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

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

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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[1]. Since then, several different scores with the aim of measuring the adherence to the diet has evolved. In 2021 Stubbendorff et al.[2] developed a score which has shown to decreased mortality, and morbidity in a Swedish population.

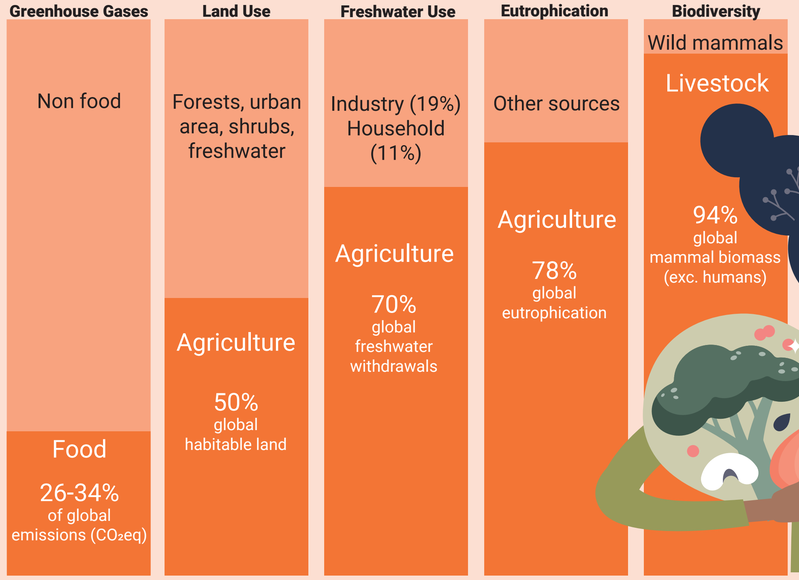
02 MEASURING HEALTH AND SUSTAINABILITY OF FOOD

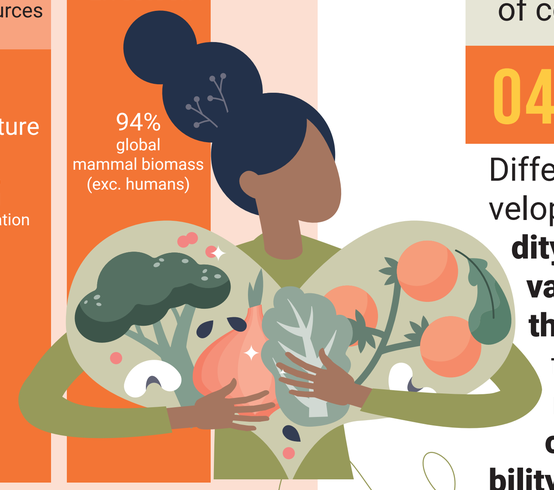
	Foods[2]	Target (range)[1]	3 pts	2 pts	1 pt	0 pts
↑	Vegetables	300 (200-600)	>300	200-300	100-200	<100
↑	Fruits	200 (100-300)	>200	100-200	50-100	<50
↑	Unsaturated oils	40 (20-80)	>40	20-40	10-20	<10
↑	Legumes	75 (0-150)	>75	37.5-75	18.75-37.5	<18.75
↑	Nuts	50 (0-100)	>50	25-50	12.5-25	<12.5
↑	Whole 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

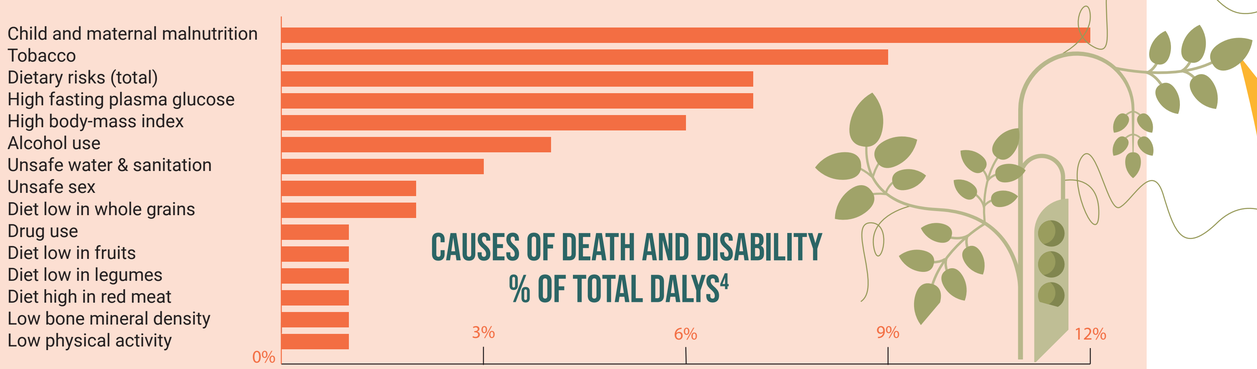
0-42 POINTS

An EAT-Lancet diet index was developed[2] 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).

WHAT ARE THE ENVIRONMENTAL IMPACTS OF FOOD AND AGRICULTURE?[3]







CAUSES OF DEATH AND DISABILITY % OF TOTAL DALYS[4]

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[2]. Other studies showed 18% lower risk of diabetes[5] and 20% lower risk of coronary events[6].

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.

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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.
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4. The Institute for Health Metrics and Evaluation (IHME). "GBD Result tool". 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.
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