

Vital food for a vital region – transparency in sustainability and health values in a regional food market

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The word restaurant originally refers to a food that restores one's strength. The Parisian Boulanger opened a shop where he sold meat-based consommés to restore his customers strength or vitality. He called them boillons restaurants, or simply restaurants. How many restaurants do you know that serve food with the purpose to restore your health?

Especially since the second World War lots of progression has been made in our food chain. Food security has increased dramatically, not only by higher yields per hectare but also by dramatically increasing shelf life. Today is the day to add vitality to the mission of our highly productive food chain, because the whole world suffers from a health crisis.

One in every nine of the world's inhabitants suffers from hunger, one in every eight people suffers from obesity. Poor access to nutritious food is mentioned as a cause for both hunger and obesity (Da Silva et al., 2018). Nutrition content of primary products has gone down every decade of at least the past century, which is presumably partly related to reduced soil health due to erosion, soil compaction and pollution (EASAC, 2018). The world-wide reduction of above ground biodiversity has also been suggested to be caused by the intensification of agricultural land use (Van Gerwen et al., 2014). In the near future this reduction of biodiversity can threaten food production, for example of pollination dependent crops such as fruit. Additionally, agricultural land use has also affected the quality of water systems. Water storage capacity has gone down dramatically through loss of organic matter in the soil, resulting in both droughts and floods, which both threaten food production, while the quality of our drinking water is more and more threatened by the use of not only agricultural chemicals, such as pesticides and herbicides, but also by medication use, both humane and live-stock based. And, last but not least, also climate change seems closely related to agricultural activities. On the one hand because of food production related energy use, but on the other hand by release (or fixation!) of greenhouse gasses by the soil (EASAC, 2018).

It seems clear that a transition is needed in the way we think about food production. Food production should no longer solely be driven by yield, vitality of the food chain should become a central theme to help solve above mentioned issues and thereby ensure future productivity. We are designing a program – SHIFT or Sustainable Healthy Innovations for a Food Transition – that aims to give insight in sustainability and health values in the food chain. As part of SHIFT we are going to select a set of affordable, applicable yet valid measures to monitor soil health, quality of water systems, higher species biodiversity, greenhouse gas emissions and health value of crops. The measurement system will be used by a regional food cooperation to provide growers, processors and wholesale costumers with data about sustainability and health values in the food chain. We aim to stimulate sustainable production of nutritious crops by creating transparency about sustainability and health values in the food chain.

