Scor to block 002 110 Groveland Avenue, No. 802. Minneaspolis , MN 55403 24 July 1992

Christ Sellers 50 Jefferson Boulevard Edison, NJ 08817

Dear Mr. Sellers

I am not clear about what I can advise or what you want to know, and why, about my early work. Reviews of my work and the Laboatiry of Physiological Hygiene have been published by C.B Chapman in Persp Biol Med 1990; 34: 17-33 and by E.R. Buskirk in Exercise and Sports Science Reviews 1992 ; 20; 26 pp. In case you have trouble finding that I enclose a proof copy.

There is a 90-page article in German on my high altitude research published by me in 1938 in Ergebnisse der Innere Med und Kinderheilkund. But I gather you want something more related to the late 1940s and 1950s. I refer you to a paper by me and colleages in the Journal of Clinical Investigation 1950; 29: 1347-1353. Perhaps it is better for me to tell you things without referring you to my publications. I gather that you are interested in how and why I got into work on the diet, coronary heart disease and epidemiology.

During World War 2 I was a Special Assisstant (my title) to the Secretary of War, the position now called the Secretary of Defence. My job was to design and test rations for parachute troops, soon to be the emergency ration for the Infantry, named the "K ration". As the war progressed I became aware of the starvation problem developing in some countries occopied by thr Germans. What would that do to people and when liberated how would they be re-habilitated?

My position enabled me to ask concientious objectors to be subjects in a semi-starvation experiment. That experiment and the whole subject of starvation was told in the 2-volume book, "The Biology of Human Starvation", published in 1950 and available in most large libraries,

When the war ended I was struck by the public press reports of a wave of coronary deaths among executives. I asked what were the charateristics of men who eventually would be victims of the disease. I organized a study on executives who were examined in detail yearly and their vital status followed for 40 years. Before long medical journals were reporting that coronary patients had high serum cholesterol levels and I thought the cholesterol might be related to the diet.

At a mental hospital I organized controlled diet experiments. It soon was evident that fats in the diet had a big

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effect on the cholesterol in the blood. The results of eight years of experiments defined the effects of different fats and mathematical analysis produced the "Keys equation" showing the effect on serum cholesterol of the various fatty acids in the food. That equation has been verified and used the world over.

All this was about diet effects in individuals. I wondered about populations and relations between the diet, serum cholesterol and coronary heart disease. So I made epidemiological surveys in 1952 in Italy and Spain. I enclose a copy of a report that has been very influential, the beginning of world wide attention to cholesterol, fats in the diet and coronary heart disease.

In 1956 I started long-time prospective studies on samples of populations that extended to seven countries and over 12,000 subjects followed with re-examinations and follow-up of 25 to 30 years. Colleagues in the several countries continue this study.

I trust you have what you want from me. I cannot devote more time to this; I am over-burdened with analysing data and reporting on the Seven Countries Study.

Yours,

Ancel Keys