

A DISSERTATION UPON DRINK

By

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The part played by tea in English life and customs is worthy of the interest of those concerned in the production of this beverage, and so a dissertation on the subject is not out of place in the *Tea Quarterly*.

For over three hundred years the consumption of tea in England has been increasing and indeed one of the characteristic meals of the Englishman has become known as "Tea", or among the best people as "Afternoon tea".

It is supposed that tea was introduced into Europe about 1610 and into England (from Holland) about 1650. Pepys in his diary entry for 25th October 1660 records, "and afterwards I did send for a cup of tea (a China drink) of which I had never drunk before."

Lemmy Caution (the American detective character of the late Peter Cheyney) who, incidentally, has several interests in common with Mr. Pepys, aptly summarises in his usual racy style the American impression of the part which tea plays in present day British life.

"Here is another thing that makes the English a great race. Every time some British guy gets himself run over, or shoots somebody or goes into war, or blows somebody up or does some other goddam thing, he always has a cup of tea—before an' afterwards. I know it aint in the history books but I am prepared to bet a blue silk garter that some dame once give me for showing her the way home in the earthquake, to a couple million dollars, that when Juilus Caesar landed in Britain he found the local mob sitting round the sea-shore fillin' the football coupons and rinking tea outa sea-shells". ("You'd be surprised," by Peter Cheyney.)

In this age of tension a cup of tea has become the standard antidote to mental strain. In 1945 the *Tea & Coffee Trade Journal*, under the caption "Tea: A War Potential" printed the following remarks¹ :—

"Beverage tea has been a war potential. It has sustained and comforted the armed forces ashore and afloat, the defence workers during the blitz, the bombed-outs, the doodle-bugged and the evacuees. And it has been in evidence right round the clock in the homes of the people, especially during the night watches when sleep is out of the question and it is mostly a matter of being on the alert. In all moments of mental strain and physical anguish it has been the teapot that has brought comfort and a link with sanity and tradition. When the history of this war comes to be written it can be said of tea that it played a far more important part in the lives of the people than it did even in peacetime, which is saying a lot.

Americans in their hundred thousands have, while in Britain, become acquainted with the war-time panacea of hot tea. Americans have become tea-minded. It is said that at a large office in the metropolis where British and Americans work together in pursuit of the common goal—victory—when a list was recently sent round for those wanting hot tea each day 60 names were supplied, 40 of them being American".

What property affords tea the power of stimulation, and has it earned the name, the "cup that cheers"? Undoubtedly, it is the caffeine content which produces the feeling of well being, which stimulates mental activity, and which reduces fatigue.

Clark in his Text book of Applied Pharmacology remarks² "Man has displayed remarkable ingenuity in finding drugs which produce actions on the central nervous system. Savage tribes have discovered independently the most varied methods for producing alcohol, and most races have discovered some source from which they can produce drinks containing caffeine or its allies".

Tea, Coffee, Cocoa, Yerba maté, Kola nut and the various aerated drinks made from Kola—some with added caffeine, are all examples of stimulants containing caffeine and its allies. The natives of West Africa chew Kola nut for precisely the same reason as people in London, Paris and New York drink their tea, coffee or "coke".

There are, of course, critics of this addiction to caffeine. There were critics two hundred years ago. One of the most vehement attacks on tea came from Jonas Hanway in 1757³. He pointed out that four million pounds of tea had been imported into England. "When will the evil stop?" he asked. In his, not so humble, opinion "your very chambermaids have lost their bloom, I suppose, by sipping tea". After an equally violent attack on gin, he added, "What an army has gin and tea destroyed".

In the library of the Tea Research Institute we have a copy of a book printed in 1772 entitled "The Natural History of the Tea Tree with Observations on the Medical Qualities of Tea and Effects of Tea-drinking" by John Coakley Lettson, M.D., F.S.A. Dr. Lettson was of the same school of thought as Jonas Hanway and predicted dire consequences from the increasing consumption of tea.

¹ Planters' Chronicle, Vol. XI, No. 3, 1945, page 41.

² Applied Pharmacology, A. J. Clark (J. & A. Churchill Ltd., 1942).

³ Essay on Tea, by Mr. Hanway, 1757

Tea brokers seem to be particularly liable to what he describes as "Universal spasms". His treatment of one case may interest any present day brokers subject to "universal spasms".

"An affittant to a Tea broker, had frequently for some weeks complained of pain and giddiness of his head, after examining and mixing different kinds of tea, the giddiness was sometimes so confederable, as to render it necessary for a person to attend him, in order to prevent any injury he might suffer from falling or other accident. He was bled in the arm freely, but without permanent relief, his complaint returned as soon as he was exposed to his usual employment. At length he was advised to be electrified and the shocks were directed to his head. The next day his pain was diminished, but the day after closed the tragical scene. I saw him a few hours before he died, he was insensible, the use of his limbs almost lost, and he sunk very suddenly in to a fatal apoplexy. Whether the effluvia of the tea, or electricity was the cause of this event is doubtful. In either view the case was worthy of attention".

The cheerful admission that it is doubtful "Whether the effluvia of the tea or electricity was the cause of this event" is an interesting sidelight on the standards of medical treatment of the day.

Dr. Lettsom was prepared to admit that tea could be useful on certain occasions. "It is an observation I have often had occasion to make, that people after violent exercise, or coming off a journey much fatigued, and affected with a sense of general uneasiness, attended with thirst and great heat, by drinking a few cups of warm tea, have generally experienced immediately refreshment. It also proves a grateful diluent, and agreeable sedative, after a full meal, when the stomach is oppressed, the head pained, and the pulse beats high."

The meals consumed in Dr. Lettsom's day were fantastic by modern standards and are in themselves a fascinating subject. Professor Drummond's "The Englishman's Food" and Parson Woodforde's Diary (which has recently been published in an abridged form) are most illuminating sources of information to anyone interested in the subject. Local customs do indeed change for it is now almost incredible that a physician should accept gorging to the point of headaches and high pulse as a normal "full meal" and recommend tea as a "grateful diluent".

Even in Dr. Lettsom's and John Hanway's time there were medical men who believed in the virtues of tea. Dr. Lettsom says, "We seldom perceive the rudiments of scrofulous diseases so often as in the weak feeble offspring of the inhabitants of towns, and whose breakfast and supper often consist of weak runnings of ordinary tea". Another authority¹ of the same age, however, observes "and with drinking of tea only and regular living, the distemper of England occasioned by our too much feeding upon flesh may be cured."

The distemper referred to was probably scurvy which would only be affected by green tea, because Vitamin C, the lack of which causes scurvy, is destroyed during fermentation in the manufacture of black tea.

It is difficult to discover whether black tea as we know it today was imported into England in the early days of the tea trade. From Lettsom's description of dry leaf and liquor, the teas he examined were all either green teas or lightly fermented Oolongs. He remarks of green tea:—

"As green tea is by some suspected to have been cured on copper, they have attributed the verdure to the efflorescence from that metal, but if there were any foundations for this supposition, the volatile alkali (Ammonia) mixed

¹A Treatise on the Inherent Qualities of the Tea Leaf, J. N. Pechlinas from the Latin, by a gentlemen of Cambridge, 2 Edition, 1750.

with an infusion of some tea would detect the least fraction by turning the infusion blue. Others have with less propriety, attributed the verdure to green copperas, but this ingredient which is only salt of iron, would immediately turn the leaves black and the infusion made from the tea would be of a deep purple colour. Is it not more probable, that some green dye, prepared from vegetable substances is used for the colouring ? ”

These remarks reflect the common and quite indiscriminate use of the salts of heavy metals in those days before the introduction of Food and Drugs Laws.

Green vitriol or copperas was commonly added to beer to give it a head. Even lead salts were used to correct acidity in wines, beer and cider, whilst the storage of cider in lead vessels was a common practice.

Afflictions such as “ universal spasms,” scrofula and even scurvy may well, in many cases, have been due to poisoning with lead or other heavy metals.

In any case, however, the consumption of large quantities of green tea, especially with a very ill-balanced diet, may have given the detractors of tea some grounds for their assertions.

In spite of three hundred years of tea drinking there are still people who just “ do not hold with tea ”. It is not uncommon to hear a soap box orator in Hyde Park denouncing tea, coffee, strong drink and the Government. The Londoner having given him or her a hearing, will usually end the feast of rhetoric by wandering off for a cup of tea or a drink.

Tea is now accepted as a harmless beverage and Professor Clark in his text book which I have already quoted merely comments :—

“ *Tea and Coffee* : The enjoyment of these substances is not attended by any ill effects on the vast majority of the population ”. He goes on to add, “ The drinking of very strong green tea has become a habit in North Africa (Tunis and Egypt) which is stated to be producing deleterious effects. In this case the volatile oils are suspected of producing toxic action on the central nervous system ”.

All foods and drinks in excess are, of course, harmful and even now-a-days, especially where highly concentrated foods such as sugar and starchy confections form a large part of the diet, many people still ‘ dig their grave with their teeth ’.

Dr. Roche Lynch a former Home Office Pathologist is doubtful, however, of the allegation that even excessive tea drinking could produce harmful effects. In a paper on ‘ The Pharmacology of Caffeine and of Tea and Coffee ’, he reached the conclusion that “ From post mortem examinations I do not believe that any changes occur in those who have drunk largely of the beverages of tea and coffee, which can be associated with such drinking ”.

During the course of three hundred years black tea has, therefore, risen to the position of a staple of the Englishman’s diet. The cup of tea is no longer regarded as a rival to beer, spirits or wine, and each has a separate place in our social customs. Few people indulge in a cup of beer at four o’clock or a tankard of tea with a game of darts. This has not always been the case, and there is no doubt that tea has brought about many social changes almost wholly to the improvement of health and social standards.

We are now so accustomed to having supplies of clean water that we take drinking water for granted. Sanitation is a comparatively very, very modern science and most of the water available for drinking, at least in the larger towns,

must have been unattractive, even to the less squeamish stomachs of Pepys' day. I recall, though I cannot at the moment find the entry, that Pepys actually records that he took a glass of water and expressed himself in such a way as to leave the impression that he normally drank wine or ale. Apart from festive occasions, Pepys, consumption of fluid was probably much lower than would be normal today and may have contributed to his trouble with "the stone".

Pepys was not wholly insensible to sanitary conditions. Underneath his house were cellars where coal and wine were stored and which also housed the sanitary conveniences, such as they were. He records one night that he stepped "into a great heap of . . . by which I find that Mrs. Turner's house of office is full and comes into my cellar which do trouble me". A month later a great deal of 'foul water' came into his parlour under the partition on the other side of the house adjoining Mr. Davies'.

Plain water from a town well could not under such conditions of life have been palatable to anyone of any sensitivity.

Even in the nineteenth century a sewer ran through the court yard of Buckingham Palace and the paint in a freshly painted basement room was turned black overnight by the action of gases from the sewer. Parliament was at times greatly inconvenienced by sewage in the river.

Victorian England was subject to terrible outbreaks of cholera which arose from contaminated drinking water. In 1851 "Punch" writing of the Great Exhibition said "The contractor is bound to supply gratis, pure water in glasses to all visitors demanding it, but the committee must have forgotten what whoever can produce in London a glass of water fit to drink, will contribute the rarest and most universally useful article in the whole Exhibition".

Although the actual connection between impure water and disease was not understood until comparatively modern times, it was long realised that contaminated water was harmful, and the degree of contamination common in large towns would have rendered it extremely distasteful. A beverage such as tea which could be taken with boiled water would, therefore, serve an extremely useful purpose, supplementing or providing an alternative to wine and ale which poorer people could not, even in those days, afford in any quantity, thus making available a safe drink, and probably generally increasing the total intake of fluid. I should imagine that plain water would only be drunk to satisfy extreme thirst and that poorer people did not drink sufficient water to keep them healthy.

Drummond and Wilbraham¹ quote evidence that even in the sixteenth century water was suspect as a drink.

The amusing lines on drinking show firstly, the popularity of wine and secondly, a deep distrust of water, a distrust shared by many contemporary writers. This is not surprising, for the character of the water supplies was, with few exceptions, appalling. Water-borne infection must have been so common that it had been established empirically that it was safer to drink wine or beer. Water was, however, thought to be fairly innocuous when drunk with wine, as of course it might be.

.....wyne and other drynkes be the most profitable medycynes and pleasant repasts, nothyng hurtful moderately taken, sometyme it is better drynke clere wyne than to delay it with water, if water be so myngled but drunke alone it causeth other drynkes to be more dangerous. It is therefore conuenient that euery day we use to put one or two glasses of water in to our

¹The Englishman's Food, J. C. Drummond & A. Wilbrahm (Jonathan Cape), 1940.

wyne, both to delay the fume of the wyne and make our bodies lyghter, and also in case nede shuld constrayne us, by this use without daunger we may learne to drynke water.¹

Wyne was held to be better than ale or cider, for these lacked 'heate and moysture', that is, they were less nourishing, for good digestion proceeded by the operation of these qualities.

The introduction into England of an economical beverage, warming and stimulating which, being made with boiling water was a safeguard against all too common water-borne diseases was destined to have an increasingly marked effect upon social customs from the seventeenth century onwards.

Drummond and Wilbraham in their treatise upon "The Englishman's Food" from which I have already freely quoted have much to say on this subject. I strongly recommend this book for general reading and much of the information I quote in the rest of this article is gathered from this source.

Thus between pages 234 and 244, Drummond and Wilbraham state:—

"No change in the habits of the English is more striking than the adoption of tea-drinking by all classes. Tea had been steadily becoming cheaper towards the end of the seventeenth century as imports from the East increased, and the trade expanded enormously after 1700. In that year about 20,000 lbs. was imported, within ten years this figure was trebled. In 1715, the market was flooded with Chinese green tea and in 1760 duty was paid on over five million pounds. By the end of the century the amount imported was over twenty million pounds, that is, about 2 lbs. per head of the population.

In addition to these official figures we have to allow for the amount which was brought into the country as a result of brisk smuggling trade with France. It was estimated that in 1766 as much reached England illegally as came through the proper channels.

This change in habit surprised everybody and disturbed not a few. Some people feared that tea would supplant ale and beer. In 1744 Duncan Forbes wrote:—

'But when the opening of trade with the East Indies brought the price of Tea so low, that the meanest labouring men could compass the purchase of it, when the connection which the dealers in this country had with many Scotsmen in the Service of the Swedish Company at Gottenburg, introduced the common use of that drug amongst the lowest of the people,—when sugar, the inseparable companion of tea, came to be in the possession of the very poorest housewife, where formerly, it had been a great rarity—and thereby was at hand, to mix with water and Brandy, or Rum—and when tea and Punch became thus the Diet and Debauch of all the beer and ale drinkers, the effects were very suddenly and severely felt.'²

'Any person who will give himself the trouble of stepping into the cottages of Middlesex and Surrey at meal-time, will find, that, in poor families, tea is not only the usual beverage in the morning and evening, but is generally drunk in large quantities at dinner. Whether this exotic is more palatable or more nutritious than home-raised barley converted into broth, I leave to Medical gentlemen to determine.'³

¹The guernance of good helthe, by the most excellent phylosopher Plutarche, the most eloquent Erasmus beyng interpretoure, 1530.

²Some Considerations on the Present State of Scotland, Duncan Forbes, 1744.

³The State of the Poor, Sir Frederic Eden, 1797.

The amount spent on tea by working class families was considerable. The family budgets given by Eden show that it was not uncommon for two pounds a year to be so spent when the total income was only a matter of forty pounds a year, and Arthur Young expresses surprise that the inmates of the Nacion House of Industry, who were allowed to spend 2d. out of every shilling they earned on food, almost invariably bought tea and sugar with this money¹.

Enterprising individuals seized the opportunity of making money out of a gullible public by selling them the essential medicinal essence of tea and Mr. Lawrence at his Toy Shop, at the Sign of the Griffin in Poultry, offered a 'Chemical Quintessence of Bohee-tea, and Cocoa nuts, wherein the Volatile salt, oil and spirit of them both, are chemically extracted and united.'² The consumption of sugar rose as the habit of tea-drinking spread. It had ceased to be a luxury as the trade with the West Indies developed and ordinary white sugar candy cost about 6½d. a pound in the first half of the century, refined varieties being about 2d. a pound dearer. The price rose a little after 1750. Later in the century attention was drawn to the possibility of preparing sugar from roots such as carrots and beets. The first reports came from the Continent, where successful extractions had been made by Marggraf and by Achard. These were only small-scale experiments, but in 1798 it was announced that Professor Klapproth had succeeded with a large-scale extraction. The discovery aroused little interest in England outside the pages of the scientific journals.³

The popularity of tea brought about a sharp decline in the sale of coffee, cocoa, and chocolate, all of which were a great deal more expensive than tea, and towards the end of the century many of the once famous coffee houses had disappeared.

On pages 246-247 and also on page 249 of "The Englishman's Food", Drummond and Wilbraham quote much information from Sir Frederic Eden's "The State of the Poor", published in 1797 which is not available in Ceylon, and I have only once had the opportunity for browsing through the work in a library in England.

The family budgets shew the place which tea was taking in the diet of families in the eighteenth century.

"The contrast between the north and the south of England late in the century can best be illustrated by taking two of the typical family budgets which Eden compiled. The first represents the amount spent on food during one year by a labourer, with a wife and four children, living at Streatley in Berkshire. The total family income—the wife and two of the children also worked on the farm—was £ 46 a year. The second budget is that of a labourer, his wife, and three children, living at Kendal in Westmorland and having a yearly income of under £ 30.

The Streatley family estimated their weekly consumption of food as follows :—

8 half peck loaves
2 lb. cheese
2 lb. butter
2 lb. sugar
2 oz. tea
½ oz. oatmeal
½ lb. bacon (usually boiled)
2d. worth milk (probably about 2 pints)

¹The Farmer's Tour through the East of England by Arthur Young, 1771.

²Advertisement in the Tatler, No. 97, 1709.

³Journal of Natural Philosophy and the Arts, edited by William Nicholson, 1797-1802

It is stated that they rarely ate meat and could seldom afford potatoes. The cost of their food amounted to over £ 52 a year, a sum already greater than their income and revealing the effect of the high prices in the south towards the end of the century.

The family in Westmorland spent the following sum in one year.

| | |
|--|-----------------------|
| 75 stone of oatmeal, @ 2/4d. the stone | £. 8 15 0 |
| Butcher's meat (probably 5d. a lb.) | 5 0 |
| Milk (probably 1½d. a quart) | 5 0 0 |
| Tea and Sugar | 1 12 0 |
| Potatoes (probably 3d. for 4 quarters) | 2 12 0 |
| Butter, 50 lb. @ 9d. a lb. | 1 10 0 |
| Treacle | 8 0 |
| | £ 20 2 0 ¹ |

From the wealth of information in Eden's great survey we can take another interesting budget. This represents the expenditure of a labourer living at Epsom, with his wife and eight children, on a yearly income of £. 45-50, which was by no means bad for the times. He was fortunate in having a small garden and being able to fatten a pig every year. His weekly purchases were estimated as follows :—

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|--|
| 13 quartern loaves |
| 1 joint of meat (<i>i.e.</i> , about 12 lbs. (4/-) for Sunday). |
| 1½ lb. butter |
| 1½ lb. cheese |
| Tea and 2 lb. Sugar |
| Small beer, 1½d. a day ² |

The mention of beer is worthy of note as it is seldom met with in the estimates quoted by Eden. Tea and sugar, on the other hand, are almost universal. We shall refer to this again later, but in the meantime, we may note what Eden says :—

“ They (farm labourers) seldom, however, can afford to purchase beer, and in its place, have very generally in this part of the country substituted tea at every meal.”

Parson Woodforde³ makes many references to tea in his diary between 1758 and 1802. On May 27th, 1763, he states the price of tea both green and ‘Bohea’. What he describes as ‘Bohea’ would, I believe, be called ‘China tea’ today.

‘ May 27th, 1763. For an ounce of green tea paid 0.0.8. For an ounce of Bohea tea paid 0.0.4d.’

Whilst waiting for the Coach to Norwich, Parson Woodforde, in the company of his niece leaves his hotel, “ The Angel ”, behind St. Clements in the Strand on the 10th October, 1786.

“ In the evening about 6 o'clock we took a coach and our baggage with us to the Bull in Bishopsgate Street—a very good INN—and there we drank TEA. For the coach to the Bull, paid 1.6. For tea, etc., at the Bull paid 0.1.9.”

A cup of tea was evidently as much a part of waiting for a coach in 1786 as it is part of waiting for a train in 1952. The taxi fare from the Strand to Bishopsgate would now be about 3/6d.

¹—²The State of the Poor, Sir Frederick Eden, 1797.

³The Diary of a Country Parson, 1758-1802, James Woodforde.

I have previously referred to the enormous meals consumed in the eighteenth century. Parson Woodforde was not a rich man but he kept a very good table. The entry for 29th February, 1788, is by no means exceptional and indeed he himself says the meal he described was prepared at three hours, notice—what we would call 'Pot luck'.

"Feb. 29. Mr. Taswell sent early to me this morning that he would take a Family Dinner with us to-day and desired us to send to Mr. Custance that they might not wait dinner for him. He went from Weston House early this morning to go to Aylsham to read Prayers there today being Friday. At 11 o'clock this morning I sent Briton to Weston House to let them know that Mr. Taswell was to take a Family Dinner with us today, Briton returned pretty soon and informed us that Mr. and Mrs. Custance, Lady Bacon and Son and Master Taswell would also come and partake of the Family Dinner, and they sent us some Fish, a wild Duck and a Sallad. It occasioned rather a Bustle in our House but we did as well as we could—We had not a bit of White bread in house, no Tarts whatever, and this Week gave no Order whatever to my Butcher for Meat, as I killed a Pigg this Week. We soon baked some white bread and some Tartlets and made the best shift we could on the whole. About 3 o'clock Mr. and Mrs. Custance, Lady Bacon and Son, Mr. Taswell and Nephew arrived and they dined, drank Coffee, and Tea and returned home about 7 o'clock this Evening to Weston House. Mr. Taswell with his servant came here a little time before the other Company on horseback from Aylsham, he dressed himself at my House. We gave the Company for dinner some Fish and Oyster Sauce, a nice Piece of Boiled Beef, a fine Neck of Pork roasted and Apple Sauce, some hashed Turkey, Mutton Stakes, Sallad &c., a wild Duck roasted, fried Rabbits, a plum pudding and some Tartlets. Desert, some Olives, Nutts, Almonds and Raisins and Apples. The Whole Company were pleased with their Dinner &c. Considering we had not above 3 hours notice of their coming we did very well in that short time. All of us were rather hurried on the occasion."

It will be noted that their principal meal of the day or "Dinner" was taken about 4 o'clock in the afternoon. In the nineteenth century the time of the midday meal was advanced and afternoon tea crept in between dinner and supper. In the late nineteenth and early twentieth century it became fashionable to have dinner in the evening but, alas, dinner is shewing marked signs today of going back to the middle of the day and the lighter evening meal is again becoming fashionable under the title of supper. Afternoon tea has, however, not changed.

Drummond and Wilbraham quote two foreigners' opinions of afternoon tea in the nineteenth century :—

"It was at this period that 'afternoon tea', taken at about 5 o'clock began to become popular, and the bread and butter and buttered toast of England to acquire a great reputation. Here are tributes from two appreciative foreigners—

'The Butter and Tea which the Londoners live upon from morning until three or four in the afternoon, occasions the chief consumption of bread which is cut in slices, and so thin, that it does as much honour to the address of the person that cut it, as to the sharpness of the knife' ¹.

'The slices of bread and butter, which they give you with your tea, are as thin as poppy-leaves—But there is another kind of bread and butter usually eaten with tea, which is toasted by the fire, and is incomparably good. This is called toast.' ²

¹A Tour to London, M. Grosley, translated by T. Nugent, 1772.

²A Journey to England, C. P. Moritz, 1782, cited in the British Tourist, W. Mavor, 1798/1800.

According to Drummond and Wilbraham, dinner was eaten at mid-day in the late part of the seventeenth century, and tea was again partly responsible for a change in social custom. Parson Woodforde was evidently fully in the fashion in dining at four o'clock.

"Dinner was the chief meal of the day and was usually eaten about mid-day, although towards the end of the century there was a tendency to dine later among the class that had taken to the new custom of drinking tea, coffee, and chocolate. The introduction of these beverages had a marked effect on the habits of the leisured class who could afford to drink them, because it favoured the development of social entertainment in which both sexes could take part. They were in no small measure responsible for the alteration in the times of meal, which can be traced in the late seventeenth century and which continued in the eighteenth. A light breakfast of coffee or chocolate and rolls became fashionable, and being taken rather late, about 9 or 10 o'clock, tended to put back the dinner hour".

My dissertation will not even approach completeness without some reference to tea in its relation to the consumption of beer and spirits. Few people cannot have seen several of Hogarth's illustration of eighteenth century life at least in the form of prints and be aware of the evil effects of the free availability of cheap spirits at that period.

The word "teetotal" is of very modern origin (about 1833) and movements concerned with total abstinence and 'prohibition' probably arose from a realisation of the very evils resulting from the drinking of cheap spirits. Until the unauthorised sale of cheap 'gin' and raw crude spirits started in the early eighteenth century any moral or religious objection to wine and ale was probably most unusual as it is today in the wine producing countries. Some idea of the seriousness of the position in England in 1736 when Government first took action to check the evil is given by Clark in his textbook of applied pharmacology which I have quoted from previously.

"It is difficult to say whether drug addiction is becoming a more serious problem as civilization increases in complexity. One certain rule appears to be that when a race is introduced to a powerful drug to which it is not accustomed the results are usually disastrous. The best-known example of this effect is the introduction of gin into England in the first half of the eighteenth century. During this period there was a definite check in the increase of population. This did not occur in other European countries and cannot be accounted for by general economic conditions that was then prevalent. Similar effects have frequently been produced when savage tribes have been introduced to strong spirits, and another familiar example is the introduction of opium to China"¹

Drummond and Wilbraham give the whole sad story and shew how tea, and beer brewed under controlled conditions by reputable brewers, have helped to stamp out this social evil which caused so much misery and poverty in the eighteenth and early nineteenth century.

"It has been estimated that the consumption of real gin, that is spirit-on-which duty had been paid and which was probably more or less drinkable, rose from half a million gallons in 1700 to more than five million gallons in 1735, when the authorities began to take steps to check the evil. It is impossible to form any estimate of the enormous consumption of illicit liquor, much of which was terrible stuff, distilled from any rubbish that would ferment".

¹Applied Pharmacology, A. J. Clark, page 267.

Driven by a rising tide of protest to do something, the Government raised the taxation on spirits in 1736. "It was a half-measure and did little more than arouse widespread wrath leading to rioting. A mob smashed the windows of the house of Sit Joseph Jekyll, who was held responsible. By the middle of the century gin-drinking was causing untold misery and ill-health and thousands of deaths. The terrible picture which Hogarth's "Gin Lane" reveals is no exaggeration in the light of what contemporary writers have said. Henry Fielding's words can be taken as an example :—

"The drunkenness I here intend is that acquired by the strongest intoxicating liquors, and particularly by that poison called *gin*, which I have great reason to think, is the principal sustenance (if it may be so called) of more than a hundred thousand people in this metropolis. Many of these wretches there are who swallow pints of this poison, within the twenty-four hours, the dreadful effects of which I have the misfortune every day to see, and to smell too."¹

It was in this year, 1751, that the authorities took more drastic measures to check the evil. Taxation was raised, this time substantially, and some efforts were made to suppress the preparation and sale of illicit spirits. It is possible to get an idea of the sort of stuff which the less reputable gin shops sold, by glancing at some of the recipes which were published quite openly. Here is one, by no means one of the worst :—

Oil of vitriol (sulphuric acid)
Oil of almonds
Oil of turpentine
Spirits of wine
Lump sugar
Lime water
Rose water
Alum
Salt of Tartar.²

The increased taxation and the other measures did something to check the growth of the evil.

"The most dangerous form of sophistication was the addition of lead. Sometimes, as we have already said, 'sugar of lead' was added for the purpose of sweetening a sour wine, and one book recommended the addition of a pint of good wine vinegar saturated with litharge (lead oxide) to each hogshead of wine."³

Lead preparations were also believed to be helpful in clearing a muddy white wine.⁴ The merchants claimed that no trace of metal passed into the wine but they were soon proved wrong when the first reliable chemical tests were devised⁵. It then became clear that the worst fears of Dr. Richard Mead⁶, Sir George Baker, and others who had drawn attention to the grave risk of lead poisoning were justified, and that many deaths must have resulted from this cause⁷.

¹An Enquiry into the Causes of the late Increase of Robbers, etc. H. Fielding 1751.

²The Publican's Daily Companion, P. Boyle, (undated, probably 1794).

³Valuable Secrets concerning the Arts and Trades, Anonymous, 1795.

⁴The Art of Making Wines from Fruit, Flowers, and Herbs, W. Graham, 1770.

⁵Description of Portable Chest of Chemistry, J. F. A. Gottling, 1791.

⁶A Mechanical Effect of Poisons, Dr. R. Mead.

Some of the latter part of my quotation from Drummond and Wilbraham may appear somewhat irrelevant but it does serve to illustrate the necessity for, and the basis of modern food and drug regulations to which tea is also subject. The maintenance of the high quality of tea now exported from countries like Ceylon and the prevention of unfair competition from areas where adulteration is liable, are also both ensured by food and drug regulations and are actually very helpful to the producer.

By the end of the nineteenth century tea had indeed become a staple of the diet of the British people. Again Drummond & Wilbraham are my main source of information.

"We are sorry to remark also, notwithstanding all we have so often said in favour of tea, that the use of it with bread and butter, as the almost *sole* food of the working classes in manufacturing towns, is a leading cause of the extension of scrofula among the mass of their population, and it hence becomes a question whether sobriety which the introduction of tea has promoted, compensates for the loss of vigour of constitution and power of body, which have followed its use, by that class of the community."¹

Professor Jack Drummond himself was responsible for the discovery which completes my story. During the last war when the diet of the British people was kept under very strict survey, the diet of groups of poorer people living on a relatively poor diet was specially studied by Drummond and his co-workers.

In spite of the poor diet of the particular group, symptoms of Vitamin B2 or riboflavin deficiency were remarkably uncommon and it was obvious that the diet contained some hitherto unsuspected source of this vitamin. It was discovered that tea and beer, are both quite rich sources of this vitamin which is vitally necessary to the maintenance of good health. Vitamin B2 is vitally connected with the functioning of nervous tissue, so that far from being 'bad for the nerves,' tea actually supplies a nutrient vitally necessary for the health of nervous tissue.

Apart from its place as a stimulant beverage beloved by millions of people in all walks of life, in sickness and health, in joy and in adversity, tea is therefore, able to make its own contribution to a balanced diet.

Tea is just as, or even more popular in this 20th century of rush and tension, as it was in the leisured circles of the seventeenth and 18th centuries who delayed their midday meal the better to enjoy it. The demand for tea will go on increasing so long as its cost is commensurate with the consumer's pocket. Having dealt at length on the history of the consumption of tea in England, I must point out the lesson that history teaches us, which is that tea has all the virtues which appeal to popular needs and taste, but that its popularity is intimately connected with its low cost per cup of brew. The tea industry must ensure that it maintains this advantage over all other beverages including the most modern synthetic flavoured and aerated concoctions of caffeine.

¹The Family Oracle of Health, Vol. II, 1824.