

## The Certificate of the Public Analyst†

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The main function of the Public Analyst under British Food and Drugs Law is to analyse the samples of foods or drugs submitted to him and to state the result of his analysis in the form of a certificate. On looking round for a subject of interest to all Public Analysts and to many outside our small circle, it struck me that the Public Analyst's Certificate, its origin, history and development and perhaps its future was one which would be worthy of consideration. To the analyst, the certificate is of considerable importance and it is one of those things which help to create his image in the national life. Anyone who has been in a Magistrate's Court when a Food and Drugs case has been heard will have seen and heard the Public Analyst's certificate produced and read. To the uninitiated it must appear very important and I remember as a young man how it excited me when I first read the basic outline of the official document. It was all very vivid.

I have been unable to trace what Public Analysts did about certificates before 1875, but the 1875 Act was the first to lay down a form of certificate which lasted for very many years and at times caused great controversy. I will remind you of its terms where it differs in essentials from that laid down 80 years later in the Public Analysts Regulations, 1957, and with which we are familiar today.

After a preamble referring to the receipt and labelling of the sample the earlier wording went on as follows:

*"... I have analysed the same, and declare the result of my analysis to be as follows:*

*"I am of opinion that the same is a sample of genuine . . .*

*or*

*"I am of opinion that the said sample contained the parts as under, or the percentages of foreign ingredients as under."*

The analyst then had to complete the certificate as he thought fit according to the nature of the sample and of the adulteration, if any. He was allowed to make observations for which a space was provided but the observation was limited by the following note:

*"Here the analyst may insert at his discretion his opinion as to whether the mixture (if any) was for the purpose of rendering the article portable or palatable, or of preserving it, or of improving the appearance, or was unavoidable, and may state whether in excess of what is ordinary, or otherwise,*

† Adapted from the Presidential Address to the Association, May, 1964.

*and whether the ingredients or materials mixed are or are not injurious to health."*

There was also the injunction to the analyst (in the case of an article liable to decomposition) to report whether any change had taken place in the composition of the article that would interfere with the analysis. This injunction is now included in all certificates—but more of that later.

Incidentally, this form of certificate was not absolute, another to the like effect being permissible.

As you can imagine, this certificate was a godsend to the lawyers of the time and many a battle was fought in the Appeal Courts to establish what was and what was not a valid certificate. I must say the Public Analysts of the time often brought it on themselves by expressing very strong opinions as to the data necessary for a certificate, or by giving a rather wishy-washy and nebulous certificate which was seized upon by the defence and the trade to counteract what might or might not have been a legitimate objection.

At the end of one lengthy tirade in the press by a trader against Public Analysts' certificates in general it was said:

"It is quite time certificates of this kind were put a stop to. They are unjust to everyone in the trade: they are a disgrace to an honourable profession, and bring it into contempt and disrepute."

It became a major controversy later as to what figures an analyst ought to put in his certificate. In 1892 Mr. Charles E. Cassal addressed the Society of Public Analysts on "The Drawing up of Certificates" and his main contention was that "analytical data" and details of analytical processes should, as far as possible, be kept out of both reports and certificates. He said:

"Those who first introduced the statement of analytical data in official documents no doubt acted in good faith but the result was very unfortunate. Anyone who has been present in a Police Court and who has heard a magistrate, assisted by a solicitor or two, . . . struggling with solids not fat and added water, fat and cream abstracted, and so forth, must admit that analytical data are edge tools, wounding not only the ignorant (whose ignorance is generally of that dangerous character which leads them to believe they are wise), but also wounding those who have been indiscreet enough to bring their data forward in their certificates under the erroneous impression that, by so doing, they add to their reputation or magnify the value of their services."

In support of this contention he said that the provision of the 1875 Act, that the certificate shall be either in the approved form or "to the like effect" meant that discretion in the drawing of certificates was intended to be placed in the Public Analyst's hands. The Act stated that the analyst shall declare the result of his analyses and not the "results," and that this did not mean that he had to give analytical data. Incidentally, similar arguments were put

forward against giving data on water reports, but this is a view which never gained much support. The matter was considered by the then Society of Public Analysts and was seized upon by members with the usual gusto and bluntness of that period. The general consensus of opinion was that a certificate should, if possible, conform strictly and literally with the form prescribed so as to give "parts as under" or "foreign ingredients as under," but that it should never give analytical figures.

It is not surprising that such an explosive situation with considerable difference of opinion between the Public Analysts on the one hand and the trade and legal advisers to the trade on the other should have resulted in some cases being put to appeal. As a result, legal decisions of great importance were made in the succeeding years which have influenced the certificate of the Public Analyst ever since. Generally speaking they were decisions against the view that a Public Analyst should not be obliged to give data although, as usual, there was considerable conflict of opinion between the learned judges themselves. The very first case to consider the form of certificate (as far as I can discover) was that of *Bakewell & Davis* (1894, 1. Q.B. 296), concerning a certificate which stated the results of analysis under "parts as under":

*"twenty-two per cent. of fat less than natural"*

and under "observations" the statement:

*"... that the abstraction of fat is a fraud, and may possibly be injurious to health."*

Mr. Justice Charles in his judgment held that observations are only to be made when the case is one of adulteration, that there was no need to make any observation in this case which was not concerned with foreign ingredients and, by implication, that the phrase "abstraction of fat is a fraud" is for the Court to decide not for a witness. On the other hand, he ruled in favour of the analyst that the certificate satisfied the form laid down by the 1875 Act, that there was sufficient disclosure of the parts as under and that the alternative "percentages of foreign ingredients" was clearly applicable only to cases of adulteration. . . .

*"It is not intended that the Court should consider how the result is arrived at: the result itself is the important factor."*

There followed, shortly after, two cases on appeal which put a different complexion on the matter. *Hewby v. Sims*, (1894 1, Q.B. 478), for a change was decided on rum rather than milk. The analyst's certificate was headed:

*"The Sale of Food and Drugs Act, 1875"*

and bore the following remarks:

*"I find that the sample contained an excess of water over and above what is allowed by Act of Parliament. I estimate the excess of water at 13 per cent. of the entire sample. I am of opinion that the sample is not a sample of genuine rum."*

Mr. Justice Day had some interesting things to say about this. Firstly he took exception to the heading Sale of Food and Drugs Act, 1875. This heading was not part of the prescribed form of certificate and contained no reference to the Act of 1879. Hence there was no evidence that the analyst ever knew of the latter Act or that he acted under it or had it before him, therefore on the fact of the certificate no offence was proved. (In some pertinent *obiter dicta* he suggested the defect in the evidence in this case could have been supplied if the analyst had been called as a witness!). But the main grounds for the objection were that it must be stated what the analyst finds in fact. The statement as to an excess of 13 per cent. was quite insufficient for there was no statement about what amount in fact the excess was. Mr. Justice Lawrence also gave concurring judgment that the certificate should contain evidence and not only the conclusion at which the analyst arrived.

Less than two years later further support was given by *Fortune v. Hanson*, (1896 1, Q.B. 202), when it was decided that a certificate which stated:

"I am of opinion that the said sample contained the percentage of foreign ingredients as under:

"5 per cent. of added water to the prejudice of the purchaser."

was insufficient for the purpose for which it was given. In this judgment the following points were brought out:

- (1) The facts are to be given by the analyst, but the magistrates themselves must come to a conclusion as to whether or not there had been an adulteration.
- (2) A distinction is drawn between the presence of a foreign body and an adulterant which is also present in some amount as a normal constituent. In the case of a foreign ingredient, it is sufficient to give the percentage. But when the added substance, as water in this case, is common to both the natural article and the adulterant, the actual composition by analysis must be given.
- (3) That 5 per cent. of added water was only an opinion based on the analyst's standard for pure milk; the magistrates may see fit to adopt another standard. (This was before the time of an official presumptive standard, and the limits laid down by the Society of Public Analysts were generally accepted, being the same as those now obtaining. It will be recalled that the Inland Revenue Authorities, who then took the place of the Government Chemist to analyse disputed samples, adopted different processes and different limits. What confusion!)
- (4) That it is insufficient for the analyst to give his conclusions; the magistrates or justices must have information by which they themselves can arrive at a conclusion and full data should be given in a certificate so that the person charged should have such information as will enable him to refute such a charge if he has a good defence.

These cases seemed to provide the case law on which Public Analysts based their certificates right down to the present day. The somewhat autocratic attitude of our predecessors had to be partly abandoned with the result that the way was open for figures being bandied about the courts to the utter confusion of the magistrates and the detriment of the consumer. Subsequent decisions showed that it was insufficient, for example, to say that beer contained arsenic or that beer contained a serious quantity of arsenic, without stating the amount, that magistrates should not have to arrive at a conclusion by doing a calculation even although the figures on a certificate were sufficient for an offence to be disclosed and so on. You will be familiar with the results of these cases as applied to our day-to-day certificates with which I shall be dealing later.

Very little change occurred either in the form of certificate laid down by statute or in the case law for very many years. The Food and Drugs (Adulteration) Act, 1928, came into force just after I became interested in the work of a Public Analyst. I well remember studying the food law of that time (how meagre it seems now, but how fascinating the fundamental principles sound even to this day). This was the first Consolidating Act we had had since the Act of 1875 with its various amendments, and I recall with what relish I committed to memory those phrases which to the ears of a novice were so simple and noble and which, in my ignorance, I believed could provide every safeguard for the consumer. This was before the days of pre-packaging as we know it today, and when a grocer's shop was still a place where articles were made up and sold by a man who knew his job. But I digress. I am mainly concerned with the form of certificate and in the 1928 Act this did not differ by one jot or tittle from that laid down in the 1875 Act, including the provision that a certificate to the like effect was still valid. In view of the legal decisions quoted it is very doubtful whether any approximation to the form would have been acceptable, but the point has never been seriously challenged, presumably because all the authorities have subscribed to it.

It was not until 1938 that the certificate was changed and was included in a Schedule to the Public Analysts Regulations and not, as before, as a Schedule to the main Act. There were many fundamental alterations in this certificate.

Where, before, one declared "the result of analysis to be as follows," the new form stated that:

*"... as a result of my analysis I am of opinion that:—"*

This was a change of great importance, but it was not taken to its logical conclusion until the 1957 Regulations as we shall see later.

The certificate then went on to say:

*"It is a sample of. . ."*

(in place of "it is a sample of genuine. . .")

*"... and/or the constituents of the sample included the following substances in proportions as under:—"*

At this stage, therefore, it provided for the case of complete substitution such as margarine instead of butter or synthetic cream instead of real cream, or, shall we say, chocolate substitute instead of chocolate, without the necessity of giving any data. Also, there was no longer a distinction drawn between parts as under and percentages of foreign ingredients as under. In cases under the old certificate it was usually assumed that the "constituent parts" and their percentages were required to be set out when the complaint was one of adulteration but not when the case was one of abstraction. Much of the case law in this respect became irrelevant with this new 1938 certificate. Again, the word "included" helped to emphasise the fact that the analysis as set out need not be a full one, a difficulty which the analyst of pre-1938 often had to argue in Court, such was the demand of both lay magistrates and solicitors to have data nicely adding up to 100—often with two places of decimals demanded as well for make weight.

There was an absolute requirement to follow this form of certificate, no form "to like effect" being permitted, which was a pity although, as I have said, the permission was rarely made use of since the very early days.

The permitted observations were made more assertive in some respects and in particular there was an injunction that where a sample of milk was found to be deficient both in milk fat and in other milk solids the analyst should indicate how much, if any, of the milk fat deficiency he considers to be due to abstraction, allowance being made for the effect of added water. This, coupled with the express injunction of Section 69 (3) of the 1938 Act that regard shall be paid to the regulations presenting what deficiency, if any, of the normal constituents of milk and what proportion of water gives rise to a presumption that the milk is not genuine, served, as far as milk was concerned, to put the analyst in a strait-jacket although its intention was to avoid difficulties. As far as articles other than milk were concerned the learned author of the succeeding volume of Bell remarked:

"It is left to the analyst to use his discretion, bearing in mind that his duty is to provide the magistrates with evidence upon which they can decide whether or not the offence charged has been committed."

This presumably applied to the list of observations he was allowed to make, with the final observation "And add any other observation he may wish to make"—which wide discretion was hailed with delight.

I do not know who was responsible for this certificate. In parts it was good and in parts bad, and it was evidently an attempt to frame the certificate so as to conform with much of the case law which had built up around the old one. It laid undue emphasis on constituents and substances and proportions without defining just what was meant by the first two, but as far as I know, the actual meaning of these words in relation to the facts or data given was never seriously challenged and everybody seemed quite happy.

Incidentally, I have often wondered at the last official note to the

observations, that: "In the case of a certificate regarding milk, or any other article liable to decomposition, the analyst should specially report whether in his opinion any change had taken place in the constitution of the sample that would interfere with the analysis" and the subsequent advice in Bell's explanatory notes that it is a usual and useful plan to print at the foot of each certificate this special report. If this were done, strictly speaking, in the case of foods not liable to decomposition this should be struck out, but how many of us did so? Again the decomposition or liability to decomposition does not interfere with the analysis, but only alters the interpretation or deductions made from the results of analysis, but of that more later.

This 1938 certificate had to last from 1938 throughout the war years and till relatively recently. In spite of what I have said in disparagement I suppose I never got into any serious difficulties with it, but perhaps many of the snags which analysts had to meet in the early days had become recognised and a stereotyped form of certificate had been produced which was rarely open to question by the legal brains. Possibly they had learnt that there was little purpose in doing so.

Perhaps the chief criticism some of us had to face in those days was the accusation that we were attempting to pre-judge the case by giving an opinion in the "observations" that the article was sold to the prejudice of the purchaser or was unfit for consumption or that the label was misleading, the contention being that this was for the magistrates to decide on the evidence before them. Yet there was a specific permission to say whether it was unfit for consumption. All the cases as to the content of the analyst's certificate were decided under the old Acts and the old form, but it is probable, although not definite, that in so far as they affect the principle, they are still valid as case law.

One of the most important decisions supporting the general principle during the period 1938-44 was that the undisputed evidence of the Public Analyst should be accepted and acted upon and, therefore, in the absence of other evidence, the justices *must* accept the certificate of the Public Analyst.

I have tried to cover the fundamental decisions bearing on the analyst's certificate up to 1955. Only by considering these is it possible to understand the various complexities and inhibitions which the younger analyst must think govern the writing of a certificate. Also, only by so doing is it possible to see the great advance in the form of certificate which it was possible to achieve with the passing of the Public Analysts Regulations, 1957. Although, as I have said, the make-up of a certificate was not often challenged, it became more and more difficult to fit what we wanted to say strictly into the form provided. During the war years and after, the analyst had to raise his sights to embrace not only straightforward deficiencies and foreign ingredients, but also offences against labelling requirements and misleading advertisements, a feature which for the first time was introduced into our Food and Drugs Law in the 1938 Act.

These problems were very much in my mind when the revised Regulations came to be made after the 1955 Food and Drugs Act, Regulations which the

Ministry nearly forgot to make at all, and did not at first realise to be necessary. It was put to us as an Association what alterations we thought were necessary, and as Honorary Secretary at the time I remember some useful conversations with the official at the Ministry who was responsible for the revision. I explained why we wanted more freedom, but quite frankly I did not expect to get as much as we were ultimately given. The Statutory provisions of Section 92 (4) (the passing-on clause), and Section 92 (6) (the provision that the analysis could be made by another person under the direction of the Public Analyst), had to be incorporated. After these things were done the rest was left wide open.

The present Form of Certificate says:

*"... as a result of the analysis I am of opinion that ..."*

and nothing more, except for the note of guidance relating to this phrase which directs (Note 6),

*"Here the analyst should specify the result of the analysis in the light of the provisions of the Food and Drugs Act, 1955."*

There is no requirement to state that it was a sample of so and so, no constituents, substances or proportions necessarily to be given, and the analyst was left with complete freedom, but with a big responsibility. It became his responsibility now to devise a certificate for every "adulterated" sample which, having regard to the probable nature of the summons, would disclose to the defendant and to the justices the exact grounds on which the offence was based, the only limit being that what the analyst says must be "as the result of the analysis." He may continue in the Observations to amplify his conclusions since it has been very definitely shown by case law, which is still valid, that the analyst's observations are likewise his opinion, and that the whole certificate must be accepted as evidence in the absence of other opposing evidence and acted upon. Incidentally one must always beware of the case where the defendant himself, where it is a case of opinion rather than of fact, may so influence the magistrates by arguing from his own knowledge and experience as to secure the dismissal of the case and that, where the analyst is not called to justify his opinion, there is no redress. It has become common practice therefore with my authorities, and I imagine over most of the United Kingdom, to call the Public Analyst to give personal evidence except in those cases where it is known beforehand that the defendant is going to plead guilty.

The "Observations" allowed in the 1957 certificate are as wide and somewhat less detailed than in the 1939 and the analyst still has wide discretion to state what he considers pertinent. Luckily, perhaps, it was decided in the very early days that if the analyst should state what might be regarded as surplusage, the redundant matter does not invalidate the certificate. The particular instructions relating to milk which appeared in the 1939 certificate have been dropped.

Finally, the observation about decomposition has been reworded so as to

certify that the sample had undergone no change which would affect the opinion expressed above: this makes sense and is now an official part of the prescribed form—as it should be.

My main purpose in discussing the Public Analyst's certificate is this. Certification by way of a document which may be produced in Court is a rare permission in British Law and very few people are allowed to give evidence in this way. It is, so to speak, an admission of the status of the Public Analyst and now that we have gained practically complete freedom of expression, it is more than ever important that each certificate we write should be absolutely fair to the person who might be charged as a result of it (remember we are working under criminal law); that it should contain all the particulars necessary for the magistrates to decide whether the offence has been committed, should be precise and to the point without unnecessary figures, and should not, I submit, attempt to prejudge the issue. At the same time we must bear in mind the case law which might still be held to be valid and to influence the content of the certificate. As I have said before, we are judged to a great extent by the world at large on this very certificate and if it always has the attributes which I have suggested it should have, our prestige will not suffer.

May I enumerate the main points to be considered in drawing up any certificate for the purpose of the Food and Drugs Act?

- (1) One need not habitually fill in the space against weighed or measured. The note to the certificate says that this may be left unanswered if the weight or measurement is not material to the result of the analysis. By including the weight every time the analyst might lay himself open to unnecessary cross-examination as, for example, when I was accused by defending counsel of being such a poor analyst that I couldn't even measure accurately, when I had put in a milk certificate that the sample measured "about 7 fluid ounces." It is very rarely that the weight is material to the analysis but it is a figure which it is as well to have in case the matter is raised by the defence, so that it can be dealt with by verbal evidence if required. In my laboratory it is not the practice as a general rule to weigh informal samples, but to take the gross weight of all formal samples, leaving the net weight to be determined if required. In the case of meat pies, sausage rolls and non-homogeneous articles like these it is always as well to enter the weight on the certificate.
- (2) I have had various samples passed on to me by other Public Analysts and this clause in the Act, well provided for in the 1957 certificate, appears to operate quite satisfactorily. Occasionally these certificates have gone into Court and have never been queried but I have never been called upon to give verbal evidence in support of such a certificate. This passing-on facility is one which I wish Public Analysts would use much more as occasion demands. Where the analysis is one which it is thought desirable to make and requires a special instrument or

special technique which the analyst does not have or use there is no disgrace in passing it on and I would like to see this recognised by Food and Drugs Authorities throughout the country. This is the age of specialisation and it should be taken for granted that where specialisation is required it is at the command of the Public Analyst to provide it, with the added assurance that the work is carried out by or under the direction of another Public Analyst who is prepared to back his certificate.

- (3) "... *I am of opinion that* ..." with only a note to guide one. If I remember rightly the Ministry were prepared to leave this unnoted but it was urged that some guidance should be given and thus Note 6 was devised. It is in no way restrictive.
- (4) All our cases start with a certificate and although we expect that in all important cases we would be called as a witness and that the certificate then ceases to be evidence (*Stone & Sons (Hounslow) Ltd. v. Pugh*), it is obviously necessary to draw up the certificate in the first place in such a way that the magistrates are given sufficient evidence on which to convict assuming that no other evidence is before them. This is particularly important in a Section 2 offence and, to a lesser extent in a Section 6 offence. In the former the magistrate has to decide whether the article was sold to the prejudice of the purchaser and in the latter to decide whether the label was misleading to an ordinary man (*Concentrated Foods Ltd. v. Champ*). These are matters for their judgment and are best left to them to decide, but they must have the evidence with which to do so, and it is up to the analyst to provide it on the certificate. It is inadvisable to say in so many words on the certificate what the magistrates have to decide. However, when it comes to certifying that an article or additive is injurious to health or that a food is unfit for human consumption it is something which can rightly go on a certificate because the Public Analyst is then giving expert evidence and not trying to put himself in the position of the ordinary purchaser or the common man.
- (5) For this reason it is essential that the analyst has a very good idea under which section of the Act he anticipates the offence will be charged when he writes his certificate and he should make every effort to ensure that the legal adviser to the Food and Drugs Authority has the same opinion. This is particularly true of cases where it is self evident that the charge should be under Section 8—unfit for human consumption. Junior solicitors usually fight shy of this section and prefer to take a case under Section 2 (not of the quality and not of the substance demanded). This should be resisted, but if the authority persists it might be necessary to issue another certificate. In "Section 2" cases it is often unnecessary to use the specific words Nature, Substance or Quality on the certificate,

as this tends to prejudice the wording of the summons. I find that lawyers and magistrates, and Public Analysts for that matter, often find it difficult to make up their minds between quality and substance and in framing the certificate it is as well to write one which will apply to either. It is common practice to take a summons out for both offences—substance and quality—and then back your favourite on the day—often after conferring with the defendants' legal adviser. Some benches particularly dislike dual summonses and in that case it is best to choose before information is laid.

- (6) Similarly it is important to come to a clear understanding of the offence to be charged under Section 6 before writing a certificate. It is often attempted not to bring a charge of giving a false label, but preferably to substitute what is believed to be the lesser charge of giving a label calculated to mislead as to the nature, substance or quality. Opinions given on a certificate suitable for one are not necessarily suitable for the other.
- (7) The analyst must always assume in writing his certificates that this is the only evidence before the magistrates and, in the absence of other evidence the magistrates *must* convict. But one must also bear in mind that the defendant can also give evidence and if this is sufficiently convincing the magistrates need not convict.
- (8) There is often difficulty when the analyst is putting up a standard for adoption where there is no statutory standard and this may be a precise figure or a maximum or minimum. It is usually necessary to show that the commercial quality of similar articles on sale is higher than the article under question, supported by analyses, but the production of a few inferior samples in a large number does not invalidate this argument. To be legally correct and of evidential worth the analyst must express his opinion as to a standard in the imperative by using the word "must" and not "should." This seems a bit bombastic on occasion, especially when the analyst is no doubt prepared to give way to a certain extent, but to do otherwise might be responsible for losing the case. The magistrates do not have to adopt the analyst's standard but have to fix one for themselves. It is advisable for the analyst's figure not to be set too low for the very reason that the magistrates might choose to compromise. The efforts made by Public Analysts to set up standards, although not always successful, have been one of the major undertakings of our profession during the last 10 years or so and consumer protection has greatly benefited.
- (9) Although the certificate is intended for use for a private purchaser's sample as well as that of a sampling officer it is questionable whether it is intended for use when the Public Analyst is called upon to examine a specimen of food or drug purchased by a private purchaser, taken back

to his home, perhaps partly consumed and then found to contain a foreign object or to possess an objectionable smell or taste, a complaint which is then passed on to the Public Health Department or Food and Drugs Sampling Department of the Local Authority. All of us have these specimens, some more than others, and Public Analysts have risen nobly to the importance of this detective work in the eyes of the public. However, I suggest that to obtain a sample from a private person who has purchased a food of which he complains, is not to "procure" the sample (*Leach v. United Dairies Ltd.*, 1949). On numerous occasions I have been pressed by the Legal Department of a Food and Drugs Authority to give an official certificate but have had to decline. Such results of examination should be given as a report on a specimen and not a sample. It is possible, however, that these examinations should be included in the analyst's quarterly report since by Section 99 of the Food and Drugs Act this report must contain the number of articles which have been analysed by him under the Act in his capacity of Public Analyst for their area during the preceding quarter of a year and the result of each analysis. The report is therefore not confined to *samples* taken under the Act. All that I find doubtful is, whether one is acting in one's capacity as Public Analyst when making such an examination. It could equally well be done by any other analyst or consultant. My present practice is not to include such articles in the quarterly report.

- (10) Finally, I cannot leave the certificate without some comment on the phrase "*I certify that the sample had undergone no change which would affect the opinion expressed above.*" I have already referred to the absurdity of the corresponding phrase in the 1939 Regulations, but this one poses the problem of what to do if the sample has undergone such a change. Would it not be altering the form of certificate if the "no" was altered to "a," or if this clause were struck out altogether? Does the certificate become completely invalid? Anyhow, it is rather an academic question since no attempt is likely to be made to proceed with a case when this statement cannot be made as it stands.

It is, of course, very usual to take informal samples of foods and drugs and I for one would not wish it to be otherwise. There is no provision under the Act for the taking of such samples and this has led, as we well know, to much confusion and argument not always to the advantage of the profession. It is the strongly held opinion of many Food and Drugs Authorities that informal samples, not being taken under the Act, can be treated just as they like. They can be "analysed" by sampling officers or by "Public Health Laboratories." In fact, we have had two recent examples of this in the case of milks for antibiotics and of liquid egg samples for the amylase test. No legal action can be taken in either case unless a formal sample is taken which must go to the Public

Analyst and yet all previous samples may have been dealt with informally by other persons. This is an old sore which affects both part-time and whole-time Public Analysts. There is nothing to stop individual analysts from pointing out to their authorities that pursuance of such a procedure may well result in their analyst not having sufficient personal knowledge to give evidence in Court. I have no wish to raise this matter again and only do so to suggest that in giving a certificate in respect of an informal sample proving to be irregular every effort should be made to draw it up in a form suitable for production in Court as if it were a formal sample, even if it means writing a letter at the same time to explain why Court action is inadvisable. It is the usual practice of many authorities when an objection is raised by their Public Analyst in respect of either a formal or informal sample, to write to the firm involved enclosing a copy of the certificate and asking for comments. I think it is highly important, therefore, that the certificate should be in a similar form in the case of an informal sample to that which would be given in the case of a formal sample, and it should clearly show in a legal sense the offence which the Public Analyst has in mind. Nothing but advantage can be gained from such a procedure. It helps to put the analyst in the right image in the public mind as well as in that of his authority: it enables him to appear as an unbiased person acting on behalf of the consumer and not directly dependant on the Food and Drugs Authority: and it prevents any point of view being put to the manufacturer, labeller, or seller which, through a misunderstanding, might not reflect accurately the point of view of the Public Analyst. It often leads to considerable correspondence, but it is correspondence which should be put to the Public Analyst each time by his Authority and cannot be pursued by a sampling officer acting without proper advice.

I ought to say a few words about the Public Analyst's certificate in other parts of the world, but I have failed to find anything of significance. There is no prescribed form in Canada although the analyst's certificate is evidence and the wording used in the Food and Drugs Act is very similar to ours. Likewise the U.S.A. does not have a prescribed form, but neither do they have Public Analysts. Australia, as you know, have State Food Law. In New South Wales the production of a certificate

*"Purporting to be signed by an analyst, shall be prima facie evidence of the identity of the food, drug or article analysed, and of the result of the analysis, without proof of the signature of the person appearing to have signed the same,"*

which is a curious way of saying that the analyst need not be called. The form of certificate is laid down and I quote it because of its intrinsic interest:

"I....., an analyst duly appointed under the provisions of the Pure Food Act, 1908, hereby certify that the seal on a sample of ....., received by me on the ..... day of ..... and marked ....., was unbroken.

I further certify that I have analysed the said sample, and that the result of such analysis is as follows:—

*(Here insert the result of analysis, and remarks)*

Signed the ..... day ....., 19....

*When a method of analysis is prescribed, the Analyst shall state that that method has been followed.*

*The analysis is not valid if the approved method has not been used, but it is open to the defence to use another method and bring evidence to show that the approved method would give an incorrect result."*

I cannot go into details of analysts' certificates for other Acts and purposes which we are from time to time required to give. Generally there is no form laid down as, for example, under the Merchandise Marks Act, the Pharmacy and Poisons Act, and the Rag Flock Act, but it is advisable to follow the same general principles. In other cases such as the Road Traffic Act, 1962, the certificate is partly prescribed and is sufficient evidence. Public Analysts are often required to give an Export Certificate in relation to a particular food or a particular consignment of food, this certificate being required by the importing country. Such certificates must often take a very different form from that of a Food and Drugs Certificate and both the exporter and importer and the Board of Trade must be consulted as to the requirements. Care must be taken not to imply that the analysis has been taken any further than that specified nor that it applies to any other goods than those referred to on the Certificate. In International Trade it is becoming increasingly common for the country exporting to sponsor the goods, but England has so far withstood pressure to do so and has passed the responsibility to the exporting firm and specified analysts. It is up to us to fill this need if and when required.