

List of All Chemicals

P Psidium cattleianum (Myrtaceae)

Common name(s)

Strawberry Guava

How used

Food

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

| Chemical | Part <input type="button" value="All"/> | Low PPM | High PPM | StdDev | *Reference |
|----------|---|---------|----------|--------|------------|
| ALANINE | Fruit | 290.0 | 1500.0 | -0.87 | * |

Activities (3)

| | |
|-------------------|--|
| Antioxidant | Larson, R.A. 1987. Review Article Number 30. The Antioxidants of Higher Plants. Phytochemistry. 27: 969-978. |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. |
| Oxidant | Larson, R.A. 1987. Review Article Number 30. The Antioxidants of Higher Plants. Phytochemistry. 27: 969-978. |

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|----------|-------|-------|-------|-------|---|
| ARGININE | Fruit | 150.0 | 775.0 | -0.94 | * |
|----------|-------|-------|-------|-------|---|

Activities (14)

| | |
|-------------------------|--|
| Antidiabetic? | Wichtl, M. 1984. Teedrogen. Ein Handbuch für Apotheker und Ärzte. Wissenschaftliche Verlagsgesellschaft. mbH Stuttgart. 393 pp. |
| Antiencephalopathic | Martindale's 29th |
| Antihepatitic | Martindale's 29th |
| Antihypertensive | |
| Antiimpotence | |
| Antiinfertility 4 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antioxidant? | |
| Aphrodisiac 3 g/day | |
| Diuretic | |
| Hypoammonemic | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| NO-Genic | |
| Pituitary-Stimulant | |
| Spermigenic 4 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Vasodilator | |

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|---------------|-------|-------|--------|-------|---|
| ASCORBIC-ACID | Fruit | 150.0 | 2100.0 | -0.15 | * |
|---------------|-------|-------|--------|-------|---|

Activities (112)

| | |
|------------------------------------|--|
| Acidulant FEMA 6,000 | Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry |
| Aldose-Reductase-Inhibitor | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reverse insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Analgesic 5-10 g/day | |
| Angiotensin-Receptor-Blocker | |
| AntiAGE 2,000 mg/day | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reverse insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| AntiCFS 500-1,000 mg | |
| AntiCTS 1,000 mg 3x/day | |
| AntiCrohn's 50-100 mg/day/orl/man | Martindale's 29th |
| AntiLyme 500-2,000 mg | |
| AntiRaynaud's 500 mg 1-2x/day | |
| Antiaggregant | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reverse insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Antiaging 400 mg/day | |
| Antiallergic | |
| AntiAlzheimeran 2,000-6,000 mg/day | |
| Antiarthritic 0.2-1 g/day | |
| Antiasthmatic 1,000 mg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |

Antidiabetic

| | |
|--|--|
| Antibacterial | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Anticataract 350 mg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Anticataract 400 mg/day | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Anticataract 1 g 3x/day | |
| Anticervicaldysplasic 1,000-2,000 mg/day | |
| Anticlimacteric 500-5,000 mg/day | |
| Anticold 1-2 g/man/day | |
| Antidecubic 500 mg/man/2x/day | Martindale's 28th |
| Antidementia | |
| Antidepressant 2,000 mg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antidiabetic | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Antidote (Aluminum) | Economic & Medicinal Plant Research, 6: 189. |
| Antidote (Cadmium) | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antidote (Lead) | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antidote (Paraquat) | Martindale's 28th |
| Antieczemic 3.5-5 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antiedemic 1 g/man/day | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antiencephalitic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antiendometriotic 2,000 mg/day | |
| Antifatigue 500-1,000 mg | |
| Antifibrotic 1,000-2,000 mg | |
| Antigallstone 1,000-3,000 mg/day | |
| Antigastritic | |
| Antigingivitic | |
| Antiglaucomic 2 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antihangover 1,000 mg | |
| Antihemorrhagic 1 g/man/day | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antihepatitic 2-6 g/man/day | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antihepatotoxic | Economic & Medicinal Plant Research, 6: 189. |
| Antiherpetic 1-5 g/day | |
| Antihistaminic 2 g/day orl man | |
| Antihypertensive | |
| Antiinfertility 1 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antiinflammatory | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antileptic 1.5 g/man/day | Martindale's 28th |
| Antilithic 1,000-3,000 mg/day | |
| Antimaculitic | |
| Antimeasles | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antimenopausal 500-5,000 mg/day | |
| Antimigraine | Martindale's 29th |
| Antimutagenic | Economic & Medicinal Plant Research, 6: 235. |
| Antineuramidase | |
| Antinitrosic 1 g/man/day | Martindale's 28th |
| Antioesity 1 g 3x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antiorchitic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antiosteoarthritic 1 g 2x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antiosteoporotic 500 mg/day | |
| Antioxidant 100 ppm | |
| Antiparkinsonian 1 g 2-3x/day | |
| Antiparotitic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antiperiodontitic 1 g 2x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antipneumonic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antipodriac | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antipoliomyelitic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antipyretic | Economic & Medicinal Plant Research, 6: 189. |
| Antiradicular | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Antiretinotic | |
| Antirheumatic | |
| Antirhinitic 1,000 mg 3x/day | |
| Antiscorbutic 10 mg/man/day | Martindale's 28th |

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| Antiseptic MIC=3.3-217 mg/ml | Martindale's 28th |
| Antiseptic 4-8 g/day | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Antishingles | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antispasmodic 500-5,000 mg/day | |
| Antistress 500-1,000 mg | |
| Antisyndrome-X 1-4 g/day | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Antitumor (Gastric) | |
| Antitumor (Lung) | |
| Antiulcer | |
| Antiviral 1-5 g/day | |
| Apoptotic 1-10 mM | |
| Asthma-preventive 1,000 mg/day/orl | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Beta-Adrenergic Receptor Blocker | |
| Beta-Glucuronidase-Inhibitor 1.5 g/day/man | |
| Calcium-Antagonist | |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. |
| Cardioprotective | |
| Cold-preventive 1-2 g/day | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Collagenic | |
| Detoxicant | |
| Diuretic 700 mg/man/orl | |
| Fistula-Preventive | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Hypocholesterolemic 300-1,000 mg/day | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Hypoglycemic | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Hypotensive 1,000 mg/man/day | |
| Immunomodulator | |
| Immunostimulant | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Interferonogenic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Lithogenic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Mucolytic 1 g/woman/day | Martindale's 28th |
| Pesticide | |
| Uricosuric 4 g/man/day | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Urinary-Acidulant | Martindale's 29th |
| Vasodilator | |
| Vulnerary | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |

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|---------------|-------|--------|---------|-------|---|
| ASH | Fruit | 5000.0 | 44000.0 | -0.33 | * |
| ASPARTIC-ACID | Fruit | 370.0 | 1915.0 | -1.08 | * |

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|-----------------------|--|--|--------------------|--|--|
| Activities (3) | | | | | |
| Antimorphinic | | | Martindale's 28th | | |
| Neuroexcitant | | | Martindale's 28th | | |
| Roborant | | | Merck 11th Edition | | |

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|---------------|-------|----|-----|-------|---|
| BETA-CAROTENE | Fruit | -- | 9.0 | -0.13 | * |
|---------------|-------|----|-----|-------|---|

Activities (53)

| | |
|------------------------------------|--|
| Allergenic | |
| Androgenic? | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| AntiPMS | |
| Antiacne | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antiaging | |
| Antiarthritic | |
| Antiasthmatic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Anticancer | Joseph, J., Nadeau, D. and Underwood, A. 2001. The Color Code. Hyperion, NY. |
| Anticarcinomic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Anticervicaldysplasic | |
| Anticoronary 50 mg/man/2 days | |
| Antihyperkeratotic | |
| Antiichthyotic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antileukoplakic | |
| Antilipoperoxidant IC71=50 ug/ml | |
| Antilupus 150 mg/man/day/2 mos | Martindale's 28th |
| Antimaculitic | |
| Antimastitic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antimutagenic | Economic & Medicinal Plant Research, 6: 235. |
| Antioxidant | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antiozenic | |
| Antipapillomic | |
| Antiphotophobic 30-300 mg/man/day | Martindale's 29th |
| Antipityriasic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antiporphyrhic 30-300 mg/man/day | Martindale's 28th |
| Antiproliferant | Joseph, J., Nadeau, D. and Underwood, A. 2001. The Color Code. Hyperion, NY. |
| Antipsoriac | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antiradicular | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antirheumatic | |
| Antistress | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antitumor | Simon, P.W. Carrots and Other Horticultural Crops as a Source of Provitamin A Carotenes. HortScience, 25(12): 1495, 1990. |
| Antitumor (Breast) IC45=60 ug/ml | |
| Antitumor (CNS) IC43=45 ug/ml | |
| Antitumor (Colon) IC43=45 ug/ml | |
| Antitumor (Lung) IC30=60 ug/ml | |
| Antitumor (Prostate) | |
| Antitumor (Stomach) IC26=45 ug/ml | |
| Antiulcer 12 mg 3x/day/man/orl | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antiulcer 15,000-25,000 IU/day | |
| Antixerophthalmic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| COX-1-Inhibitor IC78=50 ug/ml | |
| COX-2-Inhibitor IC82=50 ug/ml | |
| Cancer-Preventive 22 ppm | Jim Duke's personal files. |
| Chemopreventive | |
| Colorant | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Gastroprotective | |
| Immunostimulant 180 mg/man/day/orl | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Interferon-Synergist | |
| Mucogenic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Phagocytotic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Prooxidant 20 ug/g | |
| Thymoprotective | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Ubiquiot | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |

CALCIUM

Fruit

210.0

3400.0

-0.11

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Activities (28)

| | |
|------------------------------------|--|
| AntiPMS 1 g/day | |
| Antiallergic 500 mg/day | |
| Antianxiety | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antiarrhythmic 500-1,500 mg | |
| Antiarthritic 1,000 mg/day | |
| Antiatherosclerotic 500 mg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Anticlimacteric 1,000-1,500 mg/day | |
| Antidepressant | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antidote (Aluminum) | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antidote (Lead) | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antihyperkinetic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antihypertensive | |
| Antiinsomniac | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antimenopausal 1,000-1,500 mg/day | |
| Antiobesity | |
| Antiosteoporotic 500-2,000 mg/day | |
| Antiperiodontitic 750 mg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antirheumatic 1,000 mg/day | |
| Antistress 500-1,500 mg/day | |
| Antitic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Anxiolytic 500-1,500 mg/day | |
| Calcium-Channel-Blocker | |
| Diuretic | |
| Hypocholesterolemic 500 mg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Hypotensive 1 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Laxative 1,000-1,200 mg | |
| Tranquilizer 500-1,500 mg/day | |
| Vasodilator | |

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|---------------|-------|----------|----------|------|---|
| CARBOHYDRATES | Fruit | 145000.0 | 939000.0 | 0.83 | * |
| CYANIDIN | Plant | -- | -- | | * |

Activities (7)

| | |
|----------------------------|--|
| Allelochemic IC90=1 mM | Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp. |
| Antioxidant ID50=3.5-22 uM | |
| Antioxidant 4.4 x Vit. E | |
| Metal-Chelator (Copper) | |
| Pesticide | |
| Pigment | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Prooxidant | |

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|--------------|-------|----|----|--|---|
| ELLAGIC-ACID | Plant | -- | -- | | * |
|--------------|-------|----|----|--|---|

Activities (51)

| | |
|---|--|
| ACE-Inhibitor IC50=5 mM/l | |
| Abortifacient 1.2 mg/kg ivn mus | |
| Aldose-Reductase-Inhibitor IC50=0.2 uM | |
| Aldose-Reductase-Inhibitor IC50=0.2 ug/ml (strong activity) | |
| AntiGTF ID50=20 ug/ml | |
| AntiHIV IC90=200 ug/ml | Tan, G.T., Pezzuto, J.M., Kinghorn,* A.D., Hughes, S.H. Evaluation Of Natural Products As Inhibitors Of Human Immunodeficiency Virus Type 1 (HIV-1) Reverse Transcriptase. <i>Journal of Natural Products</i> , 54(1): 143-154, 1991. |
| Antiaflatoxin | |
| Antianaphylactic | |
| Antibacterial 1,250 ug/ml | |
| Antibacterial ID50=20 ug/ml | |
| Anticancer (Cervix) | Joseph, J., Nadeau, D. and Underwood, A. 2001. <i>The Color Code</i> . Hyperion, NY. |
| Anticancer (Colon) | Joseph, J., Nadeau, D. and Underwood, A. 2001. <i>The Color Code</i> . Hyperion, NY. |
| Anticancer (Esophagus) | Joseph, J., Nadeau, D. and Underwood, A. 2001. <i>The Color Code</i> . Hyperion, NY. |
| Anticancer (Mouth) | Joseph, J., Nadeau, D. and Underwood, A. 2001. <i>The Color Code</i> . Hyperion, NY. |
| Anticariogenic ID50=20 ug/ml | |
| Anticataract | Shimizu, M., Horie, S., Terashima, S., Ueno, H., et al. 1989. Studies on Aldose Reductase Inhibitors from Natural Products.II. Active Components of a Paraguayan Crude Drug 'Para-parai mi,' <i>Phyllanthus niruri</i> . <i>Chem. Pharm. Bull.</i> 37(9): 2531-2532, 1989. |
| Antigingivitic 1,250 ug/ml | |
| Antihyperthyroid | |
| Antiinflammatory | |
| Antimalarial IC50=0.5 uM | Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. <i>Africa Herbal Antimalaria Meeting</i> . PlantaPhile Publications, Berlin. 72 pp. |
| Antimutagenic | |
| Antioxidant >50 x tocopherol | Osawa, T. Phenolic Antioxidants in Dietary Plants as Antimutagens.Phenolic Compounds in Food and Their Effects on Health, Ch.11 p.142. |
| Antioxidant IC98=30 ppm | |
| Antioxidant 2/3 quercetin | |
| Antiperiodontic 1,250 ug/ml | |
| Antiperoxidant IC50=29 uM | <i>Planta Medica</i> , 57: A54, 1991. |
| Anti plaque 1,250 ug/ml | |
| Antiplasmodial IC50=0.5 uM | Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. <i>Africa Herbal Antimalaria Meeting</i> . PlantaPhile Publications, Berlin. 72 pp. |
| Antiseptic 1,250 ug/ml | |
| Antistreptococccic ID50=20 ug/ml | |
| Antithyroid | Jim Duke's personal files. |
| Antitumor | |
| Antiviral | <i>Economic & Medicinal Plant Research</i> , 5: 224. |
| Antiyeast IC50=10.5 uM | |
| Apoptotic | Joseph, J., Nadeau, D. and Underwood, A. 2001. <i>The Color Code</i> . Hyperion, NY. |
| Astringent | Martindale's 29th |
| Cancer-Preventive 3 ppm | |
| Candida-SAP-Inhibitor IC50=8.4 uM | |
| Cytotoxic 4.6 ug/ml | <i>Advance in Chinese Medicinal Materials Research</i> . 1985. Eds. H. M. Chang, H. W. Yeung, W. -W. Tso and A. Koo. World Scientific Publishing Co., Philadelphia Pa., page 359. |
| Deiodinase-Inhibitor | Jim Duke's personal files. |
| Detoxicant | |
| Glucosyl-Transferase-Inhibitor ID50=20 ug/ml | |
| HIV-RT-Inhibitor | <i>Economic & Medicinal Plant Research</i> , 5: 224. |
| Hemostatic | Merck 11th Edition |
| Hepatoprotective IC55=30 ug/ml | Mayumi Ito (nee Someya), et al. 1990. Hepatoprotective Compounds from <i>Canarium album</i> and <i>Euphorbia nematocypha</i> . <i>Chem. Pharm. Bull.</i> 38(8): 2201-2203, 1990. |
| Juvabional | Jacobson, M., <i>Glossary of Plant-Derived Insect Deterrents</i> , CRC Press, Inc., Boca Raton, FL, 213 p, 1990. |
| Pesticide | |
| Quinone-Reductase-Inducer 0.4 g/kg rat | Ahn, D., Putt, D., Kresty, L., Stoner, G. D., Fromm, D., Hollenberg, P. F. 1996. The Effects of Dietary Ellagic Acid on Rat Hepatic and Esophageal Mucosal Cytochromes P450 and Phase II Enzymes. <i>Carcinogenesis</i> , 17(4): 821-828. |
| Sunscreen 0.50% | Jim Duke's personal files. |
| Topoisomerase-I-Antagonist | <i>Journal of Medicinal Food</i> 2: 167.1999. |
| Xanthine-Oxidase-Inhibitor IC50=3.1 uM | Hatano, T., Yasuhara, T., Yoshihara, R., Agata, I., Noro, T., and Okuda, T. 1989. Effects of Interaction of Tannins with Co-existing Substances.VII. Inhibitory Effects of Tannins Related Polyphenols on Xanthine Oxidase. <i>Chem. Pharm. Bull.</i> 38(5): 1224-1229 |

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|-------|-------|---------|----------|-------|---|
| FAT | Fruit | 3000.0 | 33000.0 | -0.39 | * |
| FIBER | Fruit | 52000.0 | 352000.0 | 1.98 | * |

| Activities (15) | | | | | |
|------------------------------|--|--|--|--|--|
| Angiotensin-Receptor-Blocker | | | | | |
| Antidiabetic | | | | | |
| Antihypertensive | | | | | |
| Antibesity | | | | | |
| Antitumor | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). | | | | |
| Antiulcer | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). | | | | |
| Beta-Blocker | | | | | |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. | | | | |
| Cardioprotective | | | | | |
| Diuretic | | | | | |
| Hypocholesterolemic | | | | | |
| Hypotensive 10 g/man/day/orl | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). | | | | |
| Hypouricemic | | | | | |
| Laxative | | | | | |
| Vasodilator | | | | | |

| | | | | | |
|---------------|-------|-------|--------|-------|---|
| GLUTAMIC-ACID | Fruit | 760.0 | 3930.0 | -0.72 | * |
|---------------|-------|-------|--------|-------|---|

| Activities (8) | | | | | |
|--------------------------------------|--|--|--|--|--|
| Antialkali? 500-1,000 mg/day/orl/man | Martindale's 29th | | | | |
| Antiepileptic | | | | | |
| Antihyperammonemic | Martindale's 29th | | | | |
| Antilithic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). | | | | |
| Antiprostatisic 125-250 mg 3 x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. | | | | |
| Antiretardation | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. | | | | |
| Anxiolytic | Merck 11th Edition | | | | |
| Neurotoxic | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. | | | | |

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|---------|-------|-------|--------|-------|---|
| GLYCINE | Fruit | 290.0 | 1500.0 | -0.81 | * |
|---------|-------|-------|--------|-------|---|

| Activities (12) | | | | | |
|------------------------------------|---|--|--|--|--|
| Antiacid | Martindale's 29th | | | | |
| Antialdosteronic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). | | | | |
| Antidote (Hypoglycin-A) | Martindale's 29th | | | | |
| Antiencephalopathic | Martindale's 29th | | | | |
| Antigastric | Martindale's 29th | | | | |
| Antiprostatisic 125-250 mg 3 x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. | | | | |
| Antipruritic | Merck 11th Edition | | | | |
| Antisickling | Ekeke, G.I. and Shode, F.O. 1988. Phenylalanine is the Predominant Antisickling Agent in Cajanus cajan Seed Extract. Planta Medica 56(1): 41, 1990. | | | | |
| Antiulcer | Martindale's 29th | | | | |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. | | | | |
| Neuroinhibitor | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. | | | | |
| Uricosuric | | | | | |

| | | | | | |
|-----------|-------|------|-------|-------|---|
| HISTIDINE | Fruit | 50.0 | 260.0 | -1.02 | * |
|-----------|-------|------|-------|-------|---|

| Activities (7) | | | | | |
|----------------------|--|--|--|--|--|
| Antiartherosclerotic | | | | | |
| Antinephritic | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. | | | | |
| Antioxidant | | | | | |
| Antiulcer | | | | | |
| Antiuremic | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. | | | | |
| Essential | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. | | | | |
| Oxidant | | | | | |

| | | | | | |
|------|-------|-----|------|------|---|
| IRON | Fruit | 2.0 | 82.0 | -0.2 | * |
|------|-------|-----|------|------|---|

| Activities (6) | |
|------------------------------------|--|
| Antiakathisic | Martindale's 29th |
| Antianemic | Martindale's 29th |
| Anticanker | |
| Anticheilitic | Davies, S., and Stewart, A. 1990. <i>Nutritional Medicine</i> . Avon Books, New York. 509pp. |
| Antimenorrhagic 100 mg/day/wmn/orl | Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine</i> . John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Prooxidant | |

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|------------|-------|-------|--------|-------|---|
| ISOLEUCINE | Fruit | 210.0 | 1085.0 | -0.77 | * |
|------------|-------|-------|--------|-------|---|

| Activities (3) | |
|----------------------|--|
| Antiencephalopathic? | Martindale's 29th |
| Antipellagric | Martindale's 28th |
| Essential | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp. |

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|------------|-------|----|----|--|---|
| KAEMPFEROL | Plant | -- | -- | | * |
|------------|-------|----|----|--|---|

| Activities (75) | |
|---|---|
| 11B-HSD-Inhibitor | |
| 5-Lipoxygenase-Inhibitor IC50 (uM)=20 | |
| Aldose-Reductase-Inhibitor 100 uM | Oliveira, T. T., Nagem, T. J., Miranda, L. C. G., Paula, V. F., Teixeira, M. A. 1997. Inhibitory Action on Aldose Reductase by Soybean Flavonoids. <i>J Braz Chem Soc</i> , 8(3): 211-213. |
| Antiaflatoxin IC50=8.73 uM | |
| Antiaflatoxin IC50=3.28 ppm | |
| Antiaggregant 30 uM | |
| Antiallergic | |
| Antibacterial 20 ug/ml | |
| Anticancer | |
| Antifertility 250 mg/kg/day/60 days/orl rat | Kumar, P., Dixit*, V.P., and Khanna, P. Antifertility Studies of Kaempferol: Isolation and Identification from Tissue Culture of some Medicinally Important Plant Species. <i>Plantes medicinales et phytotherapie</i> , 23: 193-201, 1989. |
| Antigingivitic 20 ug/ml | |
| Antiherpetic 23-92 ug/ml | Amoros, M., Simoes, C.M.O., Girre, L., et al. Synergistic Effect Of Flavones And Flavonols Against Herpes Simplex Virus Type 1 In Cell Culture. Comparison With The Antiviral Activity Of Propolis. <i>J. of Natural Products</i> 55(12):1732-1740, 1992. |
| Antihistaminic | Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989. |
| Antiimplantation | |
| Antiinflammatory 20 mg/kg | |
| Antiinflammatory 200 mg/kg ipr rat | |
| Antileukemic IC50=3.1 ug/ml | Life Sciences 55: 1061. |
| Antilymphocytic | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp. |
| Antimutagenic ID50=10-40 nM | Phenolic Compounds in Food and Their Effects on Health. <i>Antioxidants & Cancer Prevention</i> . Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp. |
| Antioxidant IC50=40 uM | |
| Antioxidant 3/4 quercetin | |
| Antioxidant IC50=1.2 ug/ml | |
| Antiperiodontic 20 ug/ml | |
| Antiplaque 20 ug/ml | |
| Antiradicular 7 x quercetin | |
| Antiseptic 20 ug/ml | |
| Antiserotonin 200 mg/kg ipr rat | |
| Antispasmodic | Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989. |
| Antistaphylococcic | |
| Antitumor | |
| Antitumor-Promoter | Yasukawa, K., Takido, M., Takeuchi, M., Sato, Y., Nitta, K., and Nakagawa, S. 1989. Inhibitory Effects of Flavonol Glycosides on 12-O-Tetradecanoylphorbol-13-acetate-Induced Tumor Promotion. <i>Chem. Pharm. Bull.</i> 38(3): 774-776, 1990. |
| Antiulcer 50-200 mg/kg ipr rat | |
| Antiviral 23-92 ug/ml | |
| Apoptotic 60 uM | |
| Aromatase-Inhibitor IC12=1 uM/l | Journal of Medicinal Food 2: 235.1999. |
| COX-2-Inhibitor | |

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|---|---|
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. |
| Carcinogenic | Hutchings, A, Scott, AH, Lewis, G, and Cunningham, A. 1996. Zulu Medicinal Plants. An inventory. University of Natal Press, Pietermaritzburg. 450 pp. |
| Choleretic | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| Copper-Chelator | |
| Cyclooxygenase-Inhibitor IC50 (uM) =20 | |
| Cytotoxic | |
| Diaphoretic? | Lawrence Review of Natural Products, Dec-90. |
| Diuretic | |
| Estrogenic EC50=0.1-25 uM/l | Journal of Medicinal Food 2: 227.1999. |
| Estrogenic EC50=0.56 uM | |
| Fungicide 20 ug/ml | Father Nature's Farmacy: The aggregate of all these three-letter citations. |
| HIV-RT-Inhibitor IC50=50-150 ug/ml | Garcia, J., Morin,* C., Nyasse, B., Sondengam, B-L., Tchouankeu, J-C., and Tsamo, E. Complete Structural Assignments Of An Ergosterol Derivative From Entandrophragma utile. Journal of Natural Products, 54(1): 136-142, 1991. |
| Hepatoprotective IC50=5.46 uM | |
| Hepatoprotective IC50=1.30 ppm | |
| Hypotensive | |
| ICAM-1-Inhibitor | |
| Inotropic | |
| Iodothyronine-Deiodinase-Inhibitor | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| JNK-Inhibitor | |
| Lipoxygenase-Inhibitor | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| MAO-Inhibitor | |
| Mutagenic | |
| NO-Inhibitor IC50=13.9 uM | |
| Natriuretic | |
| Neuroprotective | |
| PAF-Inhibitor | |
| Pesticide | |
| Protisticide | Meckes, M., Calzada, F., Tapia-Contreras, A., Cedillo-Rivera, R. 1999. Antiprotozoal Properties of Helianthemum glomeratum. Phytotherapy Research, 13(2): 102-105. |
| Quinone-Reductase-Inducer 3 uM | |
| TNF-alpha-Inhibitor IC50=3.99 uM | |
| Teratologic | |
| Topoisomerase-I-Inhibitor | Santti, R., Makela, S., Strauss, L., Korman, J., Kostian, M. L. 1998. Phytoestrogens: Potential Endocrine Disruptors in Males. Toxicol Ind Health, 14: 223-237. |
| Topoisomerase-II-Inhibitor IC50=8.1 ug/ml | Constantinou, A., Mehta, R., Runyan, C., Rao, K., Vaughan, A., Moon, R. 1995. Flavonoids as DNA Topoisomerase Antagonists and Poisons: Structure-Activity Relationships. J Natural Products, 58: 217-225. |
| Tyrosinase-Inhibitor ID50=230 uM | |
| Uterotrophic EC50=0.1-25 uM/l | Journal of Medicinal Food 2: 227.1999. |
| Vasodilator | |
| cAMP-Phosphodiesterase-Inhibitor | |
| iNOS-Inhibitor IC50=<15 uM | |
| iNOS-Inhibitor IC50=13.9 uM | |

| | | | | | |
|---------------------|-------|-------|--------|-------|---|
| KILOCALORIES | Fruit | 560.0 | 3570.0 | -0.14 | * |
| LEUCINE | Fruit | 390.0 | 2015.0 | -0.66 | * |

Activities (2)

| | |
|---------------------|--|
| Antiencephalopathic | Martindale's 29th |
| Essential | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |

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|----------------------|-------|--------|--------|-------|---|
| LINOLEIC-ACID | Fruit | 1820.0 | 9410.0 | -0.22 | * |
|----------------------|-------|--------|--------|-------|---|

Activities (27)

5-Alpha-Reductase-Inhibitor

| | |
|-------------------------------|--|
| AntiMS | Economic & Medicinal Plant Research, 6: 189. |
| Antiacne | |
| Antialopecic | |
| Antianaphylactic | Economic & Medicinal Plant Research, 6: 189. |
| Antiandrogenic | |
| Antiarteriosclerotic | |
| Antiarthritic | Economic & Medicinal Plant Research, 6: 189. |
| Anticoronary | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Antieczemic | Economic & Medicinal Plant Research, 6: 189. |
| Antifibrinolytic | Economic & Medicinal Plant Research, 1: 53. |
| Antigranular | |
| Antihistaminic | Economic & Medicinal Plant Research, 6: 189. |
| Antiinflammatory IC50=31 uM | |
| Antileukotriene-D4 IC50=31 uM | |
| Antimenorrhagic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antiprostatic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. |
| Carcinogenic | Science News, 146: 421. |
| Comedolytic | |
| Hepatoprotective | |
| Hypocholesterolemic | Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.) |
| Immunomodulator | Economic & Medicinal Plant Research, 6: 189. |
| Insectifuge | Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990. |
| Metastatic | Science News, 146: 421. |
| Nematicide | Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp. |
| Propecic | |

| | | | | | |
|----------------|-------|-------|--------|-------|---|
| LINOLENIC-ACID | Fruit | 710.0 | 3670.0 | -0.42 | * |
| LYSINE | Fruit | 160.0 | 825.0 | -0.85 | * |

Activities (4)

| | |
|---------------------------|--|
| Antialkalotic | Martindale's 29th |
| Antiherpetic 0.5-3 g/day | |
| Essential | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Hypoarginanemic 250 mg/kg | Martindale's 29th |

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|-----------|-------|-------|-------|-------|---|
| MAGNESIUM | Fruit | 170.0 | 880.0 | -0.58 | * |
|-----------|-------|-------|-------|-------|---|

Activities (65)

| | |
|--------------------------------|--|
| AntiCFS | |
| AntiLyme 400-1,000 mg | |
| AntiMS | |
| AntiPMS 400-800 mg/day/wmn/orl | |
| AntiPMS 400-800 mg/day/wmn orl | |
| AntiRaynaud's 280-350 mg/day | |
| Antiaggregant 400 mg/day | |
| Antialcoholic | |
| Antianginal 400 mg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antianorectic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antianxiety 400 mg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antiarrhythmic 400 mg/day | |
| Antiarthritic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antiasthmatic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antiatherosclerotic 400 mg/day | |
| Anticephalagic | |
| Anticlimacteric 500-750 mg/day | |
| Anticonvulsant | Facciola, S. 1998. Cornucopia - A Source Book of Edible Plants. Kampong Publications, Vista CA. 713 pp. |

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|---|--|
| Anticoronary 400 mg/day | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Antidepressant | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antidiabetic 400-800 mg/man/day | |
| Antidysmenorrheic 100 mg 4 x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antiendometriotic 500 mg/day | |
| Antienterotic | |
| Antiepileptic 450 mg/day | |
| Antifatigue | |
| Antifibromyalgic 200-300 mg 3x/day | |
| Antigastrotic | |
| Antiglaucomic | |
| Antihyperkinetic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antihypertensive | |
| Antihypoglycemic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antiinflammatory 100 mg 4 x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antiinsomniac | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antilithic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antimastalgic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antimenopausal 500-750 mg/day | |
| Antimigraine 200 mg/day/man | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antimitral-valve-prolapse | |
| Antinephrolytic | |
| Antineurotic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antiosteoporotic 500-1,000 mg/day/wmn/orl | |
| Antiplateque 500-1,000 mg/day | |
| Antiretinopathic 400 mg/day | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Antispasmodic | |
| Antispasmophilic 500 mg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antistress 500-750 mg/day | |
| Antistroke 400 mg/day | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Antisyndrome-X 400 mg/man/day | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Anxiolytic 500-750 mg/day | |
| CNS-Depressant | Facciola, S. 1998. Cornucopia - A Source Book of Edible Plants. Kampong Publications, Vista CA. 713 pp. |
| Calcium-Antagonist | |
| Cardioprotective | |
| Diuretic | |
| Hypocholesterolemic 400 mg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Hypotensive 260-500 mg/day | |
| Immunomodulator | |
| Insulinogenic 400 mg/day | Challem, J., Berkson, Burt, and Smith, Melissa Dianne. 2000. Syndrome X - The complete nutritional program to prevent and reserve insulin resistance. John Wiley & Sons, New York. 272 pp. \$24.95 |
| Laxative 300-500 mg/day | |
| Litholytic | |
| Myorelaxant 100 mg 4 x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Neurotransmitter | |
| Tranquilizer 500-750 mg/day | |
| Uterorelaxant 100 mg 4 x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Vasodilator | |

METHIONINE

Fruit

40.0

205.0

-0.93

*

| Activities (15) | |
|--|--|
| Anticataract | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antidote (Acetaminophen) 10 g/16hr/man/orl | Martindale's 29th |
| Antidote (Paracetamol) 10 g/16hr/man/orl | Martindale's 29th |
| Antieczemic | |
| Antihepatotic | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Antioxidant | |
| Antiparkinsonian 1-5 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. |
| Emetic | Martindale's 29th |
| Essential | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Glutathionigenic | Martindale's 29th |
| Hepatoprotective | |
| Lipotropic | Merck 11th Edition |
| Urine-Acidifier 200 mg/3x/day/man/orl | Martindale's 28th |
| Urine-Deodorant | Martindale's 29th |

MUFA Fruit 550.0 2845.0 -0.21 *

| Activities (13) | |
|-------------------------------|---|
| Allergenic | |
| Anemiagenic | |
| Antiinflammatory IC50=21 uM | |
| Antileukotriene-D4 IC50=21 uM | |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. |
| Choleretic 5 ml/man | |
| Dermatitigenic | |
| Flavor FEMA 1-30 | Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry |
| Hypocholesterolemic | Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.) |
| Insectifuge | Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990. |
| Irritant | Merck 11th Edition |
| Percutaneostimulant | Seki, T., Toeda, C., Kawaguchi, T., Juni, K., Sugibayashi, K., and Morimoto, Y. 1990. Enhanced Transdermal Delivery of Zidovudine in Rats and Human Skin. Chem. Pharm. Bull. 38(11): 3086-3089, 1990. |
| Perfumery | Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry |

MYRISTIC-ACID Fruit 120.0 620.0 -0.24 *

| Activities (6) | |
|-----------------------|--|
| Antioxidant IC71=60 | |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. |
| Cosmetic | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Hypercholesterolemic | Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.) |
| Lubricant | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Nematicide | Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp. |

NIACIN Fruit 3.0 38.0 -0.3 *

Activities (39)

| | |
|--------------------------------------|--|
| Allergenic | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| AntiLyme 50 mg/day | |
| AntiMeniere's | Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705. |
| AntiRaynaud's 1,500-4,000 mg/day | |
| Antiacrodynic | |
| Antiallergic 50 mg/2x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antialzheimeran | |
| Antiamblyopic | |
| Antianginal | |
| Anticataract | |
| Antichilblain | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Anticonvulsant 3 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antidementia | |
| Antidermatitic | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antidiabetic | |
| Antidysphagic | |
| Antiepileptic 3 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antihangover 50 mg | |
| Antihistaminic 50 mg 2x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antihyperactivity 1.5-6 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antiinsomnic 1 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antineuralgic | |
| Antiparkinsonian 100 mg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antipellagric | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. |
| Antiscotomic | |
| Antispasmodic 100 mg 2x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antivertigo | |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. |
| Cardioprotective | |
| Circulotonic | |
| Fibrinolytic | |
| Hepatoprotective | |
| Hepatotoxic | |
| Hypocholesterolemic 50-100 mg 3x/day | |
| Hypoglycemic | |
| Hypolipidemic | |
| Sedative | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Serotoninergetic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Vasodilator | Martindale's 29th |

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|------------|-------|-------|--------|-------|---|
| OLEIC-ACID | Fruit | 520.0 | 2690.0 | -0.46 | * |
|------------|-------|-------|--------|-------|---|

| Activities (18) | |
|----------------------------------|---|
| 5-Alpha-Reductase-Inhibitor | |
| Allergenic | |
| Alpha-Reductase-Inhibitor | |
| Anemiagenic | |
| Antialopecic | |
| Antiandrogenic | |
| Antiinflammatory IC50=21 uM | |
| Antileukotriene-D4 IC50=21 uM | |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. |
| Choleretic 5 ml/man | |
| Dermatitigenic | |
| FLavor FEMA 1-30 | Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry |
| Hypocholesterolemic | Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.) |
| Insectifuge | Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990. |
| Irritant | Merck 11th Edition |
| Percutaneostimulant | Seki, T., Toeda, C., Kawaguchi, T., Juni, K., Sugibayashi, K., and Morimoto, Y. 1990. Enhanced Transdermal Delivery of Zidovudine in Rats and Human Skin. Chem. Pharm. Bull. 38(11): 3086-3089, 1990. |
| Perfumery | Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry |
| Propecic | |

PALMITIC-ACID Fruit 1440.0 7445.0 -0.25 *

| Activities (13) | |
|-----------------------------|--|
| 5-Alpha-Reductase-Inhibitor | |
| Antialopecic | |
| Antiandrogenic | |
| Antifibrinolytic | Economic & Medicinal Plant Research, 1: 53. |
| Antioxidant IC40=60 | |
| FLavor FEMA 1 | Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry |
| Hemolytic | Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp. |
| Hypercholesterolemic | Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.) |
| Lubricant | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Nematicide | Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp. |
| Pesticide | |
| Propecic | |
| Soap | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |

PALMITOLEIC-ACID Fruit 30.0 155.0 -0.32 *

| Activities (2) | |
|-----------------------------|--|
| 5-Alpha-Reductase-Inhibitor | |
| Soap | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |

PHENYLALANINE Fruit 10.0 50.0 -1.14 *

| Activities (7) | |
|--------------------------------------|--|
| AntiADD 587 mg/day/orl | Martindale's 29th |
| Antidepressant 50-4,000 mg/day/man | |
| Antiparkinsonian 200-500 mg/day/man | Martindale's 28th |
| Antisickling 690 ug/ml | |
| Antivilitigic 100 mg/kg/day/orl/man | Martindale's 29th |
| Monoamine-Precursor | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Tremorigenic 1,600-12,600 mg/man/day | Martindale's 28th |

PHOSPHORUS Fruit 170.0 2305.0 -0.28 *

| Activities (4) | | | | | |
|------------------|--|--|--|--|--|
| Antiosteoporotic | | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. | | | |
| Anxiolytic | | | | | |
| Immunostimulant | | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. | | | |
| Osteogenic | | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. | | | |

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|-----------|-------|--------|---------|-------|---|
| POTASSIUM | Fruit | 2890.0 | 15880.0 | -0.18 | * |
|-----------|-------|--------|---------|-------|---|

| Activities (14) | | | | | |
|---------------------------------|--|--|--|--|--|
| Angiotensin-Receptor-Blocker | | | | | |
| Antiarrhythmic | | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. | | | |
| Antidepressant | | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. | | | |
| Antifatigue | | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. | | | |
| Antihypertensive | | | | | |
| Antispasmodic | | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. | | | |
| Antistroke | | | | | |
| Anxiolytic | | | | | |
| Beta-Blocker | | | | | |
| Cardioprotective 3,000-5,000 mg | | | | | |
| Cardiotoxic 18,000 mg/man/day | | | | | |
| Diuretic | | | | | |
| Hypotensive | | | | | |
| Vasodilator | | | | | |

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|---------|-------|-------|-------|-------|---|
| PROLINE | Fruit | 180.0 | 930.0 | -0.84 | * |
|---------|-------|-------|-------|-------|---|

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|---------|-------|--------|---------|-------|---|
| PROTEIN | Fruit | 4000.0 | 55000.0 | -0.73 | * |
|---------|-------|--------|---------|-------|---|

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|------|-------|--------|---------|-----|---|
| PUFA | Fruit | 2530.0 | 13080.0 | 0.1 | * |
|------|-------|--------|---------|-----|---|

| Activities (4) | | | | | |
|------------------|--|--|-------------------|--|--|
| AntiMS | | | Martindale's 28th | | |
| Antiacne | | | Martindale's 28th | | |
| Antieczemic | | | Martindale's 28th | | |
| Antipolyneuritic | | | Martindale's 28th | | |

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|-----------|-------|----|----|--|---|
| QUERCETIN | Plant | -- | -- | | * |
|-----------|-------|----|----|--|---|

| Activities (176) | | | | | |
|---|--|---|--|--|--|
| 11B-HSD-Inhibitor | | | | | |
| 5-Lipoxygenase-Inhibitor IC50 (uM)=4 | | | | | |
| ATPase-Inhibitor | | Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp. | | | |
| Aldehyde-Oxidase-Inhibitor IC70-96=10 uM | | | | | |
| Aldose-Reductase-Inhibitor 100 uM | | | | | |
| Aldose-Reductase-Inhibitor 4 ug/ml | | Ichikawa, K., et al. 1991. Isolation and Structure Determination of Aldose Reductase Inhibitors from Traditional Thai Medicine, and Syntheses of Their Derivatives. Sankyo Kenkyusho Nempo, 43: 99-110. | | | |
| Aldose-Reductase-Inhibitor IC50=0.84 ug/ml cow | | Okada, Y, et al. 1995. Search for Naturally Occurring Substances to Prevent the Complications of Diabetes. II. Inhibitory Effect of Coumarin and Flavonoid Derivatives on Bovine Lens Aldose Reductase and Rabbit Platelet Aggregation. Chem Pharm Bull 43(8):1385-1387 | | | |
| Aldose-Reductase-Inhibitor IC50=0.344 uM | | Mao, X. M., Zhang, J. Q. 1993. Inhibition of Aldose Reductase by Extracts of Chinese Herbal Medicine. Zhongguo Zhongyao Zazhi, 18(10): 623-624. | | | |
| Allelochemic IC82=1 mM | | Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp. | | | |
| Allergenic | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. | | | |
| Analgesic | | | | | |
| AntiCrohn's 400 mg/man/3x/day | | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). | | | |
| AntiGTF ID50=120 ug/ml | | | | | |
| AntiHIV | | | | | |
| AntiPMS 500 mg/2x/day/wmn | | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). | | | |
| Antiaflatoxin IC50=25 uM | | | | | |
| Antiaflatoxin IC50=7.5 ppm | | | | | |
| Antiaggregant IC50=55 uM | | Economic & Medicinal Plant Research, 5: 333. | | | |
| Antiaggregant 30 uM | | | | | |
| Antiaging | | | | | |

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|-------------------------------------|--|
| Antiallergic IC50=14 uM | Jim Duke's personal files. |
| Antialzheimeran | |
| Antianaphylactic | Meli, R., Autore, G., Di Carlo, G., Capasso, F. Inhibitory Action of Quercetin on Intestinal Transit in Mice. <i>Phytotherapy Research</i> 4(5): 201, 1990. |
| Antiangiogenic | |
| Antiarthritic | |
| Antiasthmatic IC50=14 uM | |
| Antiatherosclerotic | |
| Antibacterial | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp. |
| Anticarcinomic (Breast) IC50=1.5 uM | Medline (post 1990 searches filed in my computer) |
| Anticariogenic ID50=120 ug/ml | |
| Anticataract | |
| Anticolitic 400 mg/man/3x/day | Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine.</i> John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Anticomplementary | |
| Anticystitic 1,000 mg/day/4 weeks | |
| Antidepressant | |
| Antidermatitic | Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine.</i> John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antidiabetic | |
| Antielastase IC50=0.8 ug/ml | |
| Antiencephalitic | Economic & Medicinal Plant Research, 5: 199. |
| Antiescherichic | |
| Antiestrogenic | |
| Antifeedant IC52=<1,000 ppm diet | Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, <i>Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology</i> , v. 4, Oryx Press, Phoenix, 1989, 267pp. |
| Antifibrosarcomic | |
| Antiflu | Vlietinck, A.J. and Dommissie, R.A. eds. 1985. <i>Advances in Medicinal Plant Research.</i> Wiss. Verlag. Stuttgart. |
| Antigastric | Rastitel'nye Resursy, 21: 85. |
| Antigonadotropic | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp. |
| Antihepatotoxic | Joyeux, M., Rolland, A., Fleurentin, J., Mortier, F., and Dorfman, P. 1989. Tert-Butyl Hydroperoxide-Induced Injury in Isolated Rat Hepatocytes: A Model for Studying Anti-Hepatotoxic Crude Drugs. <i>Planta Medica</i> 56(2): 171-173, 1990. |
| Antiherpetic 48-150 ug/ml | |
| Antihistaminic IC50=<10 uM | |
| Antihydrophobic | Vlietinck, A.J. and Dommissie, R.A. eds. 1985. <i>Advances in Medicinal Plant Research.</i> Wiss. Verlag. Stuttgart. |
| Antihypertensive | Huang, K. C. 1993. <i>The Pharmacology of Chinese Herbs.</i> CRC Press, Boca Raton, FL 388 pp. |
| Antiinflammatory 20-150 mg/kg | Fitoterapia No.5-1990. |
| Antileishmanic IC50=64 | |
| Antileukemic IC50=10 uM | Economic & Medicinal Plant Research, 5: 225. |
| Antileukemic IC50=>10 ug/ml | Life Sciences 55: 1061. |
| Antileukemic 5.5-60 uM | |
| Antileukotriene | Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine.</i> John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antilipoperoxidant IC67=50 | |
| Antimalarial IC50=1-6.4 ug/ml | Medicinal and Poisonous Plants of the Tropics. Leeuwenberg, A.J.M., ed. Pudoc, Wageningen. 1987. |
| Antimelanomic | |
| Antimetastatic | |
| Antimutagenic ID50=2-5 nM | Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp. |
| Antimutagenic ID50=0.62 ug/ml | |
| Antimyocarditic | Economic & Medicinal Plant Research, 5: 199. |
| Antinitrosaminic | |
| Antinociceptive | |
| Antioxidant IC96=300 ppm | Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp. |
| Antioxidant ED50=2.3 uM | Seidel, V., Verholle, M., Malard, Y., Tilleguin, F., Fruchart, J-C., Duriez, P., Bailleul, F., Teissier, E. 2000. Phenylpropanoids from <i>Ballota nigra</i> L. Inhibit in vitro LDL Peroxidation. <i>Phytotherapy Research</i> , 14(2): 93-98. |
| Antioxidant 4.7 x Vit. E | |
| Antioxidant IC47=10 uM | |
| Antipancreatic | Joseph, J., Nadeau, D. and Underwood, A. 2001. <i>The Color Code.</i> Hyperion, NY. |
| Antiperiodontal | Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine.</i> John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antiperistaltic | |
| Antipermeability | |
| Antiperoxidant | <i>Planta Medica</i> , 57: A110, 1991. |
| Antipharyngitic | Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine.</i> John Bastyr College Publications, Seattle, Washington (Looseleaf). |

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| Antiplaque | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antiplasmodial IC50=13-64 | |
| Antipodriac | |
| Antipolio | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antiproliferant 10 nM | |
| Antiprostanoïd | |
| Antiprostatic | Joseph, J., Nadeau, D. and Underwood, A. 2001. The Color Code. Hyperion, NY. |
| Antipsoriac | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antiradicular IC50=4.6 uM | Planta Medica, 56(6): 695, 1990. |
| Antispasmodic | |
| Antistreptococcic ID50=120 ug/ml | |
| Antithiamin | Phenolic Compounds in Food and Their Effects on Health, 69. |
| Antithrombic | |
| Antitrypanosomic IC50=13 | |
| Antitumor 10 uM | |
| Antitumor (Bladder) | |
| Antitumor (Breast) | |
| Antitumor (Colon) | |
| Antitumor (Lung) | |
| Antitumor (Ovary) | |
| Antitumor (Skin) 20 uM | |
| Antitumor-Promoter | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antiulcer | |
| Antiviral IC50=10 uM | Economic & Medicinal Plant Research, 5: 225. |
| Antiviral 48-150 ug/ml | Amoros, M., Simoes, C.M.O., Girre, L., et al. Synergistic Effect Of Flavones And Flavonols Against Herpes Simplex Virus Type 1 In Cell Culture. Comparison With The Antiviral Activity Of Propolis. J. of Natural Products 55(12):1732-1740, 1992. |
| Apoptotic 20-60 uM | |
| Bacteristat 10 mg/ml | |
| Bradycardiac | Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp. |
| COMT-Inhibitor | |
| COX-2-Inhibitor <40 uM | |
| Calmodulin-Antagonist | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. |
| Candidicide | |
| Capillariprotective | Merck 11th Edition |
| Carcinogenic 40,000 ppm (diet) mus | Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp. |
| Catabolic | |
| Copper-Chelator | |
| Cyclooxygenase-Inhibitor | |
| Cytochrome-P450-1A2-Inhibitor | |
| Cytotoxic ED50=70 ug/ml | Matsukawa, Y., et al. The Effect of Quercetin and Other Flavonoids on Cell Cycle Progression and Growth of Human Gastric Cancer Cells. Planta Medica, 56(6): 677, 1990. |
| Cytotoxic IC82=100 ug/ml | Planta Medica, 57: A113, 1991. |
| Deiodinase-Inhibitor | Jim Duke's personal files. |
| Diaphoretic? | Lawrence Review of Natural Products, Dec-90. |
| Differentiator 5.5 uM | |
| Estrogenic 10% genistein | |
| Fungicide | |
| Glucosyl-Transferase-Inhibitor ID50=120 ug/ml | |
| HIV-RT-Inhibitor IC50=<1 ug/ml | Nakane, H., Fukushima, M., and Ono*, K. Differential Inhibition Of Reverse Transcriptase And Various DNA Polymerases By Digallic Acid And Its Derivatives. Journal of Natural Products, 53(5): 1234-1240, 1990. |
| Hemostat | Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp. |
| Hepatomagenic 5,000 ppm (diet) rat | Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp. |
| Hepatoprotective | |
| Hypoglycemic 100 mg/kg orl rat | Ivorra, M.D., Paya, M., and Villar, A. 1989. A Review of Natural Products and Plants as Potential Antidiabetic Drugs. Journal of Ethnopharmacology, 27: 243-275, 1989. |
| Inotropic | |
| Insulinogenic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Juvabional | Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp. |
| Larvistat 8,000 ppm diet | Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp. |
| Lipoxygenase-Inhibitor IC11=1.25 mM | Oszmianski, J. and Lee, C.Y. 1990. Inhibitory Effect of Phenolics on Carotene Bleaching in Vegetables. J. Agric. Food Chem. 38: 688-690. |
| Lipoxygenase-Inhibitor IC50=0.1-5 uM | |

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|---|---|
| MAO-A-Inhibitor | |
| MMP-9-Inhibitor 20 uM | |
| Mast-Cell-Stabilizer | |
| Metal-Chelator (Copper) | Seidel, V., Verholle, M., Malard, Y., Tilleguin, F., Fruchart, J-C., Duriez, P., Bailleul, F., Teissier, E. 2000. Phenylpropanoids from <i>Ballota nigra</i> L. Inhibit in vitro LDL Peroxidation. <i>Phytotherapy Research</i> , 14(2): 93-98. |
| Metalloproteinase-Inhibitor IC50=>42 uM | |
| Mutagenic | |
| NADH-Oxidase-Inhibitor | |
| NEP-Inhibitor IC50=>42 uM | |
| NF-kB-Inhibitor | |
| NO-Inhibitor IC>50=125 uM | |
| NO-Inhibitor IC50=20 uM | |
| NO-Synthase-Inhibitor 5-50 uM | |
| Neuroprotective 5-25 uM | |
| Ornithine-Decarboxylase-Inhibitor <10 uM | |
| P450-Inducer 5 uM | Father Nature's Pharmacy: The aggregate of all these three-letter citations. |
| P450-Inhibitor 50-100 uM | Father Nature's Pharmacy: The aggregate of all these three-letter citations. |
| PGE2-Inhibitor | |
| PTK-Inhibitor 0.4-24 uM | |
| Pesticide | |
| Phospholipase-Inhibitor | |
| Plasmodicide | Neuwinger, H. D. 1996. <i>African Ethnobotany - Poisons and Drugs</i> . Chapman & Hall, New York. 941 pp. |
| Proliferant | |
| Prostaglandin-Synthesis-Inhibitor 40 ug/ml | Ibewuike, J. C., Ogunbamila, F. O., Ogundaini, A. O., Okeke, I. N., Bohlin, L. 1997. Antiinflammatory and Antibacterial Activities of C-methylflavonol from <i>Piliostigma thonningii</i> . <i>Phytotherapy Research</i> , 11(4): 281-284. |
| Protein-Kinase-C-Inhibitor | Naim, M., Zehavi, U., Nagy, S., and Rouseff, R.L. Hydroxycinnamic Acids as Off-Flavor Precursors in Citrus Fruits and Their Products. <i>Phenolic Compounds in Food and Their Effects on Health</i> , Ch.14. |
| Quinone-Reductase-Inducer 6 uM | Uda, Y., Price, K. R., Williamson, G., Rhodes, M. J. C. 1997. Induction of the Anticarcinogenic Marker Enzyme, Quinone Reductase, in Murine Hepatoma Cells In Vitro by Flavonoids. <i>Cancer Lett.</i> , 120 (2): 213-216. |
| Quinone-Reductase-Inducer 13 uM | |
| TNF-alpha-Inhibitor IC50=3.11 uM | |
| Teratologic | |
| Topoisomerase-I-Inhibitor IC50=12.8 ug/ml | |
| Topoisomerase-I-Inhibitor IC50=42 uM | |
| Topoisomerase-II-Inhibitor IC50=1-6.9 ug/ml | |
| Topoisomerase-II-Inhibitor IC50=23-40 uM | |
| Tumorigenic 0.1% diet orl rat/yr | Jim Duke's personal files. |
| Tyrosinase-Inhibitor ID50=70 uM | |
| Tyrosine-Kinase-Inhibitor | <i>Economic & Medicinal Plant Research</i> , 6: 170. |
| VEGF-Inhibitor | |
| Vasodilator | |
| Xanthine-Oxidase-Inhibitor IC50=>0.4 ug/ml | <i>Chem. & Pharm. Bull.</i> 38: 1772. |
| Xanthine-Oxidase-Inhibitor IC50=10.6 ug/ml | |
| Xanthine-Oxidase-Inhibitor 3.1 uM | |
| cAMP-Phosphodiesterase-Inhibitor | Pizzorno, J.E. and Murray, M.T. 1985. <i>A Textbook of Natural Medicine</i> . John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| iNOS-Inhibitor IC50=20 uM | |

RIBOFLAVIN

Fruit

0.2

1.9

-0.67

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| Activities (15) | | | | | |
|-------------------------------------|--|--|---|--|--|
| AntiLyme 50 mg/day | | | | | |
| Antiarabiflavinotic 2-10 mg/day orl | | | Martindale's 28th | | |
| Anticarpal-Tunnel 50 mg/day | | | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. | | |
| Anticataract 15 mg/day | | | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. | | |
| Anticephalagic | | | | | |
| Anticervicaldysplasic 1.6-10 mg/day | | | | | |
| Anticheilitic | | | | | |
| Antidecubitic | | | | | |
| Antiglossitic | | | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. | | |
| Antikeratitic | | | | | |
| Antimigraine | | | | | |
| Antioxidant | | | | | |
| Antipellagic | | | | | |
| Antiphotophobic | | | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. | | |
| Cancer-Preventive | | | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. | | |

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|--------|-------|-------|-------|-------|---|
| SERINE | Fruit | 170.0 | 880.0 | -0.98 | * |
|--------|-------|-------|-------|-------|---|

| Activities (1) | | | | | |
|-------------------|--|--|---|--|--|
| Cancer-Preventive | | | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. | | |

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|-----|-------|--------|--------|-------|---|
| SFA | Fruit | 1720.0 | 8900.0 | -0.18 | * |
|-----|-------|--------|--------|-------|---|

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|--------|-------|------|--------|------|---|
| SODIUM | Fruit | 40.0 | 1915.0 | -0.0 | * |
|--------|-------|------|--------|------|---|

| Activities (1) | | | | | |
|----------------|--|--|--|--|--|
| Hypertensive | | | Davies, S., and Stewart, A. 1990. Nutritional Medicine. Avon Books, New York. 509pp. | | |

| | | | | | |
|--------------|-------|-------|-------|-------|---|
| STEARIC-ACID | Fruit | 160.0 | 825.0 | -0.22 | * |
|--------------|-------|-------|-------|-------|---|

| Activities (8) | | | | | |
|-----------------------------|--|--|--|--|--|
| 5-Alpha-Reductase-Inhibitor | | | | | |
| Cosmetic | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. | | |
| FLavor FEMA 2-4,000 | | | Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry | | |
| Hypocholesterolemic | | | Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.) | | |
| Lubricant | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. | | |
| Perfumery | | | Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry | | |
| Propecic | | | | | |
| Suppository | | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. | | |

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|---------|-------|-----|-----|-------|---|
| THIAMIN | Fruit | 0.2 | 1.9 | -0.44 | * |
|---------|-------|-----|-----|-------|---|

Activities (31)

| | |
|----------------------------------|--|
| Analgesic 1-4 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| AntiLyme 50 mg | |
| Antialcoholic 50-100 mg/day | |
| Antialzheimeran 100-3,000 mg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antianorectic | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Antibackache 1-4 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antiberiberi | |
| Anticanker | |
| Anticardiospasmic | |
| Anticataract | |
| Anticolitic | |
| Antidecubitic | |
| Antideliriant | |
| Antidementia | |
| Antidyspeptic | |
| Antiencephalopathic | Martindale's 29th |
| Antifatigue | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Antigastritic | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Antihangover 50 mg | |
| Antiheartburn | |
| Antiherpetic | |
| Antimigraine | |
| Antimyocarditic | |
| Antineuralgic 1-4 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antineurasthenic | |
| Antineuritic | |
| Antineuropathic 50 mg | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antipoliomyelitic | |
| Insectifuge 75-150 mg/man/day | Martindale's 28th |
| Neuroprotective | |
| Pesticide | |

THREONINE Fruit 220.0 1140.0 -0.78 *

Activities (4)

| | |
|-------------------|--|
| Antioxidant? | |
| Antiulcer | Martindale's 29th |
| Essential | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| FLavor FEMA 1,000 | Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry |

TRYPTOPHAN Fruit 50.0 260.0 -0.83 *

| Activities (29) | |
|-------------------------------------|--|
| Analgesic 750 mg/4x/day/orl/man | Martindale's 29th |
| Anti-anxiety 500-1,000 mg/meal | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antidementia 3 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antidepressant 1-3 g/3x/day/orl/man | Martindale's 29th |
| Antidyskinetic 2-8 g/orl/wmn/day | Martindale's 29th |
| Antihypertensive | J. Agri. & Food Chemistry, 36: 1079. |
| Anti-insomniac 1-3 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antimanic 12 g/man/day/orl | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Antimenopausal 6 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antimigraine 500 mg/man/4x/day | Martindale's 29th |
| Antioxidant 125 ug/ml | |
| Antiparkinsonian 2 g 3 x/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antiphenylketonuric | Martindale's 29th |
| Antiprostaglandin 250 pg/ml | |
| Antipsychotic 12 g/man/day | Martindale's 29th |
| Antirheumatic | Martindale's 29th |
| Antiscoliotic | |
| Carcinogenic | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| Essential | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| Hypnotic | Martindale's 29th |
| Hypoglycemic | Economic & Medicinal Plant Research, 6: 157. |
| Hypotensive 3 g/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Insulinase-Inhibitor | Economic & Medicinal Plant Research, 6: 157. |
| Insulinotonic | J. Agri. & Food Chemistry, 36: 1079. |
| Monoamine-Precursor | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Prolactinogenic | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |
| Sedative 3-10 g/man/day | |
| Serotonergic 6-12 g/day/orl/man | Martindale's 28th |
| Tumor-Promoter | J. Agri. & Food Chemistry, 36: 1079. |

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|----------|-------|------|-------|-------|---|
| TYROSINE | Fruit | 70.0 | 360.0 | -0.85 | * |
|----------|-------|------|-------|-------|---|

| Activities (8) | |
|--------------------------------|--|
| Antidepressant? | |
| Antiencephalopathic | Martindale's 29th |
| Antiparkinsonian 100 mg/kg/day | Werbach, M. 1993. Healing with Food. Harper Collins, New York, 443 pp. |
| Antiphenylketonuric | Martindale's 29th |
| Antiulcer 256 mg scu | Borchard, R. E., Barnes, C. D., and Eltherton, L. G. 1991. Drug Dosage in Laboratory Animals: A Handbook. (3rd Ed.) The Telford Press, Inc., P. O. Box 287, Caldwell NJ 07006. |
| Antiulcer 400 mg/kg ipr rat | Borchard, R. E., Barnes, C. D., and Eltherton, L. G. 1991. Drug Dosage in Laboratory Animals: A Handbook. (3rd Ed.) The Telford Press, Inc., P. O. Box 287, Caldwell NJ 07006. |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. |
| Monoamine-Precursor | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf). |

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|--------|-------|-------|--------|-------|---|
| VALINE | Fruit | 200.0 | 1035.0 | -0.71 | * |
|--------|-------|-------|--------|-------|---|

| Activities (3) | |
|-------------------------|--|
| Antiencephalopathic | Martindale's 29th |
| Essential | |
| Flavor FEMA 1,000-2,000 | Aloe Research Council - Duke writeup of non-peer reviewed book by Coats and draft by Henry |

| | | | | | |
|-------|-------|----------|----------|------|---|
| WATER | Fruit | 783200.0 | 843000.0 | 0.31 | * |
|-------|-------|----------|----------|------|---|