

Environmental Impacts of Diet Changes in the EU

Introduction

- Expenditure on food and drink, transport and built environment drive over 70% of the environmental impacts of EU consumption
- What are the environmental impacts of a shift to healthier diets in the EU?

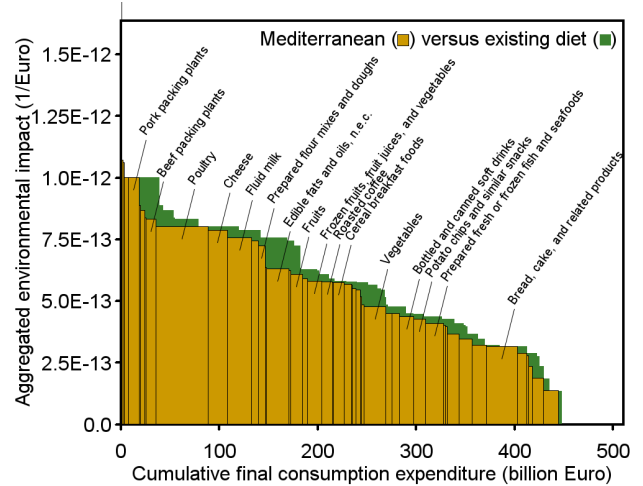
Methods

- The FAO Food Balance Sheets data represent existing diets in the EU
- Healthy nutritional recommendations lead to three alternative diet scenarios
- Environmentally Extended Input Output model, E3IOT to calculate impacts of the food baskets in each scenario, taking into account 1st order income redistribution effects.
- Dynamic 2nd order economic effects estimated with a partial equilibrium model, CAPRI, showing e.g. what alternative products the food and agriculture sector will produce if the original demand changes due to diet changes.

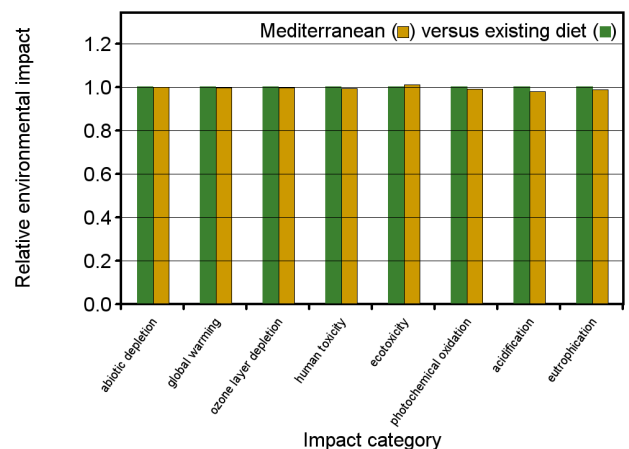
Conclusions

- Moderate diet changes can lead to 8% less impact related to food consumption, or 2% less impacts of the total consumption expenditure in Europe.
- The 2nd order CAPRI calculations show that production however will not diminish dramatically, which implies that impacts *in* Europe will not diminish, although these are now related to exports rather than domestic consumption.

Results



- Total coloured area represents total aggregated environmental impact of consumed food products.
- Changing expenditure on food products leads to smaller impact.
- Excludes 1st and 2nd order effects.



- Comparing relative environmental impacts of the existing diet with a Mediterranean diet taking into account 1st and 2nd order effects