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1 The full picture of people's realities must be considered to deliver better diets for all

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14 Editor's summary

15

16 Engaging with people's realities is key to the success of policies and interventions aimed at
17 achieving better diets for all. Drawing on social practice theory, this Perspective proposes a
18 tool - the *full picture* - to help researchers, practitioners and policymakers think through the
19 full range of people's interacting realities that shape the impact of policies and interventions
20 designed to improve diets.

21

22 Abstract

23

24 Efforts to address poor quality diets have stepped up significantly in recent years, but the
25 problem of inadequate, unhealthy, unsustainable and unequal diets persists. Here, we argue
26 that to get policies and interventions working more effectively and equitably, a fresh
27 approach is needed - one that considers the full picture of people's realities. People's realities
28 interact to shape the way people respond to and engage with policies and interventions,
29 thereby influencing their impact, particularly, albeit not only, on dietary inequalities. We
30 propose a tool which brings together key realities that shape impact, including material,
31 economic and psychosocial realities people face in their households, families, food
32 environments, social interactions and cultures. The purpose of the tool is to help
33 policymakers, intervention practitioners and researchers committed to improving diets
34 achieve greater success by helping them think through the full picture of people's realities
35 when identifying, designing, implementing and evaluating policies and interventions.

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37

38 Main

39 Despite a wealth of policies and interventions implemented to enhance the quality of people's
40 diets worldwide (Table 1), the vast majority of the global population do not eat within dietary
41 guidelines.² Diets are improving either extremely slowly or not at all.³ This is undermining
42 efforts to address the huge global burden of undernutrition, obesity and non-communicable
43 diseases. Dietary inequalities are a particular challenge, with marginalised groups and
44 populations disproportionately affected across country contexts. Diets are also malaligned
45 with planetary boundaries.⁴

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Current policies and interventions are clearly not adding up to sufficient progress; evaluations show policies and interventions often have positive outcomes, but impacts are modest, not sustained and/or at a small scale. This raises the question: how can policies and interventions be designed to work more effectively to improve diets, thus enabling a more equitable and efficient allocation of the limited resources and capacity available to address this huge global burden?

In this Perspective we propose that a key part of the answer lies in engaging more closely with the *full picture* of the realities of people’s lives. Specifically, that the identification, design and evaluation of policies and interventions should consider the full range of factors that interact to shape people’s daily experience of food (“people’s realities”) and resulting food practices. We argue that considering the full picture of people’s realities is essential for success because people’s experiences as they go about their everyday lives shapes their engagement with and response to policies and interventions and, therefore, their impact. We illustrate this by drawing on examples from a range of different contexts, populations, and dietary challenges. We then present a tool to help policymakers, practitioners, and researchers think through the realities specific to their contexts. The approach draws on social practice theory, an empirically informed theory which situates practices around food (e.g. eating, shopping, cooking) in the social, material, and everyday contexts and systems from which they emerge.⁵ It is this grounding of policy and practice in lived experience of the “flow of everyday life” that we take forward in this Perspective.⁶

Considering people's realities

We present evidence from a range of different contexts, populations, and dietary challenges to illustrate why engaging with people’s realities is key to getting policies and interventions working better to improve diets for all. We select four policy and programme areas to indicate what realities matter, why and how they interact to shape people’s response to and engagement to the intervention. All show how engaging with people’s realities shines a light onto the practical steps needed to enhance the impact of policies and interventions.

Example 1. Policies on healthy food environments

Over the past decade, an increasing number of countries have developed policies to inform people about the nutritional content of (often packaged, convenient, ultraprocessed) foods high in fats, sugars and salt; reduced access and exposure to promotions (e.g. in and around schools); and introduced financial disincentives (e.g. sugary drinks taxes). These policies address the reality that increasingly, as many people go about their daily lives, these hyperpalatable foods are easily available and widely promoted at low cost. However, evidence indicates that other realities also need to be brought into the picture when considering policy impact, notably the realities women face as caregivers typically responsible for household food provision.

Women in different contexts often face a significant labour burden of planning, acquiring, preparing and serving food. For many, food work has to be balanced against other time demands, whether it be unpaid agricultural labour, childcare or multiple low-paid or demanding jobs. This in turn affects emotional health by creating stress, anxiety and feelings of guilt. Evidence shows the need to manage multiple demands with both the time available

93 and stress involved enhances the appeal of ready-to-heat or eat and out-of-home sources,
94 often high in fats, sugars and salt.^{7,8,9,10}

95

96 The pull of less nutritious food is reinforced by another reality – that ultraprocessed foods are
97 engineered to be easy to like. In the context of challenges of time and stress, women
98 caregivers understandably prioritise foods liked by all the household and that avoid
99 “mealtime battles” with their children.^{8,11,12,13} Evidence indicates this is reinforced by
100 meanings and identity around food; in the context of socially-constructed gender norms, for
101 example, women may experience feelings of obligation to serve foods their children enjoy.^{9,12}

102

103 The interacting dynamics that reinforce the appeal of these foods is compounded by various
104 manifestations of inequality. Financial and food insecurity add stress and mental health
105 challenges,¹⁴ which evidence shows shape young child feeding practices towards less healthy
106 eating patterns.¹⁵ Lower-income parents have less recourse to healthy ways to make their
107 children happy - a cheap snack is the most affordable option.¹⁶ Financial insecurity reduces
108 space for experimentation to help young children learn to like nutritious foods, since it
109 increases the risk that food will be wasted.¹³ Even when women have a strong sense of
110 identity associated with preparing fresh, nutritious foods for their families, this is often
111 limited - particularly in urban contexts - by poor household infrastructure: lack of access to
112 energy and water; a kitchen space, pleasant place to prepare food, quality cooking equipment
113 and/or refrigeration; and/or a space to eat meals all drive women towards foods which are
114 more convenient to prepare.^{17,18,19} These foods also take on meanings in the context of
115 inequalities. For example, in low- and middle-income countries, the appeal of modern
116 industrially-manufactured foods for lower income groups is enhanced by creating a sense of
117 belonging to the “modern, affluent world.”²⁰ They may also be trusted as safer relative to
118 more nutritious but perishable foods or water in contexts where food contamination is more
119 prevalent.²¹

120

121 Thinking through these various realities makes it clear that healthy food environment policies
122 face numerous countervailing forces which push women caregivers towards less healthy
123 foods, despite the reality that they are often informed and motivated. The example shows that
124 thinking through the full picture helps identify particularly critical realities that require
125 attention - in this case the heavy burden society places on women around food, from
126 gendered expectations that shape identity, to labour and emotional health, without providing
127 the infrastructure to carry that burden. But it also helps see how this reality interacts with
128 others, providing direct indications of the portfolio of policies needed for higher impact.
129 Specifically, how gendered vulnerabilities interact with the availability and promotion of
130 these foods. Advertising, packaging, nutrient claims and broader ‘brand eco-systems’
131 intentionally work to shape meanings and trust in the context of mothers’ anxiety about their
132 own ability to feed their children, further emphasising the need to take action on these
133 practices^{9,22} in tandem with more proactive engagement with gender inequalities and norms
134 and related inadequacy of household and material resources.

135

136 ***Example 2. School food initiatives***

137 School meal programmes exist in most countries around the world in contexts dominated by
138 undernutrition, obesity and both. They play a role addressing the dietary inequalities by
139 ensuring children in families experiencing financial and food insecurity have access to at
140 least one meal or snack every school day. They also benefit families (notably women) by

141 reducing the burdens of time, labour and associated stress of food preparation, particularly
142 beneficial in low-income families with limited fuel supply and/or kitchen space to prepare
143 food at home. In lower-income country contexts, families are also more likely to send their
144 girls to school when affordable food is provided.

145

146 Stepping into children's shoes helps identify how to further enhance the impact of these
147 programmes. Firstly, social relations are important to children; European studies indicate that
148 children view the social elements of school meals as more important than the food.^{23,24} A
149 study of a "home grown school feeding programme" implemented in nursery schools in
150 Vietnam found that "eating with peers" was a major motivator of engagement with the
151 healthy school meal, indicating that considering social aspects of eating can help increase
152 uptake.²⁵ In contrast, if children do not like the social or physical environment in which food
153 is served they may turn against school meals. One UK study reported that adolescents find
154 canteens "fundamentally anti-social," ultimately driving them to take advantage of the easy
155 availability of the fast food outlets nearby, thus limiting the benefits of healthy food
156 availability inside the school.²⁴ This is compounded by the reality that for adolescents at
157 least, making their own choices about food is one way they express their autonomy and
158 agency and challenge power relations^{20,26} - an opportunity to make decisions without limits
159 imposed by their caregivers.

160

161 This, in turn, interacts with the reality that children may not be familiar with the taste of
162 newly introduced healthier (or more sustainable) foods, especially if financial insecurity
163 means they are less exposed to these foods at home. European evidence shows children who
164 dislike the taste, texture, smell, or visual appeal of school food take agency by bringing in
165 lunch from home, leaving school to go home for lunch, buying unhealthy food locally,
166 smuggling in sugary drinks, or consuming more at home.^{24,27,28,29,30} This has been shown to be
167 the case even in situations of hunger in lower-income countries. A study in Ghana found that
168 children aged 8-15 living in poverty showed agency by rejecting food they did not like in
169 school meals, even when hungry.³¹

170

171 These findings indicate that the social aspects of food should be integrated into the design of
172 programmes aiming to make healthier foods more easily available. Engaging children in
173 decisions about menus and the nature of food service rather than "top down" approaches
174 where children feel disempowered can help nurture engagement.³² "Taste education" where
175 children taste healthy foods they are not familiar with,³³ building in changes gradually or in a
176 way relatively unnoticed by children,³⁴ and involvement in food growing and preparation³²
177 can also help address both social aspects and taste. For adolescents, accepting the reality that
178 they often push back on adult authority in their food choices indicates a role for "nudge"
179 interventions which maintain a feeling of autonomy at point of sale.³⁵ In contexts where
180 social stigma is a problem, universal free school meals can increase uptake, as can designing
181 non-stigmatizing means of access for means-tested groups.³⁶

182

183 ***Example 3. Nutrition-sensitive agriculture programmes***

184 Nutrition-sensitive agriculture programmes make production of nutritious foods more central
185 to agriculture. In rural areas of low-income countries where low dietary diversity and
186 undernutrition are prevalent, programmes such as home vegetable gardening, irrigation
187 projects, support for livestock ownership, and biofortification have shown some success in
188 increasing consumption of nutritious foods, especially among young children.^{37,38} The

189 evidence base shows that their impact is enhanced when they they consider the realities faced
190 by people in these contexts, especially women, given their dual roles in both caregiving and
191 agriculture.

192

193 In many of these contexts, gender norms present challenges to engaging in these
194 programmes by excluding women from decisions about crop production, from the social
195 networks within which decisions are made, and from selling larger amounts of crops and/or
196 the control of income.^{39,40} Women’s high workload on other tasks may also undermine their
197 ability to engage.⁴¹ Thus building in elements that consider these realities, such as providing
198 seeds to women, agricultural training, focusing on less labour intensive nutritious crops, and
199 gender sensitisation workshops with men, can facilitate greater response.^{39,40} Scaling up
200 impact more fundamentally would also require changing gender norms, such as through
201 women creating or accessing social networks and economic resources.

202

203 Evidence also shows nutrition-sensitive agriculture programmes only have impact on the
204 diets of children aged 6-23 months if accompanied by behaviour change communication,
205 indicating the importance of acknowledging that information and social support is vital
206 during infant and young child feeding.³⁸ Another important reality is poverty: even with these
207 measures, financial insecurity still may mean the poorest women have greater incentive to
208 sell higher-value nutritious crops in order to generate income to buy cheaper, less nutritious
209 staples for their families.³⁹

210

211 This example illustrates how understanding different aspects of local realities *and* the
212 interactions between them – including access to nutritious foods, gender norms, literacy,
213 financial insecurity – can be used to support the practical process of designing effective
214 programmes by both adapting to these realities and working to change them.

215

216 ***Example 4. Interventions to reduce meat intake***

217 There is currently widespread discussion about policies and interventions to reduce meat
218 intake to advance both sustainability and health objectives in contexts of high consumption.
219 One approach taken has been tried is through “meat free days” that limit meat availability in
220 meals provided in institutional settings. An anthropological study of a trial of “Meat Free
221 Mondays” in canteens serving the Norwegian armed forces illustrates how neglecting the
222 reality that people’s relationship to food is shaped by identity and meanings can undermine
223 both impact and implementation. In this case, the trial was not well-received by military
224 personnel. The study revealed that underlying the push back to implementation was the
225 association in the minds of military personnel of meat with masculinity.⁴² Removing meat
226 was thus perceived as a threat to their identity. Moreover, nostalgic meat-based dishes
227 provided meaning in the form of the physical and psychological comfort when away from
228 home. Yet where personnel did try the plant-based meals, the study reported it increased their
229 liking, indicating that there was potential in this initiative to have impact over time.

230

231 Designing, communicating, and implementing this particular intervention in a way that was
232 sensitive to the identity and meanings of the target population, while also working to change
233 these meanings, could have advanced engagement. The example illustrates that the right
234 question is not necessarily whether an intervention will work or not work, but how to design
235 it in a way that considers the realities affecting how it will be received as a starting point for a
236 longer change process over time.

237

238 **The full picture tool**

239 This evidence indicates that failing to consider the full picture of peoples' realities and the
240 interaction between them undermines the potential for success of policies and interventions.
241 This is particularly important in addressing dietary inequalities, given the accumulation of
242 harsh, interdependent realities in these contexts; policymakers and intervention practitioners
243 cannot expect the most marginalised groups in society to respond to policies and
244 interventions unless they recognize the many realities that constrain agency to engage with
245 and respond to policies and interventions. The fourth example also illustrates, however, that it
246 is not only applicable to situations of dietary inequalities and can be applied throughout many
247 different contexts.

248

249 Yet throughout these contexts policymakers, practitioners, researchers (and advocates) often
250 have only a partial picture. For understandable reasons, they enter the problem shaped by
251 their mandate, sector, discipline, or learned assumptions, leading them to focus on one
252 specific element, such as literacy, prices, food environments, culture, or poverty.

253

254 To help stakeholders stand back and see the fuller, interacting, picture from the perspective of
255 the people they seek to serve, Figure 1 and Table 2 present twelve realities crucial to consider
256 as a full picture when identifying, designing, and evaluating policies and interventions. The
257 twelve realities are proposed based on research findings from studies of people's lived
258 experience by the author team and are illustrated by the above examples.^{9,16,17,19, 22,30,43,44}
259 They are also supported by a broad base of evidence from different disciplines, including
260 from systems methods designed to reveal interactions between different factors.⁴⁵

261

262 The realities span material, economic and psychosocial factors people experience in their
263 households, families, food environments, social interactions and cultures. The *full picture*
264 intentionally does not elevate any one reality or group of realities above others since all are
265 potentially relevant and should be equally considered. While the importance of the different
266 realities will inevitably vary widely between populations, places and dietary problems, these
267 realities are - as illustrated by the above examples - universally relevant to how people
268 engage with and respond to policies and interventions across low-, middle- and high-income
269 countries, urban and rural settings, forms of malnutrition and specific dietary challenges, and
270 population groups.

271

272 By naming twelve key realities, the full picture tool is designed to help policymakers and
273 practitioners think through and make sense of the complex overlapping realities. However, it
274 is recognized that there may be further realities that emerge in any particular circumstance;
275 the emphasis on the *full* is designed to encourage policymakers and intervention practitioners
276 to try to visualise and identify all possible realities from people's vantage point.^{17,19,30,44} The
277 realities provide starting points to help policy and intervention practitioners and researchers
278 step into people's shoes and engage with people's realities on the ground.

279

280 The message of the *full picture* is not that all realities need to be acted upon, a task that would
281 likely be too complex to be practical. In contrast the message is that all need to be *considered*
282 as a means of identifying priorities. As illustrated by the four examples, the full picture is a
283 means of identifying the realities or group of interacting realities most important to achieving
284 greater impact (e.g. gender norms, financial insecurity etc) in any particular context - points

285 of particular leverage to make change or interactions that call for a portfolio of
286 mutually reinforcing policies and intervention to address them.

287

288 The reference to people's realities also implies the importance of taking action in the systems
289 that underpin people's realities, such as food, social, economic, media systems, and systems
290 of infrastructure such as housing.¹⁹ Understanding peoples' realities can help identify what
291 mutually reinforcing contributions are needed from these different systems; changes in food
292 systems, for example, may need to be complemented by changes in energy and water
293 systems.¹⁸

294

295

296 ***Using the full picture***

297 The full picture is designed as a practical tool at the intersection of research and practice to
298 help policymakers and researchers - and the communities they seek to serve - think through
299 what policies and interventions could be most effective and how to design and evaluate them.
300 The picture of the twelve realities (Figure 1) becomes a practical tool when it is used to guide
301 users through questions such as:

302

303 For policy and intervention practitioners:

- 304 ● Which of the 12 realities are relevant to the ability of policies and interventions to
305 successfully achieve impact in my context? Are other realities also important? ● How
306 do the realities interact to shape impact?
- 307 ● How do *existing* policies and interventions consider people's realities? What are the
308 gaps?
- 309 ● How could considering these realities enhance people's response to, and engagement
310 with, policies and interventions?
- 311 ● Are any of these realities particular points of leverage?
- 312 ● What interactions imply a portfolio of mutually reinforcing policies and interventions
313 is needed to ensure impact?
- 314 ● What different sectors need to be brought together to design and deliver policies for
315 collective impact?
- 316 ● What further information and research are needed to answer these questions?

317

318 For the research community:

- 319 ● What formative research could help policy and intervention practitioners consider the
320 full picture and design for greater impact?
- 321 ● What realities need to be captured in research studies designed to understand why a
322 policy or intervention worked (or failed to work) as intended?
- 323 ● What research methods are needed to measure these realities?
- 324 ● Where is it important to include communities and people affected by the problem in a
325 respectful way to ensure we understand these realities?
- 326 ● How can we design a monitoring, evaluation and learning process that enables policy
327 and interventions practitioners to learn iteratively what needs to be adapted and
328 augmented to enhance effectiveness?
- 329 ● What disciplines need to be brought together to engage in this process?

330

331 Each of these questions need to be targeted to specific contexts - the dietary problem of
332 concern, the population and/or place. While they can be used at any level, the approach
333 highlights an important role for local authorities, city governments and community leaders
334 who tend to be closer to people's realities in their municipalities and communities and can
335 tailor these questions to these closer contexts.

336

337 The full picture can also be used to support iterative learning processes. Even with formative
338 research, predicting people's responses to and engagement with interventions is hard.
339 Accompanying the process of implementation with continuous learning about the role of
340 people's realities can mitigate against notion that the policy or intervention is either
341 succeeding or failing, but rather need to be adapted or augmented to take into account of the
342 fuller picture of realities as they come into view.

343

344 **Implications for sources of knowledge**

345 Our proposal to consider the full picture of people's realities has important implications for
346 sources of evidence to inform policies and interventions. While a range of methods can be
347 used to identify people's realities, the focus on people's realities implies a key role for
348 qualitative methods that give primary importance to the subjective perspectives of those who
349 directly encounter policies in their daily lives.^{46,47} This "lived experience research" is the
350 only group of methods which prioritises and explores the intricate nuances of personal
351 experiences which provide insight into the context-bound and often unexpected ways in
352 which food is understood and policy is experienced 'on-the-ground'.^{43,48} It provides the
353 knowledge needed to place the full range of issues that matter to people at the heart of the
354 response and ensures inclusion of the people most affected, processes central to the concepts
355 of the right to food and food justice.⁴⁹

356

357 Lived experience research builds on the valuable contribution of systems methods designed
358 to better understand the interacting causes of dietary challenges through engaging with policy
359 stakeholders and decision-makers.⁴⁵ It also supports the tradition of realist evaluation and the
360 emerging approach of "implementation science" to understand how to encourage uptake of
361 evidence-based policies and interventions.⁴⁶

362

363 Getting policies and interventions to work more effectively requires rigorous engagement and
364 interpretation of people's lived experience. Ways to make this a feasible approach to inform
365 policies and interventions include co-designing actions with people affected - working with
366 people to actively design policies to a pre-specified problem - or through co-creation, which
367 takes this further by involving people in identifying the problem, designing policies, and
368 participating in implementation and evaluation.⁵⁰ It also requires establishing spaces for
369 policy- and other decision-makers to learn for themselves the realities on the ground.

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371

372

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Ethics declaration – Competing interests

387 The authors declare no competing interests

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