

# CASE OF DENTAL CARIES

## vs. the Sugar Interests

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Dr. James has distinguished himself in the field of dental literature and in general society affairs, both local and national. He is an illustrious son of an illustrious father. In this article he meets the challenge of the sugar interests now engaged in faulty advertising claims.

THE EFFECTIVE IMPACT of the Dental Health Album of recordings upon the excessive sugar-consuming habits of the public appears even greater than anticipated. Added to this impact, the force of the motion picture, "It's Your Health", has brought anguished wails from producers of the offending dietary dilutents, who state that they are preparing a campaign of "education" for the dental profession. This calls for some pretty plain talk; both the film, "It's Your Health" and the album of dental health recordings were created and developed by the Southern California State Dental Association and carry the endorsement of the American Dental Association's Council on Dental Health.

The conditions which have made necessary this effort of the dental profession against dental disease, against general disease, and particularly against disease of the degenerative type, are well explained by Forman<sup>1</sup> in his statement of the problem of degenerative diseases, and particularly of dental decay:

"Here we come up against a great obstacle to the solution to our problem, and that is the miseducation of our people by the hucksters who sell white flour, candy, pastries, soft drinks, especially the sweetened varieties which in addition to the sugar frequently contain a great quantity of phosphoric acid, which helps to destroy our children's teeth."

There is no gainsaying that as the purveying of these articles listed became big business, with increasing advertising, a concurrent increase in degenerative diseases, and particularly dental caries, occurred.<sup>2,3,4</sup>

What appears inexplicable to the manufacturer who spends large sums to advertise his product for greater sale, is

the fact that the dental profession collectively spends, and is willing to spend, both large sums of money and effort to keep patients out of dental offices. Therein lies the basic difference between a profession devoted to the promotion of health and a business devoted to the promotion of profits.

In BOTTLING INDUSTRY, the newspaper of the soft drink business (Vol. VI, No. 9, WH #60—June 14, 1949), the lead writer does himself proud with the heading:

**"SEE DENTAL ATTACK AS  
DEFENSE MOVE"**

**"PART OF CAMPAIGN TO STEM  
DRIVE FOR SOCIALIZED  
MEDICINE"**

**"Despite clamour, caries  
remains medical riddle"**

*"The connection with the clamor for socialized medicine lies in the professional embarrassment of the private dental industry, that despite years of research, it has not come up with definite conclusions on the subject. The truth of the matter is, as the Sugar Research Foundation, Inc., recently pointed out, that research funds have been woefully insufficient in relation to the magnitude and importance of the problems."*

It is of great interest that after more than twenty years' application of the refined carbohydrate reduction theory with increasing success in the control of dental caries, it now should be designated as a currently whipped up defense measure against socialized medicine. The editorial writer states that the refined carbohydrate reduction theory is supported by dental groups, as distinguished from the mass of dentists in the country. But the American Dental Association membership approximates seventy thou-

sand of the seventy-five thousand ethical dentists in the United States and sponsors the dental health activities of the Council on Dental Health.

This is a typical device of the propagandist, used to becloud the issue. Oddly enough, the threat implied is actually to business, not to the professions. As much as we are opposed to a socialized program, it is probable that professional men of the lower brackets, under such a program, would find their incomes improved while those of the upper brackets would find theirs seriously reduced. The professions would go on but the burden of support for the entire program would fall directly upon big business in the form of broader and broader taxes. It would appear that the scare threat is aimed in the wrong direction.

In an editorial on page 16 headed, "An appeal to mummies and future toothbrush salesmen," the writer exhorts the bottling industry to "take up arms and . . . at least open the family closet of our tormentors to produce some embarrassing skeletons."

Then the following are presented as scientific axioms:

*"Dental caries, cause and prevention, are still a medical riddle."*

In answer it is pertinent to quote from the Michigan Workshop on evaluation of dental caries control techniques:

*Dental caries is a disease of the calcified tissues of the teeth. It is caused by acids resulting from the action of micro-organisms on carbohydrates, is characterized by a decalcification of the inorganic portion and is accompanied, or followed by a disintegration of the organic substance of the tooth. The lesions of the disease predominantly occur in particular regions of the tooth and their type is determined*

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by the morphologic nature of the tissue in which they appear.

Further statements made by the BOTTLING INDUSTRY writer are:

*"All human races are equally susceptible to tooth decay."*

That is true when the caries-producing factors occur.<sup>11 12</sup>

*"Some populations with diets heavy in sugar, starch and other carbohydrates, have been found with relatively good teeth."*

This statement is untrue where the sugar and starches have been refined or concentrated.<sup>13</sup>

*"Research to date has turned up a paradox for every theory of cause and every theory of prevention."*

The above is an inane statement. Paradox means an assertion, seemingly contradictory, but which yet may be true to fact. The writer's intention is clear, but his choice of words questionable.

*"There has not been to date a single closely controlled, statistically significant experiment that would indicate that sugar is a cardinal offender in the dental caries problem."*

Koehne, Bunting and Morrell<sup>14</sup> in 1934 studied a group of one hundred sixty-nine orphanage children of seven to sixteen years of age. These children had been observed over four and a half years during which time repeated bacteriological examinations were made and the institutional diet was checked at intervals. They had a remarkably low incidence of active dental caries. Seventy to eighty percent of them were known to have had no new caries over a period of several years, although many of the children had open cavities, formed in earlier years or previous to their coming to the institution. The salivary lactobacillus acidophilus content was also remarkably low and the great majority of cultures were negative.

In order to test the effect of sugar in the diet, fifty-one of these children were given approximately three pounds of candy each week over a period of five months and the activity of the lactobacillus acidophilus and dental caries was observed. Previous to this experiment all of these children had been restricted to the regular institutional diet which is uniform and low in sugar. During the previous year only seven

showed any evidence of active dental caries. Throughout the five months in which the candy was provided and eaten in addition to the regular diet, the oral acidophilus counts were markedly increased in eighty percent of the children and at the completion of the period forty-four percent showed evidence of active dental caries. Three months after discontinuance of the sugar feeding and return to the low sugar ration, a subsequent examination showed that in practically all cases the acidophilus counts had dropped to their former levels and that there was no further extension of caries in any case.

Becks and Jensen<sup>15</sup> reported in 1948 the testing of reduction of excessive refined carbohydrates and their substitution by proteins and other carbohydrates in 1542 one-year observations on rampant dental caries over a period of ten years. With this reduction, the vast majority of lactobacillus acidophilus indices which accompany these rampant dental caries cases dropped drastically to a zero, or low index in approximately ninety percent of 752 one-year observations. Of these ninety percent who responded to nutritional correction as judged by the lactobacillus acidophilus index, a total of 678 or 85.7 percent were caries-free in the subsequent year. Eighty-nine or fourteen percent developed one to two cavities; seven or one percent developed three to five cavities; and only one patient developed six to nine cavities.

A control group of 347 rampant dental caries cases were similarly treated as to repair, but did not receive nutritional counsel. They also had high lactobacillus acidophilus indices before repair was started and retained high L.A. in 321, or 92.5 percent of the cases. Of these none were free from tooth decay. Two hundred ninety-three, or 91 percent developed one to two cavities; twenty-five or 8 percent developed three to five cavities; three developed six to nine cavities. This indicates that if the L.A. index is not controlled, caries activity will consistently continue even though the number of surfaces available for attack is greatly reduced.

Schour and Massler<sup>16</sup> in 1945 found the average caries index for 3,905 persons of various age groups in four cities of post-war Italy (1945) to be two to seven times lower than that observed in the United States. The people examined

were, for the most part, malnourished. The reduced sugar intake in Italy and the high sugar consumption in the United States may in part explain the difference in the prevalence of caries. The possibility of gross Vitamin B deficiency in depressing the incidence of caries must also be considered." Robinson<sup>17</sup> clarifies this relationship lucidly, stating that the acidogenic bacteria also require dietary essentials in addition to an easily fermentable carbohydrate substrate for survival.

Toverud<sup>18</sup> reports a reduction of 35 to 60 percent in Decayed Missing Filled teeth and 60 to 80 percent DMF surfaces in 8,000 Norwegian children two and a half to fourteen years, during the war years 1940-1947. This is attributed to a great reduction in consumption of refined carbohydrates and an increased consumption of natural foodstuffs forcibly brought about by occupation conditions. He further cites comparable reductions in caries incidence in other Scandinavian countries in direct relationship to the severity of war restrictions on the availability of refined carbohydrates.

*"A few skeletons that might be found in the dentists' closet are: it has never been proved conclusively that toothbrushing does good or harm in the caries problem; that reducing bacilli through mouth washes reduces caries; or that ingestion of vitamins in excess of those required for normal diet has any relation to dental caries."*

A good lead writer is a good sloganeer. A good sloganeer recognizes a good slogan. "A clean tooth never decays" is one of the most harmful slogans to which the problem of dental caries ever was subjected. This slogan was the product of a member of the dental profession neither engaged in private practice nor research, but in the employ of a large insurance company at the time he coined the slogan. The modicum of truth in it, that a bacterially free tooth, which is an impossibility in the oral cavity, would not decay has afforded just sufficient credence to the slogan to be harmful and very misleading to lay editors and writers.

The mouth wash reduction of bacilli is one of the projects now being tested and no conclusive evidence has yet been presented.

In consideration of the time and effort expended in research showing that vitamins per se have no part in the dental caries problem, the latter statement is of dubious value to their editor's "skeleton closet."

Examination of the April, 1949 issue of THE SUGAR MOLECULE, the official publication of the Sugar Research Foundation, reveals the source of most of the material appearing in the BOTTLING INDUSTRY June issue. The unidentified writer skillfully emphasizes points to imply doubt in accepted theories.

Specific statements therefore are required to reply.

1. Refining of carbohydrates is essentially a concentration process of removing from the carbohydrate portion of natural food the bulk consisting of all, or nearly all other factors. This concentrating process permits what Moose<sup>2</sup> refers to as diluting with calories what otherwise could be an adequate diet. The concentrate, with inferior nutritional value, but satiating effect displaces nutritionally adequate foods in the diet and hidden hunger is born.

2. The statement is made that no differentiation can be made between refined and natural sugars. This is correct, except that the concentrating or refining process allows greater displacement in the diet. This is likewise true of those sugars of fruits processed by dehydration. When concentrated "natural" sugars present in honey, dates, maple syrup and orange juice reach the tolerance point of the individual, they become just as effective in producing dental caries as do manufactured sugars. This tolerance point of refined, or concentrated sugar, is in relation to the individual's metabolic efficiency and to his total food intake."

3. It is stated that even the Egyptian mummies buried 3000 years before the Christian era show their share of decayed and missing teeth. True, but likewise they represent the class addicted to the use of concentrated carbohydrates, whereas the skulls of the poor, exhumed from the desert side of the fertile Nile strip, show a marked absence of dental caries.<sup>3</sup>

4. Price<sup>4</sup>, McCarrison<sup>5</sup>, Waugh<sup>6</sup>, and Baarregaard<sup>7</sup> have shown that the primitives on adequate diets are relatively, and in some cases totally, caries-free.

whereas the same individuals subjected to the so-called civilized foods, the trade goods of concentrated refined carbohydrates, become highly susceptible to dental caries. It is the displacement factor again.

5. Except for bulk, there is no differentiation in the end result between starch and sugar. There is, however, the necessity for additional steps in the degradation of the polysaccharides to bring them to the same level as the di- and monosaccharides in the mouth. For that reason sugar is the more serious dental caries producer."

*"Any competent scientist examining the literature on the subject of tooth decay would be forced to say: cause unknown. There has never been a single closely controlled statistically significant experiment which would indicate that sugar is the cardinal offender."*

More than one hundred competent research scientists agreed on the cause of dental caries at the Michigan Workshop.<sup>8</sup> The statistically significant studies of Koehne, Bunting, and Morrell<sup>9</sup>, Schour and Massler<sup>10</sup>, Becks and Jensen<sup>11</sup> and Toverud<sup>12</sup> have been cited.

A leaflet, "Medical Aspects of the Dental Caries Problem, A Review of the Literature" by Harold Brown, M.D., Ph.D., put out by the AMERICAN BOTTLERS OF CARBONATED BEVERAGES, Washington, D. C., opens with the statement:

*"Dental caries are (sic) a problem, but the solution of that problem is quite another matter. It is one for which the ages of medical study have not yet found the complete and ready answer."*

From there it purports to give a brief, unbiased review of the literature although no references are indicated in the text of the succeeding paragraphs, and in the appended bibliography the most important and authoritative references are not listed.

Why was a physician employed by the American Bottlers to "front" the leaflet? The misinformation, omissions, and the alleged scientific evaluations appear to be those of a lay advertising writer. The implications are sufficiently serious to warrant repetition of the brief paragraphs with a refutation where indicated. The headings and paragraphs are as

follows:

### **"THE CARBOHYDRATE THEORY**

*"The dental profession over the past several years has developed a certain school of thought which charges that carbohydrates in the diet are a cause of dental caries. This claim is based on the idea that carbohydrates break down into sugar in the mouth and assist acid-excreting bacteria (Lactobacillus) in weakening the enamel and dentine of the teeth. The proponents of this theory recommend the elimination of a large amount of carbohydrates from the diet."*

Carbohydrates are either sugar or starch: in the physiologic end they are the same. It is refined or concentrated carbohydrates which are charged with cause of dental caries. They are broken down by the acidogenic bacteria, among which is the lactobacillus acidophilus, for the formation of the acids which attack the calcified portion of the teeth.<sup>13</sup> The proponents of this theory recommend the elimination of large amounts of refined or concentrated carbohydrates from the diet.

### **"CONCLUSION CONTROVERSIAL**

*"The medical profession and a large part of the dental profession will take exception to this theory. Since carbohydrates create the energy necessary for the support of human life, a serious depletion of carbohydrates from the diet would result in a condition far more serious than dental caries."*

Upon what authority will the medical profession and a large part of the dental profession take exception to this theory? The large segment of the medical profession is in complete accord on the subject and the dental research leaders are agreed as reported in the Michigan Workshop on Dental Caries control.<sup>14</sup> What should have been said is that carbohydrates can be used only for energy production, having no other value and yield but the same four calories per gram as do nutritious proteins. Furthermore, a reduction only of refined or concentrated carbohydrates in the diet is urged.

### **"ARE (sic) CARIES CONSTITUTIONAL?**

*"Scientific investigation has led to other theories as to the cause of*

dental caries; one of these being that caries is constitutional in origin and would occur in the teeth of certain individuals regardless of diet. It is pointed out that poor teeth are found in all countries.

"This condition occurs even where a low carbohydrate intake is maintained. On the other hand, in some countries where a high carbohydrate diet is followed teeth are excellent."

Without the fermentable substrate it would be interesting to see dental caries produced. It has never been reported. The rest of the two paragraphs has been answered previously.

#### "THE 'DISUSE' THEORY

"There is also the theory of 'Disuse.' Followers of this trend of thought claim that because of the so-called civilized diet in which a minimum of chewing is required, the teeth and jaws are not exercised as much as in the so-called primitive diets where tough, fibrous foods are used, requiring a maximum of chewing."

The reader is expected to infer from this that dental caries is a possible result of disuse, although the direct statement is obviously omitted for lack of support.

#### "FAMILY DIFFERENCES?

"It has also been suggested that the etiology of carious teeth and pyorrhea should be studied from a general resistance point of view, rather than searching for a specific factor. It has been demonstrated that even in one family, where children are on a similar diet, the teeth of one may be excellent and the teeth of the others may be found to be carious.

"In another family, a child on a carefully planned, low carbohydrate diet had carious teeth, while her brother on a high carbohydrate diet had excellent teeth."

It has been pointed out previously that the proportion of refined or concentrated carbohydrates related to the total food intake and to the metabolic efficiency of the individual is the important factor." Furthermore it is never safe to assume that children who eat at the same table are on identical diets. Even the nursery rhyme about Jack Sprat and his wife recognized the effects of undirected selection.

#### "EVEN CLEAN TEETH DECAY

"In contradiction to the sugar-caries theory, it has been pointed out that even clean teeth decay and that decay or cavity formation is at a point other than where bacterial plaques have developed—also that if sugar is the main cause of caries, why do certain teeth in the same mouth remain free of decay while other teeth become affected."

What is meant by clean teeth? One with a bacterial plaque is not clean, nor in the sense of complete sterility could such exist in the oral cavity. It has been conclusively shown that cavity formation does occur where the bacterial plaque has developed." " " " The freedom from bacterial plaques of certain friction areas of the teeth accounts for the freedom from decay referred to. The tooth surfaces where bacterial plaques remain least disturbed will decay most readily in any susceptible mouth.

#### "SYSTEMIC FACTORS

"The diet of mothers before the birth of offspring and during the nursing period is held by some to have a very great effect in determining the resistance to caries of the children's teeth. Studies tend to prove the mother's diet has much more effect upon the amount of tooth decay later experienced by these young than the diets they receive after weaning. The same studies place new emphasis on the importance of systemic factors in tooth decay resistance and show the danger of over-emphasizing merely local influences."

No evidence of the occurrence of dental caries without the presence of a fermentable carbohydrate substrate has ever been presented. Dental caries is an imposed post-natal disease, occurring only when the fermentable substrate is present beyond the individual's tolerance." The tolerance limit may definitely be modified by pre-natal and pre-weaning diet. Robinson<sup>23</sup> aptly summarizes the systemic factors as modifying only.

#### "EFFECTS DIFFER

"Those who hold carbohydrate diets are responsible for the existence of dental caries usually assert that all kinds of foods and beverages containing sugar should be avoided. That this advice is not the

proper answer is shown by the fact that if sugar were responsible then by their very nature each sugar-containing product would have a different effect."

Obviously some refined or concentrated carbohydrate foods and beverages have a higher dietary displacement value than others and do have a different total effect.

#### "DILUTED SWEETS

"For example, the oral condition created by a substance which is 100 percent sugar would vary considerably from that caused by one containing 10 percent or less sugar, such as a soft drink. Chewy sugar-containing items certainly cling to the teeth longer than some other sweetened food solids, while the latter remain in contact with the teeth considerably longer than a sweetened beverage."

There is no argument over the fact that chewy sugar containing items which do cling to the teeth longer than other sweetened food solids are greater factors in the production of dental caries than the diluted ones.

#### "TESTS FAVORABLE TO CARBONATED BEVERAGES

"Tests indicate that, of all sugar-containing items commonly consumed, those in liquid form are least likely to promote a condition favorable to caries. This is particularly true of carbonated beverages, because they have minimum contact with the teeth in their passage through the mouth."

McClure<sup>22</sup> and Restarski et al,<sup>26</sup> report the decalcifying effects of acid soft drinks, rendering the tooth surface more susceptible to bacterial attack. They point out that enamel is most readily soluble in phosphoric acid, exceeded only by solubility in nitric acid. They emphasize the increased decalcifying effect of acid-sweet drinks as compared to sweet neutral drinks. Restarski reports a popular "cola" drink to contain 0.055 percent by weight phosphoric acid and to have a pH of 2.6. This is considerably more than 100 times more acid than the pH level of 5.0 which Stephan<sup>27</sup> reports will decalcify enamel under mouth condi-

tions.

In conclusion, the words of E. V. McCollum," professor of biochemistry, School of Hygiene and Public Health, Johns Hopkins University, summarize:

"It is clear that if we were all to turn to a carnivorous diet, which is impractical or impossible in most countries, tooth decay would disappear. It seems that were we to turn

to a low sugar, high fat type of diet, such as is prescribed for diabetic patients, we might expect a prompt and marked reduction in caries susceptibility. This type of diet is practicable in many countries, but fats are in many regions considerably more expensive to produce than are starches and sugars. At any rate, we now know how to produce good teeth as respects structure and how

to preserve them in considerable measure from decay. We may confidently expect that further researches will within a few years see complete unanimity of opinion as to the factors which operate to cause caries susceptibility. Nutritional research has scored a great achievement in the field of dental science."

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# EDITORIALS

## *Pinch Hitter*

OCCASSIONALLY THE JOURNAL receives a letter with that force, direction and follow-through that make it an outstanding editorial contribution. Such a letter came recently from one of our members who, when asked, followed through with as fine a scientific substantiation of his charges as we had dared to dream about.

Member of three Academies. Periodontology, Restorative Dentistry and Applied Nutrition, Dr. Allison James has made a number of significant contributions recently to dental literature.

So, for today's lineup, a substitution. James at bat for

J.C.A.H.

\* \* \* \*

## *Who Threw That Boomerang?*

### **AN OPEN LETTER TO THE A.M.A.**

DEAR SIRs:

This is to call your attention to advertising in your Journal by the American Bottlers of Carbonated Beverages, which we believe to be very misleading.

Scientific evaluations, obtained by experiments on the effects of liquid and dry milk rations related to a dry cariogenic diet and liquid suspensions of the dry cariogenic diet (1), have been extended, through implication by the advertiser, to include carbonated beverages.

Other equally scientific work has shown the damaging effects on teeth of acid, sweet, soft beverages and has shown one of the most popular carbonated bottled beverages to have a pH level of 2.6<sup>2</sup>. It has likewise been shown that a pH level of 5.0 will decalcify tooth enamel under mouth conditions.<sup>3</sup>

We believe therefore, that such advertising in a professional journal is contrary to the public welfare and particularly so as the advertiser subsequently capitalizes upon the fact that such an advertisement has appeared in the Journal of the American Medical Association.

**Very truly yours,**

**Allison G. James, D.D.S.**

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## Give Thanks



Have you thought recently to thank the Lord for water, and for air, and for sunshine?

Probably not. We so seldom pause to give thanks for the most essential and most obvious things.

Like good health! It may be trite to say that it's only appreciated after it has been lost, but good health is some-

thing for which one should be ever grateful. With it almost all other adversities can be overcome; without it, it is hard to muster the courage to face even minor irritations.

Give thanks then for your good health and give generously to the Relief Fund of the American Dental Association so that we may in a way share our wealth of health with those poorer in body and spirit.

J. C. A. H.

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## Pollyanna

ITS HARD TO get mad this month. In fact it has been almost impossible. That is an odd beginning for an editorial, but it's true. (You have to be a little mad, perhaps in more ways than one, to write an interest catching editorial.)

A search of the incoming mail, of newly printed *Journals*, of the "releases" of the A.D.A., brought no consuming passion, no imperilled maiden, no giant, no dragon, no wizard.

The queasy policy of the *American Medical Association's Journal* is being vigorously attacked by Al James elsewhere in this issue. The A.M.A. editors seem deficient either in a knowledge of nutrition or in a sincere interest in the public's health. An editorial "Hokum in Hygeia" appeared in this space in June, 1947. It also attacked the acceptance of candy and carbonated beverage advertisements in an official publication of the A.M.A. One almost wonders if there should be a "deep-freeze" investigation in Chicago like the recent one in Washington, D. C. It is worth a great deal to the "Sugar Daddies" to be able to advertise that their product has been accepted for advertising by the *Journal of the A.M.A.*

But why get mad about that? Several widely circulated magazines operate a shake-down racket by which seals of approval are bestowed upon well advertised products.

The "Clip-Sheet," a news bulletin from the Public Relations Office of the American Dental Association, recently headlined an article "Hit False Beliefs About Tooth Decay" and went on to say:

"Popular misconceptions of what makes teeth decay were attacked in a recent issue of *The Journal of the American Dental Association* by Dr. Hamilton B. G. Robinson, of the College of Dentistry, Ohio State University, Columbus.

"First of the fallacies dealt with by the nationally-known educator was nutrition.

"Good food may keep your body strong but it probably doesn't keep your teeth from decaying, according to Dr. Robinson. While good nutrition is important to the formation of healthy teeth in children, there is no clear-cut scientific evidence that it has any effect on the structure of the fully-formed tooth.

"Good nutrition is important for general well-being and health, but neither good nutrition nor freedom from systemic disease offers any substantial assistance in prevention of dental caries," Dr. Robinson concluded."

It did not seem possible that an educator could have made a statement as inaccurate as that final paragraph. Dr. Robinson should either extend his studies in the field of nutrition or in the field of semantics.

But why be irked? In June last year we had to rebuke the *News-Letter of the Council on Dental Health* for a similar intentional, or unintentional, slanting in briefing a scientific report. It also labored under the delusion that "good nutrition" includes any dietary which provides the essential nutrients in adequate amount, without recognizing that if the supply of one or more of the ingredients is increased beyond the toler-

ance limit of the patient the diet (which still contains enough of everything) is now a bad diet, mal-nutrition. A thoroughly adequate diet which contains a preponderance of mouth fermentable foods or pseudo-foods can produce rampant decay. In this country "stuf-focation" or excessive intake, is as common a form of mal-nutrition as starvation.

It is irritating to realize that careless wording in an article, published and reprinted by official dental journals, puts words in the mouths of these venders of tooth decay, the sugar dealers. They love to quote these presumably responsible officials.

Can't even get mad over the invasion of the offices of the A.M.A. in Chicago by the F.B.I. When medical men opposed the rapid conversion of a democratic government into a poly-dictatorship with bureaucratic rule and the socialization of everything to be forced on the health professions first, they invited the retaliation of our infant police state. The use of the income tax division of the Treasury, priority boards, and the anti-trust and inter-state commerce investigators of the Justice Department to punish political opponents has become commonplace in the last twenty years.

Of course if I could get you, and you and you mad so that together we could effect some little improvement in the domestic and professional scene it would be worth the effort.

J.C.A.H.

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