

Soap usage among staff in a primary care setting

Name	Amount of soap used (ml)	No of actuations (=handwashes)	No of patients seen	Ratio of handwashes to patients seen
Dr A	1050	577	3507	1:6
Dr B	700	385	1848	1:4.8
Dr C	210	115	2330	1:20.3
Nurse D	2100	1150	3115	1:2.7
Nurse E	2450	1346	2620	1:1.9

1 actuation=1.82 ml.

Comment

Nurses are more conscientious handwashers than doctors. Primary care teams in the United Kingdom are often small but usually share a similar mix of doctors and nurses. These results will not necessarily reflect handwashing practices in all teams but form a basis on which others may conduct similar audits. Nurses in this primary care team have shown greater attention to personal hygiene than doctors. The nurses have

traditionally had a more “hands on” role, which may mean potential bias. Some members of the team may have been particularly thorough with hand washing and used more than one actuation per hand wash. These results would support the best performing nurse washing the hands at least twice as often (or twice as thoroughly) as the best performing doctor. At the Christmas party, guess who will be serving the cake...

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Competing interests: AS has a paradoxical desire to prevent further embarrassment to the medical profession.

Ethical approval: Not applicable.

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Drug point

Possible interaction between warfarin and cranberry juice

Rafe Suvarna, Munir Pirmohamed, Leigh Henderson

Pharmacovigilance Risk Assessment Unit, Medicines and Healthcare Products Regulatory Agency, London SW8 5NQ
 Rafe Suvarna senior medical assessor
 Leigh Henderson senior scientific assessor

Department of Pharmacology, University of Liverpool, Liverpool L69 3GE
 Munir Pirmohamed professor of clinical pharmacology

Correspondence to: R Suvarna rafe.suvarna@mhra.gsi.gov.uk

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After a chest infection (treated with cefalexin), a man in his 70s had a poor appetite for two weeks and ate next to nothing, taking only cranberry juice as well as his regular drugs (digoxin, phenytoin, and warfarin). Six weeks after starting cranberry juice he had been admitted to hospital with an INR (international normalised ratio) > 50. Before, his control of INR had been stable. He died of a gastrointestinal and pericardial haemorrhage. He had not taken any over the counter preparations or herbal medicines, and he had been taking his drugs correctly.

The Committee on Safety of Medicines has received seven other reports through the yellow card reporting scheme about a possible interaction between warfarin and cranberry juice leading to changes in INR or bleeding. In four cases, the increase in INR or

bleeding after patients had drunk cranberry juice was less dramatic. In two cases, INR was generally unstable, and in another case INR decreased. Limited information is available about whether patients complied with their treatment in these cases.

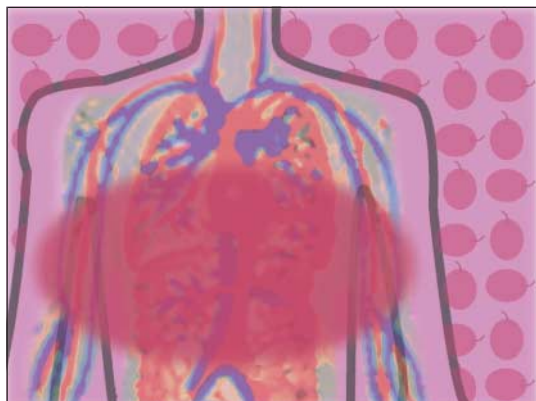
Cranberry juice (*Vaccinium macrocarpon*) is popular and is also used to prevent cystitis.¹ Interaction with warfarin is biologically plausible because cranberry juice contains antioxidants, including flavonoids, which are known to inhibit cytochrome P450 enzymes,² and warfarin is predominantly metabolised by P450 CYP2C9.³ The constituents of different brands of cranberry juice may vary, and this might affect their potential for interacting with drugs. Whether the constituents of cranberry juice inhibit CYP2C9 and therefore the metabolism of warfarin or interact in another way needs further investigation. Until then, patients taking warfarin would be prudent to limit their intake of this drink.

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LIANE PAVNE