

## California Avocado Society 1923-24 Yearbook 9: 11-13

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COLLEGE OF AGRICULTURE -AGRICULTURAL EXPERIMENT STATION BERKELEY

December 3, 1923.

Dr. J. Eliot Coit, Pres., California Avocado Association,  
1880 Linda Vista, Pasadena, California.

My dear Dr. Coit:

In accordance with your suggestion I am submitting the following with reference to standards for the avocado.

I am not in accord with the statements made by Mr. Spinks and the two commission men or wholesale dealers who were with him.

As I sat there Saturday evening, November 17th, it seemed to me that history was repeating itself with reference to the standardization of foods in a very marked manner.

I might give several illustrations. To be specific I will mention nine: butter, milk, eggs, ice cream, melons, oranges, grapes, vinegar, olives. Time and space will not permit a detailed discussion of each of these foods or the standards in connection therewith. I will discuss very briefly the first and last, namely, butter and olives.

The history in connection with the formulating of standards for these two foods, it seems to me, has a direct bearing on the general subject, standards for the avocado. It has been the experience of the Food & Drug Laboratory and confirmed by the able remarks of Mr. Rogers at the Saturday evening conference that in order to efficiently enforce any standards there must be *figures* or *definitions* which are explicit, which do not depend upon opinion.

Years ago when the subject of standards for butter was first proposed all kinds of objections were raised, both with reference to the chemical standards, and physical standards. In connection with the chemical standards, that is, differentiation between butter and oleomargarine, it was a very difficult matter to obtain a conviction in court by testimony which was mainly opinion of chemists and also upon results of microscopic examination. The difference between the slides for oleomargarine and the slides for butter was not marked and very difficult for a jury or even the court to thoroughly understand and differentiate. When, however, the Reichert-Meissl number was offered, (originally by Chemist Reichert) there was no trouble with the court or jury or anybody else. We had a number which was *definite* and was between 28 and 32 for butter as against 1 for pure oleomargarine. The advantage of the figure as against opinion and microscopic slides is obvious, axiomatic.

When it was suggested that a weight standard be adopted—that a pound of butter must weigh 16 ounces and not less, or a two-pound square or roll weigh 32 ounces and no less, except for a fraction of an ounce—there was the biggest kind of uproar from all

butter makers, creamerymen and others to the effect that it was impossible to make a standard because the water in butter evaporated and a two-pound square would weigh two pounds when made, but as soon as it got into the traffic or in the market it would weigh less. Again, it was urged that it was not necessary to make standards for weight, and so on and so forth. What is the result today? Butter is labeled as to the net weight and the net weight goes. There is no trouble from anyone except the dishonest creamerymen. A two-pound square weighing 32 ounces at the creamery when it is manufactured and kept under reasonable conditions will not decrease appreciably in weight during the period from manufacture to sale. That has been proved by careful experimentation. But until there was a *figure* there was all kinds of trouble with butter. It may be said that this is not comparable with the avocado. In one way it is and in another way it is not. It is, in the sense that until there was a figure there was trouble. It is, in the sense that when standards are proposed all kinds of opposition is raised. The standards for butter are in effect and nobody is "kicking."

As Dr. Chace told us Saturday night, we were having all kinds of troubles with the cantaloupe, not only the United States Department of Agriculture, but the State authorities also, on account of the shipping of immature, unripe melons and hurting the industry in general by so doing. Until the figure 9 for solids was adopted there was nothing but trouble all 'round and particularly in the courts, in that, it was a matter of opinion and not a matter of fact and as Dr. Chace and others well know you can get as many expert witnesses to testify on one side as you can on the other and, therefore, you might say—where are you? But with *figures*, there was no trouble, and neither will there be. Similarly with reference to the orange and the grape, and in connection with the grape there is more than one standard.

In accordance with Section 10 of the Agricultural Statutes, reading in part:

"In addition to the standards prescribed in section three of this, grapes shall show a sugar content of not less than seventeen per cent Balling scale, except Burger, Emperor, Gros Colman, Pierce, Isabella, and Cornichon, which shall show not less than sixteen per cent Balling scale ; *provided, however*, that in cases where lower sugar content is required for processing, preserving, or manufacturing grapes than is established in this section, the director of agriculture is authorized to issue a permit for delivery of same, such permit to be a matter of public record in the department of agriculture."

The olive presents another timely illustration. Before the standards for olives were adopted there was chaos and the industry, that is the ripe olive industry, was in a pretty poor condition, because all kinds of green olives were processed so as to imitate the ripe and sold as such with the result that when any of the dear public tasted these quasi pseudo ripe olives they said, "If this is your ripe olive, lead me hence." Whereas, when they tasted one of Roeding's ripe olives or Mrs. Ehman's ripe olives they said, "Gimme more." Finally, after much investigation by the United States Department of Agriculture, Bureau of Chemistry, under direction of Dr. Chace, and with the cooperation of the California authorities, there was published by the Bureau of Chemistry, Opinion 296, which reads as follows:

"The bureau has received numerous complaints that certain olive packers were packing

immature, unripe olives under a labeling which would indicate that the product was a mature, ripe olive, and that these packers so manipulated these immature olives during the process of packing as to give them the characteristic appearance of a ripe olive when packed. Such immature olives, mislabeled as ripe olives, would be regarded as in violation of the Federal Food and Drugs Act if brought under the jurisdiction of the act. An extensive investigation of the changes that occur in the composition of olives during ripening has been made. The results obtained indicate that the index of maturity for olives is the oil content of the flesh.

"As a tentative standard of maturity for Mission olives and other common varieties except Manzanillo, Ascolano, and Sevillano, an oil content of 17 per cent in the flesh is regarded as a minimum of 15 per cent of oil in the flesh to be regarded as ripe or mature. Olives containing less than the percentages of oil in the flesh specified above would not be regarded as ripe or mature, and when brought within the jurisdiction of the Food and Drugs Act would be regarded as in violation thereof, if labeled as ripe. For the large-fruited varieties, such as Ascolano and Sevillano, no standard of maturity is proposed, since these varieties are of necessity, gathered when immature. Such olives cannot properly be designated or labeled as ripe.

"These minima for the oil content of ripe olives are to be regarded as tentative. The bureau will welcome such suggestions and representations in regard to them as the trade may desire to make. Should it be determined at a later date that the minima above given should be changed in any way, due notice will be issued by means of a service and regulatory announcement."

It will be here noticed also that there are two standards. One for the Mission and other common varieties and another for the Manzanillo, Escallano, and Sevillano, so that many of the objections which were voiced by the opponents to standards for the avocado have no foundation in fact, but are merely opinions and we do not get very far on opinions only. It is figures which count and it is stated that figures do not lie, but sometimes they are extremely acrobatic.

I would suggest that it might be well to seriously consider, for the avocado, the standard, in terms of fat, 75 per cent of the maximum oil or fat yield for the respective avocado being taken as the tentative standard. In support of this I might say that we have for most avocados the percentage of fat when the fruit is fully ripe. For new varieties still to come along it would not be a serious matter to adjust difficulties. It might be that for one season some immature fruit of said variety might be sold because of the fact that there was no figure for percentage of oil in the ripe fruit. In answer to this, it could also be stated, that for new varieties, as a rule, the crop is slight, and very little is sold, and that before the next season comes around the fat percentage could easily be ascertained.

I am fully aware that the above suggestions will meet with opposition from many quarters. I am of the opinion, however, that any fruit which is honestly offered will contain at least 75 per cent of its maximum fat percentage at the time of being exposed for sale and I am further of the opinion that any fruit with any appreciably lower percentage than three-fourths of its maximum will not ripen or soften, but will spoil. Furthermore, such fruit would be hard, unpalatable, and its sale would distinctly injure

the avocado industry in general.

I think you will understand fully my suggestion which I offer for open discussion at your meeting on the 7th and I shall be glad to hear your personal opinion of this matter and also that of the conference.

Very truly yours,

M. E. JAFFA,

Prof, of Nutrition.