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Summary

- The paper begins by addressing the specific questions in the Consultation Paper that concern obesity. The responses given illustrate more general points, which are subsequently developed
- An authentic and sound process of ethical deliberation aimed at informing government policy decisions depends on involving members of the public more effectively than the currently dominant expert committee system
- The interrelationships between different areas of public life, such as those impinging on public health, are so extensive as to necessitate use of appropriate ethical tools to facilitate ethical deliberation, of which the ethical matrix, described in this paper, is a prime example
- In exploring the ethical dimensions of public health policy due attention should be paid to prospective developments in science and technology, to global market trends and to global environmental change
- Appeal to explicit ethical principles in making policy decisions (some of which assume greater significance in the light of recent technological advances and environmental change) is a democratic necessity; but the high level of uncertainty that attends the prediction of future change suggests both that deontological theory may form a sounder basis for ethical reasoning than consequentialist theory and that there are *prima facie* grounds for applying stronger versions of the precautionary principle

1. Aims of this paper

The principal aim of this paper is to comment on the section of the Consultation Paper (hereafter 'CP') headed '5 Ethical Issues.' This section (CP pp. 36-40) provides some useful background material and, in particular, identifies a number of key ethical theories. But, given that the *focus* of the consultation exercise is on ethical issues concerning public health, it is arguable that the account presented of these issues is too limited. The following comments seek to identify ethical concerns which it is considered merit further attention.

However, the paper begins with responses to the four 'Questions on obesity' listed in the CP. These responses illustrate some of the issues that are subsequently developed more fully in this paper.

2. Comments on 'Questions on obesity' (CP p. 26)

Comments follow in turn for each of the four questions in the CP, which for convenience are reproduced here (in *italics*).

I *"Food is commonly linked with individual satisfaction and lifestyle. This means that any strategy that seeks to change people's behaviour is likely to be perceived as particularly intrusive. How should this sensitivity be considered in options for policy that seek to achieve a reduction in obesity?"*

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In that obesity is a fairly recent problem, certainly on the current scale, 'individual satisfaction and lifestyle' are likely to be due to social and commercial trends of relatively short duration. Obesity is a result of too much food energy intake in relation to food energy expenditure, so that the sum of factors promoting the former (such as increasingly fatty, sugary foods, consumed in too great amounts - doubtless influenced by low costs and persuasive food marketing practices) now critically exceeds the latter (because of: low rates of physical exercise as recreation assumes more sedentary forms, a much increased reliance on vehicular transport, and the widespread use of central heating). But because of marked variation between individuals it is impossible to prescribe universally applicable dietary and lifestyle practices.

It seems clear that sensitive measures might be adopted to influence events at several different levels, e.g.

- financial penalties on producers of excessively fatty, sugary foods
- school and public education programmes, including advice on healthy diets and exercise
- labels on foods to indicate the relationships between nutrient content and health risks
- legal controls on food advertising
- encouragement of physical exercise through provision of sporting facilities and dedicated cycle tracks, e.g. for school children.

In a responsible, compassionate, society each identifiable sector would take measures to prevent harm, encourage healthy practices, and care for those who suffer from the adverse consequences of obesity. Decisions about appropriate resource allocation might well be best decided by ethics committees who are informed by public consultations, in which the issues have been explored by systematic use of appropriate ethical tools.

The nature and scope of such tools is discussed below (para. 4).

II *"While there is clear evidence about the extent and scale of obesity, there is far less clarity about what measures should be adopted by the government and other stakeholders to prevent it. In view of this uncertainty what would be suitable criteria for developing appropriate policy?"*

Obesity is becoming an increasingly serious public health issue, adversely affecting wellbeing, longevity and economic efficiency. These seem to be criteria which call for adoption of a strong version of the precautionary principle,[i] in which:

- there is a presumption in favour of public health rather than commercial profitability
- proactive, rather than reactive, measures to reduce health risks are taken, and
- the burden of proof (of no adverse effects) lies with those advocating practices (agricultural, technological, marketing) which might jeopardise health.

For example, while there might be some doubt about the effectiveness of a ban on TV advertising of certain foods to children before 21.00 hours, acknowledging the three conditions listed above could well justify such a ban.

The importance of adopting stronger versions of the precautionary principle is discussed below (para. 3).

III *"What are the appropriate roles and obligations of parents, the food industry, school food producers, schools and the government in tackling the problem of childhood obesity?"*

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In a caring society, in which the principle of *solidarity* played an important role in people's perception of good citizenship, *all* the groups identified would assume responsibility, and act cooperatively to promote a children's health. Clearly, the government has less direct influence on a child's eating habits than e.g. parents, but by creating suitable conditions (e.g. allocating increased resources for healthy eating, providing facilities for physical exercise, introducing curricular changes that encourage attitudinal changes in children) the government, schools, school meals providers and the food industry could all seek to promote healthy eating and beneficial lifestyle changes.

The principle of solidarity is discussed more fully below (para. 6).

IV *"Is it acceptable to make the provision of NHS services dependent on whether a person is obese or not, as in the Suffolk example? If so, what criteria should govern whether or not interventions are provided, and should similar criteria be developed for other lifestyle-related problems that are significantly under the control of individuals?"*

There might be three types of reason for withholding treatment, viz.

- because the treatment offered might be thought ineffective, or result in a disturbance worse than the condition itself
- because the costs of treatment might prevent treatment of others, who are less blameworthy for their illness
- in order to deter people from behaving in ways that might result in obesity. (Conceivably, some might even advocate withholding of treatment as a punitive measure.)

Clearly, all clinical judgements are subject to uncertain outcomes, and in principle decisions to treat patients suffering from obesity are no different from those for other health-related conditions. But to deny treatment because the patient is considered guilty of irresponsible behaviour implies that:

i. it is possible to ascribe a known cause to the condition
ii. the patient was wilfully negligent in controlling his/her behaviour
iii. no other extraneous influences (e.g. social, commercial, educational) can be regarded as mitigating factors
iv. medical need is not a sufficient reason for medical treatment - a criterion which, if applied consistently, would question the basis of many other current forms of medical treatment.

In view of a) the uncertainty associated with establishing causal links (implying a need to appeal to stronger versions of the precautionary principle: see para. 3) and b) application of the principle of solidarity (para. 6), it would seem that the only ethically justifiable reason for withholding treatment would be when it was judged unlikely to improve the patient's wellbeing. Obesity might thus be medically relevant, but not ethically relevant.

3. The scope and practice of ethical deliberation

Having illustrated, in the above responses, some important general points, it is the aim of this and the following paragraphs to develop these arguments.

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The scope of the ethical enquiry A major concern is that by prejudging the ethical remit of the enquiry, as illustrated by the three questions in the box that concludes the 'Ethical issues' section (CP p 40), respondents to the consultation might be led to adopt too superficial an approach to the problems - one that relegates ethical considerations to 'end of pipe' solutions. It is acknowledged that the CP begins with the sentence "Many questions about public health relate to a more general challenge at the heart of political philosophy," but, arguably, the implications of this need to be developed much more fully.

A fundamental problem in discussing applied ethics is that because, in a sense, everything takes place within a larger environment, it is impossible to draw neat boundaries around subjects. This means that any attempt to rigorously address issues such as public health will inevitably entail consideration of matters to which the term is not normally applied. It follows that adhering too rigidly to artificial boundaries may well prove less satisfactory than acknowledging the reality of these interrelationships. Even so, in order to conduct a meaningful exercise within the inevitable constraints on time and resources it is clearly necessary to define *some* boundaries.

Perhaps the most practicable compromise is to recognise that many seemingly distinct ethical domains overlap with others (as in a Venn diagram) - so that, depending on the nature of the issue and the purpose of the exercise, more or less attention will need to be assigned to these overlapping fields. For example, if it is concluded (for which there is significant evidence) that the incidence of obesity is often positively correlated with the dietary intake of certain foods, it becomes imperative to examine the ethical issues relating to the production, harvesting and processing of food, and not to confine attention to food marketing practices and consumption patterns. In turn, such factors have significant implications, *inter alia*, for trade (encompassed by aspects of business ethics), farm animals (considered in enquiries into animal rights and animal welfare), and environmental sustainability (a major concern of environmental ethics). Thus, *public health ethics* (to coin a phrase) is inextricably linked to other ethical concerns, addressing which may facilitate or impede the identification of the overall ethical acceptability of prospective practices.

Substantive and procedural ethics A second important consideration is the distinction which can be drawn between substantive and procedural approaches to ethics. In arriving at ethical positions or judgements that will affect policy decisions, there is a need to reach agreement both on substantive issues (for example, as defined in terms of the several ethical principles that have found support to greater or lesser degree in society) and on the procedures by which ethical deliberation is structured and conducted, and by means of which ethical judgements are reached in democratic societies. Both these approaches are referred to briefly in the CP, viz. 'principles' on pp. 37-8; and 'negotiating policies or measures' on pp. 39-40.

Uncertainty and precaution in assessing scientific knowledge. A third important consideration is the role of scientific knowledge in ethical judgements on matters affecting public health, a factor that is more problematical than many scientists are inclined to acknowledge. While in some cases the known facts might be accurate and pertinent, in others they might be inaccurate, unreliable or irrelevant. Clearly, uncertainty might sometimes be readily resolved by investing in resources to acquire missing data. But in others there are justifiable reservations about the objectivity of the sources of information - which e.g. might be compromised if provided, on the one hand, by a pressure group ideologically opposed to a novel food product, or, on the other hand, by a food company with a vested interest in the product's commercial success. Not infrequently, there are justifiable concerns about whether a product or process considered 'safe' under controlled

laboratory conditions is also safe when released into unregulated physical or market environments - where synergistic interactions with other factors might induce unforeseen adverse effects due to the, so-called, 'cocktail effect.' Taking due account of *uncertainty* is a common feature of ethical deliberation, and in addressing such concerns stronger or weaker versions of the *precautionary principle* are often invoked.

Summary Because the ethical dimensions of many matters related to public health are exceedingly complex in both their depth and range of interactions, it seems unlikely that attempts to encapsulate them pre-emptively (as in the three 'questions on ethical issues' posed in the CP on p.40) will adequately address the whole range of issues that may be raised. If it is an important aim of the consultation process to receive an informed public input into the enquiry, it is surely an essential prerequisite to provide an effective means of engaging responsible members of the public in an authentic process of ethical deliberation.

4. Tools for ethical deliberation

In developing these arguments further, excerpts will be cited from the report (page numbers are shown in brackets), and its associated 'manuals,' of a project funded by the European Commission,[ii] of which I was a co-author. Although the project focused on ethical assessment of biotechnological developments in agriculture and food production, the report has wider relevance, and some of its conclusions seem especially apposite in the current context.

- "Hitherto the typical institutional response to people's concerns has been to establish various ethics committees and advisory boards. But this, while formally addressing ethics, can neglect the consideration of critical questions. Are questions concerning values being adequately addressed and answered by these bodies? The answer to this question cannot depend on the convergence of the advice and one's own standpoint, since only those who agree with the decision would then endorse the ethical advice. What is needed is a comprehensive, transparent and democratic procedure that gives all ethical arguments fair and balanced consideration." (p.12)

- "This (the EC) report asks practical but complex questions relating to policy in the food sector, and therefore instruments are needed to resolve these questions. While one cannot expect that the use of such an instrument will lead to a unique and completely satisfactory answer, one should expect that it simplifies and facilitates the decision-making process by capturing those considerations that are needed for an ethically well-considered judgement. These instruments (or methods) are called *tools*. They require skilful use and should not be confused with calculating machines or algorithms. Thus ethical tools refer to practical methods designed to improve ethical deliberation by capturing all ethically relevant aspects of an issue" (p.14)

- One such tool is the *ethical matrix*,[iii] which I first proposed in the early 1990s.

    - "The ethical matrix is a principle-based methodology that aims to guide rational decision-making by appealing to principles based on both deontological and consequentialist ethical theories, which are perceived to be components of the 'common morality.' As a development of the 'four principles' approach introduced by medical ethicists Beauchamp & Childress, it assigns *prima facie* moral status not only to different human interest groups but also to certain non-human groups." (p. 54)

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- "The ethical matrix aims to:

  - raise awareness of a wide range of issues
  - encourage ethical reflection
  - provide a rational basis for ethical decision-making
  - identify areas of agreement between individuals who might nevertheless differ in their overall judgements
  - clarify the basis of disagreements
  - make explicit the reasoning that underpins any ethical decisions " (p. 23)

Briefly, the claim here advanced is that addressing the complexity of ethical deliberation in areas like public health, and doing so by involving members of the public in an effective and democratic manner, will be facilitated by the use of ethical tools, of which the ethical matrix may be considered a typical example. In this context, the ethical matrix might be seen primarily as a procedural tool, use of which will encourage the formulation of more specific substantive ethical questions by participants in a deliberative exercise - as well as providing a principle-based approach to addressing these questions. By contrast, in the CP, prospective respondents are for the most part invited to reply to a set of predetermined questions of uncertain provenance.

Some further sources of information may be helpful for those wishing to explore the potential of this ethical tool. To facilitate its effective use, an Ethical Matrix Manual (Mepham et al, 2006)[iv] provides practical advice on using it in public participation exercises, while accessible background information is provided on the website of the Food Ethics Council, which has employed the ethical matrix in several reports.[v] An account aimed at undergraduates in the biosciences is provided in chapter 3 of the recent textbook *Bioethics: an introduction for the biosciences* (OUP, 2005)[vi] - a chapter which may be viewed on the book's website.[vii] An interactive web-based exercise employing the ethical matrix, which was designed for students aged 16-20 years, is also available.[viii]

The ethical matrix approach, sometimes with minor modifications to the method originally described (which has also undergone some evolution in my own work), has been used by a number of prominent committees in the UK and elsewhere, e.g. the National Committee for Research Ethics in Science and Technology, Oslo, Norway;[ix] the Europaische Akademie, Bad Neuenahr-Ahrweiler, Germany [x]; and the UN Food and Agriculture Organization, Rome, Italy.[xi] It has also been subjected to critical analysis by philosophers,[xii] and is the basis of a forthcoming philosophy PhD thesis 'A deliberative ethical matrix method - justification of moral advice', due to be submitted to the University of Oslo in 2006.

The focus here on the ethical matrix as a tool to facilitate ethical deliberation is, perhaps understandably, explained by the fact that I have been intimately involved with the development of the method since its inception. But other tools have been described, for example the Ethical Delphi, which may be more appropriate in certain circumstances. What seems essential to meaningful public participation in ethical deliberation is the conscientious employment of one or other of the established ethical tools, such as those assessed in the EC project.[xiii] For it is questionable whether inviting an 'expert' group of correspondents (cf. CP p.8) to respond to a predetermined set of questions will provide the sort of input needed for an authentic *deliberative inclusionary process*.[xiv]

It is true that attempts to engage the general public in a major consultation on GM crops (the GM Nation? debate, which was first proposed by the AEBC, of which I was a member) came in for much deserved criticism. But the way forward would not seem to be to abandon such attempts because of past difficulties, but to invest more effort and resources in refining the methods of engagement. The EC project described represents an attempt to construct an appropriate *ethical toolbox.*

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In one sense, the arguments advanced here (in para. 4) are a criticism of the section in the CP headed 'negotiating public health policies or measures.' The issues there identified ('consent and trust': CP pp. 39-40) are, of course, important. But they can they hardly be said to define, or encompass, all issues covered by 'the negotiation of public health policies.' Of course, it may not have been the purpose of this section of the CP to provide a comprehensive overview; but it seems important to explore these issues rather more thoroughly in order to highlight key areas for discussion, and means by which they might be addressed.

5. Trajectories and scenarios

One of the most challenging features of applied ethical deliberation is the constant need to 'scan the horizon' to gain awareness of prospective technological advances. This is because applied ethics is as much about facts as it is about values; and while the latter certainly undergo change over time, scientific knowledge, and technological capability, usually change much more rapidly.

In this respect, it may be seen as a limitation of the CP that it confines attention to current concerns without acknowledging (or, at least, without stressing sufficiently) the likely impact of future technological and economic changes on a global scale. New developments in genomics, biotechnology, assisted reproductive technologies, nanotechnology and informatics (to name an incomplete selection) are likely to impact both on risks to public health and, by prevention or treatment, on means of addressing new threats to public health. At the same time, increasing globalisation of trade and travel seem likely to exacerbate current health problems that are identified in the CP. Global climate change, and consequent social and political responses to it, seem likely to compound such effects.

The rapid pace of such changes, coupled with the likely major economic impacts of the increasing prominence of China and India in world markets, presage a highly uncertain future for the world's citizens, including those in the UK. It would clearly be prudent to invest much more effort in futurological prediction. But, insofar as it is possible to assign priority to deontological or to consequentialist ethical theory in addressing future problems, it is arguable that the unpredictability of future change suggests that deontology may provide a sounder basis for ethical reasoning.

6. Ethical principles

I fully endorse the presumption of the CP that the way forward in devising policy on public health measures is to identify appropriate principles. And to a large degree, the importance of all the principles identified is acknowledged (CP pp. 37-38). Indeed, although they are defined somewhat differently, such principles underpin the ethical matrix described above (and are, in turn, essentially derived from those defined by Beauchamp and Childress). Even so, subtle differences in the formulation of principles can influence the way in which problems are perceived; and while in both the CP and the ethical matrix, the principles embrace both utilitarian and deontological theory, some advocates of a principled approach appeal exclusively to deontological principles (e.g. Kemp).[xv]

Solidarity A case can certainly be made for examining the formulation of new principles, which though they might be construed as being subsumed within those principles identified, nevertheless highlight critically important issues in the current politico-moral environment. One such is *solidarity*, which is described in the CP (p.37) - but without the emphasis there that might be

assigned it in the light of developments in genomics. For example, the Human Genetics Commission explained the concept of *genetic solidarity and altruism* (developed from Article 17 of the UN Declaration on the Human Genome and Human Rights) as follows: "*We all share the same basic human genome, although there are individual variations…Most of our genetic characteristics will be present in others. This sharing of our genetic constitution not only gives us the opportunities to help others, but also highlights our common interest in the fruits of medically based genetic research."*[xvi] And this led to the claim that *"Each individual is entitled to lead a life in which genetic characteristics will not be the basis of unjust discrimination or unfair human treatment."* This principle is certain to be relevant to many aspects of public health, and might well be relevant to the case of obesity discussed above (para. 2).

Common patrimony Another recent approach meriting consideration, especially in the light of the increasing pressure on resources and global pollution, is that of *common patrimony*, formulated by Edith Brown Weiss, from which she has derived three principles, namely:

- *conservation of options*: each generation should leave to its successors a 'robust planet' that will support a variety of life choices, including those not foreseeable at the time
- *conservation of quality*: each generation should leave the planet in as good a shape as it found it
- *conservation of access*: which aims to balance justice requirements within and between generations.[xvii]

It is apparent that seeking to accord due respect to such principles, with their strong emphasis on intergenerational justice, will impact on many concerns related to public health.

In summary, a principled approach to public health, taking appropriate account of the wide range of issues which it affects, and is affected by, encompasses a broad spectrum of concerns, adequate consideration of which will be greatly facilitated by the use of suitable ethical tools (para. 4).

13.09.06

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[xvii] See Carpenter SR (1998) Sustainability. In 'Encyclopedia of Applied Ethics' ed Chadwick R. San Diego, Academic Press. Vol. 4 p.290

Acknowledgements

I am grateful to Dr Tom Macmillan of the Food Ethics Council and Prof Peter Somerville of the Department of Policy Studies, University of Lincoln for helpful comments on a draft version of this paper