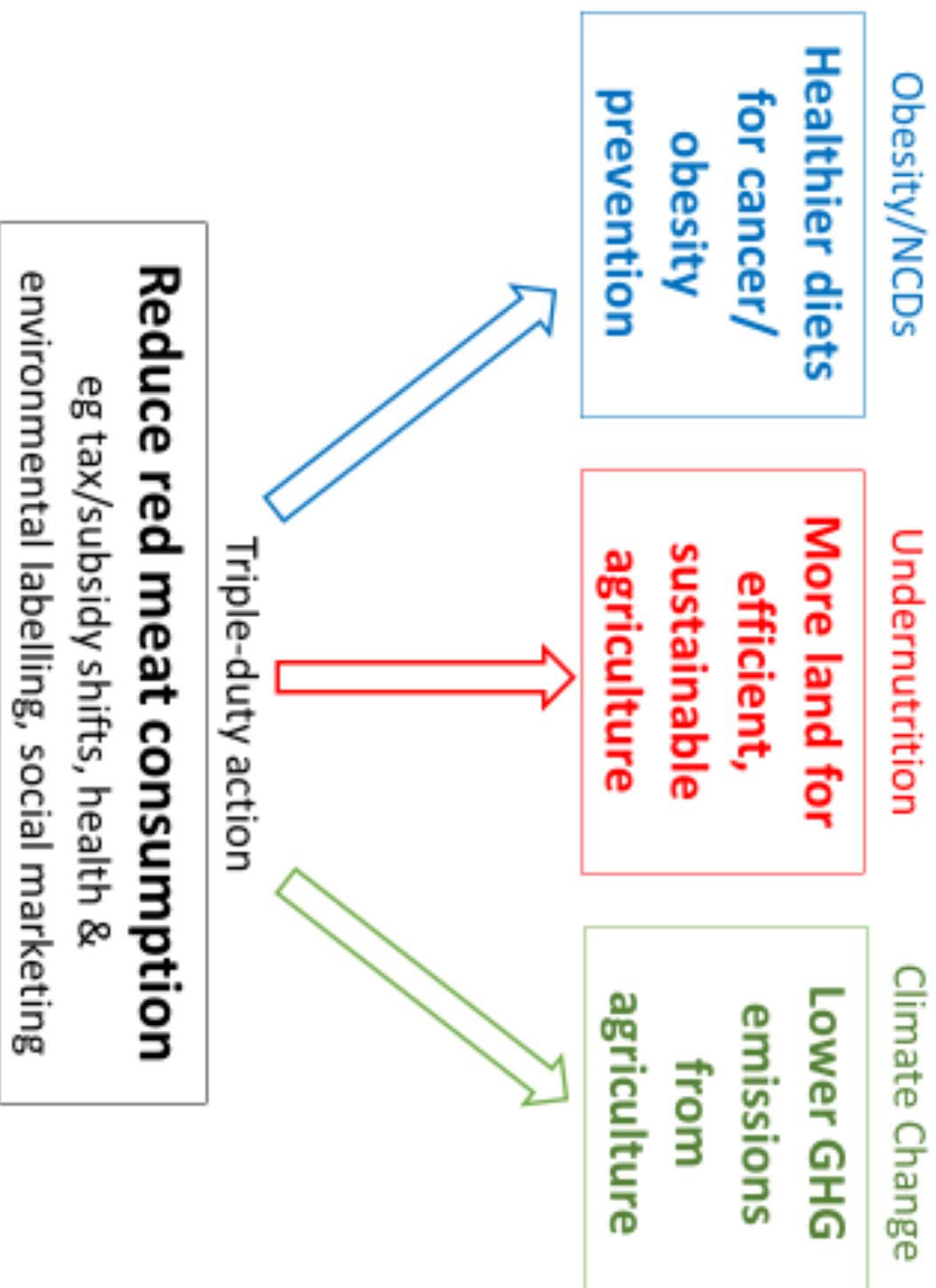


Evidence for effects of financial instruments to realize national dietary goals

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The Impact of Food Prices on Consumption: A Systematic Review of Research on the Price Elasticity of Demand for Food

- We reviewed 160 studies on the price elasticity of demand for major food categories to assess mean elasticities by food category and variations in estimates by study design. Price elasticities for foods and nonalcoholic beverages ranged from 0.27 to 0.81 (absolute values), with food away from home, soft drinks, juice, and meats being most responsive to price changes (0.7–0.8). As an example, a 10% increase in soft drink prices should reduce consumption by 8% to 10%.
- Andreyeva T, Long MW, Brownell KD. Am J Public Health 2010;100:216-222

Säll S, Gren I. Effects of an environmental tax on meat and dairy consumption in Sweden. *Food Policy*. 55(2015) 41-5

- The unit tax (meat and dairy) applied corresponded to between 8.9% and 33.3% of the respective price per kg product in 2009.
- The results indicated relatively inelastic own price elasticities and high income elasticities for all meat products and slightly lower for dairy products.
- Simultaneous introduction of a tax on all seven products decreased emissions of GHG, nitrogen, ammonia and phosphorus from the livestock sector by up to 12%.

Health-motivated taxes on red and processed meat: A modelling study on optimal tax levels and associated health impacts. Springmann M. PLOS One. 2018; 13(11): e0204139.

- The number of deaths attributable to red and processed meat consumption decreased by 9% (222,000; SI, 38,000–357,000), and attributable health costs decreased by 14% (USD 41 billion; SI, 10–57) globally, in each case with greatest reductions in high and middle-income countries.
- Including the social health cost of red and processed meat consumption in the price of red and processed meat could lead to significant health and environmental benefits, in particular in high and middle-income countries.
- The optimal tax levels estimated in this study are context-specific and can complement the simple rules of thumb currently used for setting health-motivated tax levels

A social cost-benefit analysis of meat taxation and a fruit and vegetables subsidy for a healthy and sustainable food consumption in the Netherlands.

- Over 30-years, a 15% or 30% meat tax or 10% F&V subsidy could result in reduced healthcare costs, increased quality of life, and higher productivity levels.
- Benefits to the environment of a meat tax are an estimated €3400 million or €6300 million in the 15% or 30% scenario respectively, whereas the increased F&V consumption could result in €100 million costs for the environment.
- Broeks MJ et al. BMC Public Health 2020; 20: 643

Conclusions

- Taxation of animal products will decrease consumption of these products and thereby lower environmental impact (GHG, nitrogen, ammonia and phosphorus) and impact on health (non-communicable diseases, improved quality of life).
- Price increases of animal products should be part of an integrated price policy to improve the dietary consumption of whole food plant based products (and reduce the intake of inferior refined ultraprocessed plantbased products).