

Adverse effects. An increase in seizure activity was noted in 4 of 6 children with severe neurological deficits during treatment with melatonin for sleep disorders.¹ Seizure activity returned to baseline values when melatonin was stopped and recurred on rechallenge.

1. Sheldon SH. Pro-convulsant effects of oral melatonin in neurologically disabled children. *Lancet* 1998; **351**: 1254.

Uses. Melatonin has been tried in a number of disorders¹ including, in large doses, as an adjunct to conventional chemotherapy for malignant neoplasms^{2,3} and, with norethisterone, as a contraceptive.⁴ It is possible that contraceptive use of melatonin may be associated with a reduced risk of breast cancer.⁵ For mention of response to melatonin in 2 patients with sarcoidosis, see p.1512. Preliminary studies have also suggested that melatonin may be beneficial in hyperlipidaemias,⁶ cluster headaches,⁷ tinnitus,⁸ alopecia in women,⁹ and irritable bowel syndrome associated with sleep disturbances.¹⁰ Repeated bedtime doses may also play a part in reducing nocturnal blood pressure in patients with essential hypertension.¹¹ Claims for its value as an anti-ageing treatment and for use in conditions such as Alzheimer's disease and AIDS are unfounded.¹² The effects of long-term use of melatonin have yet to be assessed.

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INSOMNIA. Although melatonin is considered^{1–6} to be potentially useful in the management of various forms of insomnia (p.957), especially those associated with circadian rhythm disturbances, there is little evidence of efficacy from large studies and its long-term safety remains to be established. A meta-analysis⁷ of randomised controlled studies concluded that melatonin does not have a significant effect on sleep onset latency in secondary sleep disorders or those accompanying sleep restriction such as jet lag and shift work. In healthy subjects melatonin has been reported^{8,9} to reduce the time to onset of sleep and to increase the time spent asleep. Whether this is due to adjustment of the 'body clock' or any hypnotic action of melatonin is unclear. Measurement of nocturnal urinary excretion of the major metabolite, 6-sulfatoxymelatonin, demonstrated that low nocturnal melatonin production is associated with insomnia in patients over 55 years of age, and might identify those more likely to respond to treatment with melatonin.¹⁰ Improved quality of sleep has been reported in elderly patients treated with melatonin for insomnia,¹¹ and it might be of use in delayed sleep phase syndrome¹² and insomnia in shift workers and totally blind people, although some^{13,14} have found no beneficial effects of melatonin in night shift workers or emergency medicine employees. There has also been a report¹⁵ of a patient with somnolence associated with melatonin deficiency after pinealectomy who responded to treatment with melatonin. A preliminary report¹⁶ has suggested that use of melatonin may enable benzodiazepine therapy for insomnia to be stopped without impairing the quality of sleep. However, melatonin might adversely affect sleep patterns in some circumstances.¹⁷

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JET LAG. Melatonin has been reported to alleviate jet lag following long flights.^{1–4} The most appropriate dosing schedule has yet to be determined but will depend on both the direction of travel and the distance travelled. A systematic review⁵ concluded that melatonin was effective in preventing or reducing jet lag in those travelling across 5 or more time zones, particularly in an easterly direction, and especially if jet lag had been experienced previously; travellers crossing 2 to 4 time zones might also derive benefit. However, a meta-analysis⁶ of randomised controlled studies concluded that melatonin does not have a significant effect on sleep onset latency accompanying jet lag.

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Preparations

Proprietary Preparations (details are given in Part 3)

Arg: Armonil Noche; Buenas Noches; Melatol; Nochiq; Repentil; **Chile:** Novelf; **Hong Kong:** Melapure; **Hung:** Bio-Melatonin; **India:** Meloset; **Mex:** Benedorm; Cronocaps; Revenox; **Port:** Circadin; **Rus:** Melaxen (Мелаксен); **UK:** Circadin; **USA:** Transzone.

Multi-ingredient: **Arg:** Plenovit Melatonina; **India:** Eternex; Stresnit; **USA:** Bevitamel; Melagesic PM.

Melilot

Barküno žolė; Gelber Steinklee; Komoniová nat'; Mélilot; Meliloti herba; Rohtomesikkä; Sötväppling; Sweet Clover; Yellow Melilot; Yellow Sweet Clover; Ziele nostrzyka.

Pharmacopoeias. In *Eur.* (see p.vii).

Ph. Eur. 6.2 (Meliloti Herba). The whole or cut, dried aerial parts of *Melilotus officinalis*. It contains a minimum of 0.3% coumarin, calculated with reference to the dried drug. Protect from light.

Profile

Melilot is used internally in herbal preparations for chronic venous insufficiency. It contains coumarin (see p.2288) and its derivatives and the dose may be expressed in terms of coumarin. The German expert committee for herbal drugs and preparations (Commission E) also allows the addition or substitution of *M. altissimus* (tall melilot), tall yellow sweet clover.

Melilotus officinalis is also used externally.

Homeopathy. Melilot has been used in homeopathic medicines under the following names: Melilotus officinalis; Mel. off.

Preparations

Proprietary Preparations (details are given in Part 3)

Braz: Vecasten; **Ger:** Meli Rephastasan.

Multi-ingredient: **Arg:** Snell Patch; Snell Progress; **Austral:** Bioglan Zellelean with Escin; **Chile:** Celltech Gold; **Fr:** Antinerveux Lessourd; Creme au Melilot Composee; Cyclo 3; Ditaven; Esberiven; Esberiven Fort; Evarose; Sedopal; **Ger:** Phlebotri N; Salus Venen Krauter Dragees N; Venen Krauter NT; **Ital:** Capill Venogel; Dermilia Flebozin; Diosmina Complex; Facosmina; Flebo-Si; Flebofort; Levital Plus; Lipaven; Pulsalul; Repaven; Venodin; Venoton; **Rus:** Cyclo 3 (Цикло 3); **Singapore:** Cyclo 3; **Spain:** Fabroven; Venofit; **Switz:** Phlebotri; Veino-Gouttes-Nf.

Melissa

Citromfűlevél; Lemon Balm; Lišč melisy; Meduřkový list; Melisa; Meliss; Melissae folium; Mélisse, feuille de; Melissenblatt; Melisų lapai; Sitruunamelissanlehti.

Pharmacopoeias. In *Eur.* (see p.vii).

Ph. Eur. 6.2 (Melissa Leaf). The dried leaf of *Melissa officinalis*. It contains not less than 4% of total hydroxycinnamic derivatives expressed as rosmarinic acid (C₁₈H₁₆O₈ = 360.3), calculated with reference to the dried drug. It has an odor reminiscent of lemon. Protect from light.

Profile

Melissa has been used as a carminative and sedative. It is an ingredient of herbal remedies used for a variety of disorders. It is also reported to have virustatic activity. The chief constituent of melissa is citral (p.2284). Hypersensitivity reactions to melissa have been reported.

Melissa is the source of melissa oil (see below).

Homeopathy. Melissa has been used in homeopathic medicines under the following names: Melissa officinalis.

References

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Preparations

Proprietary Preparations (details are given in Part 3)

Austria: Balm-Mint; Lomaherpan; **Belg:** Dormiplant; **Chile:** Citromel; **Cz:** Lakinal; Lomaherpan; Medovka Lekarska; Medunkovy; Medunkova; **Ger:** Gastrovegatal; Lomaherpan; Me-Sabona; Sedinfant; **Rus:** Novo-Passit (Ново-Пассит); **Switz:** Valverde Boutons de feuivre creme.

Multi-ingredient: **Arg:** Dr Calm; Erbonda Noche; Nervocalm; Sedante Arcelj; Valeriana Oligoplex; Valeriana Relax Diates; **Austral:** Natural Deep Sleep; **Austria:** Abdomilon N; Baldrain; Euekan; Maniazeller; Passedan; Passelyt; Sedogelat; Songha; Species nervinae; The Chambard-Tea; Wechselttee St Severn; **Belg:** Minhave; Songha; **Braz:** Anavrese; Balsamo Branco; Calmapax; Camomila; Ellixir de Passiflora; Passaneuro; Passilex; Sonhare; **Canada:** Herbal Sleep Well; Natural HRT; Nightingale; **Chile:** Melipass; Reclam; **Cz:** Abdomilon; Alvisan Neo; Baldrain; Blaugungstee Nf; Eugastrin; Euekan; Fytokliman Planta; Hertz- und Kreislauftee; Hypotonicica; Ibergogast; Klosterfrau Melisana; Melaton; Nervova Cajova Smes; Nontusy; Novo-Passit; Passedan; Persen; Schlaf-Nerventee Nf; Senalax; Songha Night; Species Nervinae Planta; Valofyt Neo; **Fr:** Biocard; Dystolise; Elkir Bonjean; Mediflor Tisane Calmante Troubles du Sommeil No 14; Mediflor Tisane Circulation du Sang No 12; Vagostabyl; **Ger:** Abdomilon N; Baldrain N Stark; Doppelherz Melissegeist; Dormarist; Dr Scheffer Bergischer Krauterte Nerven- und Beruhigungstee; Eueveg; Eueveg Entspannungs- und Einschlafdragees; Eueveg Entspannungs- und Einschlafdragees; Gastrol S; Gutnachit; Heumann Beruhigungstee Ternalv; Ibergogast; JüDorm; Jukunda Melissen-Krauterte Nf; Lindofluid N; Me-Sabona plus; Melissegeist; Nervosana; Oxacant Nf; Oxacant-sedativ; Pascoedon; Phytonoct; Plantival novo; Presselin Blahungs K 4 Nf; Pronervon Phytol; RubieSed; Schlaf- und Nerventee; Seda-Plantina; Sedacur; Sedariston plus; Sedasyx; Sedinfant Nf; Stullmanton; **Hung:** Euekan; Sedacur; **Israel:** Songha Night; **Ital:** Actenacel; Calmason; Colimil; Dormiplant; Emmenoias; Melissa (Specie Composita); Sedatol; Tisana Kelemata; Vagostabil; Valeriana (Specie Composita); **Malaysia:** Circarol; **Mex:** Nordimety; Plantival; **NZ:** Botanical Hayfever; Mr Nits; **Philipp:** Circulan; **Pol:** Amarosal; Aromatol; Calmina; Carmolis; Cravisol; Nervinolon; Klimax; Lumewal; Melisal; Melisana Klosterfrau; Melissed; Nervinolon; Nervomix; Nervosol; Nervobonisol; Pofocrat; Persen; Psychotonisol; Relana; Sedomix; **Port:** Eprecalm; Songha; **Rus:** Doppelherz Melissa (Доппельгерц Мелисса); Doppelherz Vitalotonik (Доппельгерц Виталотоник); Persen (Персен); **S.Afr:** Melissegeist; Spiritus Contra Tus-sim Drops; **Spain:** Agua del Carmen; Caramelos Agua del Carmen; Dormiplant; Himelant; Jaquesor; Meliva; Mesatit; Natsor; Aroferane; Natsor Jaquesant; Nervikan; Relana; Resolutivo Regium; Solucion Schoum; **Switz:** Alcolat de Melisse; Arterosan plus; Baldrain; Baldrisedon plus; Cardiflorce; Carmol; Dormiplant; Dragees pour la detente nerveuse; Gastosan; Hyperforce comp; Ibergogast; Phytomed Nervo; Relaxane; Relaxo; Songha Night; Soporin; Tisane calmante pour les enfants; Tisane favorisant l'allaitement; Tisane pour l'estomac; Tisane pour le coeur et la circulation; Tisane pour le sommeil et les nerfs; Tisane pour nourissons et enfants; Tisane relaxante Nf; Valverde Detente dragees; Valviska; **UK:** Melissa Comp; Valeriana Day Time; Valeriana Night-Time; **Venez:** Euekan; Sedival.

Melissa Oil

Balm Oil; Esencia de Melisa; Lemon Balm Oil.

CAS — 8014-71-9.

Profile

Melissa oil is the essential oil obtained from melissa (*Melissa officinalis*), above. It is used in preparations with other essential oils in a variety of disorders. It is also used in aromatherapy.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Austria:** Opino; **Chile:** Agua del Carmen; Agua Melisa Carminativa; **Cz:** Thrombocid; **Fr:** Stomargil; **Ger:** Amol Heilkräutergeist N; Cor-Select; Thrombocid; **Gre:** Opino-Jel; **Indon:** Opino; **Ital:** Dentosan Azione Intensiva; Dentosan Mese; Neuralta Migren; **Pol:** Amol; Argol Essenza Balsamica; Argol Grip; Argol Rheuma; **Port:** Thrombocid; **Switz:** Anal-Gen; Thrombocid.