65.
<http://doi.org/10.1016/j.mrfmmm.2004.03.002>

Ramirez-Mares, M. V., Kobayashi, H., & de Mejia, E. G. (2016). Inhibitory effect of *Camellia sinensis*, *Ilex paraguariensis* and *Ardisia compressa* tea extracts on the proliferation of human head and neck squamous carcinoma cells. *Toxicology Reports*, 3, 269–278.
<http://doi.org/10.1016/j.toxrep.2016.01.013>

Ranilla, L. G., Apostolidis, E., & Shetty, K. (2012). Ultraviolet protective properties of Latin American herbs on *Saccharomyces cerevisiae* and likely mode of action through the proline-linked pentose phosphate pathway: Focus on the yerba mate tea (*Ilex paraguariensis*). *Journal of Food Biochemistry*, 36(3), 322–333.
<http://doi.org/10.1111/j.1745-4514.2011.00557.x>

Rempe, C. S., Burris, K. P., Woo, H. L., Goodrich, B., Gosnell, D. K., Tschaplinski, T. J., & Stewart, C. N. (2015). Computational ranking of yerba mate small molecules based on their predicted contribution to antibacterial activity against methicillin-resistant *Staphylococcus aureus*. *PLoS ONE*, 10(5), 1–18.
<http://doi.org/10.1371/journal.pone.0123925>

YERBA MATE Y SALUD

Rempe, C. S., Lenaghan, S. C., Burris, K. P. y Stewart Jr, C. N. (2017). Metabolomic analysis of the mechanism of action of yerba mate aqueous extract on *Salmonella enterica* serovar Typhimurium. *Metabolomics*, 16, 1-13. <https://doi.org/10.1007/s11306-016-1159-6>

Riachi, L. G. y De Maria, C. A. B. (2017). Yerba mate: An overview of physiological effects in humans. *Journal of Functional Foods*, 38, 308-320. <https://doi.org/10.1016/j.jff.2017.09.020>

Ribeiro, M.C., Santos, Â, Riachi, L. G., Rodrigues, A. C. B., Coelho, G. C., Marcellini, P. S., Bento, C. A. D. M. y de Maria, C. A. B. (2017). The effects of roasted yerba mate (*Ilex paraguariensis* A. ST. Hil.) consumption on glycemia and total serum creatine phosphokinase in patients with traumatic brain injury. *Journal of Functional Foods*, 28 (2017), 240-245. <https://doi.org/10.1016/j.jff.2016.11.024>

Ricco, R. A., Wagner, M. L., & Giberti, G. C. (1995). Antocianos foliares de *Ilex paraguariensis* St . Hil . Acta Farmacéutica Bonaerense, 14(2), 87–90. Disponible en: http://www.latamjpharm.org/resumenes/14/2/LAJOP_14_2_1_2.pdf

Ricco, R. A., Wagner, M. L., & Gurni, A. A. (1991). Estudio comparativo de flavonoides en seis especies austrosudamericanas del género *Ilex*. *Acta Farmacéutica Bonaerense*, 10(1), 29–35. Disponible en <http://sedici.unlp.edu.ar/handle/10915/7209>

Ríos, J. L., Francini, F., & Schinella, G. R. (2015). Natural products for the treatment of type 2 Diabetes mellitus. *Planta Medica*, 81(12-13), 975–994. <http://doi.org/10.1055/s-0035-1546131>

Rivelli, D. P., Almeida, R. L., Ropke, C. D., & Barros, S. B. M. (2011). Hydrolysis influence on phytochemical composition, antioxidant activity, plasma concentration, and tissue distribution of hydroethanolic *Ilex*

YERBA MATE Y SALUD

paraguariensis extract components. Journal of Agricultural and Food Chemistry, 59(16), 8901–8907. <http://doi.org/10.1021/jf201665t>

Rivelli, D. P., Vitoriano, V., Ropke, C. D., Miranda, D. V., Almeida, R. L., Cristina, T., ... Barros, D. M. (2007). Simultaneous determination of chlorogenic acid , caffeic acid and caffeine in hydroalcoholic and aqueous extracts of *Ilex paraguariensis* by HPLC and correlation with antioxidant capacity of the extracts by DPPH· reduction. Brazilian Journal of Pharmaceutical Sciences, 43(2), 215–222. <http://doi.org/10.1590/S1516-93322007000200007>

Rodríguez Vaquero, M. J., Tomassini Serravalle, L. R., Manca de Nadra, M. C., & Strasser de Saad, A. M. (2010). Antioxidant capacity and antibacterial activity of phenolic compounds from argentinean herbs infusions. Food Control, 21(5), 779–785. <http://doi.org/10.1016/j.foodcont.2009.10.017>

Saldaña, M. D., Mohamed, R. S., Baer, M. G., & Mazzafera, P. (1999). Extraction of purine alkaloids from maté (*Ilex paraguariensis*) using supercritical CO₂. Journal of Agricultural and Food Chemistry, 47(9), 3804–8. <http://doi.org/10.1021/jf981369z>

Sánchez Boado, L., Fretes, R. M. & Brumovsky, L. A. (2015). Bioavailability and antioxidant effect of the *Ilex paraguariensis* polyphenols. Nutrition & Food Science, 45(2), 326-335. <http://dx.doi.org/10.1108/NFS-08-2014-0079>

Santiago, P. G., Gasparotto, F. M., Gebara, K. S., Bacha, F. B., Lívero, F. A. D. R., Strapazon, M. A., Junior, E. L. C., Kassuya, C. A. L., de Souza, L. M. y Gasparotto Junior, A. (2017). Mechanisms underlying antiatherosclerotic properties of an enriched fraction obtained from *Ilex paraguariensis* A. St.-Hil. Phytomedicine: International Journal of Phytotherapy and Phytopharmacology, 34, 162-170. <https://doi.org/10.1016/j.phymed.2017.08.012>

YERBA MATE Y SALUD

Santos Branco, C. dos S., Scola, G., Rodrigues, A. D., Cesio, V., Laprovitera, M., Heinzen, H., ... Salvador, M. (2013). Anticonvulsant, neuroprotective and behavioral effects of organic and conventional yerba mate (*Ilex paraguariensis* St. Hil.) on pentylenetetrazol-induced seizures in Wistar rats. *Brain Research Bulletin*, 92, 60–68.
<http://doi.org/10.1016/j.brainresbull.2012.11.008>

Santos, E. C. S., Bicca, M. A., Blum-Silva, C. H., Costa, A. P. R., dos Santos, A. A., Schenkel, E. P., ... de Lima, T. C. M. (2015). Anxiolytic-like, stimulant and neuroprotective effects of *Ilex paraguariensis* extracts in mice. *Neuroscience*, 292, 13–21.
<http://doi.org/10.1016/j.neuroscience.2015.02.004>

Santos, J. C., Gotardo, E. M. F., Brianti, M. T., Piraee, M., Gambero, A., & Ribeiro, M. L. (2014). Effects of yerba maté, a plant extract formulation ("YGD") and resveratrol in 3T3-L1 adipogenesis. *Molecules*, 19(10), 16909–16924.
<http://doi.org/10.3390/molecules191016909>

Sari, F., Turkmen, N., Polat, G., & Velioglu, Y. S. (2007). Total polyphenol, antioxidant and antibacterial activities of black mate tea. *Food Science and Technology Research*, 13, 265–269.
<http://doi.org/10.3136/fstr.13.265>

Schenkel, E. P., Montanha, J. A. & Gosmann, G. (1996). Triterpene saponins from Maté, *Ilex paraguariensis*. In: Waller, G. R. & Yamasaki, K. (Eds.) *Saponins used in food and agriculture*, vol. 405. (pp 47–56). Series *Advances in Experimental Medicine and Biology*, New York: Plenum Press. https://dx.doi.org/10.1007/978-1-4613-0413-5_5

Scherer, R., Urfer, P., Mayol, M. R., Belingheri, L. D., Marx, F., & Janssens, M. J. J. (2002). Inheritance studies of caffeine and theobromine content of Mate (*Ilex paraguariensis*) in Misiones, Argentina. *Euphytica*, 126(2), 203–210. <http://doi.org/10.1023/A:1016375012471>

YERBA MATE Y SALUD

Schinella, G. R., Troiani, G., Dávila, V., de Buschiazzo, P. M., & Tournier, H. a. (2000). Antioxidant effects of an aqueous extract of *Ilex paraguariensis*. Biochemical and Biophysical Research Communications, 269(2), 357–60.
<http://doi.org/10.1006/bbrc.2000.2293>

Schinella, G., Fantinelli, J. C., & Mosca, S. M. (2005). Cardioprotective effects of *Ilex paraguariensis* extract: Evidence for a nitric oxide-dependent mechanism. Clinical Nutrition, 24(3), 360–366.
<http://doi.org/10.1016/j.clnu.2004.11.013>

Schinella, G., Fantinelli, J. C., Tournier, H., Prieto, J. M., Spegazzini, E., Debenedetti, S., & Mosca, S. M. (2009). Antioxidant and cardioprotective effects of *Ilex brasiliensis*: A comparative study with *Ilex paraguariensis* (yerba mate). Food Research International, 42(10), 1403–1409. <http://doi.org/10.1016/j.foodres.2009.07.004>

Schinella, G., Neyret, E., Cónsole, G., Tournier, H., Prieto, J. M., Ríos, J. L., & Giner, R. M. (2014). An aqueous extract of *Ilex paraguariensis* reduces carrageenan-induced edema and inhibits the expression of cyclooxygenase-2 and inducible nitric oxide synthase in animal models of inflammation. Planta Medica, 80(12), 961–968.
<http://doi.org/10.1055/s-0034-1382876>

Schubert, A., Pereira, D. F., Zanin, F. F., Alves, S. H., Beck, R. C. R., & Athayde, M. L. (2007). Comparison of antioxidant activities and total polyphenolic and methylxanthine contents between the unripe fruit and leaves of *Ilex paraguariensis* A. St. Hil. Pharmazie, 62(11), 876–880. <http://doi.org/10.1691/ph.2007.11.7052>

Schubert, A., Zanin, F. F., Pereira, D. F., & Athayde, M. L. (2006). Variação anual de metilxantinas totais em amostras de *Ilex paraguariensis* A. St. - Hil. (erva- mate) em Ijuí e Santa María, estado do Rio Grande do Sul. Quimica Nova, 29(6), 1233–1236. <http://dx.doi.org/10.1590/S0100-40422006000600016>

YERBA MATE Y SALUD

Silva, R. D. A., Bueno, A. L. S., Gallon, C. W., Gomes, L. F., Kaiser, S., Pavei, C., ... Jahn, M. P. (2011). The effect of aqueous extract of gross and commercial yerba mate (*Ilex paraguariensis*) on intra-abdominal and epididymal fat and glucose levels in male Wistar rats. Fitoterapia, 82(6), 818–826. <http://doi.org/10.1016/j.fitote.2011.04.011>

Souza, A. H. P., Corrêa, R. C. G., Barros, L., Calhelha, R. C., Santos-Buelga, C., Peralta, R. M., ... Ferreira, I. C. F. R. (2015). Phytochemicals and bioactive properties of *Ilex paraguariensis*: An *in-vitro* comparative study between the whole plant, leaves and stems. Food Research International, 78, 286–294. <http://doi.org/10.1016/j.foodres.2015.09.032>

Stein, F. L. P. (2005). Vascular Responses to Extractable Fractions of *Ilex paraguariensis* in Rats Fed Standard and High-Cholesterol Diets. Biological Research For Nursing, 7(2), 146–156. <http://doi.org/10.1177/1099800405280521>

Strassmann, B. B., Vieira, A. R., Pedrotti, E. L., Morais, H. N. F., Dias, P. F., & Maraschin, M. (2008). Quantitation of methylxanthinic alkaloids and phenolic compounds in mate (*Ilex paraguariensis*) and their effects on blood vessel formation in chick embryos. Journal of Agricultural and Food Chemistry, 56(18), 8348–8353. <http://doi.org/10.1021/jf801041f>

Sugimoto, S., Nakamura, S., Yamamoto, S., Yamashita, C., Oda, Y., Matsuda, H., & Yoshikawa, M. (2009). Brazilian natural medicines. III. structures of triterpene oligoglycosides and lipase inhibitors from mate, leaves of *Ilex paraguariensis*. Chemical Pharmaceutical Bulletin, 57(3), 257–261. <http://doi.org/10.1248/cpb.57.257>

Taketa, A. T. C., Breitmaier, E., & Schenkel, E. P. (2004b). Triterpenes and triterpenoidal glycosides from the fruits of *Ilex paraguariensis* (Maté). Journal of the Brazilian Chemical Society, 15(2), 205–211. <http://doi.org/10.1590/S0103-50532004000200008>

YERBA MATE Y SALUD

Taketa, A. T. C., Gnoatto, S. C. B., Gosmann, G., Pires, V. S., Schenkel, E. P., & Guillaume, D. (2004a). Triterpenoids from Brazilian *Ilex* species and their *in vitro* antitrypanosomal activity. *Journal of Natural Products*, 67(10), 1697–1700. <http://doi.org/10.1021/np040059>

Tamura, A., Sasaki, M., Yamashita, H., Matsui-Yuasa, I., Saku, T., Hikima, T., ... Kojima-Yuasa, A. (2013). Yerba-mate (*Ilex paraguariensis*) extract prevents ethanol-induced liver injury in rats. *Journal of Functional Foods*, 5(4), 1714–1723. <http://doi.org/10.1016/j.jff.2013.07.017>

Torterolo, P., Falconi, A., Benedetto, L., Rodriguez-Haralambides, A., Rufo, C., & Bracesco, N. (2014). Yerba mate: efectos sobre la vigilia y el sueño. *Revista AnFaMed*, 1(1), 28–40. Disponible en: <http://www.anfamed.edu.uy/index.php/rev/article/view/68/27>

Treter, J., Peixoto, M. P. G., Giordani, R. B., Holz, C. L., Roehe, P. M., Tasca, T., & Ortega, G. G. (2010). Anti-*Trichomonas vaginalis* activity of saponins from *Ilex paraguariensis* ("mate") fruits. *Latin American Journal of Pharmacy*, 29(6), 914–918. Disponible en: https://www.researchgate.net/publication/216622857_Anti-Trichomonas_vaginalis_Activity_of_Saponins_from_Ilex_paraguariensis_Mate_Fruits

Tsai, T. H., Tsai, T. H., Chien, Y. C., Lee, C. W., & Tsai, P. J. (2008). *In vitro* antimicrobial activities against cariogenic streptococci and their antioxidant capacities: A comparative study of green tea versus different herbs. *Food Chemistry*, 110(4), 859–864. <http://doi.org/10.1016/j.foodchem.2008.02.085>

Turner, S., Cogoi, L., Isolabella, S., Filip, R., & Anesini, C. (2011). Evaluation of the antioxidant activity and polyphenols content of *Ilex paraguariensis* (mate) during industrialization. *Advance Journal of Food Science and Technology*, 3(1), 23–30. Disponible en: <http://maxwellsci.com/print/ajfst/v3-23-30.pdf>

YERBA MATE Y SALUD

Valduga, A. T., Gonçalves, I. L., Borges, A. C. P., Mielniczki-Pereira, A. A., & Picolo, A. P. (2016). Cytotoxic / antioxidant activity and sensorial acceptance of yerba-mate development by oxidation process. Acta Scientiarum. Technology, 38(1), 115. <http://doi.org/10.4025/actascitechnol.v38i1.26033>

Valerga, J., Reta, M., & Lanari, M. C. (2012). Polyphenol input to the antioxidant activity of yerba mate (*Ilex paraguariensis*) extracts. LWT - Food Science and Technology, 45(1), 28–35. <http://doi.org/10.1016/j.lwt.2011.07.022>

Valerga, J., Shorthose, R., & Lanari, M. C. (2013). Antioxidant activity of yerba mate extracts: Interactions between the individual polyphenols. European Journal of Lipid Science and Technology, 115(5), 513–525. <http://doi.org/10.1002/ejlt.201200304>

Vieira, M. A., Maraschin, M., Pagliosa, C. M., Podestá, R., de Simas, K. N., Rockenbach, I. I., ... Amante, E. R. (2010). Phenolic acids and methylxanthines composition and antioxidant properties of mate (*Ilex paraguariensis*) residue. Journal of Food Science, 75(3), 280–285. <http://doi.org/10.1111/j.1750-3841.2010.01548.x>

Yu, S., Yue, S. W., Liu, Z., Zhang, T., Xiang, N., & Fu, H. (2015). Yerba mate (*Ilex paraguariensis*) improves microcirculation of volunteers with high blood viscosity: A randomized, double-blind, placebo-controlled trial. Experimental Gerontology, 62, 14–22. <http://doi.org/10.1016/j.exger.2014.12.016>

Zapaterini, J. R., Bidinotto, L. T., Rodrigues, M. A. M., & Barbisan, L. F. (2010). Chemopreventive effects of mate against mouse mammary and colon carcinogenesis. Human & Experimental Toxicology, 29(3), 175–185. <http://doi.org/10.1177/0960327109359636>

Zenaro, L. C., Andrade, L. B., Santos, P., & Locatelli, C. (2014). Effects of Aqueous Extract of Yerba Mate (*Ilex Paraguariensis*) on the

YERBA MATE Y SALUD

Oxidative Stress in Rats Fed a Cafeteria Diet. International Journal of Natural Sciences Research, 2(23), 30–43. Disponible en <http://pakinsight.com/?ic=journal&journal=63>

Zielinski, A. A. F., Haminiuk, C. W. I., Alberti, A., Nogueira, A., Demiate, I. M., & Granato, D. (2014). A comparative study of the phenolic compounds and the *in vitro* antioxidant activity of different Brazilian teas using multivariate statistical techniques. Food Research International, 60, 246–254. <http://doi.org/10.1016/j.foodres.2013.09.010>