

rides are not the chief culprits in the blood system causing heart disease and deterioration of the arteries but that the main cause is an amino acid called homocysteine which is also present?

2. Is the department aware that Dr. Stephen A. Raymond and Dr. Edward R. Gruber of Massachusetts Institute of Technology have advanced this theory as well as such others as Dr. Kilmer McCully, Dr. Harry Demopoulos of New York University Medical Centre and Dr. David Wilcken, of the University of New South Wales, Sydney, Australia?

3. Is the department aware that such doctors and others have endorsed taking vitamin B-6 (75 milligrams approximately) per day to eliminate the dangers of homocysteine and, if so, have any tests been conducted in Canada to substantiate this and is the theory of vitamin B-6 considered to be plausible?

Hon. Monique Bégin (Minister of National Health and Welfare): 1. The primary cause of coronary heart disease is not known. There is a great deal of evidence that high blood cholesterol is one of the chief risk factors for heart disease. Persons with high levels of cholesterol in the blood have a greater chance of suffering a heart attack than those with lower levels. A high blood triglyceride level without a high cholesterol level is not considered a risk factor for heart disease. The theory that the amino acid, homocysteine, is the cause of deterioration of the arteries and of heart disease is an interesting hypothesis, but has not been substantiated.

2. The department is aware that Drs. Raymond, Gruber and others have advanced this theory. The main proponents of the theory, Drs. Raymond and Gruber, have not published their work in the scientific literature. Furthermore, they have stated that the homocysteine theory is essentially just a theory, that it is not yet sufficiently confirmed by scientific and clinical tests and that much remains to be learned. The department will continue to monitor any developments in this area.

3. The department is not aware of Canadian physicians using vitamin B-6 for eliminating the dangers of homocysteine nor is the department aware of any trials done in this regard. The use of vitamin B-6 is plausible in that vitamin B-6 activates an enzyme which cleaves cystathionine, a toxic product which builds up in the brain and other tissues when the normal enzyme (cystathione synthetase) is missing as in the rare disease homocystinuria. Cleaving of the cystathionine should reduce its toxic effects.

NATIONAL DEFENCE—NATIONAL WARNING SYSTEM

Question No. 1,214—Mr. Wenman:

1. How many warning sirens were in place in 1970 as part of the National Attack Warning System and, how many (a) were installed over the past ten years (b) more are needed today to provide adequate warning for the entire Canadian population?

2. How many fallout monitoring posts are there throughout Canada as part of the detonation and fallout reporting system and (a) where are they located (b) what type of equipment is located in each post (c) on what date were the posts last tested (d) how many of the posts are in establishments operated by (i) the Department of National Defence (ii) other departments (e) how are the federally operated posts linked to posts operated by the provinces and municipalities?

3. Does the Canadian Armed Forces have special units designated to carry out assistance to areas damaged as a result of nuclear attack or fallout and have there been any special exercises carried out to ensure that the troops know how to conduct the type of operation for which they are intended and, if so (a) how many have there been in the past ten years (b) have any involved the participation of provincial or municipal staffs engaged in emergency planning?

4. Have any province-wide radiation defence exercises been held with provincial or municipal persons since 1975 and, if not, have any exercises been carried out on paper with provincial and municipal staffs?

5. (a) What is the operational status of the nine emergency regional headquarters in terms of (i) protection against nuclear-biological-chemical agents (ii) reserves of food supplies (iii) mechanical equipment (b) are three of the nine headquarters temporary ones and, if so, on what date are they likely to be made permanent?

6. Does Saskatchewan have a regional emergency headquarters and, if not, will it be getting any type of headquarters for war emergency operations?

Mr. D. M. Collette (Parliamentary Secretary to President of the Privy Council): I am informed by the Department of National Defence and the Privy Council as follows:

1. 1700

(a) None

(b) Cannot be determined without studies of population and urban-industrial growth since 1970.

2. The Nuclear Detonation and Fallout Reporting System (NDFRS) was disbanded in the late 1960s.

The current system is called the Canadian Forces Warning and Reporting System (CFWRS). It includes all CF bases, stations and units working through a Canadian Federal Warning Centre (CFWC) and ten Provincial Warning Centres (PWC) carry out the DND assigned responsibility for the detection, reporting and warning of nuclear attacks.

The civilian counterpart is called the Civil Radiological Defence (RADEF) system formed in the early 1960s. It is essentially a provincial/municipal system used to provide specialized information about the radiological hazard to governments to allow authorities to impose or lift restrictions on activities within the area under their jurisdiction.

The civil and military radiological data gathered by RADEF and CFWRS is analysed and acted upon at the Emergency Government Headquarters.

3. No. As a result of decisions taken at the Federal/Provincial Emergency Planning Conference of 1969, re-entry responsibilities became a provincial task. Canadian Forces will assist such actions as and when required, once military commitments have been met. The 1969 decision alters the effect of PCO 1041-1965 Civil Emergency Measures Planning Order.

4. No to both questions.

5. Operational Status of Emergency Regional Headquarters

(a) (i) Protection against nuclear-biological-chemical agents

The six permanent regional emergency government headquarters have protection against nuclear fallout only. The three interim regional emergency government headquarters have a fallout protection factor not less than 100.

(ii) Reserves of food supplies

All sites are stocked with a 14 day supply of food.