including diabetes, and called for urgent action on modifiable risk factors such as unhealthy diets and physical inactivity.[w8]

It is becoming increasingly clear that a proinflammatory state is a common feature of the syndrome and of atheromatous disease. A recent randomised controlled trial showed that insulin resistance and measurements of C reactive protein were significantly lower at two year follow-up in patients with metabolic syndrome who had been allocated to a Mediterranean diet than in those who continued their normal diets.[12] Although large intervention studies have shown that intensive modification of lifestyle delays the onset of diabetes in patients with impaired glucose tolerance,[w9] no similar trials have aimed at reducing all the cardiovascular disease risk factors among people with metabolic syndrome.

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1 Reaven GM. Banting lecture 1988. Role of insulin resistance in human disease. *Diabetes* 1988;37:1595-607.
2 Meigs JB, Wilson PWF, Nathan DM, D'Agostino Sr RB, Williams K, Haffner SM. Prevalence and characteristics of the metabolic syndrome in the San Antonio heart and Framingham offspring studies. *Diabetes* 2003;52:2160-7.
3 UK Prospective Diabetes Study 6. Complications in newly diagnosed type 2 diabetic patients and their association with different clinical and biochemical risk factors. *Diabetes Res* 1990;13:1-11.
4 Stratton IM, Adler AI, Neil HA, Matthews DR, Manley SE, Cull CA, et al. Association of glycaemia with macrovascular and microvascular complications of type 2 diabetes (UKPDS 35): prospective observational study. *BMJ* 2000;321:405-12.
5 Alberti KG, Zimmet P, Shaw J. The metabolic syndrome—a new worldwide definition. *Lancet* 2005;366:1059-60.
6 Ilanne-Parikka P, Eriksson JG, Lindstrom J, Hamalainen H, Keinanen-Kiukaanniemi S, Laakso M, et al. Prevalence of the metabolic syndrome and its components: Findings from a Finnish general population sample and the diabetes prevention study cohort. *Diabetes Care* 2004;27:2135-40.
7 Park Y-W, Zhu S, Palaniappan L, Heshka S, Carnethon MR, Heymsfield SB. The metabolic syndrome: Prevalence and associated risk factor findings in the US population from the third national health and nutrition examination survey, 1988-1994. *Arch Intern Med* 2003;163:427-36.
8 Girman CJ, Rhodes T, Mercuri M, Pyorala K, Kjekshus J, Pedersen TR, et al. The metabolic syndrome and risk of major coronary events in the Scandinavian Simvastatin Survival Study (4S) and the Air Force/Texas coronary atherosclerosis prevention study (AFCAPS/TexCAPS). *Am J Cardiol* 2004;93:136-41.
9 Carnethon MR, Loria CM, Hill JO, Sidney S, Savage PJ, Liu K. Risk factors for metabolic syndrome: The Coronary Artery Risk Development in Young Adults (CARDIA) study, 1985-2001. *Diabetes Care* 2004;27:2707-15.
10 Calle-Pascual AL, Saavedra A, Benedi A, Martin-Alvarez PJ, Garcia-Honduvilla J, Calle JR, et al. Changes in nutritional pattern, insulin sensitivity and glucose tolerance during weight loss in obese patients from a Mediterranean area. *Hormone Metabol Res* 1995;27:499-502.
11 Hu FB, Van Dam RM, Liu S. Diet and risk of type II diabetes: The role of types of fat and carbohydrate. *Diabetologia* 2001;44:805-17.
12 Esposito K, Marfella R, Ciotola M, Di Palo C, Giugliano F, Giugliano G, et al. Effect of a Mediterranean-style diet on endothelial dysfunction and markers of vascular inflammation in the metabolic syndrome: A randomized trial. *JAMA* 2004;292:1440-6.

Extended prescribing by UK nurses and pharmacists

With more evidence and strict safeguards, it could benefit patients

Earlier this year the United Kingdom Department of Health consulted on options for extending prescribing by nurses and pharmacists.[1 2] Last week the department announced that nurse and pharmacist independent prescribers will be able to prescribe any licensed drug except controlled drugs—the most radical of the options considered.[3] This proposal heralds one of the most far reaching extensions of prescribing by nurses and pharmacists anywhere in the world.

The BMA has responded with dismay.[4] One of the association's concerns is that it is not safe to prescribe without training in diagnosis. We accept that this is true in most cases but note that training is becoming available for many nurses and pharmacists in the UK. As a result, both professions are able to diagnose and manage acute illnesses in primary care, and some are already prescribing independently, albeit from a limited formulary. In secondary care specialist nurses diagnose and manage in a wide range of clinical fields.

Nevertheless, the potential for nurses and pharmacists to prescribe independently from virtually the whole of the *British National Formulary*[5] is an important departure from current practice, and the wisdom of this policy deserves close scrutiny. Prescribing is one of the most powerful tools that health professionals can use in tackling disease, and yet it is also an important cause of patient harm.[6 7] To prescribe safely and effectively across all therapeutic groups requires high levels of knowledge and skill, and, even with many years of training, balancing benefits against risks can be a difficult challenge.

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A key question, however, for independent prescribing by nurses and pharmacists is that just because these professionals can prescribe any drug from the *British National Formulary*, does it follow that they will do so? Furthermore, is it likely that they will prescribe beyond their competencies?

Ideally, we would answer these questions with reference to the literature, but little high quality research has been done.[8 9] One recent study, which has considerably influenced the Department of Health's policy, has been reassuring: independent nurse prescribers tended to prescribe for relatively minor conditions, and medically trained assessors found that they generally prescribed appropriately.[10] Early data on prescribing by nurses and pharmacists in primary care suggest patterns in keeping with the skills of these professionals in treating minor illnesses and contributing to the management of patients with long term conditions (personal communication, Helen Kendall, Prescription Pricing Authority, 24 October 2005).

Nevertheless—given that evaluations of prescribing by nurses and pharmacists are not fully in the public domain, are mainly descriptive in nature, and have not all been subject to rigorous independent peer review—it is impossible to draw clear conclusions on the safety and appropriateness of extended prescribing. It is worrying that, before launching this new policy, the Department of Health has not waited for

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further evidence to accumulate, including studies that it has only recently commissioned.

While we do have concerns about the wisdom of extending prescribing now, we believe that most nurse and pharmacist prescribers will act within their areas of competence. For example, a fully trained specialist respiratory nurse might prescribe a short course of oral corticosteroids for a patient with acute asthma but would be extremely unlikely to alter the drug treatment of a patient with diabetes or epilepsy without training in managing these conditions.

To limit the potential risks from extended prescribing, health professionals must be trained to prescribe appropriately and safely in the clinical subjects in which they are likely to practise. The current schemes for training nurse and pharmacist prescribers are too short to fully equip a professional for independent prescribing practice. It is essential that additional training, support, and mentorship are available after such training programmes.

In addition, nurse and pharmacist prescribers must have access to all the tools they need to help them prescribe safely. One worrying finding from the recent study on independent nurse prescribing in primary care was that only 5% of nurses had access to systems providing computer generated prescriptions and most were probably missing out on the potential benefits of computerised alerts for drug interactions and allergies.[10] This problem could have been predicted from the way that nurse prescribing was introduced whereby the guide for implementation[11] expected nurses to hand-write prescriptions rather than being allowed to use a clinical computer system. Thorough risk assessments should be done nationally and locally before prescribing is extended to new clinical areas.

Also, it will be important to have strong clinical governance to help to identify any prescriber, medical or non-medical, exceeding his or her competency. With appropriate training, support, and governance in place, extended prescribing could combine the benefits of high quality pharmaceutical care with greater convenience and improved access to treatment for patients.

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1 Department of Health, Medicines and Healthcare Products Regulatory Agency (MHRA). *Consultation on options for the future of independent prescribing by extended formulary nurse prescribers*. www.dh.gov.uk/assetRoot/04/10/40/58/04104058.pdf (accessed 14 Nov 2005).
2 Medicines and Healthcare Products Regulatory Agency (MHRA), Department of Health. *Consultation on proposals to introduce independent prescribing by pharmacists*. www.dh.gov.uk/assetRoot/04/10/48/81/04104881.pdf (accessed 14 Nov 2005).
3 Department of Health. *Nurse and pharmacist prescribing powers extended* [press release 10 Nov 2005]. www.dh.gov.uk/PublicationsAndStatistics/PressReleases/PressReleasesNotices/fs/en?CONTENT_ID=4122999&chk=Mjc1MS (accessed 14 Nov 2005).
4 BMA. *BMA calls for urgent meeting with Patricia Hewitt on plans to extend prescribing powers* [press release 10 Nov 2005]. www.bma.org.uk/pressrel.nsf/wlu/STRE-6HZJ4X?OpenDocument&vw=wfmms (accessed 14 Nov 2005).
5 British Medical Association, Royal Pharmaceutical Society of Great Britain. *British national formulary*. London: BMA, RPS, 2005. (No 50.)
6 Smith J. *Building a safer NHS for patients: improving medication safety*. London: Department of Health, 2004.
7 Chief Medical Officer. *An organisation with a memory*. London: Department of Health, 2000.
8 Kay O, Brien J. Pharmacist prescribing: review of the literature. *J Pharm Pract Res* 2004;34:1-5.
9 Latter S, Courtenay M. Effectiveness of nurse prescribing: a review of the literature. *J Clin Nurs* 2004;13:26-32.
10 Latter S, Maben J, Myall M, Courtenay M, Young A, Dunn N. *An evaluation of extended formulary independent nurse prescribing*. Southampton: University of Southampton, Department of Health, 2005. (www.dh.gov.uk/assetRoot/04/11/40/86/04114086.pdf.)
11 Department of Health. *Extending independent nurse prescribing within the NHS in England*. London: Department of Health, 2002.

European developments in labelling allergenic foods

More still needs to be done

The new European Union directive on food labelling, requiring manufacturers of packaged foods to detail clearly the presence of certain known allergens, comes into effect later this month.[1] This welcome legislation will directly benefit the many people who experience adverse reactions to foods and could save lives, given the increasing numbers of people with IgE-mediated food allergy who may develop anaphylaxis after even minimal exposure.[2 3] Similar initiatives are being pursued in the United States, Australia, and New Zealand, indicating that the plight of those who live with the daily threat of allergic reactions to foods is, in some countries at least, at last being taken seriously.[4–6]

Manufacturers of packaged foods containing any of 12 major allergens (see box) will, as of 25 November this year, be obliged by the European Union regulations to label these ingredients. Importantly, this new legislation removes the previously unhelpful "25% rule," which exempted labelling of constituent ingredients if they amounted to less than 25% of the final product, thereby resulting in an appreciable risk of inadvertent exposure to, for example, nuts in chocolates.[7] Even use of the smallest quantities of these 12 ingredients will now require labelling.

Although many manufacturers have already begun implementing this new requirement, consumers need to be aware that stocks of products manufactured and packaged before 25 November may continue to be sold. It is also important to note that other ingredients of compound preparations may in some cases be exempt from labelling if they constitute less than 2% of the final product. Given that sensitisation may be increasing to, for example, certain stoned or exotic fruits such as apples or kiwi fruit used in small quantities in desserts or jams, this is worrying.[8 9]

More concerning, however, is the exclusion from these EU regulations of freshly prepared foods, because

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