

and October in Australia, they can breed at other times if conditions are favourable.

Although pairs of eagles are believed to hold territories during the breeding season, flocks of five and more—sometimes many more—may occur. The extent and nature of these movements may well have some relationship to the damage they cause. Collections of remains from nests have shown that these birds eat various foods, including some lambs. In areas where rabbits are abundant they seem to form the largest part of the diet, but where rabbits are scarce the diet is more varied. The next step is to measure the numbers of prey, especially rabbits, available to the eagles, to find out something about the relationship between populations of predator and prey.

MEDICINE

Another Hazard of the Pill

from our Social Medicine Correspondent

RHEUMATIC symptoms have now been added to the increasing list of adverse biological effects of oral contraceptives. In the current issue of *Lancet*, G. G. Bole, jun., M. H. Friedlander and C. K. Smith of the Rackam Arthritis Research Unit, University of Michigan, report rheumatic complaints and serological abnormalities in six women aged 21–29 who were taking, or had taken, one or more of six contraceptive preparations. This is not the first time that an association between oestrogens/progestogens and rheumatic disease has been pointed out; nevertheless, compared with other possible side effects of the pill, rheumatic complications have received little attention, and the present finding is particularly interesting in view of the fact that oral contraceptives have previously been used to treat rheumatoid arthritis.

Six of the eight women in the investigation showed evidence of thrombophlebitis (inflammation of veins with secondary clot formation) before or after administration of the agents. Antinuclear antibodies were detected in the serum of each during drug use—these disappeared from the serum of five patients who permanently discontinued oral contraceptives. Lupus erythematosus cells (white blood cells containing phagocytosed nuclei from other white cells that have been damaged and exposed to serum antinuclear globulin) were detected in six patients while on therapy, but again these disappeared in all but one case when the drug was withdrawn. Of the immunoglobulins, serum IgM concentrations were increased in five patients while they were receiving the drug, but IgG and IgA concentrations were less consistently affected; similarly, rheumatoid factor activity and acute-phase proteins were less consistently affected.

Underlying rheumatic disease is suspected in four of the cases; two others have Raynaud's disease—characterized by irritated bluish coloration of the skin on the fingers; and two have no evidence of disease. The authors say that in such a small series it is not possible to distinguish between incipient rheumatic disease and the induction of illness by oral contraceptives in a healthy person. But their preliminary work does indicate that in the evaluation of women suspected of having rheumatic disease, information on the use of oral contraceptives is required before clinical and laboratory findings can be interpreted.

NUTRITION

Eat and Feel Well

NUTRITIONISTS and doctors may know their places now and not presume to do each other's jobs, but had they been at work in the sixteenth century things would have been different. The distinction between food and drugs was far from clear in the days when English ideas on the value of foods derived from Hippocrates and Galen. Some of the intricate story of changing attitudes to foods as *materia medica* was told to members of the Society for the History of Pharmacy at their Bloomsbury Square headquarters last week by Miss A. J. O'Hara-May, a nutritionist with a wide knowledge of past and present methods.

For Galen (AD 129–199) everything was composed of the elements fire, air, earth and water, which were linked to the qualities hot, dry, wet and moist. Elements and qualities were associated with the human body through the body fluids (humors), and people were sanguine (hot and moist), melancholic (cold and dry), choleric or phlegmatic. In the sixteenth century the value of food was considered to depend on its two dominant qualities—for example, pepper was hot and dry in the third degree. In sickness the balance of qualities of the body changed and so foods with different qualities were needed. There was always a fear that food would putrefy before it could be digested by means of the innate heat supplied to the stomach from the liver. In 1599 H. Buttes recommended tobacco—then a novelty—for airing the body and counteracting putrefaction.

During the sixteenth century there was a clear distinction between what was nourishing and what was not, for only material that had been imbued with life could be nourishing. But it is hard to find any distinction between aliments and medicaments at this time. Things became a little clearer in the eighteenth century. William Cullen (1710–1790), Professor of the Practice of Physic at Edinburgh, separated aliments—substances which supply the matter of the body—from medicaments—substances which cannot do this, but can change the state of the body, particularly from disease to health. But there was still no clear distinction between food and drugs.

In an age that produced Hogarth's famous pictorial social comments, Beer Street and Gin Lane, Cullen must have been popular for saying that simple water with no addition was the proper drink for mankind. Another of his recommendations was that the acid qualities of vegetables help to prevent putrefaction; scurvy was then thought to be a form of putrefaction. His advice was evidently not taken up by hospital managements, for, as Miss O'Hara-May said, eighteenth century hospital diets consisted largely of bread, meat and beer. She suspected that either Galenic ideas were still very strong—Galen advised against fruit and vegetables—or hospital funds would not extend to vegetables.

During the nineteenth century, as knowledge about them increased, foods were gradually excluded from lists of drugs, and foods are not now found in pharmacopoeias. The discussion, however, produced the suggestion that food and drugs may be coming together again now that there is the possibility of treating certain biochemical diseases by giving very strict diets.