

From the library

Remembrance of things past

Loving, Green's 1949 novel about the servants in a big country house in neutral Ireland during the Second World War, includes a vivid scene centered on a game called Blindman's Buff, in which you have to feel people in order to tell who they are. "Not being able to see" was the subject of his first book, *Blindness*, begun when he was still in school and published before he left university. The romantic plight of the newly sightless central character, a thinly disguised version of the author, enables him to hear those around him better, giving him access to not only their words but also their thoughts. As the southern American writer Eudora Welty was to put it, Henry Green turned what people say "into the fantasy of what they are telling each other, at the same time calling up out of their mouths their vital spirit." (Jeremy Treglown. *Romancing, the life and work of Henry Green*. New York: Random House, 2000; 3–4.)

Diuretics: very important in hypertensive treatment

In the past decade a wide range of new drugs to treat hypertension have been developed. As a result, hypertensive patients are placed on β blockers or ACE inhibitors upon initiation of therapy. The standard practice of initiating hypertensive therapy with a diuretic is not always adhered to. A recent study from the state of Washington, USA, suggests the importance of diuretics. In this study hypertensive patients whose drug regimen did not include a thiazide diuretic had an increased risk of ischaemic stroke compared with those patients whose regimen did include a thiazide diuretic. (*Arch Intern Med* 2001;161:37–43.)

Effect of statins on early recurrent myocardial ischaemia

Blood cholesterol lowering with statins has been regarded as a long term strategy to reduce death and ischaemic cardiovascular events in patients with stable coronary heart disease, with the most significant effects occurring approximately 2 years after treatment. However, a randomised double blind multicentred trial using atorvastatin after an acute coronary syndrome suggests that statins may be effective in this time frame as well. In this study, the patients who received atorvastatin had a reduced number of recurrent ischaemic events in the first 16 weeks after the acute coronary artery syndrome. (*JAMA* 2001; 285:1711–17.)

Use of antibiotics in farm animals leads to drug resistant bacteria in soil and water

While the European Union has banned the use of most antibiotics as growth promoters for farm animals, in the USA routine use of antibiotics such as tetracycline, penicillin, and streptomycin continues. Indeed, 70% of all antibiotics produced in the USA are fed to animals as growth promoters. Recent studies suggest that bacteria from pigs who are fed antibiotics leads to the transfer of antibiotic resistant genes to the bacteria found in the surrounding soil. These same bacteria can

contaminate ground water and eventually infect humans. The adverse effect of antibiotic use in farming appears to be more widespread than initially thought. (*Appl Environ Microbiol* 2001;67:1494–7.)

Vitamin C and chronic diseases

At the present time, prospective studies that attempt to relate the serum levels of ascorbic acid to cardiovascular disease or cancer are not consistent. In a recent prospective study examining plasma ascorbic acid concentrations and mortality due to all causes, investigators at Cambridge University demonstrated that the risk of mortality in the top ascorbic acid group was about half the risk in the lowest group. The relation with mortality was continuous through the whole distribution of ascorbic acid concentrations. Small increases in fruit and vegetable intake may have a significant effect on longevity. (*Lancet* 2001;357:657–63.)

Does a glycine antagonist reduce the morbidity of acute stroke?

In recent years, considerable efforts have gone into developing treatments that would inhibit the release of neurotransmitters (including glutamate and glycine) in acute ischaemic episodes involving the central nervous system, spinal cord, and neural retina. The GAIN trial, was the largest phase 3 acute stroke trial yet conducted in North America. This study failed to show a neuroprotective effect for gavestinel when administered within 6 hours of acute ischaemic stroke. Regrettably, this glycine antagonist joins a growing list of neuroprotectants which have thus far failed to improve the outcome for patients with acute strokes. The search for effective neuroprotective agents in the treatment of acute stroke continues. (*JAMA* 2001;285:1719–27.)

Prion versus prion—a therapeutical approach?

Researchers at the University of California in Davis have suggested that it may be possible to treat certain progressive central nervous system disorders caused by prions by administering yet more prions. In effect what this mathematical model suggests is that giving prions from a different species might slow the progression of the host disease. This attempt to bind prions in order to inhibit their pathogenicity has been examined in mice with promising preliminary results. (*New Scientist* 2001;2287:13.)

Intake of cereal fibre and the risk of gastric cancer

Recent data show that salivary nitrates form carcinogenic nitrosamines especially at the gastric cardia. Wheat fibre has been shown to neutralise such mutagen formation. In a large scale population based case controlled study of risk factors for adenocarcinoma of the gastric cardia, investigators from Sweden demonstrated that a high intake of cereal fibre was associated with a significant lower risk of gastric adenocarcinoma. A somewhat less dramatic effect on the risk of oesophageal carcinoma was also demonstrated. (*Gastroenterology* 2001;120:387–91.)

Radiation therapy and restenosis in coronary artery disease

Beginning in 1997 the Beta-Cath system trial randomised patients with single coronary artery lesions into two groups: those that received β radiation with Sr-90 or those that received placebo following percutaneous transluminal coronary angioplasty. The results of that study were recently described at the American College of Cardiology meeting. Eight months after the procedure, β radiation significantly reduced the rate of restenosis within the lesion segment itself. However, when investigators studied the entire segment—the lesion plus its edges including the area of balloon injury and 5 mm beyond—they found increase restenosis at the edges. Similar negative results were reported in patients who underwent stenting. Further studies of the possible use of radiation therapy to prevent restenosis are under way. (*JAMA* 2001;285:2069.)

Fat: not so bad after all

A useful byproduct of the controversial procedure, liposuction, has recently been announced. It appears that fat removed from the thighs or buttocks during liposuction may be a plentiful supply of stem cells. Investigators at the University of California in Los Angeles have turned stem cells harvested from human fat into bone, muscle, and cartilage. These investigators suggest that it is easier to get stem cells from fat than from bone marrow. This also suggests that a patient might be able to provide their own stem cells for transplantation from their own body fat. (*Tissue Engineering* 2001;7:209–12.)

Cow's milk versus *E coli*

In the past decade the contamination of food with *E coli* 0157:h7 has been increasingly recognised. The use of radiation to kill the bacteria directly remains controversial. A recent study by scientists at California State Poly Tech University suggests that a natural protein from cow's milk, lactoferrin, prevents the attachment on the meat surface of 30 types of bacteria including *E coli*. In meat the protein binds to tissue matrix proteins such as collagen, removing any microbes from those surfaces and preventing new ones from attaching. (*Scientific American* 2001;284:30.)

Early nutrition in preterm infants and later blood pressure

A randomised prospective trial in five neonatal units in the UK has recently demonstrated the effect of early nutrition and blood pressure in the teenage years. Breast feeding has been associated with lower blood pressure in later life. In this investigation children were assigned to either a banked breast milk (alone or in addition to mother's milk) or to a preterm formula. Breast milk consumption was associated with lower later blood pressure in these prematurely born children. It is not clear if this effect is maintained in adulthood. (*Lancet* 2001;357:413–19.)