

**** PRE-REVIEW DRAFT ****

Regulation for Health Inequalities and Non-Communicable Diseases: In Want of (Effective) Behavioural Insights

Nikhil Gokani^{1,2}

Abstract

Non-communicable diseases (NCDs) result in 86% of European deaths and 77% of the European disease burden.³ The distribution of NCDs is not equal: the lower somebody's socio-economic position, the worse his(her) health will be and the lower their expectancy. Following increasingly powerful calls, the European Union (EU) has given the prevention of NCDs and the reduction of health inequalities greater thought.

This paper assesses, from a behavioural research perspective, interventions introduced by EU consumer law to prevent NCDs. After discussing the ubiquity of European health inequalities, it reviews the determinants of these inequalities and demonstrates that these are in fact inequities which demand regulatory action. The paper then broadly examines the range of interventions the EU legislature has introduced – primarily information regulation – in order to reduce NCDs and why these have failed to both prevent NCDs and reduce health inequalities.

The paper then analyses the controversial debate on the extent to which behavioural research should play as a core consideration in consumer policy. The paper concludes that regulating consumer information is a useful tool for NCD prevention, but that it requires integrating of greater insights from the way consumers actually behave if it is to reduce health inequalities. Moreover, there are limitations to policies which regulate information, and therefore the EU should make more use of other tools in its regulatory toolbox.

¹ Law and Non-Communicable Diseases Unit, School of Law and Social Justice, University of Liverpool, UK. nikhil.gokani@liverpool.ac.uk

² I would like to thank Dr Marine Friant-Perrot with whom I have worked on the issues of health inequalities and non-communicable diseases - this paper builds on this research with her. I would also thank Prof Alberto Alemanno and Prof Francis Snyder for their comments following my earlier presentation on these issues at the 10th International WISH Conference. A special thanks goes to Prof Amandine Garde for her comments on a more developed draft. All limitations are, of course, my own.

³ 'Action Plan for Implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases 2012–2016' (World Health Organization 2012), 1-2.

I. Introduction

The global burden of non-communicable diseases (NCDs) is staggering. NCDs account for 36 million deaths, or 63% of global mortality.⁴ The regional impact of NCDs is equally overwhelming: NCDs result in 86% of European deaths and 77% of the European disease burden.⁵

The Political Declaration on the Prevention and Control of Non-communicable Diseases,⁶ adopted in 2011 by the UN General Assembly, confirms that the threat and burden of NCDs represent one of the major challenges for development in the twenty-first century. In reaffirming the right of everyone to the highest attainable standard of physical and mental health, it recognises the urgent need for greater prevention and control. The Declaration calls on Member States to deliver multi-sector, multi-level, population-wide, evidence-based, health-in-all-policy action, which is not only affordable but also cost-effective. Particularly, the Declaration calls on Member States to create health-promoting environments which empower people to make healthy choices and lead healthy lives. It confirms that the most prominent NCDs – namely cancers, cardiovascular diseases, chronic respiratory diseases, and obesity – are linked inextricably with the conditions in which people live and their lifestyles and behaviours.⁷ These diseases are largely preventable, particularly through a reduction in exposure to the modifiable risk factors of unhealthy diets, excessive consumption of alcohol, tobacco use, and a lack of physical activity.

The distribution of these NCDs is far from equal amongst different groups of the population: there is a strong socioeconomic gradient between the health status of the lower and higher socioeconomic groups. The lower somebody's socioeconomic position ('SEP') is, the worse his or her health is likely to be. People from lower SEP groups live shorter lives than people from higher SEP groups; and live more of their shorter lives with disease. These inequalities in health are linked inextricably with, again, the conditions in which people live and their behaviours. These social

⁴ 'Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020' (World Health Organization 2013), 7.

⁵ 'Action Plan for Implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases 2012-2016' (World Health Organization 2012), 1-2.

⁶ United Nations, Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases. A/RES/66/2.

⁷ This paper will use the phrase 'behaviours' in favour of 'lifestyles', as the latter 'frames public health at an individual level - effectively blaming individuals for making irrational decisions that are detrimental to their health... The use of such descriptive terms frames public health actions in a pejorative and reductionist way, demonstrating that those who use them seemingly fail to understand or communicate the broader nature of the range of determinants of health; thus perpetuating myths about the foundations of health and health inequalities': P Lincoln, 'Lifestyle - A plea to abandon the use of this word in public health' <www.ukpublichealthnetwork.org.uk/blog/plblog>.

determinants of health, and the health inequalities they result in, are in fact inequities which demand action as a matter of social justice.

Following increasingly powerful calls to tackle the determinants of NCDs,⁸ the European Union (EU) has given the prevention of NCDs and the reduction of health inequalities greater thought.⁹ Its actions on tackling the major modifiable risk factors of unhealthy diets, tobacco use and excessive alcohol consumption have ranged from soft, non-binding measures in the case of alcohol, to stronger measures in the case of tobacco, with nutrition falling somewhere in-between.¹⁰

Where the EU has taken legislative action, with the exception of product safety, this has centred primarily on trying to influence consumers towards healthier behaviours through regulating the information environment in which consumers live, work and play. These policies are not only insufficiently effective, but they have also failed to reduce the inequalities in health which remain pervasive throughout the European populations.

This paper assesses, from a behavioural research perspective,¹¹ interventions introduced by EU consumer law to prevent NCDs. After discussing the ubiquity of European health inequalities, it reviews the determinants of these inequalities and demonstrates that these are in fact inequities which demand regulatory action. The paper then broadly examines the range of interventions the EU legislature has introduced in order to reduce NCDs and why these have failed to both prevent NCDs and reduce health inequalities. This focusses on the EU's heavy reliance on regulating the consumer information environment. It demonstrates that the measures the EU has introduced in its consumer policy are not meaningful enough to prevent NCDs and reduce health inequalities – in fact, they are more likely to increase health inequalities because they are more ineffective for members of lower SEP groups.

⁸ See for instance 'Global strategy for the prevention and control of noncommunicable diseases' World Health Assembly Resolution 53.14 adopted 22 March 2000.

⁹ See for instance European Commission, 'Commission Implementing Decision of 28 November 2012 concerning the adoption of the 2013 work plan in the framework of the second programme of Community action in the field of health (2008-2013)'; European Commission, 'The selection, award and other criteria for financial contributions to the actions of this programme and the EU payment to the WHO Framework Convention on Tobacco Control, serving as a financing decision [2012] OJ C378/6. On the history of EU calls and action on NCD prevention see A Alemanno and A Garde, 'The Emergence of an EU Lifestyle Policy: The Case of Alcohol, Tobacco and Unhealthy Diets' (2013) 50 *Common Market Law Review* 1745, 1746-1752.

¹⁰ A Alemanno and A Garde, 'Regulating Lifestyles in Europe: How to prevent and control non-communicable diseases associated with tobacco, alcohol and unhealthy diets?' (Swedish Institute for European Policy Studies 2013); A Garde and M Friant-Perrot, 'The Regulation of Marketing Practices for Tobacco, Alcoholic Beverages and Foods High in Fat, Sugar and Salt – A Highly Fragmented Landscape' in A Alemanno and A Garde (eds), *Regulating Lifestyle Risks: The EU, Alcohol, Tobacco and Unhealthy Diets* (Cambridge University Press 2014).

¹¹ The totality of research which looks at consumer behaviour is referred to as behavioural research here. It includes, for instance, behavioural economics, economics, psychology, anthropology, sociology, marketing, and consumer decision theory, reflecting its inherently interdisciplinary nature.

With this in mind, the paper then analyses the controversial debate on the extent to which behavioural research should play as a core consideration in consumer policy. The paper concludes that consumer information is a useful tool for NCD prevention, but that it requires integrating of greater insights from the way consumers actually behave if it is to reduce health inequalities. Moreover, there are limitations to policies which regulate information, and therefore the EU should make more use of other tools in its regulatory toolbox.

II. Inequalities and the social determinants of health

While the concept of health inequalities is not a new one, these inequalities were 'discovered' in the 19th century mainly as a result of the availability of new epidemiological data. Since then, the great need to eradicate health inequalities has featured at the highest global levels. Already in 1978, the Alma-Ata Declaration acknowledged that:

The existing gross inequality in the health status of the people particularly between developed and developing countries as well as within countries is politically, socially and economically unacceptable and is, therefore, of common concern to all countries.¹²

Though these issues have received increasing attention with the turn of the century,¹³ it remains the case that inequalities in health continue to be pervasive. Even in countries which have taken a historic lead in investigating health inequalities, such as the UK, little has been achieved to successfully eradicate such inequalities.¹⁴

After defining health inequalities, this section discusses the ubiquity of European health inequalities, and reviews the determinants of these. It then demonstrates that these inequalities are in fact inequities which demand regulatory action.

¹² Declaration of Alma-Ata International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978, Declaration II.

¹³ See for instance The Bangkok Charter for Health Promotion in a Globalized World (11 August 2005); 'HEALTH21 – health for all in the 21st century' (WHO European Region 2008); Commission on Social Determinants of Health, 'Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health' (World Health Organization 2008); Reducing health inequities through action on the social determinants of health (World Health Organization 2009) WHA resolution 62.14; Rio Political Declaration on Social Determinants of Health; Review of Social Determinants and the Health Divide in the WHO European Region: Final Report (World Health Organization Regional Office for Europe 2013).

¹⁴ See for instance Independent Inquiry into Inequalities in Health: Report (Stationery Office Books 1998) ['The Acheson Report']; Inequalities in Health: Report of a Research Working Group (Department of Health and Social Security 1980) ['The Black Report']; Fair Society, Healthy Lives: Strategic Review of Health Inequalities in England (The Marmot Review 2010). See also Charles Webster, 'Investigating Inequalities in Health before Black' in Virginia Berridge, Stuart Blume, Poor Health: Social Inequality Before and After the Black Report (Routledge 2013).

A. Health inequalities and health inequities

The phrase 'health inequality' is the 'generic term used to designate differences, variations, and disparities in the health achievements of individuals and groups'.¹⁵

A simple example of a health inequality is that the life expectancy at birth of a female born in the highest scoring Member State of the EU is almost eight years higher than in the lowest scoring Member State. Similarly, the life expectancy at birth of a male born in the highest scoring Member State of the EU is almost 12 years higher than in the lowest scoring Member State.¹⁶

When health inequalities are 'systematic, socially produced (and therefore modifiable) and unfair',¹⁷ they are also said to be health inequities.

In the examples above, the health inequalities between the populations from the highest scoring and lowest scoring Member States, in the case of both females and males, are also inequities. There are also inequalities between males and females, but these are not necessarily inequities as women tend to live longer than men for non-social, non-modifiable reasons.¹⁸

Differentiating inequalities from inequities is important for a number of reasons. Systematic and non-systematic inequalities are distinguished in order to exclude random differences, by only including those differences which show a consistent distribution across the population. By only considering those inequalities which are socially produced, biological causes which are fixed and unavoidable can be excluded, not least because these are not amenable to modification.¹⁹ Through only considering those differences which are unfair, that is to say those 'health inequalities that are preventable by reasonable means',²⁰ an approach can be taken which reflects real-world limitations.

While inequalities may be a factual statement, and inequities a normative statement which demands regulatory action as a matter of social justice, this distinction is not always used. The literature uses the terms interchangeably. Following this trend, the

¹⁵ I Kawachi, S V Subramanian and N Almeida-Filho, 'A Glossary for Health Inequalities' (2002) 56 *Journal of Epidemiology & Community Health* 647, 647.

¹⁶ 'Health inequalities in the EU: Final report of a consortium' (European Commission Directorate-General for Health and Consumers 2013), §2.2.2.

¹⁷ M Whitehead and G Dahlgren, 'Concepts and principles for tackling social inequities in health: Levelling up Part 1' (WHO Regional Office for Europe 2007).

¹⁸ M Marmot, 'Achieving health equity: from root causes to fair outcomes' (2007) 370 *Lancet* 1153, 1154-1155.

¹⁹ M Whitehead and G Dahlgren, 'Concepts and principles for tackling social inequities in health: Levelling up Part 1' (WHO Regional Office for Europe 2007).

²⁰ Fair Society, Healthy Lives: Strategic Review of Health Inequalities in England (The Marmot Review 2010), 10.

remainder of this paper uses the phrase 'health inequalities' as synonymous with the more accurate 'health inequities'.

B. Health inequalities in the EU

Health inequalities in the EU are alarming, and have been widely and strongly documented both within and between Member States.²¹ For instance, the level of poor health and chronic illness is on average twice as high in the bottom income quintile when compared with the highest quintile.²²

The significant differences in mortality between Member States is stark. In four Member States, predominantly in Eastern Europe, the age-standardised mortality rate for males in 2010 exceeded 1,200 per 100,000. In 17 Member States, it was less than 800. In 2010, at birth females in France or Spain could have expected to live on average 10% longer than females in Bulgaria, a difference of 7.9 years. Estimates from 2010 on morbidity also reveal that males in the EU could expect to live 61.7 years in good health - this ranged from 52 years in Slovakia to 72 years in Sweden.²³

Health inequalities within the borders of Member States are equally alarming.²⁴ For instance, in England, those living in the poorest areas will on average die seven years earlier than those living in the richest areas, and will live 17 years more with disability. Therefore, those people living in poorer neighbourhoods die earlier and spend more of their shorter life living with disability.²⁵

C. Determinants of health inequalities

Health inequalities exist on a strong gradient with SEP. SEP here is shorthand for the social hierarchy or ranking of individuals or groups based on sociological and

²¹ See particularly K Judge et al, 'Health Inequalities: a Challenge for Europe' (2006); Johan P Mackenbach, 'Health Inequalities: Europe in Profile' (2006); 'Health inequalities in the EU: Final report of a consortium' (European Commission Directorate-General for Health and Consumers 2013); Health status and living conditions in an enlarged Europe (LSE 2005); Commission Staff Working Document. Report on health inequalities in the European Union SWD(2013) 328 final; Report on Socio-Economic Differences in Health Indicators in Europe: Health inequalities in Europe and the situation of disadvantaged groups (Institute of Public Health 2003).

²² 'Health inequalities in the EU: Final report of a consortium' (European Commission Directorate-General for Health and Consumers 2013).

²³ Health Inequalities in the EU: Final Report of a Consortium (European Commission Directorate-General for Health and Consumers 2013).

²⁴ EU action aimed at reducing health inequalities within Member States, in the context of shared competences, must be consistent with the principle of subsidiarity. This requires further analysis. However, as the social determinants of health involve transnational aspects, such as cross-border marketing and the internal market generally, in many circumstances the EU would be better placed than Member States to reduce inequalities.

²⁵ Fair Society, Healthy Lives: Strategic Review of Health Inequalities in England (The Marmot Review 2010), 16.

economic goods.²⁶ This definition is not universally agreed, but this is of little consequences to the policy arguments, as '[n]o matter how it is defined, it appears that [SEP], as it relates to health status/healthcare, is an attempt to capture an individual's or group's access to the basic resources required to achieve and maintain good health.'²⁷

While certain measures of SEP, or proxies of these measures, are generally agreed upon, such as education and wealth; other measures, such as race or sex, are less agreeable.²⁸ Following the World Health Organization's lead for a broad understanding of the social determinants of health, SEP is perhaps better conceptualised as 'differential access (reali[s]ed and potential) to desired resources'.²⁹ In defining these social determinants of health, the WHO Commission on Social Determinants of Health states:

The poor health of the poor, the social gradient in health within countries, and the marked health inequities between countries are caused by the unequal distribution of power, income, goods, and services, globally and nationally, the consequent unfairness in the immediate, visible circumstances of peoples [*sic*] lives – their access to health care, schools, and education, their conditions of work and leisure, their homes, communities, towns, or cities – and their chances of leading a flourishing life...Together, the structural determinants and conditions of daily life constitute the social determinants of health and are responsible for a major part of health inequities between and within countries.³⁰

In order to understand why SEP is correlated with health status, it is first necessary to begin with the diseases which affect those in lower SEP groups more than those in higher SEP groups.

²⁶ Socioeconomic position, in this paper, is used to refer to social status in its widest sense, including factors which may not traditionally be considered to relate to socioeconomic status, such as gender, sexuality and ethnicity. There are many other definitions of SEP. Indeed, the use of socioeconomic position is in itself not universal. The most common similar phrase is socioeconomic status, but others also exist, including social class. This paper takes these as synonymous.

²⁷ VL Shavers, 'Measurement of Socioeconomic Status in Health Disparities Research' (2007) 99(9) *Journal of the National Medical Association* 1013, 1013.

²⁸ See B Galobardes et al, 'Indicators of socioeconomic position (part 1)' (2006) 60 *Journal of Epidemiology and Community Health* 7; Bruna Galobardes et al, 'Indicators of socioeconomic position (part 2)' (2006) 60 *Journal of Epidemiology and Community Health* 95; P A Braveman et al, 'Socioeconomic Status in Health Research: One Size Does Not Fit All' (2005) 294(22) *Journal of the American Medical Association* 2879.

²⁹ JM Oakes and PH Rossi, 'The measurement of SES in health research: current practice and steps toward a new approach' (2003) 56 *Social Research & Medicine* 769.

³⁰ Commission on Social Determinants of Health, 'Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health' (World Health Organization 2008), 1.

It is well known that the biggest killers and the biggest sources of disease burden in Europe, and indeed globally, are NCDs. These are not only more prevalent in people from lower SEP groups, but they also cause more deaths in lower SEP groups. This pattern is seen for all four major groups of NCDs: cancers,³¹ cardiovascular diseases,³² chronic respiratory diseases³³ and obesity.³⁴ This higher mortality and morbidity in lower SEP groups can be said to be the cause of health inequalities.

The causes of these causes are also well documented. Through disaggregated data, it is known that members of lower SEP groups live more with the major unhealthy risk factors: unhealthy diets,³⁵ tobacco use³⁶ and excessive consumption of alcohol.³⁷

Members of lower SEP groups live more with the risk factors which cause NCDs, and in turn more with NCDs. However, this evidence demonstrates correlation, but not causation.³⁸ As Josiane Bonnefoy et al identify:

'With respect to the social determinants of health, we are able to identify some of the necessary and the sufficient conditions involved in causation but their nature, under what circumstances, and how they operate from the social to the biological is not always very clear. The core candidates can be listed relatively easily because the extant literature has explored them at length'.³⁹

Due to complex and multifactorial nature of NCDs, there is no single theory which accounts for health inequalities and their causal link with SEP. Nevertheless, the most prominent approaches which have sought to capture causality include the

³¹ See JP Mackenbach, 'Health Inequalities: Europe in Profile' (2006), 26-27 & 15-16; Vanessa Gordon-Dseagu, 'Cancer and health inequalities: An introduction to current evidence (Cancer Research UK); C Schrijvers, AE Kunst and I Bovendeur, 'Health Inequalities - Inequalities in cancer mortality' (EUPHIX 2009) <http://preview.euphix.org/object_document/o5697n29797.html>.

³² See JP Mackenbach, 'Health Inequalities: Europe in Profile' (2006), 26-27; J P Mackenbach et al, 'Socioeconomic inequalities in cardiovascular disease mortality: An international study' (2000) 21(14) European Heart Journal 1141.

³³ See DE Schraufnagel et al, 'An official American Thoracic Society and European Respiratory Society policy statement: disparities in respiratory health' (2013) 42(4) European Respiratory Journal 906.

³⁴ See A Robertson, T Lobstein and C Knai, 'Obesity and socio-economic groups in Europe: Evidence review and implications for action' (European Commission 2007); Belinda Loring and Aileen Robertson, 'Obesity and inequities: Guidance for addressing inequities in overweight and obesity' (World Health Organization Regional Office for Europe 2014).

³⁵ See 'Social and economic inequalities in diet and physical activity' (Public Health England 2013); A Drewnowski, 'Obesity, diets, and social inequalities' (2009) Nutrition Reviews S36-S39.

³⁶ See R Hiscock et al, 'Socioeconomic status and smoking: a review' (2012) 107 Annals of the New York Academy of Research 1248.

³⁷ See K Bloomfield et al, 'Social inequalities in alcohol consumption and alcohol-related problems in the study countries of the EU concerted action 'gender, culture and alcohol problems: a multi-national study' 41(1) Alcohol & Alcoholism (2006) i26.

³⁸ H Graham, 'Introduction: the challenge of health inequalities' in H Graham (ed), Understanding Health Inequalities (2nd edn, Open University Press 2009), 13; M Shaw, D Dorling, D Gordon, G Davey Smith, The Widening Gap: Health Inequities and Policy in Britain (Policy Press 1999).

³⁹ J Bonnefoy et al, 'Constructing the evidence base on the social determinants of health: A guide' (NICE 2007), 14.

material/structural, psychosocial and behavioural/cultural models, with the health selection and artefact theories having been largely discredited. These approaches have been explored elsewhere.⁴⁰

As EU consumer law places the burden of making healthy decisions on the consumer, through the concept of 'consumer empowerment',⁴¹ the behavioural/cultural model is particularly relevant. This approach hypothesises that SEP emphasises differences in behaviours that are either beneficial or detrimental to health. It is thought that certain groups of the population have 'cultures'⁴² which are associated with unhealthy risk factors, and this is the cause of health inequalities. The idea of behaviours associated with cultures cannot be denied. However, this approach presents an incomplete picture – it does not explain why the behaviour of members of lower SEP groups follows this social patterning.⁴³ Therefore, even this approach is of limited use in explaining the underlying determinants

In the absence of a non-contentious, complete theory on social patterning of behavioural risk factors, policy-makers can focus on the causal pathway of health inequalities. Hilary Graham identifies that inequalities in the social/material structure of society lead to inequalities in the consumer's socioeconomic position. This leads to inequalities in the consumer's environment, which causes inequalities in the consumer's behaviour and psychology. These behaviours lead to disease differentials.⁴⁴ Following this pathway, it becomes clear that interventions designed to change consumer behaviour in order to reduce health inequalities are best directed at improving the consumer's environment, the social/material structure of society, or both.

III. Policy failures

The European Commission acknowledges that health inequalities between advantaged and disadvantaged citizens are inconsistent with the EU's aspirations of equality of opportunity, protection of human rights, social and economic cohesion,

⁴⁰ See for instance G McCartney, C Collins and M Mackenzie, 'What (or who) causes health inequalities: Theories, evidence and implications?' (2013) 113 Health Policy 221; G Scambler, 'Health inequalities' (2012) 34(1) Sociology of Health & Illness 130.

⁴¹ European Commission, 'EU Consumer Policy strategy 2007-2013 Empowering consumers, enhancing their welfare, effectively protecting them' COM(2007) 99 final.

⁴² Culture here is taken to mean the 'ideas, customs, and social behaviour of a particular people or society': <<http://www.oxforddictionaries.com/definition/english/culture>>.

⁴³ G Scambler, 'Health inequalities' (2012) 34(1) Sociology of Health & Illness 130.

⁴⁴ H Graham, 'Social determinants and their unequal distribution: clarifying policy understandings' (2004) 82(1) Milbank Quarterly 101; H Graham, 'Intellectual Disabilities and Socioeconomic Inequalities in Health: An Overview of Research' (2005) 18 Journal of Applied Research in Intellectual Disabilities 101. See also 'Closing the gap in a generation: Health equity through action on the social determinants of health' (WHO 2008).

avoidance of discrimination, and solidarity.⁴⁵ Together with Member States, it has therefore engaged in various responses, including strategic communications, policy strategies, structured activities, monitoring and evaluation, committee work, funding, and research.⁴⁶

When used, these tools have been successful in many ways, such as reducing some specific determinants of NCDs,⁴⁷ but despite these sentiments, commitments and actions, little has been successfully achieved to reduce health inequalities. For instance, while the rates of lung cancers due to smoking have been reducing in all SEP groups, the likelihood of unskilled workers developing the diseases in the 1970s was approximately three times higher than the professional classes, but in the 1990s this increased to more than five times.⁴⁸

This does not imply that these policies and interventions have been ineffective - for instance, they may have reduced the increase in health gaps which would have otherwise occurred.⁴⁹ More accurately, it reflects the fact that NCD causation is complex, and its prevention complicated. Indeed, there is no magic bullet to halt and reverse this epidemic. It therefore requires an analysis of why these have not been as successful as one would hope. This has been highlighted most rightly by Margaret Chan, WHO Director-General, who notes that '[h]ealth inequities exist because the wrong policies are in place.'⁵⁰

There are four broad policy options available to tackle health inequalities. Firstly, and most importantly, to reduce inequalities in the distribution of socioeconomic factors and structural determinants. Secondly, to tackle specific or intermediary determinants which mediate the effect of SEP on health, such as smoking. Thirdly, to tackle the consequences of lower health status on SEP. Fourthly, when people do become ill, to provide those in lower SEP groups healthcare which is more suited to their needs.⁵¹ While such action should benefit all in society universally, it should be at a scale and intensity that is proportionate to the level of disadvantage – what is termed proportionate universalism.⁵² These actions require a comprehensive, multi-level,

⁴⁵ See Health Inequalities in the EU: Final Report of a Consortium (European Commission Directorate-General for Health and Consumers 2013).

⁴⁶ 'Health Inequalities in the EU: Final Report of a Consortium' (European Commission Directorate-General for Health and Consumers 2013), 87.

⁴⁷ P Mladovsky et al, 'Health in the European Union: Trends and Analysis' (European Observatory on Health Systems and Policies 2009), ch 7.

⁴⁸ K Richardson, 'Smoking, Low Income and Health Inequalities: Thematic Discussion Document' (Action on Smoking and Health and the Health Development Agency 2001).

⁴⁹ It is often rather difficult to determine which policies have had a positive effect on the reduction of disease because of epidemiological limitations, such as an ability to remove confounding factors from population data.

⁵⁰ WHO World Conference on the Social Determinants of Health, 2011.

⁵¹ 'A conceptual framework for action on the social determinants of health' (World Health Organization 2010).

⁵² 'Fair Society, Healthy Lives: Strategic Review of Health Inequalities in England' (The Marmot Review 2010), 16.

multi-sector, health-in-all policies approach with the backing of political will.⁵³ They should also include legal interventions.

A. Legal interventions to reduce NCDs and health inequalities

Law provides significant and diverse opportunities for preventing NCDs. Of its many advantages, some of the more notable ones include its universal application to all actors, its binding nature and ability to be enforced with consequences, its democratic process, its susceptibility to legitimate challenge before the courts, and its ability to change societal norms.⁵⁴ It is therefore not surprising that the WHO Global Action Plan refers specifically to law as a tool for the prevention and control of NCDs.⁵⁵

In developing law and legal instruments, EU policy-makers have a number of tools at their disposal. These include disclosure requirements, information regulation schemes, marketing suppression, measures affecting product availability, economic instruments, fundamental rights approaches, performance-based regulation, self-regulation, supportive policies such as education campaigns, and civil liability schemes.⁵⁶

This is not to say that law is a panacea in NCD prevention. Law does have limits, not least that the regulatory process can be slow and resource-intensive. Indeed, in addition to being a source of opportunities, law is also a source of constraints, such as with the constitutional limits in which the EU operates. Moreover, 'the legality, design, legitimacy as well as the effectiveness of several regulatory interventions intended to promote healthier behaviours remain highly contested'.⁵⁷ It is only through understanding these constraints, will policy-makers be able to maximise opportunities.⁵⁸

⁵³ 'Addressing the Social Determinants of Noncommunicable Diseases' (United Nations Development Programme 2013)

⁵⁴ A Alemanno and A Garde, 'Regulating Lifestyles in Europe: How to Prevent and Control Non-Communicable Diseases Associated with Tobacco, Alcohol and Unhealthy Diets?' (Swedish Institute for European Policy Studies 2013), 12.

⁵⁵ 'Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020' (World Health Organization 2013), eg 24 & 30.

⁵⁶ A Alemanno and A Garde, 'Regulating Lifestyles in Europe: How to Prevent and Control Non-Communicable Diseases Associated with Tobacco, Alcohol and Unhealthy Diets?' (Swedish Institute for European Policy Studies 2013), 25.

⁵⁷ A Alemanno and A Garde, 'Regulating Lifestyles: Europe, Tobacco, Alcohol and Unhealthy Diets' in A Alemanno and A Garde (eds), *Regulating Lifestyle Risks: The EU, Alcohol, Tobacco and Unhealthy Diets* (Cambridge University Press 2014), 2.

⁵⁸ A Alemanno and A Garde, 'Regulating Lifestyles in Europe: How to Prevent and Control Non-Communicable Diseases Associated with Tobacco, Alcohol and Unhealthy Diets?' (Swedish Institute for European Policy Studies 2013), 12.

The question is not so much whether the law can play an important role in promoting healthier behaviours – it clearly does. Rather, the question is how the law can be designed to support effective NCD prevention and control policies and withstand legal challenges.⁵⁹

B. The limitations of EU consumer policy

Notwithstanding that multiple tools in the regulatory mix need to be employed to tackle the NCD epidemic, the overwhelming majority of legislative measures have been introduced under the EU's consumer protection competence.^{60,61} These have been aimed at reducing NCDs generally, and have targeted specific or intermediary determinants. If Hilary Graham's causal pathway above is recalled, this revolves around changing the environment so that it is conducive to healthier behaviours. Such measures have focussed on the information environment through, for instance, food labelling requirements, tobacco warnings and prohibitions against misleading marketing.⁶²

Regulating information as a tool of consumer protection expanded significantly following the 1960s, with the adoption of a 'Preliminary Programme of the European Economic Community for a Consumer Protection and Information Policy' and its explicit acknowledgment that consumers have the right to information.⁶³ This has remained at the core of the EU's consumer protection agenda.⁶⁴

The EU's legal response to NCD prevention, and the protection of vulnerable and disadvantaged groups, has also focussed heavily on the consumer information paradigm.⁶⁵ This envisages that consumers are provided with sufficient and accurate

⁵⁹ A Alemanno and A Garde, 'Regulating Lifestyles in Europe: How to Prevent and Control Non-Communicable Diseases Associated with Tobacco, Alcohol and Unhealthy Diets?' (Swedish Institute for European Policy Studies 2013).

⁶⁰ Treaty on the Functioning of the European Union [2012] OJ C326/47, Arts 169(2)(a) & Art 114.

⁶¹ Alternatively, Article 169(2)(b) 'can be used for measures which support the activities of the Member States in the field of consumer protection': C Twigg-Flesner, A Cross-Border-Only Regulation for Consumer Transactions in the EU: A Fresh Approach to EU Consumer Law (Springer 2012), 42. As could Article 352: Case C-436/03, European Parliament v Council of the European Union [2006] ECR I-3754. There is also the possibility of Article 115: K Gutman, 'The Commission's 2010 Green Paper on European Contract Law: Reflections on Union Competence in Light of the Proposed Options' (2011) 7(2) European Review of Contract Law 151. On the role of Art 168 see O Bartlett, 'The EU's Competence Gap in Public Health and Non-Communicable Disease Policy' Cambridge Journal of International and Comparative Law (forthcoming 2016).

⁶² A Alemanno and A Garde, 'The Emergence of an EU Lifestyle Policy: The Case of Alcohol, Tobacco and Unhealthy Diets' (2013) 50 Common Market Law Review 1745.

⁶³ Annex to Council Resolution of 14 April 1975 on a preliminary programme of the European Economic Community for a consumer protection and information policy [1975] OJ C92/1, para 3(d). For an indication of early legislative acts see appendices 1 & 2 to this document.

⁶⁴ European Commission, 'EU Consumer Policy strategy 2007-2013 Empowering consumers, enhancing their welfare, effectively protecting them' COM(2007) 99 final.

⁶⁵ European Commission, 'A European Consumer Agenda - Boosting confidence and growth' COM(2012) 225 final.

information so that they become well-informed, and therefore make rational decisions which protect their health.⁶⁶

Information disclosures as a tool for NCD prevention enjoys many advantages, which can be categorised into economic and equitable,⁶⁷ as well as pragmatic, rationales. Briefly said, economic efficiency can result from information disclosures because they correct informational asymmetries which favour industry.⁶⁸ Thus, the typical policy responses focus on providing information to consumers; and, where such information is unlikely to be processed and acted upon, to regulate the substance of transactions.⁶⁹ The equity rationale asserts that consumers have the right to information,⁷⁰ and consumers' desire to be informed about products⁷¹ should be fulfilled. However, in addition to there being no consensus on what it means to be sufficiently informed,⁷² fundamental rights arguments have not yet been systematically utilised by the public health community.⁷³ The political pragmatism rationale also favours information, as disclosures are often easier to implement than 'command and conquer' rules. Also, by not reducing choice, consumer autonomy can be preserved, which in turn ameliorates allegations of paternalism and its pejorative conceptualisation through the 'nanny state'.⁷⁴

If it is accepted that the regulation of information leads to consumers being empowered, and thereby guides them to healthier choices, information schemes would be consistent with NCD prevention. However, the current information paradigm is not consonant with achieving these aspirations.

⁶⁶ A Garde, 'Freedom of Commercial Expression and Public Health Protection in Europe' (2010) 12 *Cambridge Yearbook of European Legal Studies* 225; M Friant-Perrot and A Garde, 'From BSE to Obesity: EFSA's Growing Role in the EU's Nutrition Policy' in A Alemanno and S Gabbi (eds), *Foundations of EU Food Law and Policy: Ten Years of the European Food Safety Authority* (Ashgate 2014).

⁶⁷ I Ramsay, 'Framework for Regulation of the Consumer Marketplace' (1985) 8 *Journal of Consumer Policy* 353.

⁶⁸ G Howells, 'The Potential and Limits of Consumer Empowerment by Information' (2005) 32(3) *Journal of Law and Society* 349.

⁶⁹ GK Hadfield, R Howse and MJ Trebilcock, 'Information-Based Principles for Rethinking Consumer Protection Policy' (1998) 21 *Journal of Consumer Policy* 131, 132-134.

⁷⁰ See further A Garde, 'Freedom of Commercial Expression and Public Health Protection in Europe' (2010) 12 *Cambridge Yearbook of European Legal Studies* 225; A Garde, 'Freedom of Commercial Expression and Public Health Protection: The Principle of Proportionality as a Tool to Strike the Balance' in NN Shuibhne and LW Gormley (eds), *From Single Market to Economic Union: Essays in Memory of John A Usher* (Oxford University Press 2012), 119.

⁷¹ See for instance KG Grunert and JM Wills, 'A review of European research on consumer response to nutrition information on food labels' (2007) 15 *Journal of Public Health* 385, 389-390.

⁷² S Chapman and J Liberman, 'Ensuring smokers are adequately informed: reflections on consumer rights, manufacturer responsibilities, and policy implications' (2005) 14(Suppl II) *Tobacco Control* ii8.

⁷³ On the evolution of the fundamental rights discourse in consumer law see Iris Benöhr, *EU Consumer Law and Human Rights* (Oxford University Press 2013).

⁷⁴ On the limits of the notion of personal responsibility see RS Magnusson, 'Obesity prevention and personal responsibility: the case of front-of-pack food labelling in Australia' (2010) 10 *BMC Public Health* 2010 662.

This is because law, in importing the concept from neoclassical economics, takes as an axiom rational consumers who make consumption decisions which best match their true needs when armed with sufficient and accurate information. Rational consumers are said to maximise ‘their utility from a stable set of preferences and accumulate an optimal amount of information and other inputs in a variety of markets’.⁷⁵ Characterised as *homo economicus*, this consumer is ‘perfectly informed, forward-looking, invariant in his preferences, and whose decisions are unencumbered by irrelevant contextual influences’. This is the foundation on which consumer laws and policies have been adopted.

The thrust of this paper is that a substantial source of the failure to reduce NCDs and health inequalities arises from EU consumer law and policy not taking sufficient account of how consumers, especially those from lower SEP groups, actually behave.

As one of the main tasks of law, consciously or unconsciously, is to change behaviour, its ability to implement rules to effect such changes depends on the accuracy of the models of behaviour on which it is based. These models should not only foresee the response of consumers, but also include insights into why consumers are predicted to act in such ways.⁷⁶

The difficulty, therefore, of the rational consumer model centres on its lack of predictive power and the implausibility of its predictions. Behavioural research – an umbrella term which encompasses fields including behavioural economics, psychology, sociology, management, consumer decision making, and many others – has helped identified three key reasons for this.

Firstly, the information paradigm promoted by the EU presupposes that consumers are given good quality, sufficient information which is accurate and not misleading.⁷⁷ The EU therefore takes responsibility for ensuring that the consumer has available the necessary, valuable information. The difficulty with this is that information

⁷⁵ GS Becker, ‘The Economic Approach to Human Behavior’ (University of Chicago Press 1976). See further for instance CR Sunstein, ‘Empirically Informed Regulation’ (2011) *University of Chicago Law Review* 1349, 1350–1361; D Ariel, *Predictably Irrational: The Hidden Forces That Shape Our Decisions* (Harper 2008); P Diamond and Hannu Vartiainen (eds), *Behavioural Economics and its Applications* (Princeton University Press 2007); MA Eisenberg, ‘The Limits of Cognition and the Limits of Contract’ (1995) 47 *Stanford Law Rev* 211; Russell B Korobkin and TS Ulen, ‘Law and Behavioural Research: Removing the Rationality Assumption from Law and Economics’ (2000) 88(4) *California Law Review* 1051; C Jolls et al, ‘A Behavioural Approach to Law and Economics’ (1998) 50 *Stanford Law Review* 1471. But see R Epstein, ‘Behavioral Economics: Human Errors and Market Correction’ (2006) 73 *University of Chicago Law Review* 111.

⁷⁶ OD Jones and TH Goldsmith, ‘Law and Behavioral Biology’ (2005) 105 *Columbia Law Review* 405.

⁷⁷ M Friant-Perrot and A Garde, ‘From BSE to Obesity: EFSA’s Growing Role in the EU’s Nutrition Policy’ in A Alemanno and S Gabbi (eds), *Foundations of EU Food Law and Policy: Ten Years of the European Food Safety Authority* (Ashgate 2014), 137-138.

provided is not always sufficient and of good quality, and not always accurate and not misleading.⁷⁸ There is therefore a disparity between the behaviour of the notional consumer and the real-world consumer.

Secondly, behavioural economics has brought to the fore the identification of the two sets of systems of thought, which can be considered endogenous limitations.⁷⁹ System 1 is the automatic system: it is uncontrolled, effortless, emotional, unconscious and fast, and has great capacity but engages superficially. System 2 is the reflective system: it is controlled, effortful, deductive, self-aware and slow, and has limited capacity but engages deeply.⁸⁰ This research reveals that consumers rarely act completely rationally – what is often termed ‘bounded rationality’⁸¹ – not least because consumers are subject to heuristics and biases. Despite this, the behaviour change model on which much of law⁸² – including consumer law⁸³ – is grounded takes as its base a strong vision of System 2, and largely discounts the role of System 1.

Thirdly, rationality is not always determinant of consumer decisions, as consumer behaviour is multifaceted.⁸⁴ In particular, there are exogenous factors which can impact on consumers following through with healthy purchasing decisions. For instance, a consumer may make a perfectly rational decision to purchase and consume more fruit and vegetables, but may not have local access to a retailer who supplies these products, or may not have sufficient income to purchase healthier products which are often more expensive than less healthy products.⁸⁵

⁷⁸ See for instance the debates on the contents of nutritional declarations and front-of-pack labelling: European Commission, Proposal for a Regulation of the European Parliament and of the Council on the provision of food information to consumers. Impact Assessment Report on Nutrition Labelling Issues COM(2008) 40 final, ss 6.7 & 6.8.

⁷⁹ See D Kahneman, P Slovic and A Tversky, *Judgment under Uncertainty: Heuristics and Biases* (Cambridge University Press 1982); A Tversky and D Kahneman, ‘Judgment under Uncertainty: Heuristics and Biases’ (1974) 185(4157) *Research* 1124-1131; Matthew Rabin ‘Psychology and Economics’ (1998) 36(1) *Journal of Economic Literature* 11.

⁸⁰ ‘MindSpace’ (Institute for Government).

⁸¹ HA Simon, *Models of Bounded Rationality* (MIT Press 1982).

⁸² See C Jolls, C R Sunstein, and R Thaler, ‘A Behavioural Approach to Law and Economics’ (1998) 50 *Stanford Law Review* 1470; C R Sunstein (ed), *Behavioral Law and Economics* (Cambridge University Press 2000); R Korbkin and T Ulen, ‘Law and Behavioural Research: Removing the Rationality Assumption from Law and Economics’ (2000) 88 *California Law Review* 1951.

⁸³ See RA Epstein, ‘Behavioral Economics: Human Errors and Market Corrections’ (2006) 73 *University of Chicago Law Review* 111; O Bar-Gill, ‘The Behavioral Economics of Consumer Contracts’ (2008) 92 *Minnesota Law Review* 749; RA Epstein, ‘The Neoclassical Economics of Consumer Contracts’ (2007) 92 *Minnesota Law Review* 803; JD Hanson and DA Kysar, ‘Taking Behavioralism Seriously: The Problem of Market Manipulation’ (1999) 74 *New York University Law Review* 630.

⁸⁴ See G Howells, ‘The Potential and Limits of Consumer Empowerment by Information’ (2005) 32(3) *Journal of Law and Society* 349.

⁸⁵ A Drewnowski, ‘Obesity and the food environment: dietary energy density and diet costs’ (2004) 27(3 Suppl) *American Journal of Preventative Medicine* 154.

The totality of this behavioural research tells us that consumers (i) do not like change; (ii) are influenced by others; (iii) are not inherently selfish; (iv) have egos; (v) live in the here and now; (vi) have limited cognitive capacity; (vii) are influenced by their environment; (viii) makes choices relatively; and (ix) have values which are personal.⁸⁶

These behavioural insights apply at all stages of the purchasing process. Therefore, in order for information to influence behavioural choices positively, consumer decision theories reveal that consumer must (i) be exposed to the information and (ii) perceive it. They must then (iii) understand the information and (iv) draw an inference of the healthiness of product. Then (v) integrate this with other information. This will influence the (vi) evaluation of the product, and eventually the (vii) purchase decision.⁸⁷

The corollary of the application of behavioural insights to the purchasing process is to reveal that a failure to sufficiently incorporate the findings of behavioural research into consumer policy leads to the development of rules which may not be effective in NCD prevention.⁸⁸ This is not to say, however, that consumer law has not taken any account of behavioural research. This is far from true.⁸⁹ Instead, it is to say that, despite some limited behavioural insights, the rational consumer model in consumer law still lacks sufficient predictive power and maintains implausible predictions.

C. Behavioural insights in consumer law

⁸⁶ Behavioural research is a conceptually evolving field filled with varying and conflicting nomenclature, and disputes over classification and boundaries. This rough categorisation has been adapted from A Samson and O Wood, 'Behavioral Economics: A Primer' (London School of Economics and Political Science 2010).

⁸⁷ KG Grunert et al, 'Use and understanding of nutrition information on food labels in six European countries' (2010) 18 *Journal of Public Health* 261, esp 262. See also KG Grunert and JM Wills, 'A review of European research on consumer response to nutrition information on food labels' (2007) 15 *Journal of Public Health* 385; K G Grunert, 'Current issues in the understanding of consumer food choice' (2002) 13 *Trends in Food Research & Technology* 275. For an alternative modal see J Barreiro-Hurlé, 'Does nutrition information on food products lead to healthier food choices?' (2010) 35 *Food Policy* 221, 222.

⁸⁸ See TA Glass and MJ McAtee, 'Behavioral research at the crossroads in public health: Extending horizons, envisioning the future' (206) 62 *Social Research & Medicine* 1650; K Glanz and DB Bishop, 'The Role of Behavioral Research Theory in Development and Implementation of Public Health Interventions' (2010) 31 *Annual Review of Public Health* 399; J Coreil, *Social and Behavioral Foundations of Public Health* (2nd edn, Sage Publications 2010); Derek Rutter and Lyn Quine (eds), *Changing Health Behaviour Intervention And Research With Social Cognition Models* (Open University Press 2002), esp chs 3, 5, 7 & 11.

⁸⁹ See MG Faure and HA Luth, 'Behavioural Economics in Unfair Contract Terms: Cautions and Considerations' (2011) 34 *Journal of Consumer Policy* 337; J Trzaskowski, 'Behavioural Economics, Neuroscience, and the Unfair Commercial Practices [sic] Directive' (2011) 34 *Journal of Consumer Policy* 377; SI Becher, 'Behavioral Science and Consumer Standard Form Contracts' (207) 68(1) *Louisiana Law Review* 117; JD Wright, 'Behavioral Law and Economics, Paternalism, and Consumer Contracts: An Empirical Perspective' 2 *NYU Journal of Law & Liberty* 470; J A Luzak, 'To Withdraw Or Not To Withdraw? Evaluation of the Mandatory Right of Withdrawal in Consumer Distance Selling Contracts Taking Into Account Its Behavioural Effects on Consumers' (2014) 37 *Journal of Consumer Policy* 91; J Mehta (ed), *Behavioural Economics in Competition and Consumer Policy* (ESRC Centre for Competition Policy 2013); 'Consumer Behavioural Biases in Competition: A Survey' (Office of Fair Trading 2011); 'Consumer Decision-Making in Retail Investment Services' (European Commission).

EU consumer law does take behavioural considerations into account when developing new legislation.⁹⁰ However, when behavioural research is taken into account, two limitations remain. Either (i) the standard against which consumer behaviour is assessed is particularly high; or (ii) the expectation of consumer behaviour is improbable.

For limitations of space, this section discusses two examples from recent consumer protection legislative acts which have, at least in part, the objective of NCD prevention. The first is the case of the Food Claims Regulation⁹¹ which, through its average consumer benchmark, assesses consumer behaviour against an exceptionally high standard. The second is the revised Tobacco Products Directive⁹² which, through its provisions on warnings, places an improbable expectation on consumer behaviour.

(a) Food Claims Regulation

Notwithstanding the EU's early awareness of the negative effects of unhealthy diets, and the importance of food labelling in informing and educating consumers,⁹³ it is only in recent years that the EU has taken a more active, joined-up approach to food labelling which fuses considerations of economic interests with that of health.⁹⁴ What has resulted is the current regulatory system governing food information which aims for 'the protection of the interests of consumers' through enabling 'consumers to make informed choices in relation to the foods they consume'.⁹⁵

Article 5(2) of the Food Claims Regulation provides that health and nutrition claims⁹⁶ are only permitted if 'the average consumer can be expected to understand the beneficial effects as expressed in the claim.'⁹⁷ This is qualified by the Preamble which states that in determining whether consumers are likely to be misled, in line

⁹⁰ See A Sibony and G Helleringer, 'EU Consumer Protection and Behavioural Sciences: Revolution or Reform?' in A Alemanno and A Sibony (eds), *Nudge and the Law: A European Perspective* (Hart 2015); A Sibony, 'Can EU Consumer Law Benefit From Behavioural Insights' in K Mathis (ed), *European Perspectives on Behavioural Law and Economics* (Springer 2015).

⁹¹ Regulation (EC) No 1924/2006.

⁹² Directive 2014/40/EU.

⁹³ Annex to Council Resolution of 19 May 1981 on a second programme of the European Economic Community for a consumer protection and information policy [1981] OJ C133/1, para 15(1).

⁹⁴ See White Paper on A Strategy for Europe on Nutrition, Overweight and Obesity related health issues COM(2007) 279 final. See also European Commission, 'Commission staff working document on knowledge-enhancing aspects of consumer empowerment 2012 – 2014' SWD(2012) 235 final.

⁹⁵ Regulation (EC) No 178/2002, Article 8.

⁹⁶ This is any non-mandatory message or representation which states, suggests or implies that a food has particular beneficial nutritional properties; or which states, suggests or implies that a relationship exists between a food category, a food or one of its constituents and health: Article 2.

⁹⁷ Article 5(2). See also Arts 13(1)(c)(ii) & 16(3)(c).

with general EU consumer law,⁹⁸ a benchmark is taken of the average consumer who is reasonably well-informed and reasonably observant and circumspect taking into account social, cultural and linguistic factors.^{99,100}

The notion of the average consumer has developed over a substantial body of case law.¹⁰¹ This asserts that the average consumer is an active player in the market who reads information¹⁰² but perhaps will pay less attention to common products.¹⁰³ The average consumer will have background knowledge.¹⁰⁴ The average consumer will also be critical towards information, and not take information literally.¹⁰⁵ The average consumer will not be misled easily if sufficient information is available.¹⁰⁶

The reality is that consumers do not always read food information,¹⁰⁷ will not always have background knowledge,¹⁰⁸ will not always be critical towards information,¹⁰⁹ and

⁹⁸ See BB Duivenvoorde, *The Consumer Benchmarks in the Unfair Commercial Practices Directive* (Springer 2015); R Incardona and C Poncibò, 'The average consumer, the unfair commercial practices directive, and the cognitive revolution' (2007) 30 *Journal of Consumer Policy* 21.

⁹⁹ Recital 15. See A Garde, *EU Law and Obesity Prevention* (Kluwer Law International 2010), 155-157.

¹⁰⁰ It should be noted that where a claim is specifically aimed at a particularly vulnerable group of consumers, it takes as desirable that the impact of the claim be assessed from the perspective of the average member of that group. However, this was not introduced in order to protect members of lower SEP groups, but instead to protect consumers who have specific characteristics (such as mental or physical disability) only when communications are directed specifically at these groups. See M Friant-Perrot, 'The Vulnerable Consumer in the UCPD and Other Provisions of EU Law' in W van Boom, A Garde and O Akseli (eds), *The Unfair Commercial Practices Directive: Impact, Enforcement Strategies and National Legal Systems* (Ashgate 2014); BB Duivenvoorde, *The Consumer Benchmarks in the Unfair Commercial Practices Directive* (Springer 2015).

¹⁰¹ Case C-210/96, *Gut Springenheide GmbH, Rudolf Tusky v Oberkreisdirektor des Kreises Steinfurt Amt für Lebensmittelüberwachung* [1998] ECR I-4657, as confirmed in Case C-303/97, *Verbraucherschutzverein eV v Sektkellerei G.C. Kessler GmbH und Co.* [1999] ECR I-00513

¹⁰² Case C-51/94, *Commission of the European Communities v Federal Republic of Germany* [1995] ECR I-03599, [34]. See also for instance Case C-133-136/85, *Walter Rau Lebensmittelwerke and others v Bundesanstalt für landwirtschaftliche Marktordnung* [1987] ECR I-2289; Case 178/84, *Commission of the European Communities v Federal Republic of Germany* [1987] ECR 01227; Case 407/85 *3 Glocken GmbH and Gertraud Kritzinger v USL Centro-Sud and Provincia autonoma di Bolzano* [1988] ECR 04233. On this labelling doctrine see G Davies, 'Consumer Protection as an Obstacle to the Free Movement of Goods' [2003] 4(3) *ERA Forum* 55.

¹⁰³ Case C-498/07, *P Aceites del Sur-Coosur SA v Koipe Corporación SL* [2009] ECR I-7371.

¹⁰⁴ Case C-465/98, *erein gegen Unwesen in Handel und Gewerbe Köln eV v Adolf Darbo AG* [2000] ECR I-02297. But not necessarily technical knowledge: Case C-26/13, *Árpád Kásler, Hajnalka Káslerné Rábai v OTP Jelzálogbank Zrt* [2014].

¹⁰⁵ Case C-362/88, *GB-INNO-BM v Confédération du commerce luxembourgeois* [1990] ECR I-00667; Case C-126/91, *Schutzverband gegen Unwesen in der Wirtschaft e.V. v Yves Rocher GmbH* [1993] ECFR I-02361.

¹⁰⁶ Case C-373/90, *Criminal proceedings against X* [1992] ECR I-00131

¹⁰⁷ As confirmed by eye tracking experiments: DJ Graham et al, 'Eye tracking and nutrition label use: A review of the literature and recommendations for label enhancement' (2012) 37(4) *Food Policy* 378. See also J Aschemann-Witzel and U Hamm, 'Do consumers prefer foods with nutrition and health claims? Results of a purchase simulation' (2010) 16 *Journal of Marketing Communications* 47, 48-49; Liisa Lähteenmäki, 'Claiming health in food products' (2013) 27 *Food Quality and Preference* 196; B Roe et al, 'The impact of health claims on consumer search and product evaluation outcomes: results from FDA experimental data' (1999) 18 *Public Policy Mark* 89.

¹⁰⁸ For reviews on background knowledge and understanding see KG Grunert et al, 'Determinants of consumer understanding of health claims' (2011) 56(2) *Appetite* 269; KG Grunert et al, 'Nutrition knowledge, and use and understanding of nutrition information on food labels among consumers in the UK' (2010) 55(2) *Appetite* 177; G Nocella and O Kennedy, 'Food health claims – What consumers understand' (2012) 37 *Food Policy* 571.

therefore will often be misled.¹¹⁰ Moreover, although the Court does not prohibit research polls and expert opinions, which may provide statistical or qualitative insight into consumer behaviour, it stresses the issue being one for judicial assessment.¹¹¹

The benchmark is ‘an attempt to navigate a course between the rich diversity of actual consumer behaviour and the need for an operational regulatory benchmark.’¹¹² However, in aiming for a workable pan-European standard,¹¹³ and adopting a measure of maximum harmonisation, there remains little room to take into account the differences which exist between consumers.¹¹⁴

The Regulation seeks to mitigate these difficulties by only permitting ‘nutrition claims’ which appear on a closed list in the Annex to the Regulation. As regards ‘health claims’, the Regulation provides that these ‘should only be authorised...after a scientific assessment of the highest possible standard.’¹¹⁵ The European Food Safety Authority (EFSA), who is tasked with delivering opinions on health claims, shall ‘give advice on whether the proposed wording of the health claim is understandable and meaningful to the average consumer’¹¹⁶ and take this understanding into account when assessing application for authorisation of claims.¹¹⁷ In its initial assessment of claims, which must also follow the average consumer test laid down by the CJEU, EFSA rejected approximately 80% of claims submitted to it. This has certainly helped wipe out a great number of misleading statement. However, the known processes of

¹⁰⁹ M Dean et al, ‘Perceived relevance and foods with health-related claims’ (2012) 24(1) *Food Quality and Preference* 129; F Mariotti, ‘Potential pitfalls of health claims from a public health nutrition perspective’ (2010) 68(10) *Nutrition Reviews* 624; S Burton et al, ‘Nutrition ad claims and disclosures: Interaction and mediation effects for consumer evaluations of the brand and the ad’ (2000) 11(3) *Marketing Letters* 235; Li Lähteenmäki, ‘Claiming health in food products’ (2013) 27 *Food Quality and Preference* 196; J Aschemann-Witzela and Ulrich Hamm, ‘Do consumers prefer foods with nutrition and health claims? Results of a purchase simulation’ (2010) 16 *Journal of Marketing Communications* 47; P Chandon and B Wansink, ‘The Biasing Health Halos of Fast-Food Restaurant Health Claims: Lower Calorie Estimates and Higher Side-Dish Consumption Intentions’ (2007) 34 *Journal of Consumer Research* 301.

¹¹⁰ M Pothoulaki and G Chrysoschoidis, ‘Health claims: Consumers’ matters’ (2009) 1 *Journal of Functional Foods* 222, 225 & 227; ‘Review and analysis of current literature on consumer understanding of nutrition and health claims made on food (Food Standards Agency 2007); JM Wills et al, ‘European consumers and health claims: attitudes, understanding and purchasing behaviour’ (2012) 71 *Proceedings of the Nutrition Society* 229; SS genannt Bonsmann et al ‘Do consumers prefer foods with nutrition and health claims? Results of a purchase simulation’ (2010) 16 *Journal of Marketing Communications* 47.

¹¹¹ Case C-210/96, Gut Springenheide GmbH, Rudolf Tusky v Oberkreisdirektor des Kreises Steinfurt Amt für Lebensmittelüberwachung [1998] ECR I-4657, [35] & [36]. Cf Case C-373/90, Criminal proceedings against X [1992] ECR I-00131, where the Court used a quantitative test.

¹¹² S Weatherill, ‘Who is the ‘Average Consumer?’ in Stephen Weatherill and Ulf Bernitz (eds), *The Regulation of Unfair Commercial Practices under EC Directive 2005/09* (HArticle 2007), 135..

¹¹³ Case C-315/92, Verband Sozialer Wettbewerb eV v Clinique Laboratoires SNC and Estée Lauder Cosmetics GmbH [1994] ECR I-00317. Cf Case C-313/94, F.lli Graffione SNC v Ditta Fransa [1996] ECR I-6039; Case C-220/98, Estée Lauder Cosmetics GmbH & Co. OHG v Lancaster Group GmbH [2000] ECR I-117.

¹¹⁴ Although the case law does not take much account of behavioural research, this is not to say that it cannot: S Weatherill, ‘Who is the ‘Average Consumer?’ in S Weatherill and U Bernitz (eds), *The Regulation of Unfair Commercial Practices under EC Directive 2005/09* (Hart 2007), 133.

¹¹⁵ Recital 22.

¹¹⁶ Article 16(3).

¹¹⁷ Recital 28.

EFSA,¹¹⁸ as well as its implementing rules,¹¹⁹ do not make explicit reference to consumer understanding. Indeed, the Panel on Dietetic Products, Nutrition and Allergies at EFSA, which deals with substantiation of food claims, does not have members who specialise in matters of consumer understanding.¹²⁰ It therefore remains the case that while the EU has made much progress, it has not gone far enough.

Indeed, the original proposed Food Claims Regulation included a provision which would have prohibited food claims if the food product did not meet a certain nutritional profile. As the preamble correctly notes: 'The application of nutrient profiles as a criterion would aim to avoid a situation where nutrition or health claims mask the overall nutritional status of a food product, which could mislead consumers when trying to make healthy choices in the context of a balanced diet.'¹²¹ This, however, transpired to be 'one of the most debated articles' in the proposed Regulation.¹²² The final text of the Regulation was diluted in two ways. Firstly, the restrictions are less restrictive than originally proposed. Secondly, nutrient profiling was not detailed in the text. Instead, the Commission was required to establish such a system. Reaching consensus on this has proved so difficult¹²³ that no profile has been adopted by the Commission.¹²⁴ The deadline expired in January 2009.¹²⁵

(b) Tobacco Products Directive

The revised Tobacco Products Directive (TPD2) takes into account behavioural research most notably by requiring larger graphical warnings;¹²⁶ and removing the tar, nicotine and carbon monoxide (TNC) declaration. The preamble specifically notes this behavioural basis:

¹¹⁸ M B Gilsenan, 'Nutrition & health claims in the European Union: A regularity overview' (2011) 22 Trends in Food Science & Technology 536, esp 538.

¹¹⁹ Commission Regulation (EC) No 353/2008 of 18 April 2008 establishing implementing rules for applications for authorisation of health claims as provided for in Article 15 of Regulation (EC) No 1924/2006 of the European Parliament and of the Council [2008] OJ L109/11

¹²⁰ David P Richardson, 'The scientific substantiation of health claims with particular reference to the grading of evidence' (2005) 44 European Journal of Nutrition 319, 321. The list of current members of the panel does not list anyone who is a specialist in consumer understanding: <<http://www.efsa.europa.eu/en/nda/ndamembers.htm>> (accessed 21st May 2015).

¹²¹ Recital 10.

¹²² A Garde, EU Law and Obesity Prevention (Kluwer Law International 2010), 150 et seq.

¹²³ For some difficulties see for instance T Lobstein and S Davies, 'Defining and labelling 'healthy' and 'unhealthy' food' (2007) 12(3) Public Health Nutrition 331; Peter Scarborough, Mike Rayner and Lynn Stockley, 'Developing nutrient profile models: a systematic approach' (2007) 10(4) Public Health Nutrition 330.

¹²⁴ But see EFSA's recommendation: <<http://www.efsa.europa.eu/en/scdocs/doc/644.pdf>>.

¹²⁵ Article 4.

¹²⁶ Article 8.

'The labelling provisions should also be adapted to new scientific evidence. For example, the indication of the emission levels for tar, nicotine and carbon monoxide on unit packets of cigarettes has proven to be misleading as it leads consumers to believe that certain cigarettes are less harmful than others. Evidence also suggests that large combined health warnings comprised of a text warning and a corresponding colour photograph are more effective than warnings consisting only of text. As a consequence, combined health warnings should become mandatory throughout the Union and cover significant and visible parts of the surface of unit packets. Minimum dimensions should be set for all health warnings to ensure their visibility and effectiveness.'¹²⁷

The advantages of warnings are well known. They educate consumers as to health risks, increase motivation to quit, undermine brand value, and can therefore help reduce smoking rates. Although there is 'broad consensus that these warnings are legitimate and helpful'¹²⁸ tobacco warnings required by the first Tobacco Products Directive¹²⁹ proved not be in line with best evidence.¹³⁰ 'There is a genuine difference between information provision and information impact'.¹³¹ Consumers often do not see or notice warnings, do not understand warnings, and may also ignore warnings even if they are visible and comprehensible.¹³²

Therefore, following the binding commitments the EU and its Member States have signed up to through the Framework Convention on Tobacco Control,¹³³ improvements followed with TPD2. These included increased size, more visible placement, combined warnings which include both text and graphics, and better rotation of warnings.¹³⁴ However, the behavioural limitations of warnings persist¹³⁵

¹²⁷ Recital 25.

¹²⁸ G Howells and J Watson, 'The role of information in 'pushing and shoving' consumers of tobacco and alcohol to make healthy lifestyle choices' in Alberto Alemanno and Amandine Garde (eds), *Regulating Lifestyle Risks: The EU, Alcohol, Tobacco and Unhealthy Diets* (Cambridge University Press 2014), 39.

¹²⁹ Directive 2001/37/EC.

¹³⁰ D Hammond, 'Health warning messages on tobacco products: a review' (2011) 20 *Tobacco Control* 327; DM Krugman, RJ Fox and PM Fischer, 'Do Cigarette Warnings Warn? Understanding What It Will Take to Develop More Effective Warnings' (1999) 4(2) *Journal of Health Communication* 95; E J Strahan et al, 'Enhancing the effectiveness of tobacco package warning labels: a social psychological perspective' (2002) 11 *Tobacco Control* 183.

¹³¹ DM Krugman, RJ Fox and PM. Fischer, 'Do Cigarette Warnings Warn? Understanding What It Will Take to Develop More Effective Warnings' (1999) 4(2) *Journal of Health Communication* 95, 98.

¹³² MS Wogalter, 'Consumer Product Warnings: The Role of Hazard Perception' (1991) 22 *Journal of Safety Research* 71. See also WK Viscusi and Richard J Zeckhauser, 'Hazard Communication: Warnings and Risk' (1996) *Annals of the American Academy of Political and Social Science* 106.

¹³³ Article 11.

¹³⁴ See 'A review of the science base to support the development of health warnings for tobacco packages' (Sambrook Research International).

¹³⁵ H Latin, "'Good' Warnings, Bad Products, and Cognitive Limitations' (1994) 41 *UCLA Law Review* 1193

even for well-designed warnings.¹³⁶ It is therefore not surprising that the revised information scheme, on its own, will contribute to an unambitious estimated 1-1.5% reduction in smoking over the first five years of the Directive.¹³⁷

With the limited effectiveness of tobacco warnings, it is suggested that standardised, sometimes known as plain or generic, packaging would be a more useful tool. This would maintain warnings but otherwise enforce 'drab, purposefully unattractive packaging, devoid of branding (other than name) or promotional information.'¹³⁸ Through reducing the appeal of the products, increasing the effectiveness of health warnings and reducing the ability of packaging to mislead consumers about the harmful effects of tobacco, such packaging would discourage adults and children from taking up smoking, encourage people to give up and discourage relapses.¹³⁹

The Commission's impact assessment, which was based on extensive evidence, made clear that standardised packaging would be the most effective policy: it would strengthen the internal market, improve equality, and have the most positive implications for consumer health.¹⁴⁰ Although the Commission acknowledged that standardised packaging was 'expected to achieve the policy objectives even more effectively' it did not recommend this 'given the current lack of real life experience, pending legal disputes regarding the plain packaging and serious concerns expressed by some stakeholders'.¹⁴¹ In this context it is useful to note that the adoption of TPD2 was mired in controversy, delay and unprecedented industry lobby¹⁴² with 'no previous public consultation launched by the European Commission [having] ever registered such significant participation'. During the public consultation on the revision, the most controversial element proved to be the provision of consumer information.¹⁴³

D. Specific impacts on lower SEP groups

¹³⁶ See KR Laughery and MS Wogalter, 'Designing Effective Warnings' (2006) 2 *Reviews of Human Factors and Ergonomics* 241.

¹³⁷ The total impact of TPD2 is estimated to be 2%. In absolute terms this represents 2.4 million citizens.

¹³⁸ Standardised packaging of tobacco: Report of the independent review undertaken by Sir Cyril Chantler (2014), [1.4].

¹³⁹ Standardised packaging of tobacco: Report of the independent review undertaken by Sir Cyril Chantler (2014).

¹⁴⁰ European Commission, Impact Assessment. Accompanying the document Proposal for a Directive of the European Parliament and of the Council on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products COM(2012) 788 final, §5.3.

¹⁴¹ §5.3.5.

¹⁴² S Peeters et al, 'The revision of the 2014 European tobacco products directive: an analysis of the tobacco industry's attempts to 'break the health silo'' (2015) 0 *Tobacco Control* 1.

¹⁴³ 'Report on the public consultation on the possible revision of the Tobacco Products Directive (2001/37/EC)' (Health and Consumers Directorate-General 2011).

The reduced effectiveness of information regulation in NCD prevention, through the omission of sufficient insight from behavioural research, is exaggerated in members of lower SEP groups. In other words, interventions benefit lower SEP groups much less than higher SEP groups. Compounded with the fact that some interventions may have limited impact anyway, this becomes an appreciable hindrance to improving the health of members of lower SEP groups. Policies, in effect, perpetuate health inequalities.

This could be for a number of reasons, but there is a large dearth in the literature highlighting the behavioural research implications on health inequalities. As there has been no systematic attempt to explain why the omission of behavioural insights is more detrimental to lower SEP groups, this paper seeks to fill this gap. From the broader literature, three reasons can be inferred.

The first reason relates to the endogenous limitation of consumers. This is that consumers from lower SEP groups are subject to greater limitations of both Systems 1 and 2 – their rationality is ‘more bounded’. For instance, poverty causes psychological consequences, including stress and negative affective states, which lead to short-sighted and risk-averse decision-making, which reinforce habitual behaviours more strongly.¹⁴⁴

The second reason relates to the interaction between the consumer’s endogenous limitations and their exogenous environment. This is that, because of the circumstances in which people from lower SEP groups live, the negative effects of bounded rationality are exaggerated. For instance, poorer members of society will more often have to make decisions which require volition. This draws on their finite psychological resources, so that earlier acts to maintain willpower for healthy decisions will have detrimental impacts on later attempts at volition. This decision fatigue is more common in lower SEP groups.¹⁴⁵

The third reason relates to the consumer’s exogenous environment. Following the idea that rationality (or the lack of it) is not the sole determinant of consumer behaviour, the consumer’s environment can result in purchasing decisions which are not in the consumer’s best health interests. So, for instance, consumers may not be

¹⁴⁴ J Haushofer and E Fehr, ‘On the psychology of poverty’ (2014) 344 *Science* 862.

¹⁴⁵ RE Baumeister et al, ‘Ego Depletion: Is the Active Self a Limited Resource?’ (1998) 74(5) *Journal of Personality and Social Psychology* 1252.

able to follow through with healthful decisions if their poverty means that purchasing is restricted by cost.¹⁴⁶

These ideas are compounded by the two inherent assumptions of the EU information paradigm – that information is both sufficient and accurate – as these are not designed with lower SEP groups in mind.

IV. Policy opportunities

In light of the difficulties discussed in this paper, behavioural insights have been steadily increasing in prominence in law, but have yet to achieve mainstream acceptance into policy-making.¹⁴⁷ As Jolls and Sunstein note:

To the extent that legal rules are designed on the basis of their anticipated effects on behavio[u]r, bounded rationality is obviously relevant to the formulation of legal policy. But an important and under-addressed question is precisely how it is relevant to the formulation of legal policy. The most obvious possibility is that, given a demonstration of the existence and importance of a particular aspect of bounded rationality, the law should be structured to presume the persistence of that particular feature of human behaviour.¹⁴⁸

However, while ‘laws fail because of a failure of the behavioural models on which they are based’,¹⁴⁹ findings from behavioural research do not necessarily provide a ready solution for more capable policy. Nevertheless, the implications of not taking a lead from behavioural insights are too great to ignore.¹⁵⁰

The remainder of this section, therefore, seeks to synthesise when behaviourally-informed interventions are warranted, what types of interventions are desirable, and how these can be incorporated into consumer policy.

¹⁴⁶ A Drewnowski and SE Specter, ‘Poverty and obesity: the role of energy density and energy costs’ (2004) 79(1) *American Journal of Clinical Nutrition* 6.

¹⁴⁷ On the use of behavioural research in law see for instance J D Wright and DH Ginsburg, ‘Behavioral Law and Economics: Its Origins, Fatal Flaws, and Implications for Liberty’ (2012) 106(3) *Northwestern University Law Review* 1033; DC Langevoort, ‘Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review’ (1998) 51 *Vanderbilt Law Review* 1499; C Jolls and CR Sunstein, ‘Debiasing Through Law’ (2006) 35 *Journal of Legal Studies* 199; J Arlen, ‘Comment: The Future of Behavioral Economic Analysis of Law’ (1998) 51 *Vanderbilt Law Review* 1765; C Jolls, CR Sunstein and R Thaler ‘A Behavioral Approach to Law and Economics’ (1998) 50(5) *Stanford Law Review* 1471; RA Posner, ‘Rational Choice, Behavioral Economics, and the Law’ (1998) 50(5) *Stanford Law Review* 1551.

¹⁴⁸ C Jolls and CR Sunstein, ‘Debiasing Through Law’ (2006) 35 *Journal of Legal Studies* 199.

¹⁴⁹ OD Jones and TH Goldsmith, ‘Law and Behavioral Biology’ (2005) 105 *Columbia Law Review* 405.

¹⁵⁰ JD Hanson and DA Kysar, ‘Taking Behavioralism Seriously: The Problem of Market Manipulation’ (1999) 74 *New York University Law Review* 630.

Behaviourally-informed policies are often dismissed for three reasons. Critics claim, firstly, that these policies are paternalistic and infringe consumers' personal autonomy, but the issue of paternalism has been explored at great length in the literature. Secondly, some question the effectiveness of behavioural findings, but interventions should only be based on sufficient and best available evidence, with a thorough analysis of the foreseen implications, unintended consequences and the balancing of all other options. Thirdly, others highlight the multifactorial nature of NCDs.¹⁵¹ The multifactorial nature of NCDs is also openly accepted. However, behavioural insights are not peddled as a magic bullet. 'Instead, behavioural economics can perhaps best be thought of as offering a library of tools, not all of which can be used at any specific time, but each of which may be of use in some particular contexts. Behavioural economics is not a panacea, but by using the insights from human psychology that are embedded in the approach, academics and policy makers may be able to design interventions that – in some circumstances – are relatively well equipped to motivate people to behave in ways that are better for themselves, and for society at large.'¹⁵²

Moreover, the aim of behavioural policies is not to change the law entirely, or to make out that behavioural interventions are without difficulties.¹⁵³ It is to find a balance between preventing NCDs and reducing health inequalities, while still promoting the functioning of the internal market taking a high level of consumer protection.¹⁵⁴ Consumer law should adopt laws which not only take into account the behaviour of consumers generally but which place greater emphasis on the behaviour of members of lower SEP groups in line with the principle of proportionate universalism.

When developing NCD prevention policies there are five pertinent questions. Firstly, do consumers suffer from systematic misperceptions about the product or the practice? Secondly, do sellers respond strategically to this misperception? Thirdly, does this consumer misperception increase the likelihood of developing NCDs or increasing health inequalities? Fourthly, is legal intervention warranted and, if so, what type of legal intervention is desirable?¹⁵⁵ The overriding consideration for each

¹⁵¹ A Alemanno and A Garde, 'Regulating Lifestyles in Europe: How to prevent and control non-communicable diseases associated with tobacco, alcohol and unhealthy diets?' (Swedish Institute for European Policy Studies 2013), 9-1.

¹⁵² A Oliver, 'Whither behavioural economic policy?' (London School of Economics and Political Science, 12 April 2012) <<http://blogs.lse.ac.uk/healthandsocialcare/2012/04/12/whither-behavioural-economic-policy>>.

¹⁵³ A Alemanno and A Spina, 'Nudging legally: On the checks and balances of behavioral regulation' (2014) 12(2) International Journal of Constitutional Law 429.

¹⁵⁴ RB Korobkin and TS Ulen 'Law and Behavioral Research: Removing the Rationality Assumption from Law and Economics' (2000) 88(4) California Law Review 1051, 25.

¹⁵⁵ O Bar-Gill, 'The Behavioral Economics of Consumer Contracts' (2008) 92 Minnesota Law Review 74.

of these cases should be the degree to which members of lower SES groups are affected.¹⁵⁶

There has been much research in recent years on the actual¹⁵⁷ and potential¹⁵⁸ success of behavioural research in NCD prevention. The findings are often conflicting or context-specific. It is therefore not always easy to incorporate findings into policy.¹⁵⁹ Indeed, the evidence on behavioural approaches to a reduction in health inequalities, especially in differing SEP groups, is even less explored. Nevertheless, even based on current research, there is sufficient evidence that behavioural interventions work.¹⁶⁰ With future experimentation, and with commissioning of research on this, the EU would be in a position to determine the effectiveness of specific behavioural policies. Indeed, many policies are well researched and already known to the Commission, including nutrient profiling, front of pack nutritional labelling and standardised tobacco packaging. Moreover, where research suggests that information regulation is failing to provide effective solutions, this must be accepted, and other interventions in the regulatory toolbox adopted.

V. Conclusion

‘Non-communicable diseases can be prevented and their impacts significantly reduced, with millions of lives saved and untold suffering avoided.’¹⁶¹ There is no easy way to achieve this most necessary of aims. It demands action and cooperation from all levels and sectors of society. However, the EU’s current failures in consumer protection can be said to originate to a significant degree from a reliance on the

¹⁵⁶ B B Duivenvoorde, *The Consumer Benchmarks in the Unfair Commercial Practices Directive* (Springer 2015), 217-219.

¹⁵⁷ See for instance K Glanz and D B Bishop, ‘The Role of Behavioral Research Theory in Development and Implementation of Public Health Interventions’ (2010) 31 *Annual Review of Public Health* 399; A Oliver, ‘Is Nudge an Effective Public Health Strategy to Tackle Obesity? Yes’ (2011) 342 *British Medical Journal* d2168; G Loewenstein et al, ‘Can behavioural economics make us healthier?’ (2012) 344 *British Medical Journal* e3482; O Amir and O Lobel, ‘Liberalism and Lifestyle: Informing Regulatory Governance with Behavioural Research’; T Marteau et al, ‘Judging nudging: can nudging improve population health?’ (2011) 342 *British Medical Journal* 263.

¹⁵⁸ See for instance O Oullier and Sarah Sauneron (supervisors), ‘Improving public health prevention with behavioural, cognitive and neuroresearch’ (Centre for Strategic Analysis 2010); DR Just, L Mancino and B Wansink, ‘Could Behavioral Economics Help Improve Diet Quality for Nutrition Assistance Program Participants?’ (US Department of Agriculture 2007); DR Just and CR Payne, ‘Obesity: Can Behavioral Economics Help?’ (2009) 38 *Annals of Behavioral Medicine* S47; PJ Liu, ‘Using Behavioral Economics to Design More Effective Food Policies to Address Obesity’ (2014) 36(1) *Applied Economic Perspectives and Policy* 6; JB Kessler and C Yiwei Zhang, ‘Behavioral Economics and Health’; L R Skov et al, ‘Choice architecture as a means to change eating behaviour in self-service settings: a systematic review’ (2013) 14 *Obesity Reviews* 187.

¹⁵⁹ J Arlen, ‘Comment: The Future of Behavioral Economic Analysis of Law’ (1998) 51 *Vanderbilt Law Review* 1765; JD Hanson and DA Kysar, ‘Taking Behavioralism Seriously: The Problem of Market Manipulation’ (1999) 74 *New York University Law Review* 630.

¹⁶⁰ A Alemanno, ‘A Behavioural Approach to Health Promotion: Informing the Global NCD Agenda with Behavioural Insights’ in A Alemanno and A Garde (eds), *Regulating Lifestyle Risks: The EU, Alcohol, Tobacco and Unhealthy Diets* (Cambridge University Press 2014).

¹⁶¹ United Nations, Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases. A/RES/66/2, [42].

information paradigm with its assumption of rational actors. The EU desperately needs to re-evaluate its laws in light of increasingly strong evidence which makes clear that consumers have limitations of the mind, interact with their environment, and face external obstacles.

Individual policies require specific research to ensure that they are based on the best available evidence with minimal chance of unintended consequences. With more attention given to behavioural research, and the calls for more research, the EU can develop a sound understanding of how specific policies can incorporate behavioural insights for NCD prevention and health inequalities reduction.

What is needed is an integrated approach which recognises the reduction of health inequalities as a prime consideration. To achieve this, firstly, behavioural insights, especially those from consumers in low SEP groups, need to be integrated into mainstream consumer policy at every stage of development. Secondly, where behavioural research reveals that the information paradigm is unlikely to lead consumers to make healthier behavioural decisions, other tools in the regulatory toolbox, such as marketing restrictions, need to be deployed.