

中叶酸的分离。

(3)实验结果表明,叶酸的最低检出浓度为0.01 ng/mL,相关系数为0.9999,样品回收率为98.1%,变异系数为2.3%,完全满足各类样品的测定。

本方法具有灵敏度高、杂质干扰少、操作简单等优点,且线性范围良好,重现性好,回收率高,是一个适用范围较广的测定方法。

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Measurement of Folic Acid in Food Using HPLC

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ABSTRACT 60% perchloric acid was added into food sample to remove protein. After filtering the sample, the filtrate was injected into HPLC to measure its folic acid. 50mmol/L potassium dihydrogen phosphate containing 12% acetonitrile (v/v), pH 3.5 was used as mobile phase, the flow rate was 1mL/min. ODS C18 was used as separating column, column temperature was 40°C. Potassium persulfate was chosen as postcolumn derivative agent, the flow rate was 0.3 mL/min, reaction temperature was 60°C. The folic acid derivate was measured with fluorescence detector (Ex:365nm, Em: 450nm). It is seen that the standard curve was linear with the range of 0.01~3.2μm/mL, its related coefficient was 0.9999. The determination limit of this method was 0.01ng/mL, the yield was 98.1% and the variation coefficient was 2.3%.

Key words post column derivation, potassium persulfate, folic acid

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尽管2002年的经济不稳定、股市持续走低,但消费者对酒精类饮料的需求还是刺激了美国的酒市并创下了不俗的销售业绩。美国的蒸馏酒销售持续上涨已经保持了5年,去年消费量上涨1.8%,进口和国产葡萄酒的销售业绩也令人满意,他们创下了连续9年销售增长的记录,销售量2002年上涨了3.3%,而且,进口酒比国产酒增长得还要快。享有最大市场份额的啤酒依然保持着它的地位,去年的上涨量为1.8%,而且啤酒的新种类越来越多,受到了广大消费者的喜爱。

一位业内人士说:“低醇啤酒”这种30年前还未出现的新品种,现在已牢牢占有了市场,良好的包装和适宜的价格让低醇啤酒利润可观。占有率达45.9%,使得它占有啤酒市场最大的份额。啤酒中较低的热量应该是低醇啤酒走俏的一个原因。”

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经过一项长达7年的关于酒精对65岁以上人群健康的影响的研究,科学家们发现,如果饮酒正当且适量,就能避免患阿尔茨海默性痴呆和其他类型的早发性痴呆。

经过对5000多名65岁以上老人饮酒习惯的跟踪调查,研究人员收集每周每人饮酒量的信息,并最终锁定研究373名患早发性痴呆的病人和373名无任何病兆的老年人。研究结果表明,每周饮酒1~6次的老年人比滴酒不沾的人患痴呆症的几率低54%,每周饮酒7~13次的老年人患病几率低31%。研究人员说,体内脂肪会沉淀在血管壁内侧然后堵塞血管,进而引起心脏病和脑部供血减少,最后会导致早发性痴呆。而酒精恰好能阻止脂肪的沉淀从而预防了早发性痴呆的发生。当然前提是每周饮酒的量要适当,否则就适得其反了。