type who could have retired at 25 or 30, with profit to their community. Don't you agree?” Retirement should not be frozen mechanically with no fluidity and flexibility. Thewlis (5) rightly asserts, “The phase of life to which geriatrics applies does not begin at any special time; persons of thirty may present senile changes which should not occur till seventy or later.” Dr. C. Charles Burlingame (6) the noted head of the Hartford Institute for Living, observed, shortly before his death, that some should retire at 40 and others at 75, and that it was “sociologically unsound and psychiatically impossible” to retire all persons at 65. He wrote: “It is no longer considered good psychiatric practice, or good medical practice, for that matter to say ‘you need a vacation,’ which used to be the universal recipe when the medical adviser did not know what else to say. Sardonically enough, however, ‘loafer’s delight’ or ‘do nothing for a while,’ with its etiological potentialities for mental and physical illness, is gradually receiving great impetus through pension schemes with enforced retirement. These erroneously assume that a man’s goal is ultimate idleness. Too often, sudden decompression from carrying heavy responsibilities is producing an emotional caisson disease which slowly receiving great impetus through pension schemes with enforced retirement. These erroneously assume that a man’s goal is ultimate idleness. Too often, sudden decompression from carrying heavy responsibilities is producing an emotional caisson disease which

In a word, the urge for retirement and pension schemes derives from the laziness of a few and the economic pressure of the many. Yet, as society seems to move toward levels of steady high employment, it surely should not be an excessive tax upon social imagination to produce an adequate degree of flexibility among the retiring group and adequate fluidity for the oncoming.

CONCLUSIONS

It must be recognized that there has in recent years been an improvement in both the social and the medical outlook on the problem of age. Let us confess, however, that these modest steps forward in public attitude and in medical learning and practice are as much owing to the demonstration of the nation’s need for services of older men in World War II and since Korea as to a genuine reawakening on the part of either the public or the medical profession. In a sense, therefore, the place of the older group on both sides of the physician’s desk has yet to be considered systematically and with foresight. With regard to the doctor’s side, we lament the shortage of physicians as we are compelled to draft many for military service, but we do nothing to lower the obstacles to continued utilization of the skills of our older colleagues. With regard to the patient’s side, we have not gone far or just enough in eradicating the ‘old age’ excuse for inadequate attention. We still have a shortage of geriatric literature that stands in bold contrast to the abundance of publication in pediatrics. To remedy this defect, given specialization, geriatrics should receive due recognition, on a par with other specialties, and the subject should be included in college curricula. Retirement as now in vogue is overmechanical and non-selective, with losses to professional life. Old age honors gold, paintings and tapestries. This should be our concept of senescence. Succinct and accurate is an aphorism of Nascher: Some are aged before they are old, some are old but are not aged. The ‘old age’ attitude on the part of general medicine should not go unchallenged. The range of interest in the geriatric patient should not be limited but should be permitted to widen and grow.

Thorough study of gerontology, on which preventive geriatrics is dependent, would help to bring the physiologic age up to par with the mental alertness of the individual, and public policy, in its broadest meaning of the organization of the activity of American society, must be reoriented to take into account the growing proportion of older people in our culture, together with their needs, and society’s needs from them.

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PRESENT DIETARY CONSIDERATIONS IN LIVER DISEASE

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Nutrition behavior must be viewed in terms of the total behavior. While one may review the dietary implications in a disease, one should not forget that the whole nutrition picture is greater than its parts, or the sum of the parts. The liver is an important organ, but dietary essentials affect other parts of the body besides the liver even when one is thinking of present dietary considerations in liver disease, hence this review will hasten down those hinges that belong to the pathological physiology in addition to the important nutritive materials for life.

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the removal of fat from the depots cannot be discussed in full at this point, the reader is referred to references (1, 2, 3, 4, 5, 6, 7, 8, 9, 10).

An ultimate understanding of the mechanism* of maintenance for good liver function is also involved in the picture of liver regeneration. Certain patterns are evident in our present day understanding of patterned reparative responses, particularly as protein is concerned with the supportive therapy. (11) (12) (13) (14) (15) (16) (17).

Food is an important factor in the environment which may contribute to the impairment of the liver. The integrity of the liver depends on a large extent on the food materials offered in the diet, elaborated as a result of the mix used in the G. I. tract, and utilized in response to the proportions found in the total pattern. A more penetrating understanding of the value judgements necessary in making the dietary order contribute to a maximum in the rehabilitation of the liver includes a dietary order of:

a. High protein of high biological efficiency offered in divided doses.

b. Protective calories offered chiefly from starches rather than sugars, the protein of plant origin, and lipoids of plant origin.

c. Vitamins, vitamers, vitagens and isotellic compounds which have been demonstrated as being interrelated with the calorie-carrying compounds.

d. Lipotropic factors in balance with the other aliments and nutrients.

e. Therapeutic concentrates and emphasis on those well chosen food supplements which convey the much needed restorative food agents in the right proportions.

f. Individually guided recommended daily dietary essentials that meet the needs for total behavior in all areas, not just thinking of one "organ."

The association of dietary deficiencies with liver cirrhosis has long been reported. Being on a diet which is geared to enhance all dietary essentials, and particularly protein, vitamins, lipotropic agents, is an educational pursuit. Analysis of diets undertaken for the specific purpose of determining present day orders shows them to include: high calories, low cholesterol, low fat, high protein, high vitamin and mineral intake, possibly some restriction on sodium in some cases, protective in character, non-stimulating, laxative and adequate for the individual case.

All the data is not yet in for a complete review of the dietary factors in the etiology, but some of the literature references implicate too high a fat intake in the presence of too low a carbohydrate intake (below .6-.75 grams per kilogram) and too low a protein intake (below .5-.75 grams per kilogram in adults); deficiency of certain B-complex vitamins in the presence of high quotas of non-protective foods such as 1400 calories a day coming from refined sugars and milled grains in many of the so-called normal diets; use of beverages which cannot be called upon to meet nutritional essentials.

Individual differences and individual variations in the amount and kind of materials offered is possibly the most discussed fraction of the present day liver damage literature. Variations in figures in the literature are such that some understanding of the factors responsible for the apparent discrepancies has become important to the intelligent interpretation of the standards quoted as acceptable for patterned reparative responses. A point in case is the vitamin A content of food. Most investigators recognize that all sources of carotene are potentially poor sources of vitamin A if the liver is not functioning to capacity. Hence vitamin A-1 and A-2 are much better choices than the 9 protein-carotenoids and cryptoxanthin at the onset of these liver diseases in which vitamin A pro-compounds are poorly handled. Moreover instead of 3000 I. U. of vitamin A, the standard is held up to 10,000 I. U. of vitamin A, or higher. In this 10,000 I. U. of vitamin A at least 6,000 I. U. will come from vitamin A-1 and A-2 instead of the provitamin-A groups. Vitamin A is a group and not a single entity.

For many years it has been suspected that a deficiency is never singular. Multiple dietary deficiency diseases may be handled by feeding the hungry tissues a diet replete in the right proportions of functional forms of the necessary dietary essentials. There are so many complementary, augmentary and supplementary interrelationships between one material and another that for purposes of illustration only, niacin is chosen to point up the complexity of the situation. A patient may use niacin to replace a part of the tryptophane in diets in which tryptophane is not present in high enough quotas, as for example on high corn diets which are low in lysine and tryptophane. However one may lower the amount of niacin needed by increasing the amount of riboflavin present. Riboflavin is important for the mobilization of vitamin A group and hence this fact makes B-complex vitamins important in liver function. Carotene conversion to vitamin A depends in part on an adequate supply of vitamin E group compounds. Vitamin A affects the metabolism of calcium, phosphorous and magnesium. Feeding an excess of vitamin A tends to prevent or to alleviate the toxicity of excessive doses of vitamin D. In avitaminosis A, B, requirement is increased. The amount and utilization of all nutritive materials is dependent upon the kind, assortment, proportions and balance of all other nutrients.

Attached are two levels of low fat, low cholesterol, high protein, balanced diets. It is not safe to drop below 2000 calories without vitamin-mineral supplementation.

*The mechanisms of maintenance of good liver function include:

a. Providing the richest dietary sources of the factors which have been missing in the diet, have been increased in need, have been excreted in excessive amounts, have been altered in metabolic function hence making them non-functional, have been diverted to some lesser function rather than the central objective, or are hence poorly utilized.

b. Shift the proportions to those that sponsor changes for the better in pathological physiology with the least expenditure of time, energy and materials.

c. Segregate the vehicles, acceptable from the long term point of view, from those foods and materials which may have short term interest but because of cost, inconvenience and unavailability are not suited to a diet that takes over for months and even years. Some plans for diets can be worked out in an institution that would not be practical at home.