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German reduction strategy on salt, sugar and saturated fat (2016)

Position paper of diabetesDE – German Diabetes Aid

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The German federal budget for 2016 allocates €2 million for the development of a national strategy to reduce sugar and salt content in processed foods and to lower consumption of saturated fats [1]. The coalition has accordingly asked the *Bundesministerium für Ernährung und Landwirtschaft* (Federal Ministry of Food and Agriculture) to agree on appropriate voluntary measures with the food industry as part of a "minimization dialogue". A national reduction strategy should significantly reduce the content of sugar, salt and saturated fatty acids at product level within a short and acceptable time period. Measurable improvements providing healthier choices must be achieved by the end of 2020 [2]. *diabetesDE – Deutsche Diabetes-Hilfe* (German Diabetes Aid) calls on the federal government to expand the objective to include saturated fatty acids at product level, to pursue a more ambitious target in a shorter time span in relation to sugar content, and to consider more effective measures with economic incentiv-es for the food industry in accordance with recommendations by the World Health Organization (WHO), i.e. product-group-related upper limits or the use of nutrient profiles and/or consumption taxes in combination with subsidies for foods with favorable nutrient profiles.

Summary

Foods with a high content of saturated fats, sugar or salt encourage the development of non-communicable diseases [3–6], including diabetes mellitus type 2 [3, 4]. Unhealthy diets also induce high medical expenses [7]. As regards food industry contributions to preventing non-communicable diseases, healthier product formulations are a key measure in the creation of a healthier food environment – alongside restricted marketing for unhealthy foods, reductions in portion sizes, consumer-friendly nutrition labelling "front of pack" and the creation of healthy food environments in settings (schools, kindergardens, workplace, ...).

Appraisal of time bound targets

Salt reduction

Germany has voluntarily agreed to reduce salt intake by 30% by the year 2025. The federal government's objective (-16% on product level by 2019) is an acceptable sub-target, as a way for the public to gradually adjust to changes in flavor.

Reduction of saturated fats

There is no product-related target value and thus no demand for any contribution by the food industry to lowering the population's consumption of saturated fats.

Sugar reduction

The voluntary reduction of sugar content in products by at least 10% in five years is too low, the likelihood of achieving the target too uncertain and the time period in which to achieve the target too long.

diabetesDE – German Diabetes Aid calls for:

- product-related target values to be extended to include saturated fats
- a more ambitious time bound target for sugar

diabetesDE – German Diabetes Aid recommends:

- more thorough monitoring and evaluation (every other year)
- involvement of independent expert bodies
- use of economic incentives for more effective product reformulation in accordance with WHO/UN recommendations.

Evidence-based rationale

According to an analysis of 2015, the direct costs of an unhealthy diet in Germany caused by too much fat, sugar and salt were estimated at almost €17 billion in 2008, and forecasted at €20 billion by 2019. Potential savings amounted to approx. 7% of healthcare treatment costs in 2008 – without accounting for indirect costs [7]. It is time for the food industry to make a contribution [6]. Healthier product recipes play a key role in the creation of healthy food environments, alongside the above-mentioned environmental preventive measures [3, 4, 8]. By the end of 2020 more healthy foods shall be measurably available in Germany and Europe [2]. Relying on voluntary commitments by the food industry is perceived as weak political leadership; this approach is described as being weak to ineffective [9, 10]. Based on current evidence, only legal regulations and market interventions are effective [9]. Magnusson and Reeve [11] describe a feasible political process of responsive regulation, which includes a gradual regulatory "upgrade" in the absence of significant changes via self-commitments (underperformance). This requires thorough monitoring by the government [11], and is still a lengthy process.

Appraisal by diabetesDE – German Diabetes Aid

...on salt reduction

In Germany, 70% of women and 80% of men consume too much salt, according to the recommendation of the *Deutsche Gesellschaft für Ernährung* (German Nutrition Society) (DGE) [5]. Women consume an average of 8.4 g of salt per day, and men 10 g per day [5]. The WHO recommends a maximum intake of 5 g table salt/day; the DGE a maximum of 6 g/day. 75–90% of table salt is consumed in processed foods or when eating out; the amount of added salt consumed at home is low. The largest proportion of table salt intake is provided by the food groups of bread, meat, processed meat and cheese ([12], cited in: [13]). This illustrates the importance of environmental preventive reduction measures to reduce the public's salt intake ahead of individual behavioral changes. The WHO member states, including Germany, have voluntarily committed to reducing salt intake by 30% by 2025 [13].
In accordance with recommendations for gradual and imperceptible adjustments to lower salt content [6], the federal government's time bound target is an acceptable sub-target to be attained by 2019, as far as a salt reduction strategy is sustainably pursued beyond this period. diabetesDE – German Diabetes Aid recommends that Germany take part in the EU Salt Reduction Framework [14, 15].

...on reduction of saturated fats

In Germany, approx. 80% of men and 76% of women exceed the guideline for fat intake of 30% of daily energy intake; on average, consumption is around 35–36% of daily energy intake [12, 16]. The German population consumes three times as many saturated fatty acids as unsaturated fatty acids [12]; the proportion of saturated fatty acids should be at most a third of total fatty acids [16]. The recommendation is therefore to reduce fat intake in total and to modify the pattern of fat consumption in favor of unsaturated fats and at the expense of saturated fats [16].
Unfortunately, the reduction strategy has adopted only a behavioral preventive objective with regard to saturated fatty acids. This objective does not seek a reduction in the content of saturated fats in defined product groups; instead consumers are expected to consume less. However, well-meant appeals have proven broadly ineffective in the past decades. Likewise, the use of the German word "*Diät*" (means "on a diet") in this context does not seem appropriate. This approach absolves the food industry of any responsibility and shifts the attainment of this goal exclusively on to consumers. There is no product-related target value.
In contrast, WHO Europe's Action Plan proposes that the entire spectrum of products and all market segments be taken into account in reformulation strategies [3]. The authors of a recent model calculation at the Martin Luther University of Halle-Wittenberg/Germany estimate that a reduction of sugar, salt and fat content in food by around one third could save the German health system approx. €5–6 billion per year [7]. Technological-sensory studies have shown that sugar, salt and fat can be reduced by up to 30% [17, 18] and saturated fats can be replaced by unsaturated fats to at least

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Definition of objectives in the reduction strategy [1]:
- salt: -16 % in products in four years
- saturated fats in individual diets: -5% in four years
- sugar: at least -10% in products in five years

this extent, without a perceptible decrease in taste acceptance [18]. A reduction in saturated fats in defined product groups by one third therefore appears to be an appropriate target quantity [17, 18].

...on sugar reduction

The German population consumes on average 107 g (men) and 100 g (women) of monosaccharides and disaccharides per day [12]. This is twice the amount currently recommended by the DGE and the WHO of a maximum of 10% of daily energy intake [19] (around 50 g sugar/day), which is described by the federal government as the "convergence objective", and four times the latest "conditional" WHO recommendation of a maximum of 5% of energy intake (25 g sugar/day).

The current target value, a voluntary reduction of sugar in products by at least 10% in five years, is therefore considered too low, the likelihood of achieving the target too uncertain and the time span in which to achieve the objective too long.

In Mexico, a 10% price increase prompted by a soft drink tax resulted in a 12% reduction in the consumption of sugary drinks within the first year [20]. People with a lower socio-economic status and a higher risk of noncommunicable diseases benefitted in particular (-17% consumption).

A British research group proposes a gradual reduction of sugar content in sugar-sweetened drinks by 40% within five years and estimates that this measure alone could reduce the number of overweight people by 0.5 million and the number of obese people by 1 million. Two decades after this forecasted weight decline, there would be around 300,000 fewer new manifestations of overweight-related diabetes mellitus type 2 [21]. In light of the above-mentioned model calculation by the Martin Luther University of Halle-Wittenberg/Germany on savings in public health in the event of reductions in sugar, salt and fat by one third [7] and the above-mentioned technological-sensory findings [17, 18], a reduction of sugar content in defined product groups by one third appears to be an advisable target.

Conclusion

In the opinion of diabetesDE – German Diabetes Aid, the national reduction strategy does not currently exploit the identifiable potentials to a sufficient extent and will probably have a lesser, if any, measurable impact on the diet of the population within the proposed time period.

Particularly given the fact that more healthy foods shall be measurably available in Germany by the end of 2020 [2], it is hard to understand why the federal government is investing €2 million in lengthy and uncertain voluntary measures, when WHO and UN recommend economic incentives as the first resort, as these promise more effective results in shorter time periods and can also generate income which could be used to subsidize healthy foods or for the purposes of health promotion or innovation research.

The planned evaluation after four years is too late; the results of the implementation should be determined at least halfway through the planned implementation period, so that readjustments can be made in the event of underperformance – thorough governmental monito-

Product reformulations (optimizing recipes in terms of health) have been discussed for around ten years as a way in which the food industry can contribute to the creation of a healthy food environment to prevent overweight and non-communicable diseases [24, 25]. In 2008 and 2009, WHO and EU Commission recommended product reformulations [8, 15, 26]; recent action plans by WHO, FAO and EU also push these measures. They are also supported by Health Ministers in EU countries [3, 4]. Economic incentives are particularly recommended in this context, e.g. setting upper limits or imposing consumption taxes (e.g. fat and sugar taxes in combination with subsidies for healthy foods) [10, 11, 22].

However, the federal government believes that reformulation measures can only make a contribution to a healthier diet as part of an integrated strategy [1]. The €2 million budgeted for 2016 is intended to support research and innovative projects on reduction methods [1]. At present, the *Bundesministerium für Ernährung und Landwirtschaft* (Federal Ministry of Food and Agriculture) (BMEL) is undertaking an inventory of existing voluntary measures taken by the industry and identifying product groups which may be particularly suitable for reformulation [1]. The *Bundesministerium für Gesundheit* (Federal Ministry of Health) and the *Bundesministerium für Wirtschaft und Energie* (Federal Ministry for Economic Affairs and Energy) are also working on the reduction strategy alongside the BMEL and its subordinate authorities (*Max Rubner-Institut*). The federal government stresses the importance of implementing EU-wide regulations and for the time being is focusing on voluntary measures and agreements with the food industry [1, 2]. The extent to which regulatory measures will be considered if necessary [11, 22] remains to be seen.

Other countries such as Denmark, France, Finland, Hungary, Greece and Lithuania have already had successes with various, mostly regulatory, reformulation instruments [23]. There are four types of reformulation instruments [23]: labelling systems and voluntary self pledges as well as upper limits, bans and charges/taxes determined by state regulatory measures [23].

ring is particularly recommended in the event of voluntary self-commitments by the industry [22]. Furthermore, it remains to be seen whether there will be funding beyond 2016; a voluntary approach requires regular investment [23]. The recommended involvement of independent experts and non-governmental organizations [23] is unscheduled so far, but is desirable.

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