

Lo carb - hi Fat in 1975!

July 24, 1975

Dr. Peter Kühn  
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Dear Peter:

Thanks for your May letter. I hope we have a chance to discuss these matters one day. In our pragmatic way, we welcome discussion, but perhaps best not by mail. For your information I would personally take some issue with some points Prof. Irsigler makes in terms of: 1) The average long term effects of isocaloric high fat (low CHO) diets, in the garden variety hyperlipidemias, in normal weight persons, which is the usual coronary situation, I believe, in our country, 2) and the rationale for a trial being sufficient that it hasn't been done before and 3) this is inarguable. The latter is quite appropriate to smaller clinical investigations, but we find <sup>a</sup>different order of magnitude required in the rationale, with pretests ~~at~~ feasibility studies necessary before mounting a large collaborative effort. These steps can save many headaches.

As for the efficiency of nutrients, I agree there is much we don't know, but suspect that the laws of thermodynamics are operating.

Fred Epstein would be a good friend and contact for your group (Institute of Social & Preventive Medicine, University of Zurich, Gloriastrasse 32, 8006 Zurich, Switzerland), and would probably like to get progress reports from you for the CV Epid. Newsletter.

Keep in touch.

Cordially,

Henry Blackburn, M.D.  
Professor and Director

HB:lc

KARDIOLOGISCHE UNIVERSITÄTSKLINIK

Vorstand: Prof. Dr. F. Kaindl

PC  
A Keys  
J Stamler  
T Stasser  
to my reply

RECEIVED

MAY 30 1975

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LAB OF PHYSIOLOGICAL  
HYGIENE

Vienna, 1975 05 14

*pull my letter to Peter  
attached*

Dear Henry!

I know you'll think we had a good reason not to reply to your last letter in which you wrote about your discussion with Dr. Kastner and about your doubts concerning our diet-heart study mainly aiming at reduction in carbohydrates.

The actual reason, however, is that I'm only involved in this study as a cardiologist (-epidemiologist?), but that the dietetic background comes from Doz. Irsigler. He is a very busy man and took over a new department last year, so it took quite some time to sum up the ideas leading to the plan of our study. Doz. Irsigler is very renowned here for the treatment of obesity and diabetes and was involved in a government-sponsored screening program and I'm sure he is the best man we have here as an advisor for such a study.

Here now is his reply (in German) and I'll try to give you a translation:

Dear Dr. Blackburn, you are wondering why we want to conduct a secondary prevention study in infarct patients with carbohydrate reduction as the main dietary change.

I shall try to make a few points clear that seem relevant to us: We are aware of the role of high serum cholesterol levels, of the possibility of dietary intervention with reduction of animal fat and increase of polyunsaturates with all the background of the trials conducted so far and we do see positive possibilities in this direction.

However, as has been shown by the diet-feasibility-study, it is very difficult to reduce animal fat to a certain degree in order to achieve a P/S ratio of 2 or more.

In our past experience over several years in the treatment of obesity we have learned that a long lasting dietary change can mainly be achieved by reduction in carbohydrate. The consequence of such a change is not only reduction of carbohydrate but also of total calories combined with a relative increase of fat and protein intake. It could be shown, however, that the absolute amount of fat consumed is reduced. In our opinion the relative increase in fat calories is irrelevant. The cost of food is inevitably raised by the increase in protein consumption.

The most effective result of such a diet in obese persons is weight reduction, which - in cases with hypertriglyceri-

demia - is usually combined with reduction of triglyzeride and cholesterol levels. This fall in lipid levels is also present in normal-weight persons. These measures are only disappointing in heterozygote patients type II in whom other diet regimens fail as well.

Long term adherence to this diet can be achieved relatively easily: bread, potatoes, sugar and sweets do not only carry high amounts of calories per se but also entail the consumption of other - non carbohydrate - calories.

This was the primary background of our clinical experience.

The most important point in favor of such a diet study is that a similar study has not been performed so far. Therefore one can hardly argue about its value and possible results as long as data are not available.

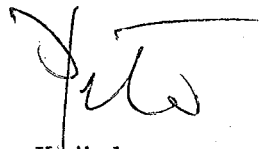
A few remarks concerning the scientific background: it has not been proven that the body is using each calorie (in the thermodynamic sense) whether derived from protein, fat or carbohydrates in an equal way. Most considerations on this problem are based on dogmas derived from nutritionist's studies 80 years ago. However, Sims (1, 4) and Bray (3) have contributed quite interesting studies and also the results of Kaspar (5) suggest that the body can vary the caloric efficiency of administered food (2).

We are quite aware of the fact that by changing the diet in the way described above we do not test any isolated factor but that we are primarily studying the influence of caloric intake and hence of weight reduction and only secondarily the influence of carbohydrate restriction.

#### References.

Well, this was the translation and I hope it turned out so that you can understand what he means. If you should be able to reply within a delay smaller than ours this would be fine.

With best personal regards  
sincerely yours



Peter Kühn

P.S.: I just received a copy of an article in which Walker also regrets the fact that long term studies with carbohydrate reduction are still lacking.