

# Supplementary Appendix to “Sharing your voice — healthy action for climate change”

## Examples of broad climate health action

The New Zealand health sector is increasingly committed to climate health action, and collaborating. Of these, OraTaiao: The New Zealand Climate and Health Council's action has grown from the vision of “healthy climate, healthy people”, strategy hui, and strong commitment, to climate change responses promoting equitable health and social outcomes consistent with Te Tiriti.

Examples of the range of actions include:

- Collaborating with colleagues in the New Zealand Medical Students' Association (NZMSA), Medical Colleges,<sup>1,2</sup> the New Zealand Medical Association (NZMA), and other health sector groups to:
  - call for leaders to act fast to drop our emissions,<sup>3-7</sup>
  - call to prioritise human health,<sup>8</sup>
  - call to cut district health board (DHB) climate emissions,<sup>9,10</sup>
  - more recently, call for post-COVID-19 pandemic renewal<sup>11-13</sup>
- A Zero Carbon Act health hui, hosted by the Royal Australasian College of Surgeons (RACS), for leading health groups to talk with the Minister for Climate Change<sup>14</sup>
- Written submissions and presentations to government and local councils urging urgent cuts to climate-damaging emissions<sup>15,16</sup>
- Explaining how climate-protective actions like plant-based diets, warmer homes, and more active and shared transport, grow better health and wellbeing now
- Media releases, Letters to the Editor, newspaper opinion-editorials, online comments, conference presentations, lectures, and media interviews<sup>17-20</sup>
- Stunts and joining in with other groups in protest rallies<sup>15</sup>
- Working together on climate change and health public policy, including briefings to incoming Ministers; health (equity impacts); international climate action; emissions trading schemes; fossil fuel divestment; healthy transport choices; trade agreement risks; and impacts on human rights (especially health) including indigenous peoples and children<sup>1,2,14,21-27</sup>
- Evidence for the Climate Commission<sup>28</sup>
- Health sector carbon reduction and sustainability, working in District Health Boards (DHBs) and primary care
- Carbon offsetting schemes and other ways for health professionals and organisations to reduce their own carbon footprints<sup>29</sup>
- Online submission guides for busy health professionals to have their say on NZ's climate law<sup>30,31</sup>
- Supporting the 2019 school strikes with a mock medical certificate for time off school.<sup>32,33</sup>

## Health, equity, and climate costs of agriculture

Additional to methane expanding sea level rise,<sup>34,35</sup> there are other serious climate, health, and equity implications from current dairy practices.

Breastfeeding protects mothers against breast cancer and diabetes, and for children, means passive immunity and reduced infections, with subsequent protection against obesity, inflammatory bowel disease, and type 1 diabetes.<sup>36-38</sup> Yet despite the advantages of breastfeeding, the use of infant formula is increasing particularly in the Asia-Pacific region, as a result of weak government regulations on aggressive marketing of baby foods, and weak labour market policies to protect the rights of women in the workplace.<sup>39,40</sup> This uptake of infant formula, much of which is made from cow's milk, has significant environmental repercussions.<sup>38,41</sup> The greenhouse gas emissions of producing one kilogram of raw milk is similar to the emissions from driving a car 10–20 kilometres, even without accounting for the energy costs of the manufacturing process for milk powder, too often coal-powered.

Clearing land for dairy farming damages environmental diversity and removes forests (Earth's natural 'carbon sinks'). Additionally, much of the infant formula is produced thousands of miles away from where it's sold, contributing to further emissions from transportation. Emissions from the infant formula industry contribute to changing weather patterns, floods, droughts, and fires, and thus subsequent increased food insecurity and starvation. Ironically, those most vulnerable to food insecurity and ill health from climate change are also those most likely to be exposed to formula feeding and to miss out on the benefits and protection of breastfeeding.<sup>38,39</sup>

So, think about talking with farming whānau about how our big money export — dairy breast milk substitutes — is too much like tobacco farming. Reductions in dairy are a win for healthy climate, a win for mother and baby health, and a win for healthy rivers.

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