

The Weight Of Public Opinion

Imperial or Metric?
Research Findings 1997-2001

British Weights and Measures Association

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~~www.footrule.org and www.bwmaOnline.com~~

This document

Over the past few years the laws governing the weights and measures we use to buy and sell goods have changed. Most goods, by law, must now be priced and weighed in the metric system, and there are penalties – ranging from the withdrawal of traders' licences to fines to jail sentences – for those who disobey.

And over the past few years there have been surveys and opinion polls, measuring the public's reaction to all of this, and to weights and measures generally.

This document is a summary of all of the major research on the subject published since 1997. It covers six major national surveys, carried out by three independent market research companies, and draws on the opinions of 6,030 people.

It covers everything from the units people think in, to the way they understand and internally represent quantity, to opinions on the legislation and the 'metric martyr' cases, to how they think about the weather and the food on their table.

It was written by Warwick Cairns for the British Weights and measures Association. Warwick Cairns is a professional market research analyst and a director of Britain's most successful advertising agency.

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BWMA the people behind this document.

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In more detail:

The units people think in, 1997-2001
over time, and by sex and age

How people understand quantity, 2001 by sex, age, social class and region. The metropolitan elite versus the provincial working classes. Judging the number of apples to the kilo.

Legislation and related issues, 2001
levels of support for compulsory metric laws and indications of a change between January 2000 and May 2001. Levels of support for shopkeepers who defy the law.

The British Weights and Measures Association (BWMA)

The British Weights and Measures Association is a non-party-political organisation whose aim is to protect and promote customary UK weights and measures, and to preserve the long-established freedom under British law for people to use whichever system they see fit.

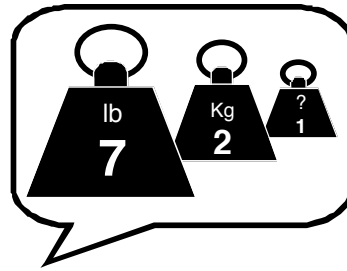
BWMA's supporters come from all points along the political spectrum, from left to centre to right, and from none at all.

BWMA's patrons are Lord Monson, Vice-Admiral Sir Louis Le Bailly KBE CB and Sir Patrick Moore, CBE

Honorary members include Peter Alliss, Clive Anderson, Trevor Bailey CBE, Michael Barry OBE, Christopher Booker, Ian Botham OBE, Max Bygraves OBE, Beryl Cook OBE, Jilly Cooper, Fred Dibnah, Roy Faiers, Sir Ranulph Fiennes OBE, Edward Fox, Dick Francis CBE, George MacDonald Fraser OBE, Sandy Gall CBE, Candida Lycett Green, Simon Heffer, Peter Hitchens, Sir Julian Hodge KStG, KStJ, Prof Richard Holmes CBE, Jools Holland, Richard Ingrams, Dr James Le Fanu, Bernard Levin CBE, Jonathan Lynn, Dr Richard Mabey, Leo McKern AO, Norris McWhirter CBE, Christopher Martin-Jenkins, Robin Page, Lord Phillips of Sudbury, R W F Poole, Sir Tim Rice, Andrew Roberts, J K Rowling OBE, David Shepherd MBE, Dr Charles H Sisson CH DLitt, Fritz Spiegl, Quinlan Terry, F S Trueman OBE, Antony Worrall Thompson, Keith Waterhouse CBE and Sir Rowland Whitehead Bt.

BWMA records with gratitude the honorary membership of the late Rt Hon Lord Shore PC, John Aspinall, Nirad C Chaudhuri CBE and Jennifer Paterson

In summary...



THE PUBLIC – 70% think in pounds and ounces: the dominant cultural elite less so, and those furthest from it more so

- In all of the major surveys conducted between 1997 and 2001, just over 70% of the UK adult population say that they think in feet and inches, pints and pounds for most everyday purposes.
- Just under 20% say they think in metric measures, and around 10% either don't know or have no strong opinion either way.
- These figures have remained remarkably constant despite the changes in legislation enforcing metric measures in shops and businesses.
- The people who think most in traditional UK measures are women, the over-25s, mass-market and working-class people and those living outside the major cities. Metric thinkers are in the minority in almost all sections of the public, but the metric minority is biggest in those groups closest to the dominant cultural elite: upmarket metropolitan men.

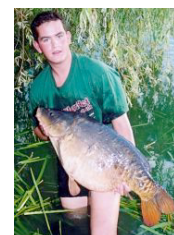
THE YOUNG – an apparently permanently bilingual generation, reflecting the interplay between metric ‘official’ culture and inch-pound ‘street’ culture

- The under-25s are effectively ‘bilingual’ as a generation, with just over half saying they think in UK measures, around 40% thinking in metric and 10% ‘don’t knows’.
- The evidence of surveys over time is not of a gradual transition to a metric way of thinking, but towards a ‘fixing’ of the current situation.
- Whilst the proportion thinking in customary measures has remained constant since 1997, the proportion preferring metric measures has actually declined, swelling the ranks of the ‘don’t knows’.
- This appears to reflect the ‘bilingual’ nature of the cultural influences and discourses experienced by the young, with the education system and ‘official’ culture operating in the metric system, and with the heavily American-influenced unofficial and ‘street’ cultures operating largely in ‘inch-pound’ measures over everything from the tabloid press to jeans and trainer sizes to the most popular established and ‘extreme’ sports, to buying ‘eighths’ of cannabis resin.
- Even in earlier years this two-system interplay is present, with parental culture and the most popular children’s books (Harry Potter, Roald Dahl) being largely imperial and schooling being mainly metric.



*“A fierce 25-yard shot past the German goalkeeper
Oliver Kahn”*

*“You has the chance to win an ounce of the finest
Skunk money can buy”*



*Young angler Fred Guttfield lands “a 37lb
12oz carp on 8lb line”
(anglersnet.co.uk)*

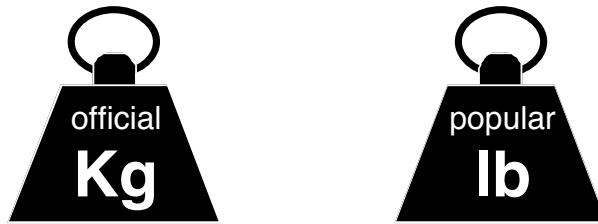
UNDERSTANDING – low understanding of metric outside the urban elite

- A third of the population say they do not understand kilos at all, and only think in pounds and ounces. 38% say they have some understanding of kilos, in theory, but that they need to convert the weight to pounds in their heads to make sense of it.
- Understanding of the metric system is greatest amongst upmarket metropolitan men and lowest amongst women, mass-market and working class people and people outside the major cities.
- At the most extreme, the London 'Metropolitan Elite' and the Northern working class are two different nations. Only 18% of northern manual workers say they find it easy to understand kilos.

THE LAW – a large majority in favour of freedom of choice and a hardening of public opinion against enforcement of compulsory metrication. 75% support the 'metric martyrs'

- Support for compulsory metrication started at a low level – 16% - in 1997, and declined to 10% by 2001.
- The decline in support was greatest amongst those furthest from the values of the dominant cultural elite.
- In May 2001, 75% of the public expressed support for shopkeepers who continue to sell goods in pounds and ounces in defiance of the law.

In conclusion...



Britain was once a wholly pounds-and-ounces society. Thirty years from the onset of metrication, people *are* different and things *have* changed - but only to a certain degree, and not nearly as fast or as far as one might think. On the basis of the evidence to date it is doubtful whether Britain will *ever* become a fully metric society. This evidence suggests that we are becoming at best a 'bilingual' society and at worst a divided 'two nation' society.

Despite all of the legal and other changes, the youngest of Britain's people, the metric-educated under-24s, appear to have 'stuck' for at least the past five years in a position where just over half say they think mainly in customary measures, around 40% say they think in metric ones, and the rest are not sure either way.

What we see is not a smooth, uniform transition from one system to another but the balance-point in a complex interplay between two opposing world-views or *discourses*, to use the current academic jargon – the metric *official discourse* encompassing Government, the education system and Establishment media channels, on the one hand - and on the other the unofficial, vernacular *popular discourse* encompassing everything from street sports to fashion clothing to tabloid newspapers.

Those closest to values of the 'official culture' of the current cultural Establishment – the upmarket and the metropolitan - embrace and propagate its values, including, for a substantial minority, the metric system; whilst those furthest from it – the downmarket and the provincial – continue to ignore it where they are allowed to, and to kick against it where – as in the case of the 'metric martyrs' – it is imposed upon provincial shopkeepers and their customers by force of law.

The best outcome in all of this is that we learn to be tolerant of the virtues and shortcomings of both systems, and of their supporters. This depends upon the consent of the people rather than on laws or penalties. It means allowing people to adopt the metric system where they find it helpful; but equally it means allowing the majority the freedom of choice to continue to use the familiar Anglo-American ones where and when they wish it, and for as long as they wish to do so, however much this may frustrate or irritate those who think they know better. And this, after all, is what democracy is all about.

The surveys

Date	Research Company	Sample	Areas covered
November 1997	RSL	1005 adults	Units people find 'most convenient for everyday purposes'
December 1999	BMRB	1010 adults	Units people prefer to think in when buying fresh foods
January 2000	BMRB	1015 adults	Level of agreement with compulsory metrication laws
March/April 2001	ICM	1000 adults	Units preferred for descriptions of weather conditions
May 2001	ICM/The Ecologist	1000 adults	Measures shop-keepers should use. Opinion of compulsory metric laws/prosecutions. Units people tend to think in.
June 2001	ICM/BWMA	1000 adults	Understanding of the metric system. Ability to judge quantity in kilos

TOTAL 1997-2001	6 national research studies by 3 different independent market research companies, using 2 main methodologies: face-to-face interviews and phone polling	6030 adults Nationally-representative cross-sections of the UK population by age, sex and social class	How people think/understand/ internally represent quantity, over time. Plus topical 'side-issues' eg. opinions of metric legislation
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These are the main national opinion polls whose findings are fully in the public domain. In addition, there have been a number of similar exercises whose findings are either unpublished, or not fully published. These include work by the Department of Trade and Industry, and by the major supermarket chains and various other commercial and media organisations.

There have also been a number of polls based on narrower and more specific samples, such as people who read a particular magazine and people who shop at a particular supermarket, rather than a nationally-representative cross-section of the entire adult population of the UK.

Where available, and where they serve to illustrate or cast light upon the findings of the major national opinion polls, such findings of these other studies as have made their way in the public domain are referred to.

Seven Out Of Ten: the key numbers

- The units people think in
- The way people understand
- The legislation and related issues
- ...and the weather

The units people think in: key numbers

In...	when asked...	this proportion of the UK public...	...gave this answer
November 1997	"Which kinds of measurement do you generally find most convenient for everyday purposes?"	74%	"Imperial measures such as pints, pounds, feet and inches"
December 1999	"Thinking about buying fresh foods, do you prefer to think of weight in pounds & ounces or in kilograms and grams?"	72%	"Pounds and ounces"
May 2001	"Do you tend to think in Kilos and grams or in pounds and ounces?"	74%	"Pounds and ounces"

In addition, there have been several other 'private' polls on the units people think in, some of which have been reported on in the media. Here is an example, quoted in the *Wall Street Journal* (11th April 2001):

"According to a survey of 1,000 customers of the British grocery giant Tesco last year, 90% of customers still think in pounds and ounces. Thus most British shoppers mentally translate 'one kilo' into '2.2 pounds', a quantity that however awkward is still meaningful. But while dual labelling remains common in supermarkets, as of 2009 putting imperial measurements anywhere on the label will be against the law."

And here is another from the British women's magazine Bella:

"In an exclusive survey of 1,000 people, it was revealed that, when it comes to metric, we've still got a pretty long way to go...more than 80% [young and old] say they always count distances in miles...well over half claiming they have no idea what their weight is in kilograms..."

How people understand: key numbers

In...	when asked...	this proportion of the UK public...	...gave this answer
June 2001	"How would you describe your understanding of how much goods like vegetables and meat weigh, in kilos?"	70%	"I have some understanding of kilos but I need to convert the weight to pounds to make sense of it" (38%) or "I only think in pounds. I don't understand kilos" (32%)
June 2001	"If you bought a bag of regular eating apples weighing one kilo, roughly how many apples would you expect to get in it?"	73%	The wrong answer: Too high (26%) Too low (47%) The single most common answer (30%) was "5 or 6" – the equivalent of 1 1/2-2lbs.

The legislation and related issues: key numbers

In...	when asked...	this proportion of the UK public...	...gave this answer
January 2000	"This year, under the new metrication law, it became a criminal offence - punishable by a fine of up to £2,000 or even a possible prison term - for shopkeepers to measure out goods like fruit and vegetables in pounds and ounces. Do you agree with this law?"	67%	No
May 2001	"Do you believe that goods should be sold by law..." (followed by 3 options – metric-only, imperial-only, and free-choice)	70%	The choice should be left to shopkeepers and customers
May 2001	Would you support shopkeepers who continue to sell goods in pounds and ounces in defiance of the law or not?	75%	Yes

In addition, a teletext poll in 2000, asking the question "Do you agree with the new Euro law enforcing metric weights" elicited 7229 responses, of which 97% were 'No'. However, because of the self-selecting nature of the sample, and the lack of proper research conditions, this should be treated as anecdotal and indicative, rather than as statistically sound.

And finally, the topic all British conversations return to: the weather

In...	when asked...	this proportion of the UK public...	...gave this answer
March/April 2001	Thinking about TV and radio weather forecasts, which of the following kinds of descriptions of weather do you prefer?	74%	Inches of rain, yards of visibility in fog, miles-per-hour winds

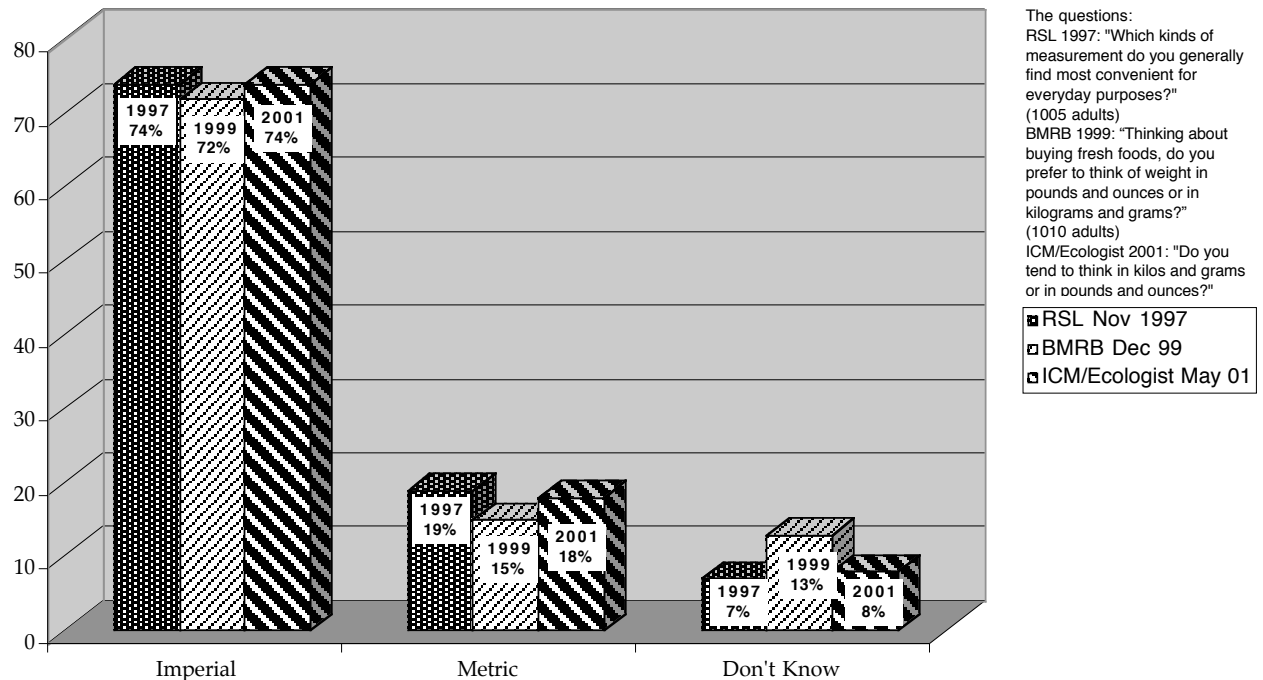
In more detail:

The units people think in, 1997-2001

- The changes (or the lack of them) since 1997
- How men and women differ in the units they think in
- Young and old

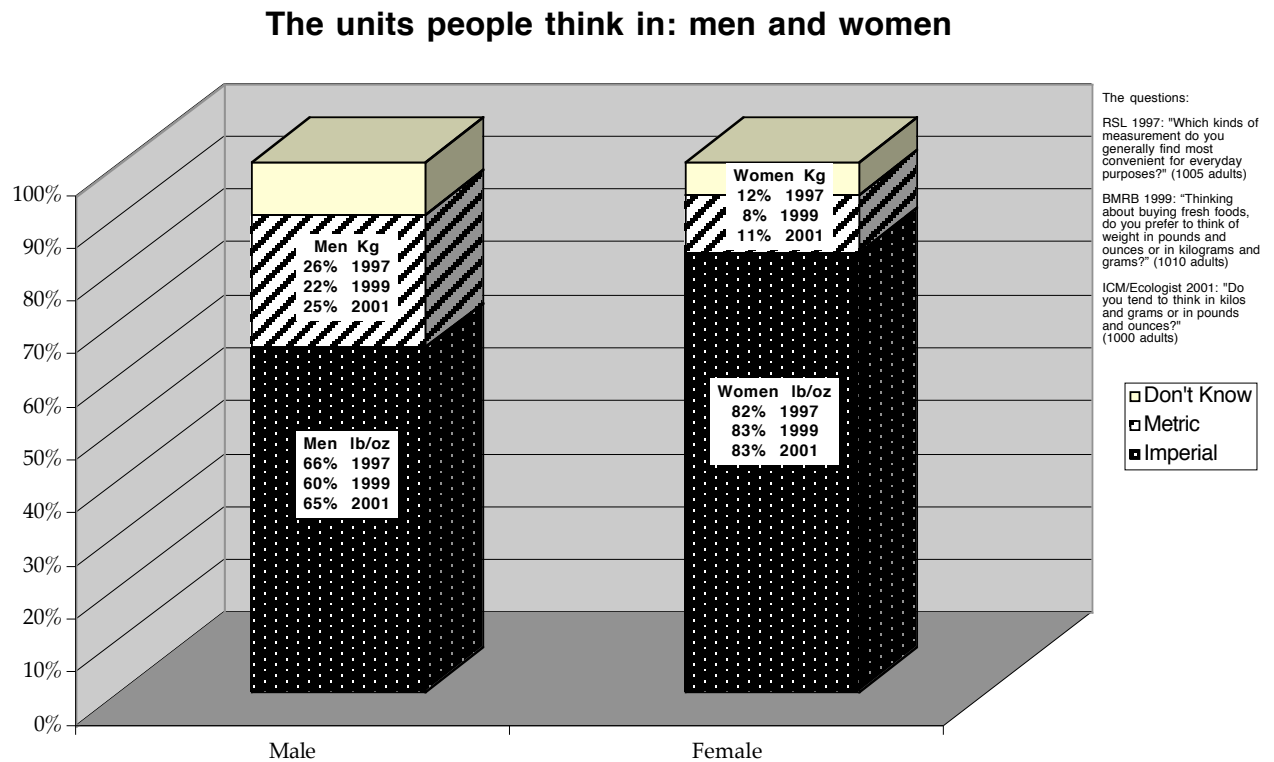
The changes (or the lack of them) since 1997

The units people think in: 1997-2001



- Despite different phrasings of the question, different methodologies and different research companies, and despite the passage of years during which most of the remaining imperial measures were made illegal for trade purposes, the results are remarkably stable and consistent.
- Three quarters of the public think in traditional measures.
- 15-20% think in metric measures
- 7-13% either don't know, or have no strong preference either way.

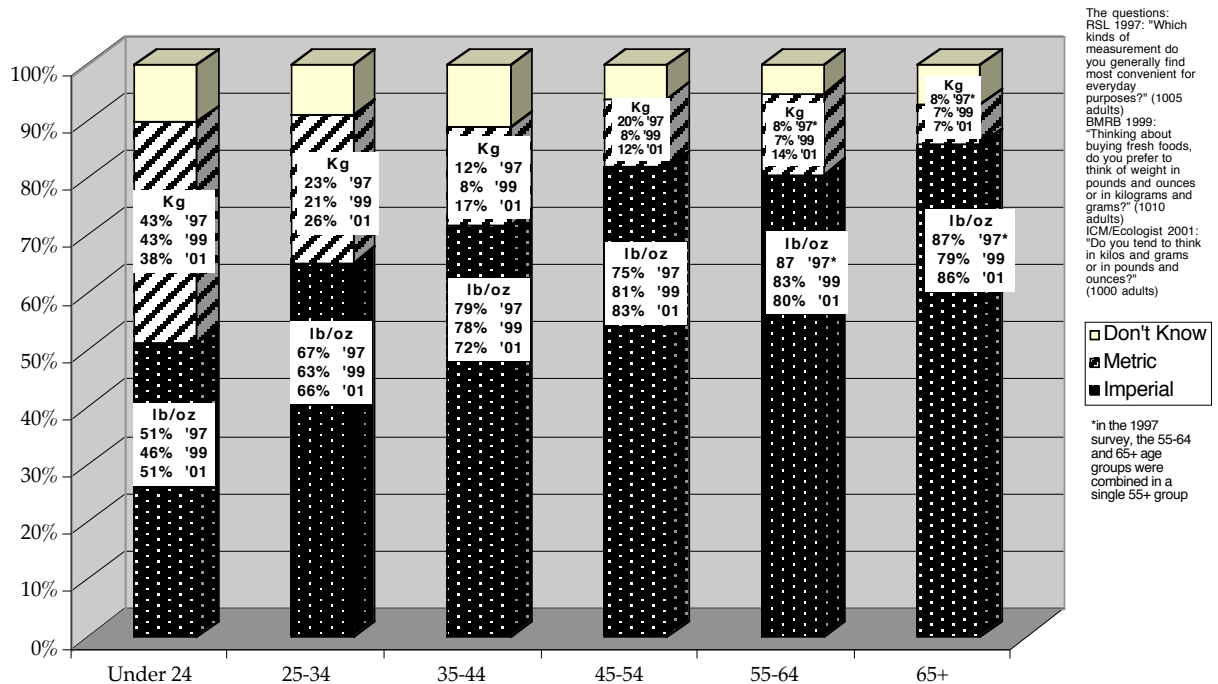
How men and women differ in the units they think in



- Consistently since 1997, just over eight out of ten women say they think in feet and inches, pounds and ounces. Around one in ten prefer metric.
- Amongst men the imperial majority is slightly smaller: around two thirds think in traditional measures and around a quarter think in metres and kilos.

Young and old

The units people think in, by age

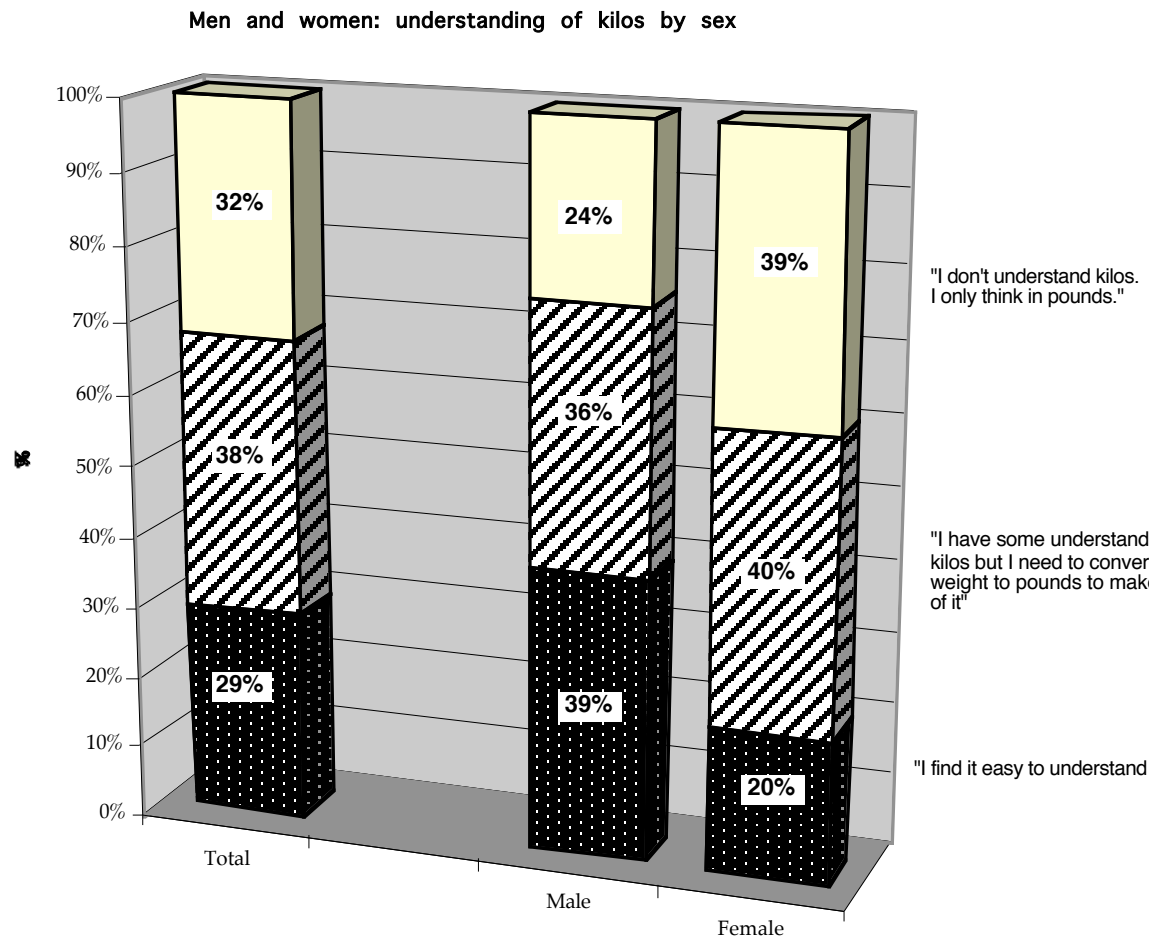


- The young are more comfortable with metric than the old. However, a small majority - just over half of all under-24s still say they think in imperial measures, while a smaller proportion - around 40% - think in metric.
- This figure dipped slightly in 1999, but returned to exactly the same level in 2001 as in 1997.
- Conversely, the proportion of under-24s saying they preferred metric measures actually fell in 2001. The 'don't knows' showed a corresponding increase.
- There is no evidence of any noticeable shift towards metric amongst the young since 1997. This is despite the overwhelmingly metric education of this age group, and the almost complete metrication of 'official' communication to young people.
- There are, however, many unofficial cultural influences at every stage of life, from children's books (eg. Tolkein, Roald Dahl, JK Rowling), to organised sports and hobbies (football, fishing, tennis etc), to 'street culture' (skateboarding, for example) to the worlds of music and film, (dominated by the overwhelmingly-non-metric USA), to the national press. In almost all of these 'unofficial' worlds, imperial measures remain in common usage, either alongside or instead of, the metric ones.

In more detail: How people understand quantity, 2001

- Overall and by sex
- By age
- By social class
- By region
- Two nations: the metropolitan elite versus the Northern working class
- Apples to the kilo

Overall and by sex



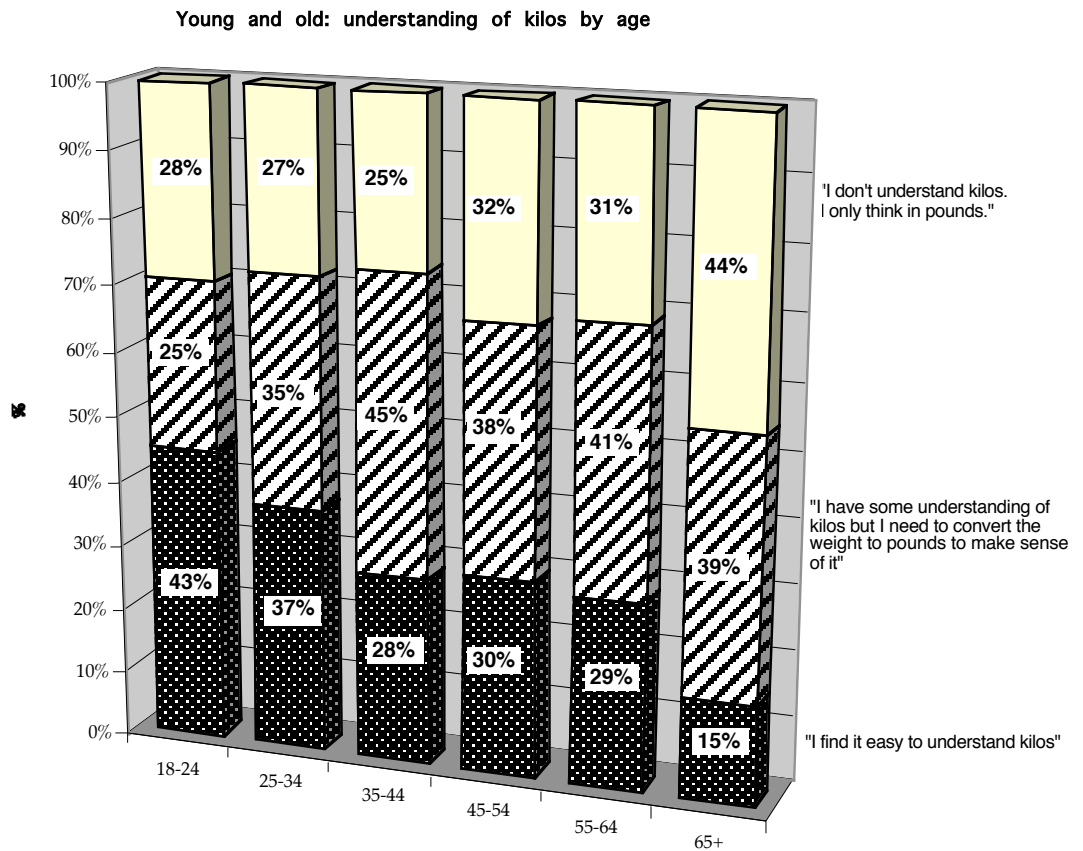
Only a minority say they are comfortable with metric.

- Overall, just under 30% of the British public claim to be 'native speakers' of the metric system.
- The rest – some 70% - claim, to some degree or other, to need to think of a weight in pounds to make sense of it.
- Of these, the biggest group – 38% - say they have some understanding of kilos, in theory, but need to convert from kilos to pounds.
- But 32% say they can't even do that, and that they can *only* understand pounds.

Men *claim* to be better at kilos.

- There is a difference between men and women. More men *claim* to be comfortable using kilos, and more women *claim* to be unable to understand them at all.
- The question is, are men really as good, and women as bad, as they say? This is something that the responses to the second question cast some light on.

By age



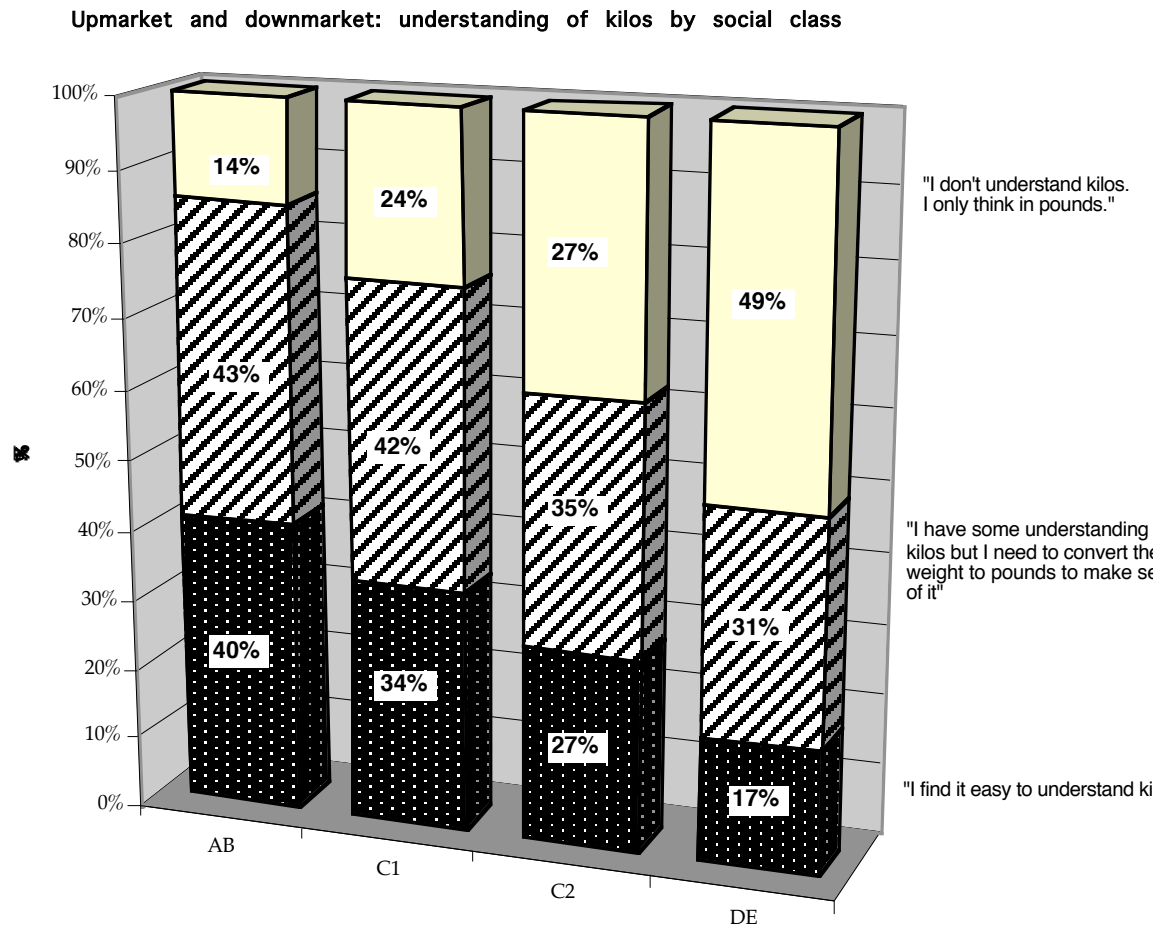
More of the young claim to have a better understanding of kilos...

- Whereas only 15% of over-65s say they find it easy to understand kilos, almost three times as many 18 –24s are confident with their understanding of the measure.
- It is beyond the age of 35 that understanding of metric measures really drops off.

... but a clear majority across *all* age groups say they think most naturally in pounds

- Even amongst the 18-24 age bracket, well over 50% say they understand weights best in the familiar UK measures.
- A startling 28% of 18-24s – nearly three in every ten – say they *only* think in pounds. This is actually a higher proportion than amongst both the 25-34s and, surprisingly, the 35-44s.

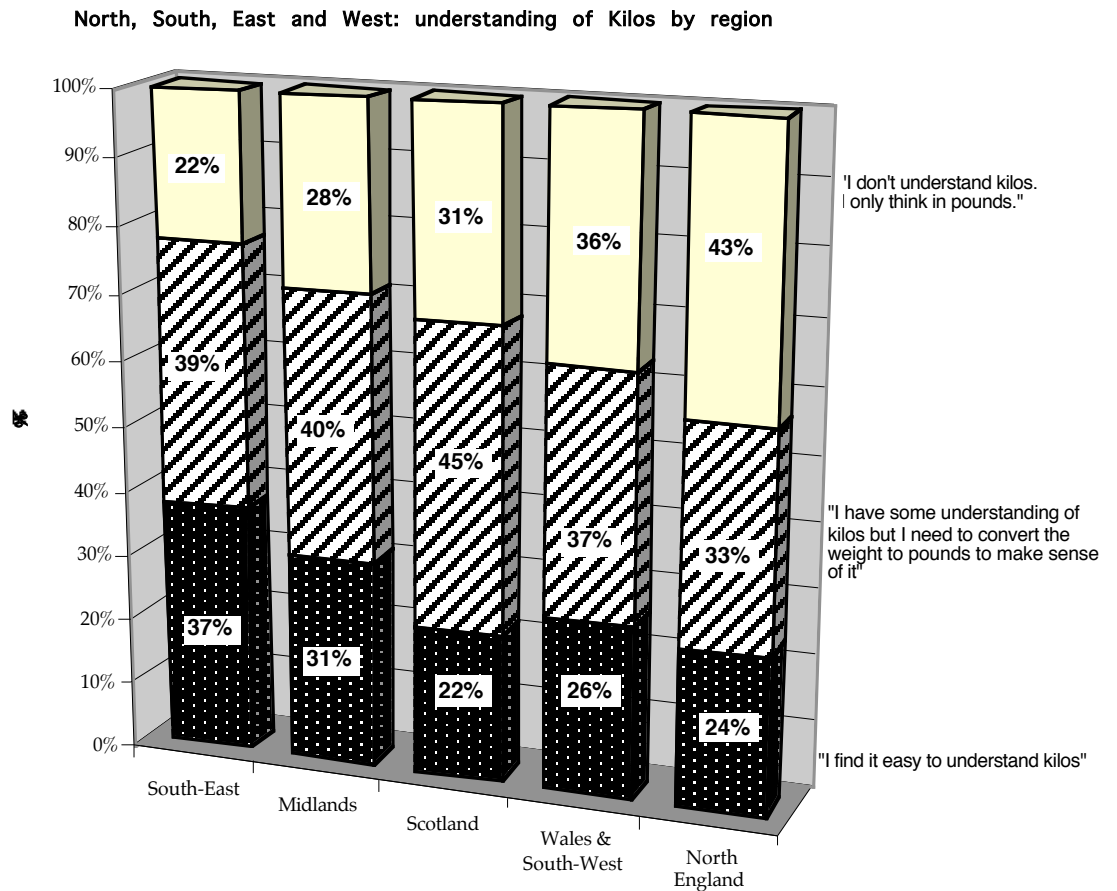
By social class



Middle-class metric and working-class imperial – a marked class difference

- While 40% of social classes A and B claim to be fluent in kilos, only 17% of classes D and E make the same claim.
- Conversely, only 14% of the top classes say they only think in pounds, this figure rises to 49% at the other end of the scale – by far the biggest single group of manual workers say they think only in pounds

By region

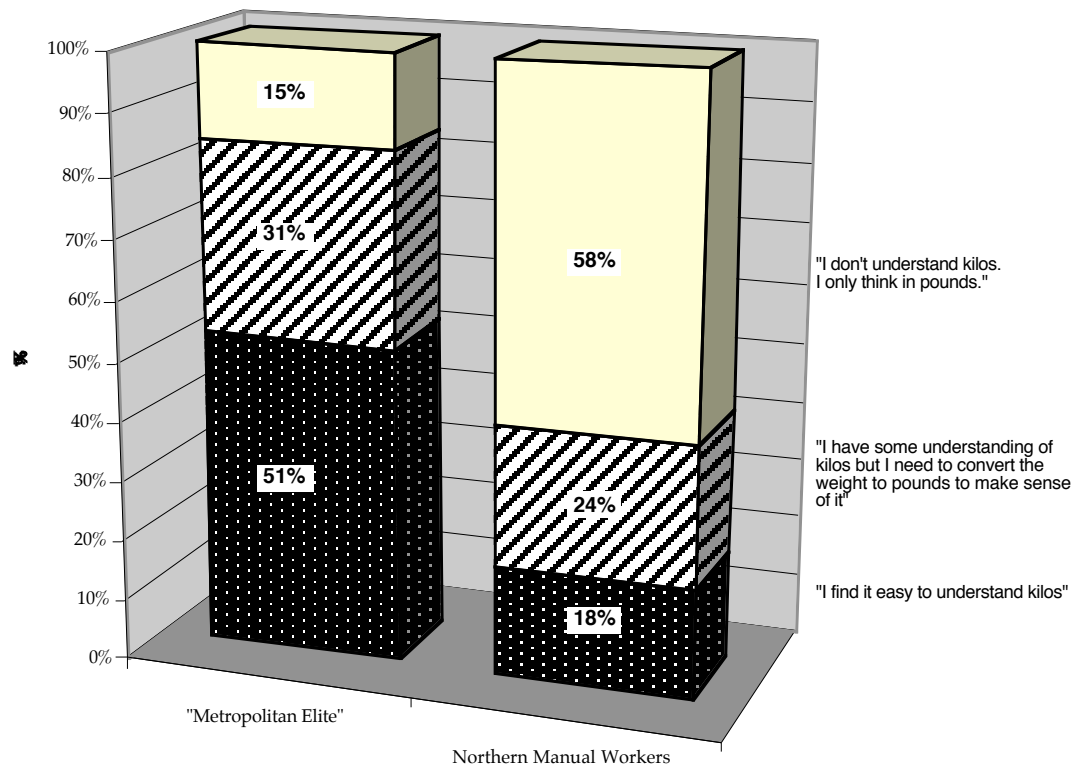


The cosmopolitan cities versus the regions – more metric in London and the Midlands, more imperial in the rest of the country.

- The inhabitants of London, Manchester and Birmingham are far more at ease with the metric system than are those who live in Scotland, Wales, the South-West and, especially, the North of England.

Two Nations – the ‘metropolitan elite’ versus the Northern working class

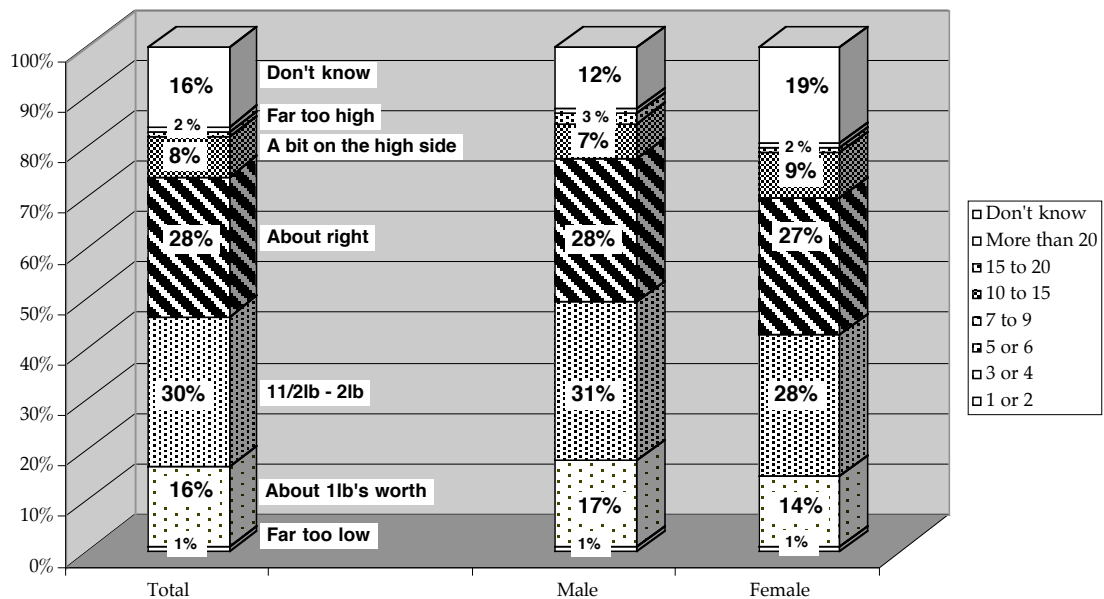
Two nations: the 'Metropolitan Elite' versus Northern Manual Workers



- The Sunderland ‘Metric Martyr’ trial of 2001 was covered very differently by the *London Evening Standard* and the *Sunderland Echo*. This reflects the profile of their readers.
- The *Evening Standard*’s readers –London and South-Eastern AB professionals and office-workers – are arguably the most metric-friendly group in the country, with a majority (51%) claiming to be comfortable with kilos.
- The Northern manual workers who make up the customer base of greengrocers like Steven Thoburn and the readership of papers like the *Sunderland Echo*, are almost the complete opposite. Nearly six out of ten claim only to think in pounds, and only 18% are fully confident with metric measurements.

Apples to the kilo

How many apples to the kilo? Men and women



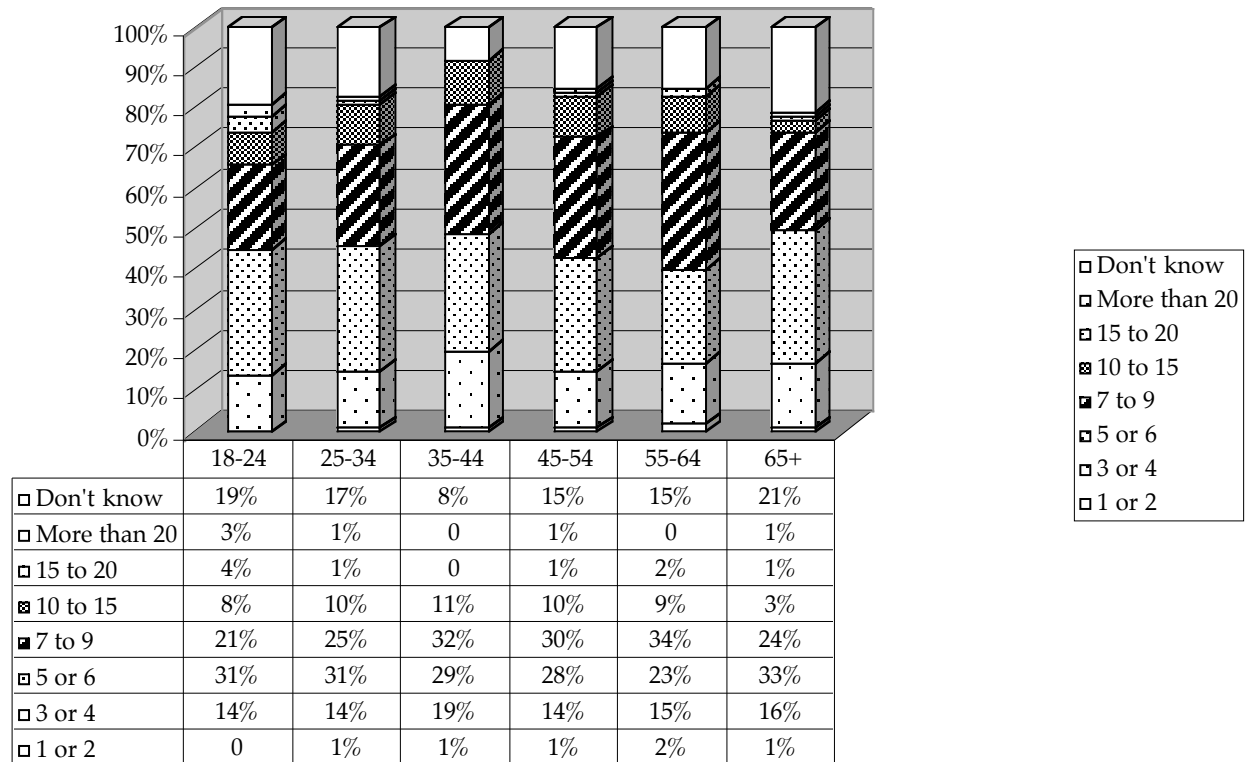
Overall, people's judgement is about the same as they claim it is

- 28% correctly guess that there are around 7 to 9 average-sized apples to the kilo. This compares with 29% who claim to be comfortable with their understanding of kilos.
- Around 30% make a guess which is on the low side, the equivalent of 1 1/2-2lb and a smaller number – 8% - guess slightly on the high side. This compares with the 38% who say they have to convert a metric weight to pounds to make sense of it.
- The remaining 35% either get it hopelessly wrong, or simply say they have no idea – slightly higher than the 32% who admitted to having no understanding of kilos.

...but men's judgement is worse, and women's better, than they claim

- Although 39% of men claim to be confident with kilos, only 28% actually get the quantity of apples right.
- Conversely, 27% of women guess the right number of apples, compared with only 20% who claim to be 'metric speakers'.

How many apples to the kilo? Answers by age

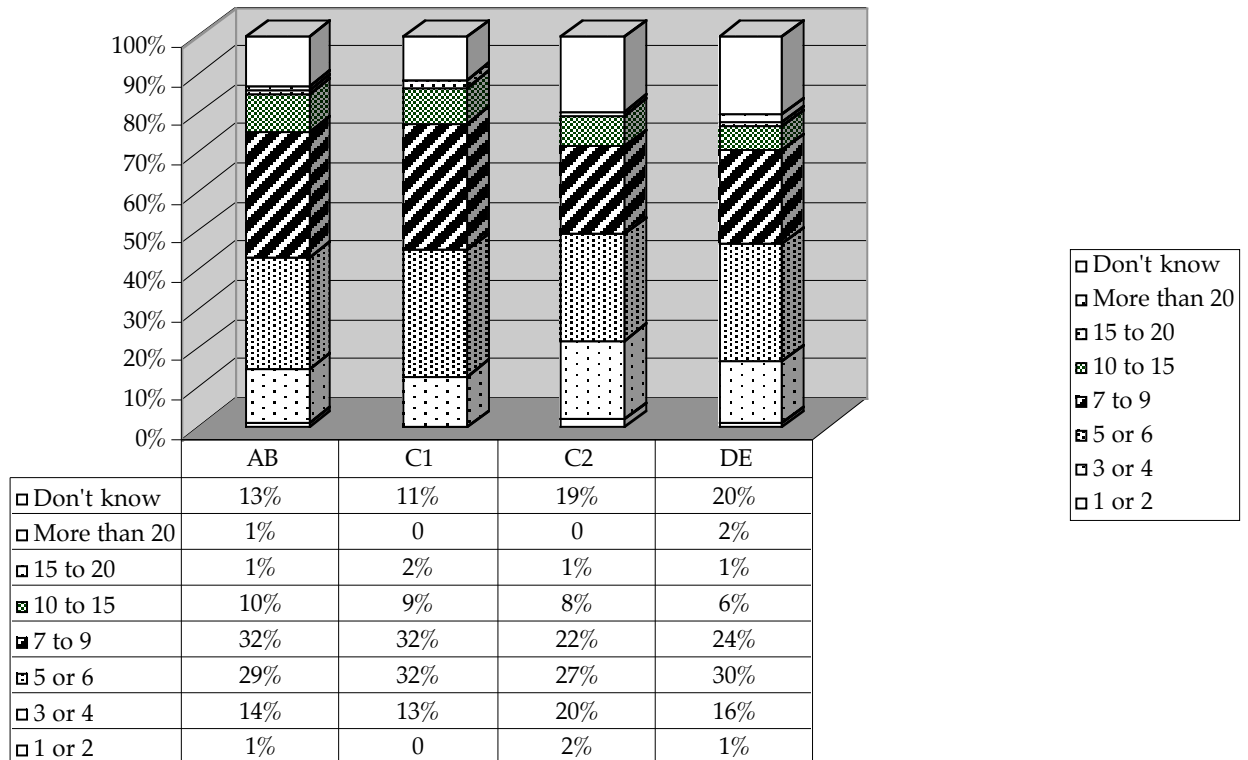


(correct answer – 7 to 9 - shown in diagonal stripes)

The young may claim to understand kilos better than the old, but the old are better at judging weight

- ...presumably because the old do – and have done – more shopping.

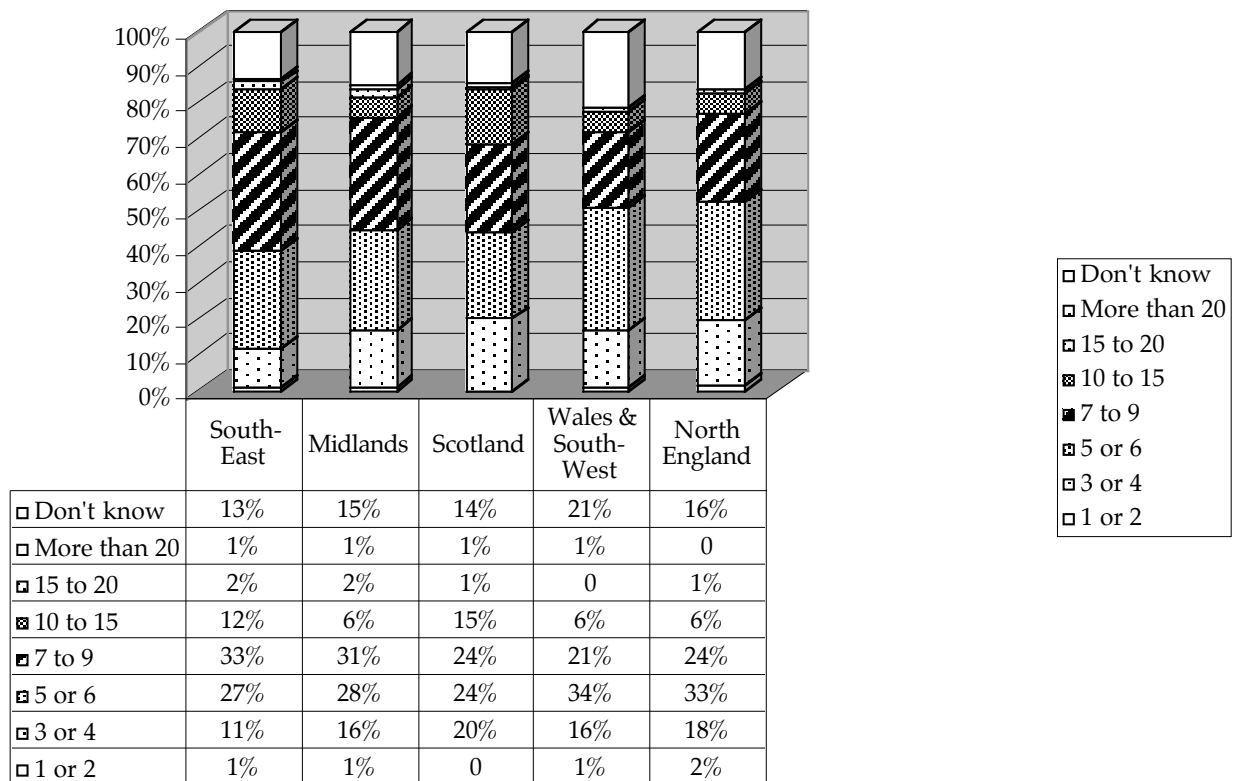
How many apples to the kilo? Answers by social class



The upmarket are better at judging apples to the kilo than the downmarket

- ...but the 32% who get the right answer is somewhat lower than the 40% who say they 'think metric'

How many apples to the kilo? Answers by region



The South-East/midland metropolitans are the best at judging kilos

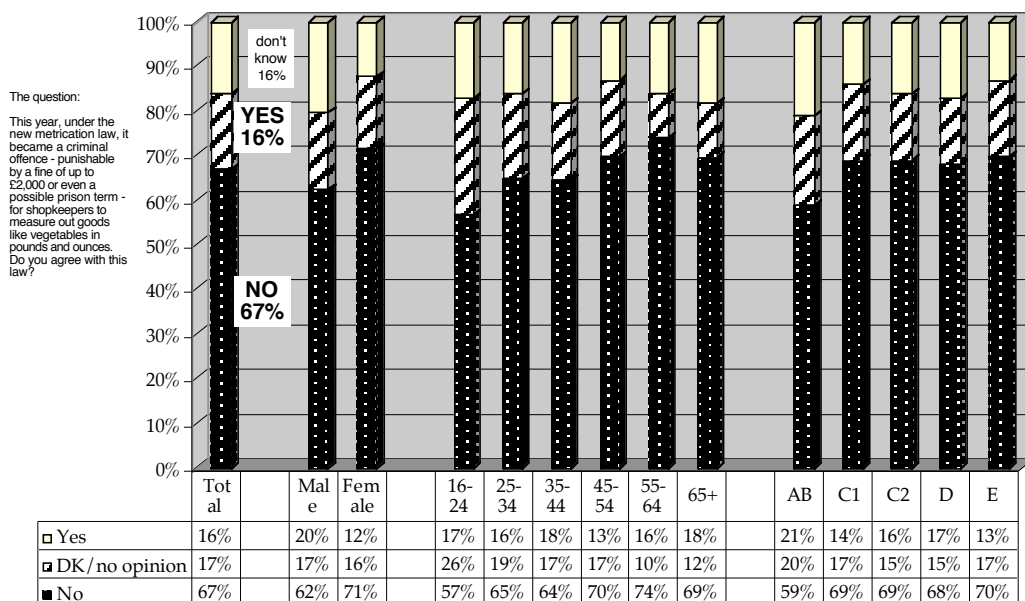
- ...and those in Wales, the South-West and the North of England are the most likely to make a guess at a value equivalent to around 1 1/2 – 2lb.

In more detail: legislation and related issues

- Support for the law, 2000
- Changes in support for compulsory metrication, 2001
- The state of public opinion, May 2001
- The 'metric martyrs'

Support for the law, 2000

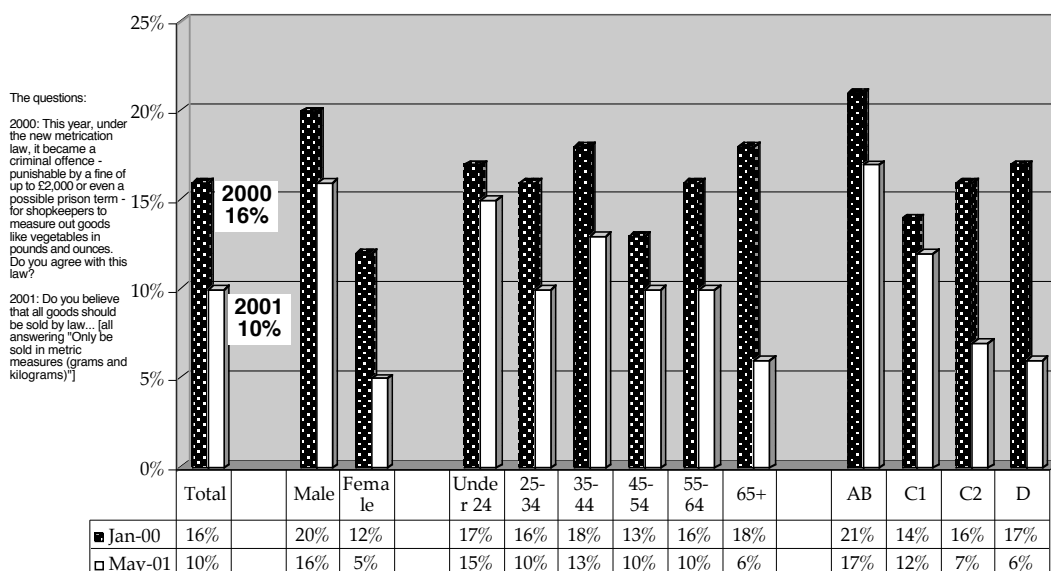
Support for compulsory metrication, 2000



- In January 2000, the month that the compulsory metrication of loose goods law first took effect, 67% of the British public disagreed with the new law. 16% said they agreed with it and 17% either didn't know what they thought or had no particular opinion either way.
- Women were more against the law than men, the over-25s more than the under-25s, and the middle and lower social classes more than the higher ones.

Changes in public support for compulsory metrication, 2001

Changing support for compulsory metrication,
Jan 2000 - May 2001

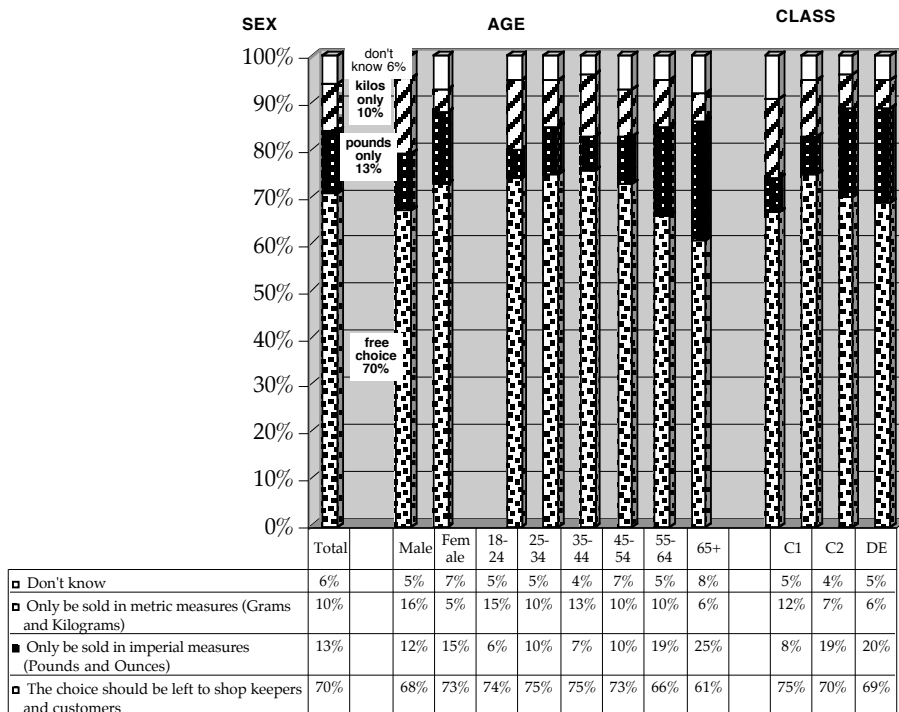


Indications of a hardening of public opinion against compulsory metrication

- The question asked in 2001 was different. It focused not on the penalties for breaking the law, but on the principle of compulsory metrication itself.
- However, where 16% of the public supported compulsory metrication in January 2000, only 10% said they did so in May 2001.
- The fall in support was universal, but most marked amongst women, the over-25s and the middle and lower social classes.

The state of public opinion, May 2001

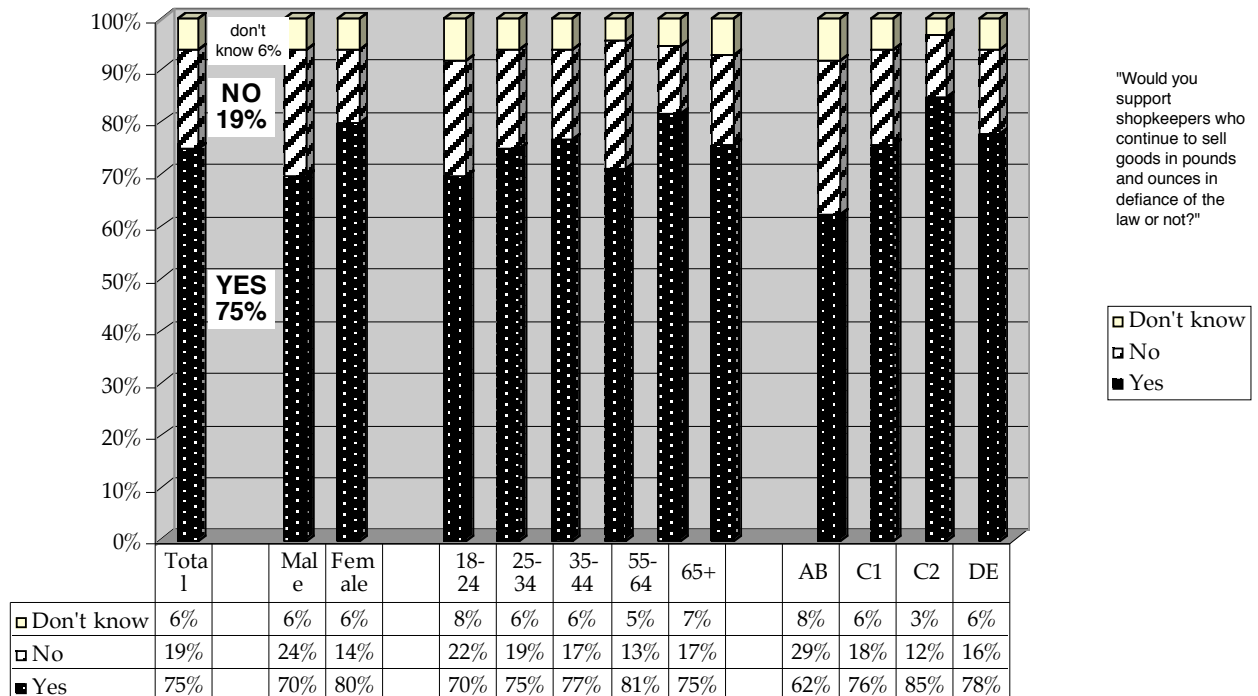
How do you think goods should be sold by law?



- 10% of the public say support the current state of affairs, which enforces metric measures.
- Slightly more - 13% believe that goods should be sold by law in imperial measures only. This figure is higher amongst the over-55s and classes C2, D and E – the manual and unskilled clerical occupational groups.
- The overwhelming majority – 70% - believe that the choice should be left to shopkeepers and their customers.

The 'metric martyrs'

Support for defiance of metric laws by shopkeepers



- Three quarters of the public support shopkeepers who defy the laws enforcing compulsory metrication.
- The 'metric martyrs' have the support a clear majority of both sexes, all ages and all social classes. This majority is smallest amongst the highest social classes (62% in favour versus 29% against) and largest amongst women (80% versus 14%), the over-55s (81% versus 13%) and the lower middle classes (85% versus 12%).
- Even the under-24s, of whom over 40% say they think in metric measures, show strong support for shopkeepers who defy the law on this issue (70% in favour versus 22% against)

The Weight of Public Opinion

The truth behind the myth of a Metric Britain

So, how tall are you? How much do you weigh? And how, in your mind, do you size things up? The weight of a baby or a bag of apples? The height of a tall tree or a low doorway? The length of your car or the distance to the seaside?

Thirty years on from the start of Britain's 'going metric' journey, are *you* nearly there yet? And if not you personally, then what about your children? What could inches and pints and pounds and miles possibly mean to them in this day and age? And why, at the beginning of the twenty-first century, does any of this matter?

Today, the people who run things increasingly behave as if we all 'think metric'. Safe depths in swimming-pools are given in metres only, in the expectation that you will understand whether 1.8 metres will be up to your chin or over your head, and whether 0.6m is too shallow to dive into; lifejackets are marked as being suitable 'for children up to 40kg'; growing numbers of goods are priced simply 'per kilogram' or 'per 100g', under the assumption that you will understand whether they are cheap or expensive; and then there are the 'metric martyr' prosecutions and the withdrawal of traders' licences for those won't play along... There are implications, and there are repercussions.

For a nation comfortable and competent with metric as its system of choice, none of this would matter much at all. No-one would be excluded or disenfranchised, and no-one would have their safety, or their livelihood, or their ability to judge good and bad value for money compromised.

But what if we *aren't* a metric nation yet? And what if we're not even noticeably moving in the direction of becoming one, despite all of the pressure and all of the legislation? Surprisingly, it is a question that no-one has actually thought to ask in a detailed and systematic way. Until now, that is.

Five years of research by three different independent market research companies; over six thousand interviews with ordinary members of the public across the UK; a detailed analysis of all the findings by age, class, sex and region; plus a comprehensive audit of every single study, article and survey published on the subject in recent years.

All of this means that now, for the first time, we are able to set down, in detail, exactly how the whole of the British public measures; how this has changed – or not changed – over time; how well - or how badly - we understand the metric system; and what we think about the new compulsory metrication laws and the penalties for breaking them.