

has been used for anxiety disorders and as a tonic during convalescence from chronic illness.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Multi-ingredient:** **Austral:** Avena Complex; Calmo; Nevaton; **Austria:** Sinupret; **Cz:** Sinupret; Stomatosan; **Fr:** Calmophytum; Vigilla; **Ger:** Sinupret; **Hong Kong:** Sinupret; **Hung:** Sinupret; **Indon:** Sinupret; **Ital:** Neodema 47; **Mex:** Bisolinus; **Philipp:** Sinupret; **Pol:** Sinupret; **Rus:** Sinupret (Синупрет); **Singapore:** Sinupret; **Switz:** Sinupret; Tisane pour nourissons et enfants; **Thai:** Sinupret; **UK:** Athera; HRI Night; Kalms Sleep; Modern Herbs Menopause; Modern Herbs Stress; Newrelax; Period Pain Relief; Prementaid; Scullcap & Gentian Tablets; Stressless; SuNerven.

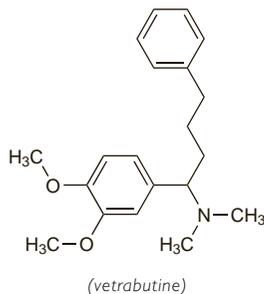
### Vetrabutine Hydrochloride (BANM, rINN)

Dimophebumine Hydrochloride; Hidrocloruro de vetrabutina; Sp-281; Vétrabutine, Chlorhydrate de; Vetrabutini Hydrochloridum. *N,N*-Dimethyl- $\alpha$ -(3-phenylpropyl)veratrylamine hydrochloride.

Ветрабутина Гидрохлорид

$C_{20}H_{27}NO_2 \cdot HCl = 349.9$ .

CAS — 3735-45-3 (vetrabutine); 5974-09-4 (vetrabutine hydrochloride).



### Profile

Vetrabutine hydrochloride is used as a uterine relaxant in veterinary medicine.

### Vinburnine (rINN)

CH-846; (–)-Ebumamnine; 3 $\alpha$ ,16 $\alpha$ -Ebumamnine; Vinburnina; Vinburninum; Vincamone. (3 $\alpha$ ,16 $\alpha$ )-Ebumamenin-14(15H)-one.

Винбурнин

$C_{19}H_{22}N_2O = 294.4$ .

CAS — 4880-88-0.

ATC — C04AX17.

ATC Vet — QC04AX17.

### Profile

Vinburnine is an alkaloid related to vincamine (below) and has been used in conditions associated with cerebral circulatory insufficiency.

Vinburnine phosphate has been used similarly.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Fr:** Cervoxan; **Ital:** Ebumal; Tensiplex; **Port:** Cervoxan; **Spain:** Cervoxan.

### Vincamine (BAN, rINN)

Vincamina; Vincaminum. Methyl (3 $\alpha$ ,16 $\alpha$ )-14,15-dihydro-14 $\beta$ -hydroxyebumamenine-14-carboxylate.

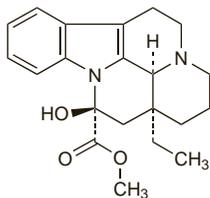
Винкамин

$C_{21}H_{26}N_2O_3 = 354.4$ .

CAS — 1617-90-9.

ATC — C04AX07.

ATC Vet — QC04AX07.



### Pharmacopoeias. In Fr.

### Profile

Vincamine is an alkaloid obtained from *Vinca minor* (Apocynaceae). It is claimed to increase cerebral circulation and utilisation of oxygen and has been used in a variety of cerebral

disorders. Vincamine may have adverse effects on the cardiovascular system and care should be taken in patients with hypertension or cardiac dysfunction.

Vincamine salts including vincamine hydrochloride, oxoglurate, teprosilate, and hydrogen tartrate have also been used.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Arg:** Cincualta; Vinkhum; **Austria:** Ceta; **Belg:** Cerebroxine; **Fr:** Vincap; **Ger:** Ophdivas N; **Hong Kong:** Aethroma; **Ital:** Vasonett; Vincap; Vincap-Treis; Vincadar; Vraap; **Mex:** Vincapan; **Port:** Arteriovinca; Cervinca; Vincagil; **Spain:** Arteriovinca; Domeni; Tefavinca; Vadicat; Vincacen; Vincaminol; **Switz:** Ceta; Oxygeron.

**Multi-ingredient:** **Arg:** Ribex; **Fr:** Rheobral; **Port:** Anacervix; Centracetam; Stimilfar; **Spain:** Anacervix; Devincal; **Venez:** Devincal.

### Vinpocetine (USAN, rINN)

AY-27255; Ethyl Apovincaminat; Ethyl Apovincaminoate; RGH-4405; Vinpocetin; Vinpocetina; Vinpocétine; Vinpocetinum; Vinpocetiini. Ethyl (3 $\alpha$ ,16 $\alpha$ )-ebumamenine-14-carboxylate.

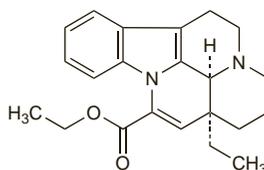
Винпоцетин

$C_{22}H_{26}N_2O_2 = 350.5$ .

CAS — 42971-09-5.

ATC — N06BX18.

ATC Vet — QN06BX18.



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

**Ph. Eur. 6.2** (Vinpocetine). A white or slightly yellow, crystalline powder. Practically insoluble in water; soluble in dichloromethane; slightly soluble in anhydrous alcohol.

### Profile

Vinpocetine is a derivative of vincamine (above) that has been given orally in cerebrovascular disorders and dementia. Good evidence to support its use in cognitive impairment is lacking.

### References.

- Grandt R, et al. Vinpocetine pharmacokinetics in elderly subjects. *Arzneimittelforschung* 1989; **39**: 1599–1602.
- Blaha L, et al. Clinical evidence of the effectiveness of vinpocetine in the treatment of organic psychosyndrome. *Hum Psychopharmacol Clin Exp* 1989; **4**: 103–11.
- Berecki D, Fekete I. A systematic review of vinpocetine therapy in acute ischaemic stroke. *Eur J Clin Pharmacol* 1999; **55**: 349–52.
- Szatmari SZ, Whitehouse PJ. Vinpocetine for cognitive impairment and dementia. Available in The Cochrane Database of Systematic Reviews; Issue 1. Chichester: John Wiley; 2003 (accessed 31/03/06).
- Kemény V, et al. Acute and chronic effects of vinpocetine on cerebral hemodynamics and neuropsychological performance in multi-infarct patients. *J Clin Pharmacol* 2005; **45**: 1048–54.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Arg:** Cavinton; **Braz:** Vicog; **Cz:** Cavinton; Vicerol; **Ger:** Cavinton; **Hung:** Cavinton; **Pol:** Cavinton; Vicerol; Vinpoton; **Port:** Cavinton; Ultra-Vinca; Vipozem; **Rus:** Cavinton (Кавинтон); Telectol (Телектол); **Singapore:** Cavinton; **Thai:** Cavinton; Vinprosen.

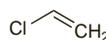
**Multi-ingredient:** **Rus:** Vinpotropile (Винпотропили).

### Vinyl Chloride

Cloruro de vinilo; VCM; Vinilo, cloruro de; Vinyl Chloride Monomer; Winylu chlorek. Chloroethylene.

$C_2H_3Cl = 62.50$ .

CAS — 75-01-4.



### Profile

Vinyl chloride is used in the manufacture of polyvinyl chloride (PVC) and other vinyl polymers. Occupational exposure to vinyl chloride in polymerisation plants has been associated with acroosteolysis, especially in the terminal phalanges of the fingers, a condition resembling Raynaud's phenomenon, and scleroderma-like skin changes. Liver damage and hepatic angiosarcoma, splenomegaly, thrombocytopenia, impaired respiratory function, and chromosomal abnormalities have also occurred.

### References.

- Infante PF, et al. Genetic risks of vinyl chloride. *Lancet* 1976; **i**: 734–5.
- Black CM, et al. Genetic susceptibility to scleroderma-like syndrome induced by vinyl chloride. *Lancet* 1983; **i**: 53–5.

- Piratsis R, et al. La mortalità dei produttori di cloruro di vinile in Italia. *Med Lav* 1991; **82**: 388–423.
- Riordan SM, et al. Vinyl chloride related hepatic angiosarcoma in a polyvinyl chloride autoclave cleaner in Australia. *Med J Aust* 1991; **155**: 125–8.
- Mur JM, et al. Spontaneous abortion and exposure to vinyl chloride. *Lancet* 1992; **339**: 127–8.
- McLaughlin JK, Lipworth L. A critical review of the epidemiologic literature on health effects of occupational exposure to vinyl chloride. *J Epidemiol Biostat* 1999; **4**: 253–75.

### Water

Aqua; Aqua; Aqua Communis; Aqua Fontana; Aqua Potabilis; Eau Potable; Vatten; Vesi; Víz; Wasser; Woda.

$H_2O = 18.02$ .

CAS — 7732-18-5.

### Purified Water

Aqua purificata; Aqua purificata; Eau purifiée; Išgyrintas vanduo; Puhdistettu vesi; Tisztított víz; Vatten, renat; Voda čistěná; Woda oczyszczona.

**Pharmacopoeias.** In *Chin.*, *Eur.* (see p.vii), *Int.*, *Jpn.*, *US*, and *Viet.*

*Eur.* also includes Highly Purified Water. *US* also includes Sterile Purified Water.

Some pharmacopoeias only include distilled water or have additional monographs for demineralised water or distilled water.

**Ph. Eur. 6.2** (Water; Purified; Aqua Purificata). It is water for the preparation of medicines other than those that are required to be both sterile and apyrogenic, unless otherwise justified and authorised. It is prepared from suitable potable water either by distillation, by ion exchange, by reverse osmosis, or by any other suitable method. Store in conditions designed to prevent growth of micro-organisms and to avoid any other contamination. Sub-monographs cover Purified Water in Bulk and Purified Water in Containers.

**Ph. Eur. 6.2** (Water; Highly Purified; Aqua Valde Purificata). It is water intended for the preparation of medicinal products where water of high biological quality is needed, except where Water for Injections is required.

**USP 31** (Purified Water). It is prepared from potable water by a suitable process.

**Preparation. DEIONISATION.** By passing potable water through columns of anionic and cationic ion-exchange resins, ionisable substances can be removed, producing a water of high specific resistance. Colloidal and non-ionisable impurities such as pyrogens may not be removed by this process.

**DISTILLATION.** In this process water is separated as vapour from non-volatile impurities and is subsequently condensed. In practice, non-volatile impurities may be carried into the distillate by entrainment unless a suitable baffle is fitted to the still.

### Water for Injections

Aqua para inyecciones; Aq. pro Inj.; Aqua ad iniectiones; Aqua ad Injectionem; Aqua Iniectionis; Aqua Pro Iniectione; Aqua pro Iniectione; Aqua pro Iniectionibus; Eau pour préparations injectables; Injekcinis vanduo; Injektionesteisin käytettävä vesi; Vatten för injektionsvätskor; Víz parenterális célra; Voda na injekci; Wasser für Injektionszwecke; Water for Injection; Woda do wstrzykiwań.

**Pharmacopoeias.** In *Chin.*, *Eur.* (see p.vii), *Int.*, *Jpn.*, *US*, and *Viet.*

*US* also includes Sterile Water for Injection, Sterile Water for Inhalation, Sterile Water for Irrigation, and Bacteriostatic Water for Injection.

**Ph. Eur. 6.2** (Water for Injections). It is water for the preparation of medicines for parenteral administration when water is used as the vehicle, and for dissolving or diluting substances or preparations for parenteral administration. It is prepared by distillation of potable water or purified water from a neutral glass, quartz, or suitable metal still fitted with an effective device for preventing the entrainment of droplets; the first portion of the distillate is discarded and the remainder collected. Store in conditions designed to prevent growth of micro-organisms and to avoid any other contamination. Sub-monographs cover Water for Injections in Bulk and Sterilised Water for Injections.

**USP 31** (Water for Injection). It is purified by distillation or a purification process that is equivalent or superior to distillation in the removal of chemicals and micro-organisms. When used for the preparation of parenteral solutions it should be sterilised first or the final preparation should be sterilised after preparation. Sterile Water for Injection, Inhalation, or Irrigation and Bacteriostatic Water for Injection are the subjects of separate monographs.

### Profile

There are international standards for the quality of water intended for human consumption. Toxic substances such as arsenic, barium, cadmium, chromium, copper, cyanide, lead, and selenium may constitute a danger to health if present in drinking water

in excess of the recommended concentrations. Water-borne infections are also a hazard.

Fluoride is regarded as an essential constituent of drinking water but may endanger health if present in excess—see Sodium Fluoride, p.1962. Ingestion of water containing large quantities of nitrates may cause methaemoglobinemia in infants; many countries have standards for nitrates in water.

The use of tap water containing metal ions (such as aluminium, copper, and lead), fluoride, or tosylchloramide sodium, for dialysis may be hazardous.

Hard water contains soluble calcium and magnesium salts, which form scale and sludge in boilers, water pipes, and autoclaves; they also cause the precipitation of soap and prevent its lathering. Temporary hardness in water is due to the presence of bicarbonates which are converted to insoluble carbonates on heating. Permanent hardness is due to dissolved chlorides, nitrates, and sulfates, which do not form a precipitate on heating. The presence or absence of such salts can play a part in cardiovascular health.

Without further purification, potable water may be unsuitable for certain pharmaceutical purposes. In such instances, purified water should always be used. Most pharmacopoeias include monographs on various preparations of water, such as water suitable for injections. Potable water should not be used when such preparations of water are specified.

Excessive ingestion of water can lead to water intoxication with disturbances of the electrolyte balance.

#### References.

1. Manz F, et al. The most essential nutrient: defining the adequate intake of water. *J Pediatr* 2002; **141**: 587–92.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Fin.:** Aquasteril; **Hung.:** Humaqua; Rins-Aqua; **Port.:** Estericlean†; **UK:** Aquasoli; Urilflex W; **USA:** Fleet Bagenema.

### Wheat

Blé; Froment; Frumento; Grano; Trigo; Weizen.

Пшеница Мягкая

NOTE. Distinguish from Triticum, a synonym for Couch-grass (see p.2288).

#### Profile

Wheat (*Triticum* spp., Poaceae) is a grass cultivated worldwide as a cereal crop. Common wheat (*Triticum aestivum*, (*T. vulgare*)) is the source of wheat germ and wheat-germ oil (below). Malted grain of wheat is used in the preparation of malt extract (p.1955). Wheat is also used as a source of bran (p.1712) and starch (p.1968).

Wheat germ and wheat-germ oil are used in preparations for lesions of the skin and mucous membranes and as nutritional supplements.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Braz.:** Dermocrem; Vagitrene; **Canad.:** Dermatix Fitocream; **Ger.:** Vulnostimulin; **Ital.:** Fitostimoline; Step 2; **Turk.:** Fito; **Venez.:** Derain; Gynoderain.

**Multi-ingredient: Arg.:** Amenite Plus†; Cicalut; Microlift; **Fr.:** Phytolong-bronze; **Ital.:** Decon Ovuli; Fitostimoline; Sclerovis H; Solecin; **Mex.:** Fitostimulina; Italdermol; **Port.:** Fitocreme; **UK:** S.H.P.H.

### Wheat-germ Oil

Búzacsíraolaj; Germes de blé, huile de; Kviečių gemalų aliejus; Oleum Tritici Germinis; Pšeničný olej; Tritici aestivi oleum; Tritici Oleum; Vehnänalkioöljy; Vetegroddolja.

Масло Пшеничных Зародышей

CAS — 8006-95-9.

**Pharmacopoeias.** *Eur.* (see p.vii) includes Wheat-germ Oil, Refined, and Wheat-germ Oil, Virgin.

**Ph. Eur. 6.2** (Wheat-germ Oil, Refined; Tritici Aestivi Oleum Raffinatum). The fatty oil obtained from the germ of the grain of *Triticum aestivum* by cold expression or by other suitable mechanical means and/or by extraction. It is then refined. A suitable antioxidant may be added. A clear, light yellow liquid. Practically insoluble in water and in alcohol; miscible with light petroleum at 40° to 60°. Relative density about 0.925. Store in an airtight container. Protect from light.

**Ph. Eur. 6.2** (Wheat-germ Oil, Virgin; Tritici Aestivi Oleum Virginale). The fatty oil obtained from the germ of the grain of *Triticum aestivum* by cold expression or other suitable mechanical means. A clear, light yellow or golden-yellow liquid. Practically insoluble in water and in alcohol; miscible with light petroleum at 40° to 60°. Relative density about 0.925. Store in an airtight container. Protect from light.

#### Profile

Wheat-germ oil is a rich source of vitamin E (p.1992). It is included in dietary supplements and in preparations for lesions of the skin and mucous membranes.

The symbol † denotes a preparation no longer actively marketed

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Multi-ingredient: Braz.:** Gamaline-V; **Fr.:** Bio-Selenium; Phytophanere; **Indon.:** Evioprostat; **Ital.:** Babigoz Crema Protettiva; Babysteril; Ottovis; **Jpn.:** Evioprostat; **Singapore:** Evioprostat; **Switz.:** Sanhelios Capsules a la vitamine A†; **UK:** No-Sor Nose Balm.

### Wild Carrot

Dauci Herba; Daucus; Queen Anne's Lace; Zannahoria silvestre.

NOTE. The name Queen Anne's lace has also been used for cow parsley (*Anthriscus sylvestris*), another umbellifer.

**Pharmacopoeias.** In *Chin.*

#### Profile

The fruits of the wild carrot, *Daucus carota* (Umbelliferae) have been used as a diuretic and antelmintic, and are included in herbal preparations for various indications. Other parts of the plant have been used in folk medicine. Carrot seed oil is used in aromatherapy. The root of the cultivated form, *D. carota* subsp. *sativus*, is a culinary item and a source of carotenoids in the diet.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Multi-ingredient: Arg.:** Hepatolgina; Metiogen; Palatrobil; **Chile:** Natur-Zin; Natursel-C; **Ital.:** Evamilk; **Malaysia:** Eyebright Plus†; **UK:** Sciargo; Watershed.

### Wild Cherry Bark

Corteza de cerezo silvestre; Prunus Serotina; Virginian Prune; Virginian Prune Bark; Wild Black Cherry Bark; Wild Cherry.

#### Profile

Wild cherry bark is the dried bark of the wild or black cherry, *Prunus serotina* (Rosaceae), known in commerce as Thin Natural Wild Cherry Bark, containing not less than 10% of water-soluble extractive. It has a slight odour and an astringent, aromatic, bitter taste, recalling that of bitter almonds. It contains (+)-mandelonitrile glucoside (prunasin) and an enzyme system, which interact in the presence of water yielding benzaldehyde, hydrocyanic acid, and glucose.

Wild cherry bark, in the form of the syrup, has been used in the treatment of cough but it has little therapeutic value. It has also been used as a flavour.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Multi-ingredient: Canad.:** Bronchial Cough; Mielocol; Rophelin†; Wampole Bronchial Cough Syrup†; **Venez.:** Cerylana.

### Wild Lettuce

Herba Lactucae Virosae; Laitue Vireuse; Lechuga silvestre.

#### Profile

The wild lettuce, *Lactuca virosa* (Compositae), has been given in herbal medicine as a sedative and antitussive. The dried latex extract (lactuarius; lettuce opium) is also used.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Multi-ingredient: Canad.:** Sirop Cocillana Codeine; Sirop Cocillana Compose; **S.Afr.:** Choats Extract of Lettuce Cough Mixture; **UK:** Anased; Antibron; Gerard House Somnus HRI Night; Kalms Sleep; Quiet Life; Quiet Nite; Slumber; Unwind Herbal Nytol; **Venez.:** Cerylana.

### Wild Pansy

European Field Pansy (*Viola arvensis*); European Wild Pansy (*Viola arvensis* or *V. tricolor*); Field Pansy (*Viola arvensis* or *V. tricolor*); Heart's Ease; Heartsease (*Viola tricolor*); Johnny-jump-up (*Viola tricolor*); Keto-orvokki; Love-in-idleness (*Viola tricolor*); Pansy (*Viola tricolor*); Pensée sauvage; Viol; Viola herb; Viola Tricoloris Herba (*viola tricolor*); Ziele fiołka trójbarwnego (*viola tricolor*).

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

**Ph. Eur. 6.2** (Wild Pansy (Flowering Aerial Parts); Viola Herba cum Flore). The dried flowering aerial parts of *Viola arvensis* and/or *V. tricolor*. It contains a minimum of 1.5% of flavonoids, expressed as violanthin (C<sub>27</sub>H<sub>30</sub>O<sub>14</sub> = 578.5), calculated with reference to the dried drug. Protect from light.

#### Profile

Wild pansy, *Viola tricolor* or *V. arvensis* (Violaceae) is used in herbal medicine in topical preparations for minor skin disorders, in particular for seborrhoeic skin diseases. Wild pansy is also included in oral preparations for gastrointestinal and respiratory-tract disorders.

**Homoeopathy.** Wild Pansy has been used in homoeopathic medicines under the following names: *Viola tricolor*.

**Adverse effects.** Haemolysis was reported in a 9-month-old infant with G6PD deficiency given an extract of wild pansy orally.<sup>1</sup>

1. Behmanesh Y, Abdollahi M. Haemolysis after consumption of *Viola tricolor*. *WHO Drug Inf* 2002; **16**: 15–16.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Multi-ingredient: Austral.:** Bioglan Bioage Peripheral; **Cz.:** Antirevmaticky Caj; Bronchialtee N†; **Fr.:** Depuratif Parnel; Evacrine; Fitacnol†; **Ital.:** Neoderma 47; **Switz.:** Antidry; Viola; **UK:** Gerard House Skin.

### Wild Thyme

Backtimjan; Kangasajuruoho; Mateřidoušková nat' (Nat' mateřidoušky); Mother of Thyme; Paprastuju čiboreliu žolē; Quendel; Serpolet; Serpylli herba.

NOTE. Distinguish from Thyme, p.2401.

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

**Ph. Eur. 6.2** (Wild Thyme; Serpylli Herba). The whole or cut, dried, flowering aerial parts of *Thymus serpyllum* containing a minimum of 0.3% v/w of essential oil, calculated with reference to the dried drug. Protect from light.

#### Profile

Wild thyme (*Thymus serpyllum*, Lamiaceae) is included in herbal medicines for disorders of the upper respiratory tract. Its actions are similar to, but weaker than, those of thyme (p.2401). Commercially, *T. pulegioides* and *T. praecox* subsp. *arcticus* are also offered as *T. serpyllum*.

Wild thyme oil is used similarly.

### Preparations

**Proprietary Preparations** (details are given in Part 3)

**Multi-ingredient: Austral.:** Gartech; **Austria:** Scottpect; **Belg.:** Colimax†; Thymoseptine; **Cz.:** Bronchialtee N†; Detsky Caj s Hermankem; Pruduškova; Thymome; **Fr.:** Aromasol; Bronchorectine au Citral; Dinacode avec codeine†; Dinacode†; Nazinette du Docteur Gilbert; **Indon.:** Silex; **Ital.:** Stenobronchial; Tussamag; Tussamag Complex; **Port.:** Pilka F†; **Rus.:** Stoptussin-Fito (Стронтуссин-Фито); **Spain:** Llantusil†; **Switz.:** Frixo-Drag-on Vert†; Nasobol†; Pectosan N†; Tisane contre les refroidissements.

### Xanthine-containing Beverages

Xantina, bebidas con.

#### Adverse Effects

The adverse effects of xanthine-containing beverages are largely due to their caffeine (p.1116), theophylline (p.1140), and theobromine (p.1140) content. Common adverse effects are sleeplessness, anxiety, tremor, palpitations, and withdrawal headache.

**Breast feeding.** For references to the effects of caffeinated beverages in breast feeding, see under Caffeine, p.1117.

**Effects on the heart.** A meta-analysis of published studies found no evidence of an association between coffee consumption and the development of coronary heart disease,<sup>1</sup> and a large cohort study in men followed up for 14 years and women for up to 20 years also found no evidence of a link.<sup>2</sup> Expert opinion in the UK<sup>3</sup> has been that the evidence that caffeine or coffee consumption contributes to coronary heart disease development is inconsistent. Coffee prepared by boiling, as is the practice in Scandinavia for example, does raise serum cholesterol concentrations due to the presence of the diterpenes cafestol and kahweol, and coffee made in a cafetière (French press) has a similar effect, but filtered coffee does not, as the hypercholesterolaemic fraction does not pass a paper filter.<sup>4</sup> A case-control study has suggested a relationship between consumption of boiled, but not filtered, coffee and incidence of a first non-fatal myocardial infarction.<sup>5</sup> Others have raised concern that the potential pressor effect of caffeine itself may be a cardiovascular risk factor,<sup>6</sup> but as mentioned above there is little evidence for this. A large prospective cohort study<sup>7</sup> found no association between dietary caffeine and risk of atrial fibrillation or flutter.

Tea drinking has not been associated with increased cardiovascular risk<sup>3</sup>—indeed, its polyphenol content has been suggested to have beneficial antioxidant effects.<sup>8,9</sup>

1. Myers MG, Basinski A. Coffee and coronary heart disease. *Arch Intern Med* 1992; **152**: 1767–72.

2. Lopez-Garcia E, et al. Coffee consumption and coronary heart disease in men and women: a prospective cohort study. *Circulation* 2006; **113**: 2045–53.

3. Department of Health. Nutritional aspects of cardiovascular disease. Report of the cardiovascular review group committee on medical aspects of food policy. Report on health and social subjects no. 46. London: HMSO, 1994.

4. Urgert R, et al. Comparison of effect of cafetière and filtered coffee on serum concentrations of liver aminotransferases and lipids: six month randomised controlled trial. *BMJ* 1996; **313**: 1362–6.

5. Hammar N, et al. Association of boiled and filtered coffee with incidence of first nonfatal myocardial infarction: the SHEEP and the VHEEP study. *J Intern Med* 2003; **253**: 653–9.

6. James JE. Is habitual caffeine use a preventable cardiovascular risk factor? *Lancet* 1997; **349**: 279–81.