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## Co-benefits and global use of the EAT-Lancet index

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# CO-BENEFITS AND GLOBAL USE OF THE EAT-LANCET INDEX

## 01 WHY?

**Current global food systems threaten human health and environmental sustainability.** It is responsible for 1/3 of the world's greenhouse gas emissions and has a major impact on biodiversity loss, land and water use and several other environmental factors. **Human diets are also a major contributor to non-communicable diseases.**

Dietary factors are the third most important cause of death globally. Shifting to sustainable diets is necessary for achieving the United Nations' Sustainable Development Goals and maintaining our existence within environmental limits.

**In 2019, the EAT-Lancet Commission on healthy diets from sustainable food systems defined a global reference diet to improve both areas<sup>1</sup>.** Since then, several different scores with the aim of measuring the adherence to the diet has evolved. In 2021 Stubbendorff et al.<sup>2</sup> developed a score which has shown to decreased mortality, and morbidity in a Swedish population.



## 02 MEASURING HEALTH AND SUSTAINABILITY OF FOOD

Foods <sup>2</sup>	Target (range) <sup>1</sup>	3 pts	2 pts	1 pt	0 pts
Vegetables	300 (200-600)	>300	200-300	100-200	<100
Fruits	200 (100-300)	>200	100-200	50-100	<50
Unsaturated oils	40 (20-80)	>40	20-40	10-20	<10
Legumes	75 (0-150)	>75	37.5-75	18.75-37.5	<18.75
Nuts	50 (0-100)	>50	25-50	12.5-25	<12.5
Whole grains	232	>232	116-232	58-116	<58
Fish	28 (0-100)	>28	14-28	45121	<7
Beef & lamb	7 (0-14)	<7	7-14	14-28	>28
Pork	7 (0-14)	<7	7-14	14-28	>28
Poultry	29 (0-58)	<29	29-58	58-116	>116
Eggs	13 (0-25)	<13	13-25	25-50	>50
Dairy	250 (0-500)	<250	250-500	500-1000	>1000
Potatoes	50 (0-100)	<50	50-100	100-200	>200
Added sugar	31 (0-31)	<31	31-62	62-124	>124

0-42 POINTS

**An EAT-Lancet diet index was developed<sup>2</sup> based on 14 food groups.** Food components were classified as either “emphasized foods” or “limited foods”. 0-3 points was given for each group (total 0-42).

## 03 HEALTH OUTCOMES

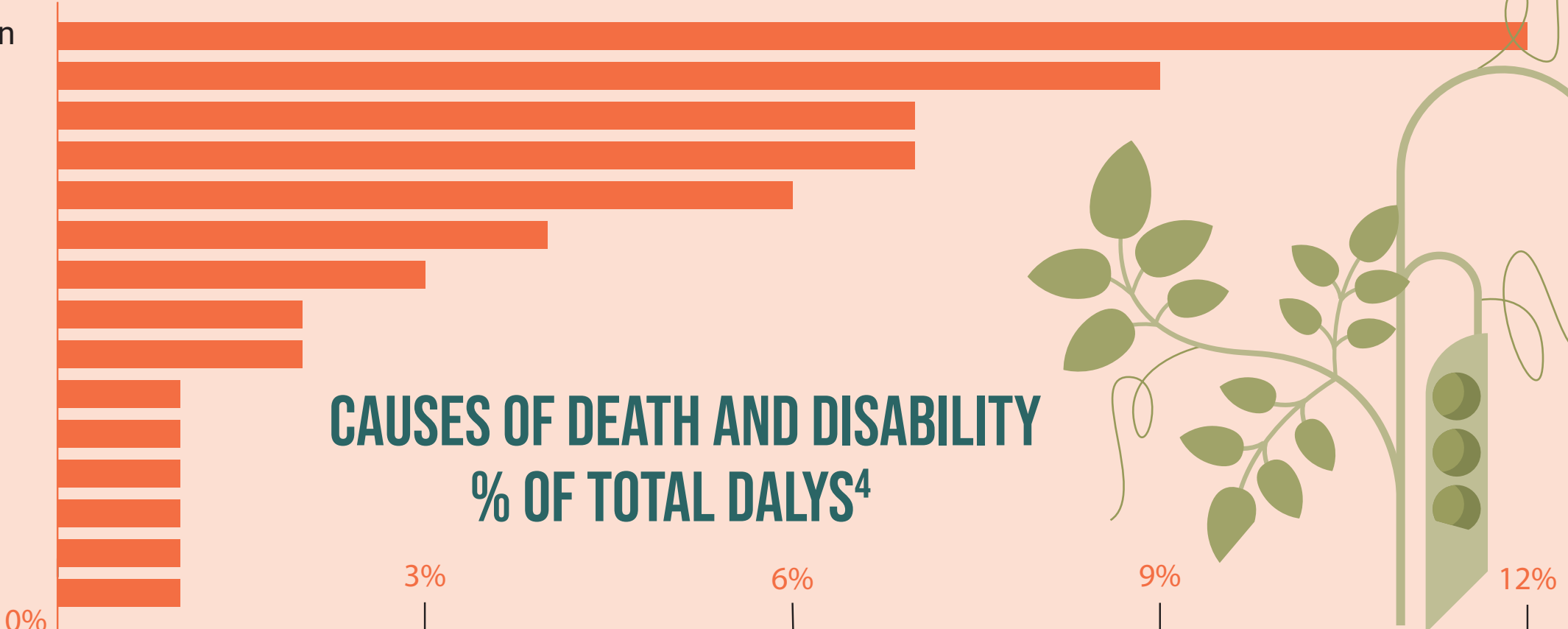
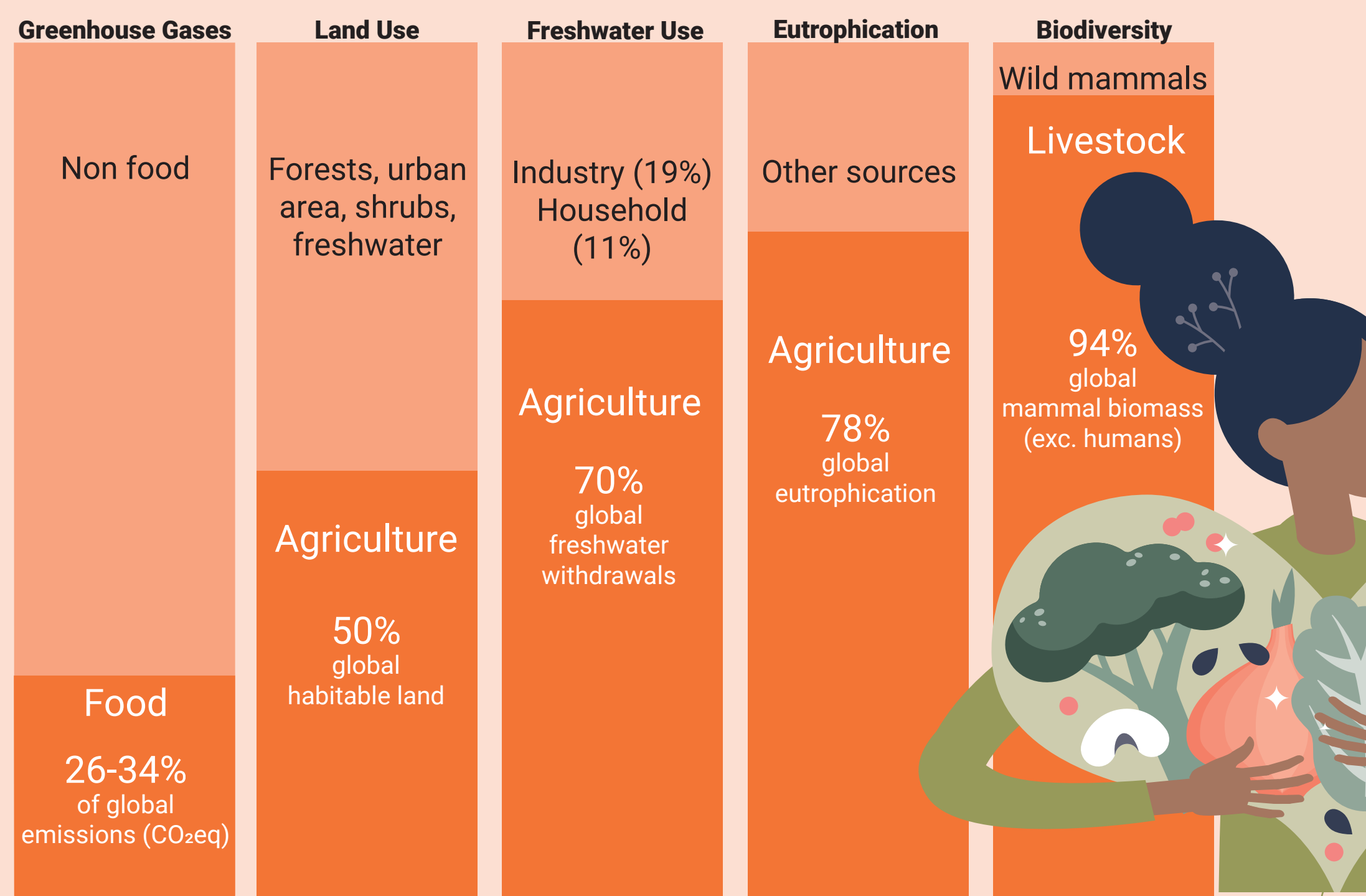
**EAT-Lancet score** was tested on 22,421 participants in MDC. Highest adherence was associated with **25% lower all-cause** mortality, **24% lower cancer** mortality, and **32% lower cardiovascular** mortality<sup>2</sup>. Other studies showed 18% lower risk of diabetes<sup>5</sup> and 20% lower risk of coronary events<sup>6</sup>.

## 04 MOVING FORWARD

Different EAT-Lancet scores have been developed but their **association with morbidity, mortality, and nutritional adequacy varies**. To **confirm the global usage of the EAT-Lancet diet**, as measured with this index, it has to be tested in different contexts and populations. **Associations with environmental sustainability** needs to be assessed before the diet is incorporated in development of sustainable dietary guidelines and policies.

**TO TEST THE GLOBAL USE OF THE SCORE WE WANT TO ESTABLISH A COLLABORATIONS ABOUT FOOD AND SUSTAINABILITY IN SOUTH AFRICA.**

### WHAT ARE THE ENVIRONMENTAL IMPACTS OF FOOD AND AGRICULTURE?<sup>3</sup>



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1. Willett, W., et al. (2019). "Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems." Lancet.  
2. Stubbendorff, A., et al. (2021). "Development of an EAT-Lancet index and its relation to mortality in a Swedish population." The American Journal of Clinical Nutrition.  
3. Ritchie, H. and M. Roser. (2021). "Environmental impacts of food production". <https://ourworldindata.org/environmental-impacts-of-food>.  
4. The Institute for Health Metrics and Evaluation (IHME). "GBD Result tool". [www.healthdata.org](http://www.healthdata.org).  
5. Zhang, S. et al. (2023). "Adherence to the EAT-Lancet diet, genetic susceptibility, and risk of type 2 diabetes in Swedish adults." Metabolism - Clinical and Experimental.  
6. Zhang, S. et al. (2023). "Adherence to the EAT-Lancet diet and risk of coronary events in the Malmo Diet and Cancer cohort study." The American Journal of Clinical Nutrition.